City of Ramsey
Agenda
Revised
Regular City Council
Tuesday, January 26, 2021
7:00 pm
Council Chambers, 7550 Sunwood Drive NW

This meeting is being held in accordance with Minnesota Statutes 13D.021. Due to the COVID-19 Pandemic, it is not practical and prudent for all members of this board to attend in person. Current Minnesota law requires certain social distancing standards that impacts the capacity of the Council Chambers. For those at highest risk, it is advised to isolate themselves from the general public. For these reasons, it is not practical and prudent to have this meeting exclusively in person. Members of the public are welcome to attend in person or remotely.

Remote Attendance available at www.cityoframsey.com/meetings. To maximize social distancing due to the COVID-19 Pandemic, those that can join remotely are encouraged to do so. Those joining remotely and requesting to speak are asked to use a webcam when speaking.

1. **Call to Order**

2. **Presentation**

3. **Citizen Input**

4. **Approve Agenda**

5. **Consent Agenda**

1. Note the Following Boards, Commissions, and Committee Meeting Minutes:

- Planning Commission Meeting Minutes Dated November 5, 2020
- Planning Commission Meeting Minutes Dated December 3, 2020
- Economic Development Authority Meeting Minutes Dated November 12, 2020
- Park and Recreation Commission Meeting Minutes Dated November 12, 2020
- Public Works Committee Meeting Minutes Dated November November 17, 2020

2. Approve the Following Meeting Minutes:

1. City Council Work Session dated 1/12/2021
2. City Council Regular Session dated 1/12/2021

3. Approve Rental Licenses

4. Award Sign Addition for Loral I Armstrong Delaney Ramsey Central Park

5. Adopt Resolution #21-033 Approving Cash Disbursements Made and Authorizing Payment of Accounts Payable Invoicing Received During the Period of January 7, 2021 through January 20, 2021

6. Adopt Resolution #21-014 Approving an Interim Use Permit for Storage Containers and Gravel Parking at 8049 146th Ave NW (Project No. 20-137); Case of JBR Ramsey, LLC on behalf of Richard Lee

7. Adopt Resolution #21-024 Prohibiting Parking on Riverdale Drive between Feldspar Street and Sunfish Lake Boulevard for Improvement Project #21-00

8. Adopt Resolution #21-025 Approving Second Amendment to Purchase Agreement and Right of Re-Entry Agreement with Gigi's Salon and Spa, Inc. (Portions of case may be closed to the public)

9. Adopt Resolution #21-028 Authorizing Partial Payment #4 to RJM Construction for Improvement Project 20-07 New Public Works Facility

10. Adopt Resolution #21-029 Authorizing Final Payment to Northern Lines Contracting, Inc. for Improvement Project 18-09, COR Infiltration Basin Improvements.

11. Adopt Resolution #21-032 Authorizing Partial Payment #6 to Park Construction for Improvement Project 20-01, Variolite Street Reconstruction Project.

12. Adopt Resolution #21-034 to Approve the City's 2021 Union Contracts for LELS Patrol and LELS Sergeants

13. Adopt Resolution #21-035 Directing Staff to Submit the 2021 Pay Equity Report

6. Public Hearing

7. Council Business

1. Adopt Resolution #21-027 Approving Request for Interest (RFI) for a Dynamic Display Billboard for Retail Advertising on Highway 10 Near The COR

2. Adopt Resolution #21-022 Approving Plans and Specifications and Authorizing Advertisements for Bids for Riverdale Drive Reconstruction, Improvement Project #21-00

3. Adopt Resolution #21-023 Approving Plans and Specifications and Authorizing Advertisements for Bids for 2021 Crack Seal Improvements, Improvement Project #21-06

4. Introduce Ordinance ~~#20-01~~ **#21-01** Amending City Code Sections 117-111 (R-1 Residential District) and 117-112 (R-2 Residential District) Clarifying Sub-districts based on Lot Size

5. Introduce Ordinance ~~#20-02~~ **#21-02** Amending City Code Section 117-148 Entitled Mississippi River Corridor Critical Area

6. Receive Request from Planning Commission to Reconsider Bowers Drive Connection

7. Consider Preliminary Approvals Related to Riverstone South; Case of Capstone Homes/Riverstone Development

1. Adopt Resolution #21-015 Approving Comprehensive Plan Amendment from Low Density Residential to Medium Density Residential for Detached Townhome Section
2. Adopt Ordinance #21-03 Approving Zoning Amendment from R-1 Residential (MUSA - 80) District to R-1 Residential (MUSA - 65) District, R-1 Residential (MUSA - 50) District and R-2 Residential (Detached Townhome) District

8. Approve Revised Cost Share Framework for Riverdale Drive Extension Improvement Project Related to Riverstone South; Case of Capstone Homes and Pearson Properties of Ramsey

8. Mayor/Council/Staff Input

9. Adjournment

CC Regular Session **5. 1.**

Meeting Date: 01/26/2021

By: JoAnn Shaw, Community Development

Information

Title

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Purpose/Background:

N/A

Recommendation:

N/A

Action:

N/A

Attachments

Planning 11 05 20

Planning 12 03 20

EDA 11 12 20

Park 11 12 20

Public Works 11 17 20

Form Review

Inbox	Reviewed By	Date
Kurt Ulrich	Kurt Ulrich	01/21/2021 03:27 PM
Form Started By: JoAnn Shaw		Started On: 01/14/2021 10:43 AM
Final Approval Date: 01/21/2021		

PLANNING COMMISSION
CITY OF RAMSEY
ANOKA COUNTY
STATE OF MINNESOTA

The Ramsey Planning Commission conducted a regular meeting on Thursday, November 5, 2020, at the Ramsey Municipal Center, 7550 Sunwood Drive NW, Ramsey, Minnesota.

Members Present:	Chairperson Randy Bauer Commissioner Bruce Anderson Commissioner Cheri Gengler Commissioner Eric Peters Commissioner Gary VanScoy Commissioner Matt Woestehoff
Members Absent:	Commissioner Torrey Johnson
Also Present:	Senior Planner Chloe McGuire Brigl Deputy City Administrator Tim Gladhill Planning Technician Brian McCann

1. CALL TO ORDER

Chairperson Bauer called the regular meeting to order at 7:00 p.m.

2. PLEDGE OF ALLEGIANCE

Chairperson Bauer led the group in the Pledge of Allegiance.

3. CITIZEN INPUT

None.

4. APPROVAL OF AGENDA

Motion by Commissioner Peters, seconded by Commissioner Anderson, to approve the agenda as presented.

A roll call vote was performed:

Commissioner Peters	aye
Commissioner Anderson	aye
Commissioner Woestehoff	aye
Commissioner Gengler	aye
Commissioner VanScoy	aye

Chairperson Bauer aye

Motion Carried.

5. CONSENT AGENDA

5.01: Approve the October 1, 2020 Planning Commission Meeting Minutes
5.02: Review Sketch Plan for Northfork Meadows, Case of Lennar (Project 20-135)

Motion by Commissioner Anderson, seconded by Commissioner Peters, to approve the consent agenda as presented.

A roll call vote was performed:

Commissioner Anderson aye
Commissioner Peters aye
Commissioner Gengler aye
Commissioner Woestehoff aye
Commissioner VanScoy aye
Chairperson Bauer aye

Motion Carried.

6. PUBLIC HEARINGS/COMMISSION BUSINESS

6.01: Public Hearing: Consider Resolution #20-243 Approving a Conditional Use Permit for Additional Outside Storage Space at 6820 143rd Avenue NW (Project No. 20-133); Case of Molin Concrete Products Company

Public Hearing

Chairperson Bauer called the public hearing to order at 7:05 p.m.

Presentation

Senior Planner McGuire Brigl presented the staff report stating that staff recommends approving Resolution #20-243 granting a Conditional Use Permit for outside storage on the subject property not to exceed 35 percent of the lot size.

Citizen Input

No comments made.

Motion by Commissioner Peters, seconded by Commissioner Anderson, to close the public hearing.

A roll call vote was performed:

Commissioner Peters	aye
Commissioner Anderson	aye
Commissioner Gengler	aye
Commissioner Woestehoff	aye
Commissioner VanScoy	aye
Chairperson Bauer	aye

Motion Carried.

Chairperson Bauer closed the public hearing closed at 7:07 p.m.

Commission Business

Motion by Commissioner VanScoy, seconded by Commissioner Gengler, to recommend that City Council adopt Resolution #20-243 approving a Conditional Use Permit for outside storage on the subject property not to exceed 35 percent of the lot size.

A roll call vote was performed:

Commissioner Anderson	aye
Commissioner Peters	aye
Commissioner Woestehoff	aye
Commissioner Gengler	aye
Commissioner VanScoy	aye
Chairperson Bauer	aye

Motion Carried.

6.02: Public Hearing: Consider Resolution #20-189 and Resolution #20-257 Approving Multiple Items Related to Outside Storage at 6300 Bunker Lake Boulevard NW (Project 20-124); Case of Lawn Monster

Public Hearing

Chairperson Bauer called the public hearing to order at 7:09 p.m.

Presentation

Planning Technician McCann presented the staff report stating that staff recommends approval of this case, contingent upon amendments as outlined in Resolution #20-189. The Planning Commission may add a termination date of five years from the date of approval for the Interim Use Permit, per past approvals and as allowed by City Code.

Senior Planner McGuire Brigl stated that this case arose through code enforcement.

Commissioner VanScoy stated that a blanket statement was made that there are other businesses that have structures within the 35-foot setback in that area and asked to what extent.

Planning Technician McCann stated that he does not have the exact number but displayed an aerial view that shows multiple businesses with encroachments.

Commissioner VanScoy stated that in the previous case there was a specific percentage of outdoor storage that would be allowed and asked if the current amount of outdoor storage could be validated as well as the percentage.

Senior Planner McGuire Brigl stated that in this case the outdoor storage would be based on the proposed site plan and provided details.

Commissioner VanScoy stated that it is his understanding that the ordinance allows a specific percentage of outdoor storage, 30 percent. He stated that this case is a legal non-conforming case and asked why the amount allowed would not be specified.

Senior Planner McGuire Brigl commented that this request is for a Conditional Use Permit to expand the legal non-conforming use, so it would be based on the site plan rather than a percentage. She stated that staff could complete the calculation and identified the area proposed for outdoor storage.

Commissioner VanScoy commented that it would appear that over half of the site would be allowed for outdoor storage.

Deputy City Administrator Gladhill noted that this site predated the establishment of the City and therefore the CUP tool would be an adequate tool to use in this case. He stated that it would be difficult to compare this site to the last case, as there needs to be acknowledgement of the lawful nonconforming protection.

Chairperson Bauer stated that the applicant indicated that they would like this to be permanent while the interim use would be for five years. He asked why the City is using the interim use tool if the desire would be for this to be permanent.

Senior Planner McGuire Brigl explained that there are allowed conditional uses within each zoning district and hoop buildings are not a listed conditional use. She stated that the only tool to allow this structure would be an interim use permit. She noted that two additional structures of this nature have been allowed within the City for salt storage through a similar Interim Use Permit process. She confirmed that when the five-year period expires, it would be reviewed and could be extended.

Councilmember Musgrove asked whether the Commission or staff looks at this type of structure differently for businesses and residential use. She noted that the Council does not desire these structures in residential areas, but the Public Works site uses this type of structure for salt. She asked if a condition could be added that the structure be placed on an appropriate surface.

Commissioner Anderson commented that this is a nonconforming site, noting that the whole site is dirt and without gravel or asphalt. He asked why the business would not want to build a permanent structure on the site. He stated that if the intent is to have retail operation there should be a permanent structure that is presentable.

Senior Planner McGuire Brigl commented that Lawn Monster is a tenant of the building and therefore investing in a permanent structure when you do not own the property would be a burden, especially in the current economical climate. She stated that for salt storage this type of structure would make more sense and follow industry standard.

Commissioner Anderson asked if the applicant has plans to update the site with class five gravel.

Senior Planner McGuire Brigl commented that staff has made that request and has worked with the property for multiple years related to code enforcement. She confirmed that could be added as a condition.

Commissioner Gengler asked for clarification on the covering.

Senior Planner McGuire Brigl stated that during the summer months there would only be the poles and cement base and the tarp/membrane structure would be used in the summer. She commented that staff would recommend the covering stay on (in good repair) year-round.

Commissioner VanScoy asked for clarification on other encroachments within the 35-foot setback.

Senior Planner McGuire Brigl reviewed some of the neighboring encroachments.

Deputy City Administrator Gladhill stated that something similar was done for another Highway 10 business, near Tungsten, a few years back noting that business is a similar use.

Councilmember Musgrove asked if the neighboring properties with encroachments are also legal nonconforming.

Senior Planner McGuire Brigl confirmed that those properties are also legal nonconforming as the buildings were constructed prior to the current setbacks being in place.

Commissioner VanScoy commented that if a variance is allowed for a situation in which the applicant created the problem without a permit that would place the City in a position where it could have to approve similar requests in the future. He stated that when he drove past the site, he did not see the metal hoops on the concrete structure.

Senior Planner McGuire Brigl commented that the hoops were up the previous week but there were some improvements being made and it could have been moved.

Commissioner VanScoy asked for details on the surface under the structure.

Planning Technician McCann replied that the surface is concrete.

Councilmember Musgrove asked if the concrete base was installed by the applicant or part of the legal nonconforming.

Senior Planner McGuire Brigl replied that those things were done within the last six months and are not part of the legal nonconforming.

Deputy City Administrator Gladhill stated that if there are more types of these requests, perhaps the variance is not the tool the City would like to use in the future. He stated that typically these small structures want to be closer to the back property line and could be considered for a Code adjustment in the future.

Commissioner Woestehoff asked if this would be considered a structure if it were just the concrete sides and did not have the metal hoops. He stated that he has worked at a landscaping company and it was not uncommon to have concrete walls between materials that could be loaded in a truck.

Senior Planner McGuire Brigl replied that if there was not a roof it would not be considered a structure. She stated that the preference of staff would still be to have it within the yellow area behind the building.

Commissioner Woestehoff asked for details on the traffic flow of the site and why the proposed location would make the most sense.

Senior Planner McGuire Brigl commented that unfortunately the applicant is not present but in past discussions the applicant stated that this was the best location. She commented that this is a large site, so most likely other sites could work.

Commissioner Woestehoff asked where the entrance to the site is.

Senior Planner McGuire Brigl identified the entrance to the site.

Commissioner Woestehoff stated that he does not feel that is an adequate reason to put it so close to the fence. He stated that he would be more likely to support the request if it were in a different location, as suggested by staff.

Citizen Input

No comments made.

Motion by Commissioner Peters, seconded by Commissioner Anderson, to close the public hearing.

A roll call vote was performed:

Commissioner Anderson aye

Commissioner Peters	aye
Commissioner Woestehoff	aye
Commissioner Gengler	aye
Commissioner VanScoy	aye
Chairperson Bauer	aye

Motion Carried.

Chairperson Bauer closed the public hearing closed at 7:38 p.m.

Commission Business

Commissioner VanScoy commented that he is not opposed to the use proposed but is concerned with the variance to place the structure within five feet of the property line.

Commissioner Woestehoff echoed those comments noting that this is not a situation where the plight is not caused by the landowner, noting that there are other locations where the structure could fit on the property.

Chairperson Bauer stated that the Commission could table this and request the applicant to be present to answer some of the questions raised tonight.

Senior Planner McGuire Brigl commented that while that is an option, the longer this is pushed out the more likely the blocks would be frozen into the ground and unable to be moved.

Motion by Commissioner VanScoy, seconded by Commissioner Peters, to recommend that City Council adopt Resolution #20-189 approving an Interim Use Permit (IUP) for use of a membrane accessory structure and Conditional Use Permit (CUP) for expansion of outdoor storage.

Further discussion

Deputy City Administrator Gladhill clarified that this action is simply for the IUP and CUP and does not yet address the variance.

A roll call vote was performed:

Commissioner Gengler	aye
Commissioner Woestehoff	aye
Commissioner Anderson	nay
Commissioner Peters	aye
Commissioner VanScoy	aye
Chairperson Bauer	aye

Motion Carried.

Motion by Commissioner VanScoy, seconded by Commissioner Anderson, to deny Resolution #20-257 approving a Variance to reduce the rear building setback of the membrane structure for Lawn Monster.

A roll call vote was performed:

Commissioner Peters	aye
Commissioner Anderson	aye
Commissioner Woestehoff	aye
Commissioner Gengler	aye
Commissioner VanScoy	aye
Chairperson Bauer	aye

Motion Carried.

6.03: Public Hearing: Review Conditional Use Permit Request for Fill within a Floodplain at 6349 168th Circle NW; Case of John and JoDell Seaman

Public Hearing

Senior Planner McGuire Brigl commented that 11 written comments in support were entered into the record and provided to the Commission prior to the meeting.

Chairperson Bauer called the public hearing to order at 7:44 p.m.

Presentation

Senior Planner McGuire Brigl presented the staff report and stated that due to the degree of policy/legislative discretion of this case, staff needs policy direction from the Commission and has forwarded this case in the event that the Commission is ready to make a contingent recommendation. The applicant is willing to extend the application period if more information is necessary. At the end of the day, staff felt it was important to discuss with the Commission due to the time it has taken to get to this point. Staff desired to ensure that the current direction to find a compromise solution is still appropriate before investing more staff resources into this project.

Commissioner Anderson asked if this floodplain is part of the 100-year floodplain and the chances of this area flooding.

Senior Planner McGuire Brigl confirmed that this area is part of the 100-year floodplain. She stated that a 100-year floodplain equates to a one percent chance of flooding during a year.

Commissioner Anderson stated that he would be more concerned on whether this would alert the flow of water. He asked if there have been comments received from the DNR.

Deputy City Administrator Gladhill stated that this is a backyard, and it would not impact a structure. He stated that the chances of flooding are minimal. He stated that there have been

numerous conversations with the DNR Floodplain Manager and the fact that this is before the Commission shows that there is a path to approval, if desired. He stated that the watershed was not consulted because the disturbance is under the one-acre threshold. He noted that the City, DNR and FEMA have been involved in the review of this request.

Commissioner Anderson asked if the necessary approvals were gained from the City for the retaining wall construction.

Senior Planner McGuire Brigl replied that there were no approvals for the retaining wall. She stated that a contractor did reach out last year and staff noted the necessary regulations and that a wall over four feet requires a permit. She stated that originally the wall was measured at four feet tall, but one layer of brick has since been removed to come under that height. She stated that the DNR has helped staff find a path to approval but does not provide recommendations. She explained that the DNR is available as a tool and resource but does not make a recommendation or approval.

Chairperson Bauer asked the options that would be available if this were approved and the calculations come back above zero percent rise.

Senior Planner McGuire Brigl replied that staff is hopefully that the results will show a 0.0 percent rise, but if rise is created the applicant could completed remediation of the rise elsewhere to mitigate that rise.

Chairperson Bauer stated that this intrudes on a portion of the conservation and trail easement and asked what would need to be reimbursed.

Senior Planner McGuire Brigl replied that the City on occasion vacates drainage and utility easements but does not typically vacate conservation easements. She estimated that the cost would be about $1,000 and staff would recommend that the homeowner pay that amount.

Commissioner VanScoy stated that staff indicated that the applicant did not obtain a building permit for the wall and indicated that a contractor contacted the City in advance. He asked if the applicant was aware that they were building a retaining wall in a conservation easement and floodplain and still proceeded.

Senior Planner McGuire Brigl suggested that the applicant answer that question.

Commissioner Anderson stated that perhaps neighboring property owners would want to construct retaining walls and asked if those property owners would also need to obtain CUPs.

Senior Planner McGuire Brigl confirmed that a CUP would be required along with vacation of the conservation and trail easement. She stated that the easement varies from site to site and some property owners have more usable backyard space outside of the easement.

Councilmember Musgrove referenced the letter sent to the residents and asked if the Commission has a copy of that letter. She felt that the information in the letter could be helpful to clarify some

of the questions. She asked if there are not other violations to the floodplain because of the variations to the floodplain.

Senior Planner McGuire Brigl replied that there are a lot of structures close to the easement and along the trail. She noted that staff completed a high-level analysis, and they encroach, most are one to two feet into the easement, and there were no unpermitted structures. She stated that some things, such as swing sets will need to be moved and the property owners have been alerted to that. She stated that the larger structures did not appear to encroach.

Councilmember Musgrove asked if this is land that the property owner owns and pays taxes on but cannot do anything on because of the easement.

Senior Planner McGuire Brigl confirmed that to be true. She commented that it is very common in more rural areas. She stated that almost all properties have drainage and utility easements around the property lines. She noted that properties along other features such as the river, a bluff, or wetland have similar restrictions.

Councilmember Musgrove commented that the difference she would see in this case is that the City received funds for the easement.

Councilmember Woestehoff asked for more information on a holistic approach for the neighborhood as he felt that this situation could come forward again. He commented that there is a steep drop and there are not enough trees on the hillside to prevent the constant runoff. He asked if the easement could match the floodplain or trail itself.

Senior Planner McGuire Brigl stated that is something staff would like to bring to the City Council as it seems more logical for the conservation boundary to follow two or three feet off the trail. She noted that would require repayment of the funds. She stated that when people purchase a home in this area the easement is on the title documents, but it has been said that builders and realtors are not alerting buyers to that.

Commissioner VanScoy asked whom the City would pay back for a change to the easement.

Deputy City Administrator Gladhill stated that there is a funding pot allocated by the State Legislature which provides funding for this type of activity. He commented that the easement was acquired for about $75,000 in 2005 but recognized that would be a higher value today. He stated that there is a process outlined for vacating that type of easement that would come along with a valuation.

Commissioner VanScoy asked who was paid $75,000 for the easement.

Deputy City Administrator Gladhill stated that the City secured the easement rights from the property owner at the time, Oakwood Land Development. He stated that the easement allowed the City to have the trail and obtain the easement which helps to protect the corridor.

Commissioner VanScoy stated that it is his understanding that taxes are based on the value of the home and property and not based on the size of the lot.

Deputy City Administrator Gladhill confirmed that to be generally correct. He stated that encumbrances on property typically have some impact on land values.

Commissioner VanScoy commented that he has a one-acre lot but about 75 percent of the lot is encumbered by wetland and buffer area, but the value of his home is still comparable to the other lots/homes in his development.

Citizen Input

JoDell Seaman, applicant, stated that Capstone told them that they could do what they wanted up to the middle of the brook and they experience continuous washouts on their property. She stated that she has sent multiple emails to City staff about the issue and their communication with Capstone related to that washout and trees falling onto their property and the trail. She stated that the email from staff to the contractor stated that they could go about 25 to 30 feet from their home and would need to work around the easement. She stated that the builder told them that he came to the City and identified the location they could use. She stated that they have cleaned up trees that have fallen, unaware of the easement. She stated that they were also unaware that a permit would be needed as they were under four feet. She stated that in the spots on the wall that reached four feet, they removed the top layer of brick. She stated that there are trees removed, retaining walls and fire pits that are within the easement throughout that area. She stated that they were not attempting to create additional land use in their backyard but are trying to correct the problems they experience from washout and trees falling. She stated that they want to plant additional trees to replace those that have fallen. She stated that she was not made aware of the different aspects of their yard until this process. She commented that the easement on their property comes up to ten feet from their home. She stated that if she were aware that this issue was the responsibility of the City, she would have placed the burden on the City. She commented that they feel that they were setup for failure from the beginning with the grading of the site.

Councilmember Musgrove asked the number of trees that have fallen in the applicant's backyard. She noted that it also appears that there are a number of dead trees in the neighboring lot.

Mr. Seaman replied that three or four trees have fallen in their yard and they removed one additional tree because of unsafe conditions.

Mrs. Seaman stated that the neighboring property owner pleaded with Capstone about the dead trees and she was told by both Capstone and the City that the trees could not be removed. She commented that one of those dead trees actually hit the neighbor's home and caused damage. She stated that following that incident the neighbor was allowed to remove the dead trees in that area at their expense. She stated that she has now found out that trees removed could result in a fine to the property owner but explained that those trees were removed because they were hazards and caused unsafe conditions.

Justin Gross, 7344 168th Circle Drive NW, commented that he supports the retaining wall. He commented that it looks nice. He echoed the comment that there are a lot of dead trees that need to be removed. He noted that snow removal could be pushed to the other side of the trail. He stated that he supports this request.

Cindy Schulwalter, 6967 170th Trail, stated that she purchased a lot and found that it would not support a walkout rambler therefore they relinquished that lot to the builder and purchased a walkout rambler that was already constructed. She stated that she was never told that there were restrictions on the property and had been told that they could do whatever they wanted up to the middle of the brook. She stated that she was told it was her land to do what she wanted. She stated that when the neighborhood was first realized there was an association but was glad to find out that the association is no longer in existence. She stated that although the trail is nice, it also causes nuisance. She stated that she has now found out that the easement area is not their land to do what they want with but if someone is injured on their property, they would be responsible. She stated that there is also an old dump in that area which is hazardous. She stated that if the City wants the property of the easement, it should complete the maintenance as large tree limbs often fall. She stated that trees were damaged by the creation of that trail and continue to die. She stated that it has been frustrating to find out that there are encumbrances on the property, along with the problems they have with erosion. She stated that it was written into their purchase agreement that if there were issues with erosion the builder would need to construct retaining walls in the back and side yards, but the builder did not fulfill that agreement. She stated that they have also found out that after the builder received the certificate of occupancy, additional fill was brought into the site. She stated that when they brought the issue to the attention of City staff, about the grade that exceeds 20 percent, staff came to the property and she was told to "go inside and let the men talk about it". She stated that she is upset about this issue. She stated that she has one retaining wall even though they need a second retaining wall, which the builder refuses to complete, and she has now been alerted by the City would not be allowed. She asked if the reference to altering the line of the easement would align with the floodplain. She noted that a majority of her backyard is floodplain.

Senior Planner McGuire Brigl explained that the easement would not be extended and would only be reduced if that were to be the direction of the Council. She stated that in spaces where more easement exists further than the trail, it could perhaps be adjusted to within two or three feet of the trail.

Ms. Schulwalter stated that she has backyard on both sides of the trail.

Senior Planner McGuire Brigl stated that if an adjustment is made it would only be made to the backyard side of the trail.

Deputy City Administrator Gladhill stated that the conservation and trail easement is shown on all property titles and the City is considering a compromise to pull back the easement and follow the southern boundary of the trail to allow property owners to maximize the usable backyard space. He stated that the north side of the trail contains considerable floodplain and wetlands therefore there would still be restrictions on use in that area. He stated that if the entire conservation and

trail easement were vacated it would have a potential cost of $100,000 and there would still be other restrictions from the wetlands and floodplain.

Ms. Schulwalter asked the point of the easement if the land is already protected.

Deputy City Administrator Gladhill replied that it provides an extra layer of protection for the scenic area in terms of vegetative management and of the tree canopy cover.

Ms. Schulwalter commented that if the City wants that easement, it needs to manage that area. She stated that there are dying trees everywhere in the easement with large branches that fall onto the trail daily.

Deputy City Administrator Gladhill stated that staff can talk about a forestry management plan. He stated that if there is a safety hazard, that can be discussed as there are opportunities for vegetative management. He stated that is part of the broader neighborhood discussion that will be held and would like to focus the discussion tonight on the question of floodplain fill.

Ms. Schulwalter stated that they have been told by City workers that they appreciate the residents taking care of the lawn areas as it results in less work for them. She stated that after she moved in, she submitted a complaint via email as tree trimming was completed and the branches were left in her yard.

Josh Schulwalter, 7341 168th Circle NW, commented that he experiences dead tree fall in their yard and have additional dead trees. He stated that they also have washout in their yard because of the grading. He stated that they installed a fence on their property to prevent cyclists from going into their yard from the trail. He stated that Capstone told them that the path could not be obstructed but they were not advised of the floodplain or easement. He stated that the path is better because of the retaining wall and the people are not attempting to impede on the path but make it nicer for the community.

Tim Tyler, 7323 168th Circle, asked if the City does a survey when they plan to build a community.

Chairperson Bauer replied that the developer is responsible for preparing those plans and marking those restrictions.

Mr. Tyler commented that it was then the responsibility of Capstone to alert potential buyers of the restrictions. He asked for clarification on the ownership of the land within the easement.

Deputy City Administrator Gladhill replied that the City holds an easement on top of private property and the easement gives the City certain rights. He stated that Capstone was required to do additional surveying and submit the information to FEMA, which is reflected on the certificate of survey.

Senior Planner McGuire Brigl stated that the City keeps records of surveys but does not complete the surveying itself.

Ben Pearson, 7371 168th Circle, thanked the Commission for taking the time to consider this request. He stated that he used to do professional landscaping and built retaining walls. He stated that the wall built by the applicant is a fine example of a professionally built wall and is a great addition to the neighborhood. He stated that it is his understanding that the only reason this is before the Commission is a result of a complaint. He noted that he is unsure that is the case and instead feels that this is an instance of the City wanting to play "big brother" and tell people what they can do on their own property. He commented that he does not believe the statement that the property value takes into account the encumbrance. He stated that his lot is smaller but is still valued the same as larger lots without the easement, while those properties owners get a lot more use of their lot. He stated that there are three massive oak trees on his property that have oak wilt and will die and impact other trees on the property. He stated that the property owner has a right to remove trees within the easement if there is an issue with safety. He stated that he has already removed two trees on his property in the easement because they were dead, and it was a hazard. He stated that he never would have purchased this property if he knew that this would be the case.

Chairperson Bauer commented that it is the responsibility of the City to enforce code violations. He stated that he does not have the background information about a complaint and noted that typically the City does not proactively look for violations.

Mr. Pearson commented that this is a small retaining wall that will not alter the floodplain.

Kendall Pane, 7336 168th Circle NW, stated that she wrote a letter of support. She echoed the comments of Mr. Pearson that a mountain has been made out of a molehill. She felt that the property owners pay taxes based on their lot size. She stated that even if a portion of the property is wetland, it still adds value to the property even if it is unusable. She stated that the applicant is paying taxes on the property and the wall does not encroach on the path. She supported the idea of the City adjusting the easement to match the path as there is a lot of confusion as to property rights. She stated that the wall has been built and did not see a benefit in making the property owners take the wall down. She asked the City to find a way to move forward that does not require the applicants to remove the wall.

Ms. Schulwalter stated that if the property owners are not going to be able to do anything with their land, she would like the money for that land and the City own it outright rather than have that easement.

Motion by Commissioner Anderson, seconded by Commissioner Peters, to close the public hearing.

A roll call vote was performed:

Commissioner Woestehoff	aye
Commissioner Anderson	aye
Commissioner Peters	aye
Commissioner VanScoy	aye
Commissioner Gengler	aye
Chairperson Bauer	aye

Motion Carried.

Chairperson Bauer closed the public hearing closed at 8:58 p.m.

Commission Business

Commissioner VanScoy stated that the retaining wall is close to the trail and asked if there would be an impact to snow removal.

Deputy City Administrator Gladhill stated that the placement is not ideal but manageable. He stated that there would be more concern if this was the situation along the entire corridor as they prefer to see things at least two feet from the trail.

Motion by Commissioner Anderson, seconded by Commissioner Peters, to recommend that City Council adopt Resolution #20-256 approving the Conditional Use Permit for floodplain fill at 7349 168th Circle NW.

A roll call vote was performed:

Commissioner Woestehoff	aye
Commissioner Gengler	aye
Commissioner Anderson	aye
Commissioner Peters	aye
Commissioner VanScoy	aye
Chairperson Bauer	aye

Motion Carried.

Commissioner VanScoy stated that there were a lot of concerns and issues raised tonight by residents and asked how staff intends to address those.

Deputy City Administrator Gladhill stated that additional information has been provided to homeowners in attempt to be more proactive, similar to what they do for river corridor property owners. He stated that they can continue to respond to individual requests as they come forward. He stated that staff is also going to seek direction from the Council in order to make the regulations easier to interpret. He stated that staff will also gain a better understanding of the financial impact to adjusting the easement and will bring that forward for Council consideration as well.

7. COMMISSION BUSINESS

7.01: Review Concept Plan for Rivenwick 4th Addition; Case of Lennar for Rivenwick 4th Concept Plan (Project 20-134)

Presentation

Senior Planner McGuire Brigl presented the Staff Report stating that staff recommends retaining the existing PUD as is. This guides land along Highway 10 for retail/commercial and leaves viable commercial pads with visibility on Highway 10.

Commission Business

Chairperson Bauer stated that he would follow the guidance of the EDA, noting that most retailers want Highway 10 visibility. He stated that he would prefer to leave the area as retail.

Commissioner Peters agreed that would be too much residential next to the highway and the retail portion should remain.

Commissioner VanScoy concurred.

Commissioner Anderson stated that when this parcel has come up in the past, the Commission worked hard to determine the land use and found that commercial use along the highway was the best use of the space and he still agrees with that.

Commissioner Woestehoff agreed, stating that there has already been a compromise for this parcel to meet the current PUD and would not want to amend it further.

Commissioner Gengler agreed.

7.02: Discussion Item: Potential Interim Use Permit of Storage Containers for Ve-Ve Inc. (Project No. 20-136); Case of John Vevea on behalf of Ve-Ve Inc.

Presentation

Planning Technician McCann presented the Staff Report and asked the Commission to provide the applicant with any feedback, recommendations, and/or concerns related to the use of two storage containers for Ve-Ve Inc.

Commission Business

Chairperson Bauer commented that currently an accessory building is supposed to match the color/materials of the primary structure. He stated that the storage container could be painted to match the building, which would at least be closer to the Code.

Senior Planner McGuire Brigl commented that even if painted to match, the containers would not meet City Code provisions. She stated that if there are two of these structures located on a commercial property in Anoka, noting that they blend in with the building when driving by.

Commissioner VanScoy commented that he could see considering this on a temporary basis as there is a need to have additional space while the business grows. He commented that five years seems like a long time and does not seem temporary. He stated that he would not support this

permanently. He stated that he could support two years. He stated that he would not be in favor of amending the Code to allow these types of structures.

Commissioner Anderson echoed the comments of Commissioner VanScoy. He stated that he does not like using storage containers as they look good for a short time and then degrade and do not fit the character of Ramsey.

Commissioner Peters commented that the containers are metal and will rust out over time.

Commissioner Woestehoff commented that he would be okay with it on a temporary basis in this industrial district.

Senior Planner McGuire Brigl commented that the applicant was looking to use this as a permanent solution and therefore if an IUP is approved, the applicant would most likely come back to request extensions.

Tony Frolick, 6859 Lakewood Drive, stated that he represents Ve-Ve's for the storage units. He stated that they are experiencing heavy growth rather than steady growth. He stated that they have priced out making a permanent structure, but the expense would be a risk without knowing where the growth is going in the future. He stated that this would be a temporary solution, with a minimum of five years, to allow the company to further review the growth trend. He stated that they would keep the structures painted and maintained. He hoped that the City would consider the request.

Chairperson Bauer stated that it appears the applicant is asking if there would be support to change the Code and it is obvious that the Commission would not be in favor of that. He hoped that would provide the potential applicant with direction and save them the expense of going through the formal application process.

Councilmember Musgrove asked how this would impact of effect the business and the value that these containers would be, if allowed on a temporary basis.

Mr. Frolick explained that the applicant has many boxes on pallets that are stacked within the shop and it takes additional time to find the appropriate box. He stated that the container would allow better access to the boxes and materials and would provide additional temporary working area. He stated that if the growth continues the business could consider adding a permanent addition to the building. He stated that this would assist in the operations and production of the business.

Councilmember Musgrove asked what other communities allow.

Mr. Frolick commented on the allowances that he has seen in other communities. He stated that these are great temporary structures for different types of things that provide assistance to businesses.

Senior Planner McGuire Brigl commented that she has not reviewed neighboring community regulations but noted that Ramsey is unique in its use of Interim Use Permits to provide more

flexibility. She stated that more rural communities outside the metro tend to allow this type of structure.

Commissioner VanScoy stated that he is not interested in changing the ordinance to allow this but would support an IUP in certain circumstances. He believed that there should be additional control including the length of time allowed.

Commissioner Gengler stated that using an IUP allows the City to add stipulations and clarifications based on the request. She commented that the container could have its time and place and should be a short-term solution. She acknowledged that a business may need expansion space without being able to make a permanent expansion to their building and therefore would support this as an IUP.

Commissioner VanScoy asked the process if an applicant were to come back after expiration of an IUP.

Senior Planner McGuire Brigl stated that the applicant would go through the process again if they wanted to obtain another IUP.

Commissioner Woestehoff stated that he agrees with what has been said but would be comfortable with a term of three to five years for this type of IUP application.

Chairperson Bauer commented that it appears there is enough support for the applicant to submit an IUP application.

8. COMMISSION / STAFF INPUT

Chairperson Bauer congratulated Councilmember Musgrove on her reappointment to Councilmember Elect Woestehoff for his projected appointment to the Council. He encouraged them both to continue in a Planning Commission Liaison position because of their experience with the Commission.

Senior Planner McGuire Brigl commented that Planning Consultant Maass accepted another position and will no longer be working with Ramsey through WSB.

9. ADJOURNMENT

Motion by Commissioner Peters, seconded by Commissioner Anderson, to adjourn the meeting.

A roll call vote was performed:

Commissioner Anderson	aye
Commissioner Peters	aye
Commissioner Gengler	aye
Commissioner Woestehoff	aye
Commissioner VanScoy	aye

Chairperson Bauer aye

Motion Carried.

The regular meeting of the Planning Commission adjourned at 9:36 p.m.

Respectfully submitted,

_____
Chloe McGuire Brigl
Senior Planner

ATTEST:

_____
JoAnn Shaw
Planning Division Secretary

Drafted by Amanda Staple
TimeSaver Off Site Secretarial, Inc.

PLANNING COMMISSION
CITY OF RAMSEY
ANOKA COUNTY
STATE OF MINNESOTA

The Ramsey Planning Commission conducted a regular meeting on Thursday, December 3, 2020, at the Ramsey Municipal Center, 7550 Sunwood Drive NW, Ramsey, Minnesota.

Members Present:	Chairperson Randy Bauer Commissioner Bruce Anderson Commissioner Cheri Gengler Commissioner Eric Peters Commissioner Gary VanScoy Commissioner Matt Woestehoff
Members Absent:	Commissioner Torrey Johnson
Also Present:	Senior Planner Chloe McGuire Brigl Deputy City Administrator Tim Gladhill Planning Technician Brian McCann City Council Liaison Debra Musgrove

1. CALL TO ORDER

Chairperson Bauer called the regular meeting to order at 7:00 p.m.

2. PLEDGE OF ALLEGIANCE

Chairperson Bauer led the group in the Pledge of Allegiance.

3. CITIZEN INPUT

None.

4. APPROVAL OF AGENDA

Motion by Commissioner Peters, seconded by Commissioner Woestehoff, to approve the agenda as presented.

A roll call vote was performed:

Commissioner Woestehoff	aye
Commissioner Gengler	aye
Commissioner Peters	aye
Commissioner Anderson	aye

Commissioner VanScoy aye
Chairperson Bauer aye

Motion Carried.

5. CONSENT AGENDA

5.01: Approve the November 5, 2020 Planning Commission Meeting Minutes:

Motion by Commissioner VanScoy, seconded by Commissioner Peters, to approve the consent agenda as presented.

A roll call vote was performed:

Commissioner Peters aye
Commissioner Gengler aye
Commissioner Woestehoff aye
Commissioner Anderson aye
Commissioner VanScoy aye
Chairperson Bauer aye

Motion Carried.

6. PUBLIC HEARINGS/COMMISSION BUSINESS

6.01: Public Hearing: Consider Resolution #20-283 Approving a Home Occupation Permit for Twin Cities Generator at 17040 Baugh St NW (Project No. 20-132); Case of Twin Cities Generator

Public Hearing

Chairperson Bauer called the public hearing to order at 7:03 p.m.

Presentation

Senior Planner McGuire Brigl presented the staff report stating that staff recommends approving Resolution #20-283 granting a Home Occupation Permit on the subject property. She confirmed that the proposed garage would meet all requirements of City Code.

Citizen Input

No comments made.

Motion by Commissioner VanScoy, seconded by Commissioner Woestehoff, to close the public hearing.

A roll call vote was performed:

Commissioner Anderson	aye
Commissioner Peters	aye
Commissioner Gengler	aye
Commissioner Woestehoff	aye
Commissioner VanScoy	aye
Chairperson Bauer	aye

Motion Carried.

Chairperson Bauer closed the public hearing closed at 7:08 p.m.

Commission Business

Motion by Commissioner Anderson, seconded by Commissioner Peters, to recommend that City Council adopt Resolution #20-283 approving a Home Occupation Permit on the subject property.

A roll call vote was performed:

Commissioner Gengler	aye
Commissioner Woestehoff	aye
Commissioner Peters	aye
Commissioner Anderson	aye
Commissioner VanScoy	aye
Chairperson Bauer	aye

Motion Carried.

6.02: Public Hearing: Consider Resolution #20-281 Approving an Interim Use Permit for Storage Containers for Ve-Ve Inc. (Project No. 20-136); Case of John Vevea on behalf of Ve-Ve Inc.

Public Hearing

Chairperson Bauer called the public hearing to order at 7:10 p.m.

Presentation

Senior Planner McGuire Brigl presented the staff report stating that staff recommends approving Resolution #20-281 for an Interim Use Permit for two storage containers on the subject property.

Commissioner VanScoy asked if the five-year period is typical for an interim use permit.

Senior Planner McGuire Brigl confirmed that it a typical timeframe that the City and other municipalities use. She noted that an interim use permit can also be tied to a point in time, such as reconstruction of a road.

Commissioner VanScoy stated that his only concern would be the length of five years.

Commissioner Peters asked if there would be hazardous materials stored in the structures.

Senior Planner McGuire Brigl commented that she did not believe hazardous materials would be stored in the structures but noted that the applicant can provide additional details.

Citizen Input

John Vevea, applicant, confirmed that there will not be hazardous materials stored in the structures and provided details on what would be stored in the cold storage, such as boxes and pallets. He stated that these are not normal storage containers that you see on railroad tracks with an end door. He stated that these have double side doors, which allow all materials to be accessed. He stated that these would be an investment of $12,000 and therefore he would like to have a period of five years. He stated that his business is growing, and this would allow additional storage space and give them time to adjust to the growth.

Chairperson Bauer asked for details on the exterior of the container.

Mr. Vevea replied that it does have a corrugated look with side doors. Staff displayed an example photograph. He stated that his dad started this business in 1973 and they have continued to grow in Ramsey. He hoped that he could continue that growing relationship.

Commissioner Gengler asked if the applicant would keep the trees that provide screening and if those trees would be removed some other screening would be added to screen the containers from the road.

Mr. Vevea agreed that the trees help to screen the containers and confirmed that he does not plan to remove any trees. He stated that the structures will come in the tan color and he could paint it if desired. He stated that these containers are meant to serve for a number of years and therefore will hold up during the five-year period.

Commissioner Anderson asked for additional information on the location of the containers.

Senior Planner McGuire Brigl highlighted the proposed location, which would be behind the trees on the subject property.

Mr. Vevea provided additional information on the different tree screening.

Senior Planner McGuire Brigl confirmed that this area only has business uses and does not receive regular residential traffic.

Commissioner VanScoy asked the plans of the applicant in five years.

Mr. Vevea stated that ideally, he will be expanding into a new space, but it is uncertain to say that would be for sure with all the unknowns.

Councilmember Musgrove thanked the applicant for coming forward with this proposal, noting that the area looks nice from the aerial photograph. She stated that this is a business district, and this would be a great way to help a business make the jump to possibly continue to expand in the future. She commented that the proposed location is both functional and screened.

Motion by Commissioner Woestehoff, seconded by Commissioner Gengler, to close the public hearing.

A roll call vote was performed:

Commissioner Anderson	aye
Commissioner Woestehoff	aye
Commissioner Peters	aye
Commissioner Gengler	aye
Commissioner VanScoy	aye
Chairperson Bauer	aye

Motion Carried.

Chairperson Bauer closed the public hearing closed at 7:27 p.m.

Commission Business

Motion by Commissioner Gengler, seconded by Commissioner VanScoy, to recommend that City Council adopt Resolution #20-281 Approving an Interim Use Permit for two storage containers on the subject property, contingent upon screening remaining in place.

A roll call vote was performed:

Commissioner Gengler	aye
Commissioner Peters	aye
Commissioner Anderson	aye
Commissioner Woestehoff	aye
Commissioner VanScoy	aye
Chairperson Bauer	aye

Motion Carried.

6.03: Public Hearing: Consider Resolution #20-282 Approving an Interim Use Permit for Storage Containers and Gravel Outdoor Storage Area at 8049 146th Ave NW (Project No. 20-137); Case of JBR Ramsey, LLC on behalf of Richard Lee

Public Hearing

Chairperson Bauer called the public hearing to order at 7:28 p.m.

Presentation

Senior Planner McGuire Brigl presented the staff report stating that staff recommends approving Resolution #20-282 for an Interim Use Permit for parking on gravel surfacing and the use of storage containers currently on the subject property.

Commissioner Anderson asked for details on the containers.

Richard Lee, applicant, replied that they are shipping containers similar to the last case. He stated that these containers would be front loaded. He stated that the current tenant uses three containers for salt storage and the other containers are used for storage of seasonal equipment.

Commissioner VanScoy stated that there are six containers on the site and asked if the intent would be to keep the container between the building and Ferret Street.

Mr. Lee believed that the tenant would keep the container in that location. He stated that the property is fenced with gates and that container is easily accessible as it sits across from the gate.

Commissioner VanScoy asked for details on the site setbacks.

Senior Planner McGuire Brigl replied that these are unique uses and because the entrance of the building is to the south, it is not that much of a concern with the container on the front of the building. She stated that the containers are easily moved, and that container could be moved to another location.

Commissioner VanScoy stated that he would anticipate that the City would continue to receive these types of requests and therefore he would be concerned with continuing to approve interim use permits, rather than modifying the ordinance. He stated in this case the container is not screened from the road.

Commissioner Woestehoff asked when the container usage began.

Mr. Lee replied that the previous owner constructed the building and used the property from 1986 to 2018. He stated that when he purchased the property in 2018, some of the containers were already onsite.

Commissioner Woestehoff commented that these containers do not seem to be temporary and seem to be long-term storage in a temporary container and based off the lifespan of these types of containers, he would hesitant. He also recognized that the property is listed for redevelopment and it would be easier to remove these containers than to remove a building.

Senior Planner McGuire Brigl confirmed that this area is identified for retail development and at some point, this type of use would end on the site.

Mr. Lee stated that he purchased the property for future development. He stated that they found it easy to find a tenant to use the site until development reaches this site. He agreed that the future use of this site would be retail but stated that it would be hard to anticipate when that will occur. He stated that this action would help them to maintain the site until the development reaches this site.

Commissioner Woestehoff asked if there is screening between this site and the adjacent retail development.

Mr. Lee confirmed that the retail development planted a line of trees to provide screening.

Commissioner Anderson asked and received confirmation that the time period for this interim use permit would be five years. He asked if the containers could be moved back to be behind the building and look better on the site rather than the haphazard placement that currently exists.

Mr. Lee confirmed that could be considered.

Senior Planner McGuire Brigl displayed an aerial photograph of the site, identifying the location of the containers and the area Commission Anderson would desire.

Councilmember Gengler asked if there is a specific area that would hope to be covered with the class five gravel.

Senior Planner McGuire Brigl identified the area where gravel would be placed.

Councilmember Musgrove asked if the location of the containers proposed by Commissioner Anderson on the side of the building would be functional for the use.

Mr. Lee commented that it would be hard for him to answer that question as he is not the end user and is the property owner. He did not believe there would be an issue as the containers are front loaded.

Commissioner VanScoy commented that two of the containers abut the eastern fence and asked if there would be a setback or screening added.

Mr. Lee replied that the fence is setback 10 feet from the property line, and they did not have any intent on adding screening as the neighboring property owner planted trees.

Commissioner VanScoy commented that when he visited the property, he did not notice screening in the area where the containers back to the fence. He commented that the trees on the neighboring property are on the north end, whereas he is speaking about the containers on the south end of the property.

Senior Planner McGuire Brigl displayed the landscaping plan for Armstrong Retail, which is the adjacent development and then identified the location of the containers in relation.

Citizen Input

No additional comments.

Motion by Commissioner Woestehoff, seconded by Commissioner Peters, to close the public hearing.

A roll call vote was performed:

Commissioner Peters	aye
Commissioner Gengler	aye
Commissioner Anderson	aye
Commissioner Woestehoff	aye
Commissioner VanScoy	aye
Chairperson Bauer	aye

Motion Carried.

Chairperson Bauer closed the public hearing closed at 7:49 p.m.

Chairperson Bauer stated that he received a comment Commissioner Johnson., who was not able to attend the meeting. Commissioner Johnson does not support the requests related to shipping containers as they do not meet the architectural requirements of the City. He expressed concern that if this case and the previous case were approved, the City will continue to see these types of requests.

Commission Business

Commissioner VanScoy stated that he would have difficulty supporting this request without screening and in the current locations related to setback. He believed that the City should review these uses on a more long-term consideration.

Commissioner Gengler commented that she would rather see the container on the far side remain on that side as it would be less visible from the retail center.

Councilmember Musgrove commented that this is a unique situation as this is currently an industrial area, but the use will potentially change in the coming years. She did not want to be too onerous on the business to plant trees that may be removed when the site redevelops. She stated that she would support the use of the containers rather than having the items stored outdoors.

Commissioner Anderson commented that this property can be seen from the entrance ramp onto Highway 10. He stated that these containers are not aesthetically pleasing. He commented that he would like to see the business able to function but would like to see the site cleaned up. He

stated that he does not like allowing these containers in this area and would like to see the containers perhaps fenced.

Commissioner Woestehoff stated that he also has concerns as this is an interested location and zoning compliance. He stated that he also has concerns with salt being placed into metal containers as the containers could rust more quickly. He stated that the containers are meant to store things but in the aerial photographs you can see materials stored outside of the containers. He estimated that another two containers would be needed in order to contain all the equipment.

Commissioner Anderson asked if the Commission should table this request and the applicant could come back with a better site layout and how the containers could be arranged to be more aesthetic. He stated that perhaps screening be placed around the containers as well.

Senior Planner McGuire Brigl commented that there is a not a specific timeline as the containers are already on site. She stated that having gravel placed is a priority of staff as the site is dirt and there is a concern that it would snow before that could happen. She stated that if the Commission would like to see a revised plan making the containers less visible from Armstrong Retail, staff can work on that administratively and bring that forward to the Council once they believe it is ready.

Motion by Commissioner Anderson, seconded by Commissioner VanScoy, to table this review to allow staff to work with the applicant to present a more favorable layout for the storage containers that may include screening.

A roll call vote was performed:

Commissioner Peters	aye
Commissioner Woestehoff	aye
Commissioner Anderson	aye
Commissioner Gengler	aye
Commissioner VanScoy	aye
Chairperson Bauer	aye

Motion Carried.

7. COMMISSION BUSINESS

7.01: Review Concept Plan for Rivenwick 4th Addition; Case of Lennar for Rivenwick 4th Concept Plan (Project 20-134)

Presentation

Senior Planner McGuire Brigl presented the Staff Report stating that staff is open to this compromise request if the land uses within the PUD contain the same amount of commercial a previously directed. Public Works and Public Safety had a few concerns about the public road

ending at a private road, and do prefer the layout with the previous proposal, but can make this layout work with the proper signage.

Commission Business

Commissioner VanScoy asked if the pond would be that large as it takes up a portion of the site that could be used for commercial development.

Senior Planner McGuire Brigl commented that would be close to the estimated size, noting that Lennar does not tend to oversize its ponds.

Commissioner Woestehoff asked if the EDA provided input on this proposal.

Senior Planner McGuire Brigl noted that this has not gone to the EDA but the economic development department provided input, sharing similar concerns to the last proposal but agreed that this could work and they would like the retail along Highway 10.

Councilmember Musgrove asked if the pond is proposed aesthetically or to meet requirements of the City.

Senior Planner McGuire Brigl replied that it is a requirement of the City.

Commissioner Anderson commented that he would like all of the commercial property to face Highway 10. He stated that the pond could be moved to the back corner, as that location is flexible. He stated that he likes the previous proposal layout rather than this layout.

Chairperson Bauer agreed that he preferred the last proposal where the retail faced Highway 10.

Commissioner VanScoy commented that accommodations have already been made for this site and does not want to see more changes and would not support moving the pond onto the commercial area.

Senior Planner McGuire Brigl stated that the previous proposal did not include the pond and a pond would be necessary for stormwater management. She stated that one of the biggest changes was the road layout and where parking should occur.

Chairperson Bauer asked if there would be one pond for both the residential and commercial uses or whether each use would have its own pond.

Senior Planner McGuire Brigl commented that there would most likely be ponding for both uses, as they would most likely develop at separate times.

Chairperson Bauer stated that he would prefer the retail to face Highway 10.

Commissioner Woestehoff echoed the comments of the Commission thus far. He stated that he is unsure of the road going into a T. He stated that he would prefer the townhomes removed as that could provide space for the ponding and free up additional commercial space.

Senior Planner McGuire Brigl asked if the concern was that the townhomes would abut the commercial use or with the road.

Commissioner Woestehoff stated that it is the road issue and noted that moving the pond would allow additional space for the commercial use.

Commissioner Gengler commented that she preferred the previous layout as well and had concern with residential abutting commercial use and the proposed road in this configuration.

Chairperson Bauer reviewed the consensus of the Commission that the commercial portion of the property should not be reduced further than what has already been agreed to. The Commission also prefers a road between the commercial and residential uses rather than allowing those uses to abut each other as shown in this proposal.

7.02: Review Sketch Plan for Bacon Property; Case of Bill Boyum

Presentation

Senior Planner McGuire Brigl presented the Staff Report asked the Commission to provide feedback on which concept plan to move forward with and develop a formal sketch plan application.

Commission Business

Chairperson Bauer stated that the applicant's narrative includes two cul-de-sacs, noting that one lies within Nowthen. He recognized that the comments from public safety shows that they prefer the loop but asked if a larger cul-de-sac would accomplish the same things.

Senior Planner McGuire Brigl stated that she could bring that idea forward to public safety for review.

Chairperson Bauer stated that Commissioner Johnson stated that he preferred the 19-lot layout.

Commissioner VanScoy referenced the option which would connect to 178th and asked for additional details.

Senior Planner McGuire Brigl commented that connection would be challenging as the road would go through the park area that is mostly wetlands.

Commissioner VanScoy commented that several of the lots appear to be encumbered with floodplain and asked how the developer would intend to handle that.

Senior Planner McGuire Brigl stated that the floodplain circles the properties and there is upland area. She commented that some fill is allowed in the floodplain with proper measures and mitigation. She stated that the lots could accommodate the area needed for a house pad and well/septic and most likely only the driveways would be within floodplain.

Councilmember Musgrove referenced the nine-lot layout and easements and asked for additional input on whether those would be for roads.

Senior Planner McGuire Brigl noted that these are easements that already exist for utilities and would not be used for roads.

Commissioner Anderson referenced lots two through five, which would appear to be hard to build on because of the floodplain in that area. He commented that he does not like the 1,500-foot cul-de-sac and asked if a road could be run from the cul-de-sac bulb to 178th to provide a second access to the development. He stated that he does not prefer to have only one way in or out of a development.

Senior Planner McGuire Brigl displayed a map which identifies the wetlands on site, explaining that the road connection would run entirely through wetland. She stated that the comments of the neighbors have been that they do not want the road connection or disruption to the wetlands.

Commissioner VanScoy commented that it would appear the road connection would go through tilled fields rather than wetlands and that there would be minimal wetland disruption.

Commissioner Anderson stated that he could support a connection that would move to the west to connect to 178th.

Kendra Lindahl, Landform, commented that the only request tonight is for the nine-lot subdivision and they are requesting for input on the cul-de-sac. She stated that they do not intend to include a connection to 178th as it was clear that the neighbors do not want that. She stated that they received the input from the neighbors and reduced the number of lots from the 37 which would be allowed to nine lots. She stated that the road connection to 178th would need to go through a public park and require wetland fill and would instead preserve the natural features of the site with two estate lots that backup to that area and fits the existing character of the area. She stated that they are looking for feedback on this alignment and the longer cul-de-sac before they decide whether to invest additional funds into this proposal.

Commissioner Woestehoff asked if there is an economic consideration between the different alignments and whether a cul-de-sac would support nine lots and 19 lots would be needed to support a road connection. He commented that there just seems to be a large jump between the two proposals.

Ms. Lindahl replied that the neighbors would not support the 19-lot subdivision and they do not want to present something that the neighbors would not support. She stated that the road connection would require additional road costs and process, as the road would go through public

park land and impact wetlands. She commented that they believe the nine-lot proposal would be a better subdivision.

Senior Planner McGuire Brigl commented that while it may appear easy to make the road connection on paper, the requirements of the City would require acquisition of the entire public park and a portion of a neighbor's property. She commented that it would be a difficult process and would not be preferred by staff as it would be very challenging.

Commissioner VanScoy commented that it would appear that the connection to 178th would occur at the cul-de-sac bulb and did not see how a neighboring property would be impacted.

Senior Planner McGuire Brigl stated that the City only has about 40 feet of frontage on the cul-de-sac, whereas 66 feet of right-of-way is needed for a roadway.

Commissioner Gengler asked for input from the developer on perhaps making the cul-de-sac wider for more turnaround room.

Ms. Lindahl stated that the cul-de-sac proposed would meet the City standards but confirmed that if that is the desire, they could work with City staff to satisfy those concerns.

Commissioner Anderson asked whether the road would be public or private.

Ms. Lindahl stated that as drawn this would be a public street and would meet the 66-foot street right-of-way with a 28 paved rural section street.

Commissioner Anderson commented that on the drawing it is shown as 24 feet and he would have concern with the 28-foot width as well.

Ms. Lindahl confirmed that the 24-foot shown as an error and that would be 28 feet as required by City standard. She stated that if a wider road is desired, they could work with City staff.

Commissioner VanScoy stated that he would prefer not to have another cul-de-sac that is 1,500 feet in length and would prefer to see another option.

Commissioner Anderson agreed.

Chairperson Bauer asked if there would be another option for a secondary access that would not go through the park.

Senior Planner McGuire Brigl stated that the proposal from the applicant would be the only logical option as there is no development on the north or east to connect to and the other areas are surrounded by wetland.

Commissioner Gengler commented that she likes that the applicant listened to the input from the neighbors but also acknowledged the concerns of public safety. She stated that she would tend to support this layout because of the difficulties and uniqueness of the lot.

Chairperson Bauer noted that some issues and concerns have been raised and the developer should continue to work with staff in attempt to develop something more acceptable before going forward with full plan development.

8. COMMISSION / STAFF INPUT

8.01: Receive Staff Update

Chairperson Bauer asked how the Council liaison appointment is done.

Councilmember Musgrove commented that it is typically done by discussion of the Council.

Deputy City Administrator Gladhill provided additional input on the process, noting that Councilmembers rank their preference for different appointments and the Council then discusses those.

Chairperson Bauer commented that he has appreciated the participation of Councilmember Musgrove and noted the experience of Commissioner Woestehoff. He stated that he would prefer that those two members of the Council continue in a liaison relationship because of their knowledge. He stated that Commissioner Johnson stated that it has been an honor for him to serve on the Board and appreciated the knowledge of City staff. He stated that Commissioner Johnson has not been able to attend the last few meetings because of conflicts with his work and therefore has submitted his resignation. He noted that with Commissioner Woestehoff moving to the City Council, that will create a second vacancy. He stated that applications are going to be accepted for those two vacancies and appointments will be made by the City Council in the spring, but until that time the group would be a Commission of five members.

Commissioner Woestehoff thanked the Commission and staff for the last few years, stating that he has enjoyed his time on the Commission and while he will be sad to leave the Commission, he will continue to serve as a member of the City Council. He confirmed that he would hope to be able to serve as a liaison to the Planning Commission. He also thanked Chairperson Bauer and Commissioner VanScoy in their leadership in moving the Commission to a fully remote meeting in this challenging time.

The Commission thanked Commissioner Woestehoff for his service.

Commissioner VanScoy thanked the staff for making it possible to hold remote meetings.

9. ADJOURNMENT

Motion by Commissioner Peters, seconded by Commissioner Anderson, to adjourn the meeting.

A roll call vote was performed:

Commissioner Gengler aye

Commissioner Peters	aye
Commissioner Anderson	aye
Commissioner Woestehoff	aye
Commissioner VanScoy	aye
Chairperson Bauer	aye

Motion Carried.

The regular meeting of the Planning Commission adjourned at 8:52 p.m.

Respectfully submitted,

_____
Chloe McGuire Brigl
Senior Planner

ATTEST:

_____
JoAnn Shaw
Planning Division Secretary

Drafted by Amanda Staple
TimeSaver Off Site Secretarial, Inc.

ECONOMIC DEVELOPMENT AUTHORITY
CITY OF RAMSEY
ANOKA COUNTY
STATE OF MINNESOTA

The City of Ramsey Economic Development Authority (EDA) conducted a regular meeting on Thursday, November 12, 2020, at the Ramsey Municipal Center, 7550 Sunwood Drive NW, Ramsey, Minnesota.

Members Present:	Acting Chairperson Brian Burandt Member Scott Cords Member Ryan Heineman Member Mark Kuzma Member Chris Riley
Members Absent:	Chairperson Jim Steffen
Also Present:	Sean Sullivan, Economic Development Manager Tim Gladhill, Deputy City Administrator

1. CALL TO ORDER

Acting Chairperson Burandt called the Economic Development Authority meeting to order at 7:30 a.m.

2. APPROVE AGENDA

Economic Development Manager Sullivan requested to remove Item 4.03 from the agenda noting that the developer could not fit the desired size building onto the site and therefore has withdrawn the request to purchase the parcel.

Motion by Member Cords, seconded by Member Kuzma to approve the agenda as amended.

Motion carried. Voting Yes: Acting Chairperson Burandt, Members Cords, Kuzma, Heineman, and Riley. Voting No: None. Absent: Chairperson Steffen.

3. APPROVE MINUTES

3.01: Approve Meeting Minutes Dated October 8, 2020

Motion by Member Riley, seconded by Member Cords, to approve the October 8, 2020, minutes as presented.

Motion carried. Voting Yes: Acting Chairperson Burandt, Members Riley, Cords, Heineman, and Kuzma. Voting No: None. Absent: Chairperson Steffen.

4. EDA BUSINESS

4.01: Consider Approval of Third Amendment to Purchase Agreement for Lots 1, 2, and 3, Block 1, COR TWO; Case of RGH RAMSEY LLC (Portions may be closed to the public)

Economic Development Manager Sullivan presented the staff report.

Member Riley asked if there has been any other interest in these properties.

Economic Development Manager Sullivan stated that there have not been any additional requests in the site but noted that the site is not listed in the market due to an active PA. He stated that the market interest from retail is not strong right now because of COVID. He stated that the applicant has been working hard to bring different prospects to the site and has shared those communications with staff. He stated that the applicant has not been able to gain traction because the retail market remains in a holding pattern. He stated that the applicant has invested $40,000 in the process thus far and still wants to make it work. He stated that due to the COVID environment and anticipated winter conditions, staff supports the amendment.

Commissioner Heineman asked if there are other similar parcels in the City that garnered retail interest recently.

Economic Development Manager Sullivan stated that the only retail interest in recent times has been for the site adjacent to Casey's Gas Station by O'Reilly's, noting that business has not been impacted by COVID in the same manner other businesses have been.

Member Cords asked how this project would compare to the strip mall constructed across Armstrong from this location. He asked if that would have similar tenants and whether it would compete for tenants.

Economic Development Manager Sullivan replied that rather than a multi-tenant building, which is across Armstrong, this project would have a different structure with three separate owner-occupied buildings.

Member Kuzma commented that this is a reasonable request with the challenges of COVID.

Motion by Member Kuzma, seconded by Member Cords, to recommend to City Council to approve the Third Amendment to Purchase Agreement for Lots 1, 2, and 3, Block 1, COR TWO; subject to City Attorney review as to legal form.

Further discussion: Member Cords agreed that this is a reasonable request based on the current economic and other conditions.

Motion carried. Voting Yes: Acting Chairperson Burandt, Members Kuzma, Cords, Heineman, and Riley. Voting No: None. Absent: Chairperson Steffen.

4.02: Consider Lease Agreement for 6710 Highway 10 NW; Case of Potter's House Christian Community Church (Portions of the meeting may be closed to the public)

Economic Development Manager Sullivan presented the staff report.

Member Cords referenced the lease accepted the previous month and asked if this lease would occupy the remainder of the building.

Economic Development Manager Sullivan confirmed that this lease for Potter's House Church would occupy the remainder of the space as the other portion is occupied by Youth First.

Member Cords noted the concern related to parking for a church use at the last meeting and asked for input on how there would be sufficient parking for two churches.

Economic Development Manager Sullivan explained that Connections Church withdrew its lease and therefore this lease would replace that and use that same proposed space which provided enough parking.

Member Kuzma asked the timeline if the City exercised the opt out clause.

Economic Development Manager Sullivan commented that the lease would require a 90-day notice from either side to terminate.

Member Kuzma hoped that more notice could be provided as the Highway 10 planning effort continues and more information is known.

Member Heineman asked if there are two different occupants for the north and south sides of the building.

Economic Development Manager Sullivan identified the areas of the building used by Youth First and proposed area to be leased by Potter's House Church. He stated that the neighboring tenant has a lease that expires in March 2021 and additional parking opportunities could arise.

Motion by Member Cords, seconded by Member Kuzma, to recommend to City Council to approve of the lease as presented, subject to City Attorney review.

Motion carried. Voting Yes: Acting Chairperson Burandt, Members Cords, Kuzma, Heineman, and Riley. Voting No: None. Absent: Chairperson Steffen.

~~**4.03: Consider Purchase Agreement for 6590 141st Avenue NW; Case of City Moving and Storage (Portions of the meeting could be closed to the public)**~~

5. MEMBER / STAFF UPDATE

- Receive Update on Major Development Projects.

Economic Development Manager Sullivan highlighted potential commercial and industrial development projects that could come forward and also provided an update on the status of previously approved projects. He also provided an update on the City's small business grant program reporting that 30 grants were awarded for roughly $295,000. He stated he also worked with Ramsey business owners to apply for the Anoka County grant program.

Deputy City Administrator Gladhill reviewed current development trends and provided an update on residential development in the community. He also provided an update on a possible water treatment facility, noting that much of the expense has already been planned for and believed that the majority of the project could potentially be funded through funds on hand that have been collected by sewer and water fees through development.

6. ADJOURNMENT

Motion by Member Kuzma, seconded by Member Riley, to adjourn the meeting.

Motion carried. Voting Yes: Acting Chairperson Burandt, Members Kuzma, Riley, Cords, and Heineman. Voting No: None. Absent: Chairperson Steffen.

The regular meeting of the Economic Development Authority adjourned at 8:05 a.m.

Respectfully submitted,

Sean Sullivan
Economic Development Manager

ATTEST:

Wendy Schlueter
Economic Development Administrative Assistant

Draft by Amanda Staple
TimeSaver Off Site Secretarial, Inc.

PARK AND RECREATION COMMISSION
CITY OF RAMSEY
ANOKA COUNTY
STATE OF MINNESOTA

The Ramsey Park and Recreation Commission conducted a regular meeting on November 12, 2020, at the Ramsey Municipal Center, 7550 Sunwood Drive NW, Ramsey, Minnesota.

Commission Members Present:	Chair Shane Bennett Vice Chair Brandon Sis Commissioner Nathan Barten Commissioner Matthew Guck Commissioner Jennifer Leistico Commissioner Justin Loss
Commission Members Absent:	
Also Present:	City Council Liaison Debra Musgrove Parks & Assistant Public Works Superintendent Mark Riverblood Recreation Specialist Abby Proulx

1. CALL TO ORDER

Chair Bennett called the Park and Recreation Commission meeting to order at 6:30 p.m.

2. CITIZEN INPUT

None.

3. APPROVE AGENDA

Motion by Commissioner Sis seconded by Commissioner Leistico to approve the Park and Recreation Commission meeting agenda as presented.

Motion carried. Voting Yes: Chair Bennett; Commissioners Sis, Leistico, Barten, Guck and Loss. Voting No: None. Absent: None.

4. APPROVE MINUTES

4.01: Approve Park and Recreation Commission Meeting Minutes

Motion by Commissioner Leistico, seconded by Commissioner Loss to approve the following Park and Recreation Commission Regular Meeting Minutes:

- Park and Recreation Commission Meeting Minutes dated October 8, 2020

Motion carried. Voting Yes: Chair Bennett; Commissioners Leistico, Loss, Sis, Barten, and Guck. Voting No: None. Absent: None.

5. COMMISSION BUSINESS

5.01: Consider the 2021-2030 Parks Five-Year Capital Improvement Plan

Parks & Assistant Public Works Superintendent Riverblood stated that the Commission discussed the CIP on an ongoing basis each year. He stated that 2021 is similar to the past year. He explained that the CIP is a planning document that attempts to identify the timing, funding and proposed cost estimate noting that none of the individual projects have been approved. He stated that the discussion tonight will focus on the park and trail section of the CIP. He noted that the Council will review and adopt the entire CIP later this year. He noted that most of the parks items within the CIP are funded through the park trust fund which has been established with funds from developers and not from the general fund. He provided an overview of the proposed projects shown for 2021, placeholder projects and newly proposed projects. He provided background information on each project.

Chair Bennett stated that as they look at the potentially planned projects over a period of time it is important to note that the attempt is to balance the resources over a multitude of things. He commented that there are projects that range widely in type. He stated that this is a plan that attempts to plan for future improvements in the most cost-effective manner.

Councilmember Musgrove referenced the trail mentioned along Hwy 47 and asked if that is not meant to move forward until the development of those lots occurs or whether the City could move forward with some type of trail prior to that time.

Parks & Assistant Public Works Superintendent Riverblood replied that he mentioned the development of those lots for many reasons. He explained that development would help to increase support for retail and provide the easements needed for the trail. He stated that if desired, the City could proceed with the project but there would be added cost. He stated that there is a sidewalk along Xkimo, but people still tend to make their own foot trail along 47.

Commissioner Loss asked if the trail connection along 47 would potentially bring in increased interest from developers.

Parks & Assistant Public Works Superintendent Riverblood replied that could be a possibility. He explained that if the City does not have the land, the City would need an easement or acquire that land through purchase. He stated that it may make better sense to have that connection occur with development as the site development is unknown and therefore there could be a possibility that the City would pay to construct a trail segment that may be torn out and replaced in order to match grade with the development or to provide utility connection. He noted that in the case of waiting for development to occur, the developer may also construct the trail to themselves rather than the City paying that cost. He confirmed that trails are an amenity to retail and all businesses.

Chair Bennett commented that this is a good list with the vast majority of projects that have been on the plan for some time.

Commissioner Sis referenced the expansion of the Dog Park at Alpine and asked if that is part of this plan.

Parks & Assistant Public Works Superintendent Riverblood replied that is included in the CIP for 2020. He stated that the Commission discussed that topic, met at the park in October and there was consensus to move forward on that project. He noted that information will be reviewed for action in the next case.

Motion by Commissioner Sis, seconded by Commissioner Loss to recommend approval of the 2021-2030 Parks Capital Improvement Plan to the City Council.

Motion carried. Voting Yes: Chair Bennett; Commissioners Sis, Barten, Guck, Leistico, and Loss. Voting No: None. Absent: None.

5.02: Recommend Proposed Improvements to Alpine Park's Off-Leash Area – a 2020 Parks Capital Improvement

Parks & Assistant Public Works Superintendent Riverblood stated that some of the background for this case was discussed in the discussion for the last agenda item. He stated that the dog park has a lot of users and the request to expand the off-leash area makes sense. He displayed a sketch showing the proposed expansion area and noted that it would increase the size by one third. He reviewed the proposed materials and a cost estimate. He asked if the Commission would like to move forward on the project at this time or wait until 2021, with an estimated cost of $20,000.

Chair Bennett commented that the Commission met at the park recently to hear the request from the resident. He stated that even though this is just space between ballfields, it is one of the most loved parks in the community. He stated that he often hears requests to make the park larger and believed that this would be a good option to provide a cost-effective expansion to the dog park.

Commissioner Leistico stated that she supports this project. She believed that this would be good representation of what people in the community want, as a resident had enough interest in the park to gather input from other users in order to present a realistic proposal.

Chair Bennett agreed that this would be creative use of space and existing fencing.

Parks & Assistant Public Works Superintendent Riverblood commented that the Commission should also consider another off-leash area in the future. He acknowledged that it can often be difficult to find the right site for this type of recreational activity, as not everyone loves dog to the same degree. He stated that the entire dog area is bare soil because of all the use by the dogs.

Councilmember Musgrove commented that she takes her dog to the park often and her dog is often curious about the area proposed for the expansion. She also liked the fact that this project was proposed by residents. She asked for details on the lighting of parks.

Parks & Assistant Public Works Superintendent Riverblood stated that City Code states that parks are closed at 10 p.m. He commented that he believes that there will eventually be a transition to 24-hour parks because of the changing trends of when people are working and when they are taking walks or using things like the dog park.

Chair Bennett commented that as he was on his way to the meeting tonight, he saw two people walking their dogs in The Draw area and fortunately there is lighting to assist with walking in the evening hours. He believed that lighting would be worth exploring. He stated that while dusk occurs much later in the evening during the summer, the winter hours bring darkness much earlier.

Councilmember Musgrove recognized that more people are using the parks earlier in the morning or after 10 p.m. She stated that she better understands the need for lighting and that residents would find that helpful in the winter months.

Parks & Assistant Public Works Superintendent Riverblood commented that lighting was previously the top request for the dog park, noting a light that was installed during an earlier project.

Motion by Commissioner Leistico, seconded by Commissioner Guck to recommend City Council authorize $20,000 for the expansion of Alpine Park's off-leash area to include aspects of solar lighting.

Motion carried. Voting Yes: Chair Bennett; Commissioners Leistico, Sis, Barten, Guck, and Loss. Voting No: None. Absent: None.

5.03: Note Draft Center Street Area Framework and Policy Plan

Parks & Assistant Public Works Superintendent Riverblood presented the draft Center Street area framework and policy plan. He stated that the detail is intended to update the existing framework and plan that was adopted in 2012. He stated that input would be gathered from all the Boards and Commissions prior to presentation to the City Council. He provided background on the creation of the plan and public input process for the downtown "COR" area. He stated that it was clear through that public input process that pedestrian connection and connection from the downtown area, over the rail and highway, to the Mississippi Park were the most desired elements by residents along with a green corridor and water feature. He explained how the plans evolved over time and how the plans can be reactive to different types of development. He displayed a sketch from the 2012 Center Street area framework and policy plan and explained that additional detail is needed in order to provide developers with the necessary information. He reviewed the details of the proposed draft framework and plan including the pump house, pump house plaza, different streetscape project elements, irrigation, and future development site frontage.

Chair Bennett recalled that there was a great deal of discussion related to Municipal Plaza and appreciated the creativity, sustainability elements, and stormwater reuse for irrigation. He stated that he also understands the need to revise the original plan to better plan for the Center Street projects.

Parks & Assistant Public Works Superintendent Riverblood reviewed the different Board and Commission review that will occur, noting that the EDA and Planning Commission will be asked to recommend approval of the draft plan. He explained the additional level of detail that those groups will be presented and provide.

Chair Bennett stated that he likes the concept of improving the look of the pump house and the desire to make that more residential in appearance because of the surrounding residential properties. He noted that area also continues to be popular in terms of recreation and events and therefore the bathrooms would be helpful as well.

Commissioner Sis commented that it is fantastic to see the level of planning that has gone into the downtown area and how the plan has changed with the different economic conditions.

Commissioner Loss stated that this is the first time he has seen a lot of these plans and appreciated that the City did not rush into the method of accepting any development and instead putting more thought into the desired outcome.

Parks & Assistant Public Works Superintendent Riverblood stated that the intent would be to have standards in place which ensures that development projects will meet the expectations.

Commissioner Loss asked if there is a timeline for the build out of Municipal Plaza.

Parks & Assistant Public Works Superintendent Riverblood stated that he will be asking the City Council for authorization for RFQ to complete the design build plans for the pump house perhaps as soon as January with improvements to occur in 2021. He stated that he would also like to work on the interface near the Affinity building in 2021. He stated that Center Street may be reconstructed in a future year, so some improvements would be tied to that project. He noted that some elements will be developer and/or opportunity driven. He noted that staff will continue to explore grant opportunities as well.

6. COMMISSION/STAFF INPUT

None.

7. ADJOURNMENT

Motion by Commissioner Leistico, seconded by Commissioner Loss to adjourn the meeting.

Motion carried. Voting Yes: Chair Bennett; Commissioners Sis, Barten, Guck, Leistico, and Loss. Voting No: None. Absent: None.

The Park and Recreation Commission meeting adjourned at 8:05 p.m.

Respectfully submitted,

_____

Mark Riverblood
Parks & Assistant Public Works Superintendent

Drafted by Amanda Staple
TimeSaver Off Site Secretarial, Inc.

PUBLIC WORKS COMMITTEE
CITY OF RAMSEY
ANOKA COUNTY
STATE OF MINNESOTA

The Public Works Committee conducted a regular meeting on Tuesday, November 17, 2020, at the Ramsey Municipal Center, 7550 Sunwood Drive NW, Ramsey, Minnesota.

Members Present: Chairperson Mark Kuzma
Councilmember Jeff Menth
Councilmember Chris Riley

Also Present: Public Works Superintendent Grant Riemer
City Engineer Bruce Westby
City Administrator Kurt Ulrich
Councilmember Debra Musgrove
Assistant City Administrator Tim Gladhill

1. CALL TO ORDER

Chairperson Kuzma called the regular meeting of the Public Works Committee to order at 5:30 p.m.

2. CITIZEN INPUT

There was none.

3. APPROVE AGENDA

Motion by Councilmember Riley, seconded by Councilmember Menth, to approve the agenda, as presented.

Motion carried. Voting Yes: Chairperson Kuzma, Councilmembers Riley and Menth. Voting No: None.

4. APPROVE MINUTES

4.01: Approve October 20, 2020, Meeting Minutes

Motion by Councilmember Riley, seconded by Councilmember Menth, to approve the following minutes:

Regular Meeting Minutes dated October 20, 2020

Motion carried. Voting Yes: Chairperson Kuzma, Councilmembers Riley and Menth. Voting No: None.

5. COMMITTEE BUSINESS

5.01: Consider Recommendation to City Council Approving Proposal to Comply with America's Water Infrastructure Act of 2018

City Engineer Westby reviewed the staff report and noted that although the staff report identifies a different action, staff believes that there would be adequate time to complete this action in-house.

Councilmember Riley stated that it sounded like this would have required staff time even with a consultant, therefore even though it may take a little more staff time, there would be a cost savings.

City Engineer Westby confirmed that with a consultant they were estimating 55 to 60 hours of staff time and if they complete this in-house, he estimates 100 to 120 hours.

Motion by Councilmember Menth, seconded by Councilmember Riley, to authorize City staff to complete the RRA.

Motion carried. Voting Yes: Chairperson Kuzma, Councilmembers Menth and Riley. Voting No: None.

5.02: Consider Recommendation to City Council Authorizing Flashing Yellow Arrow Studies at Select Intersections.

City Engineer Westby reviewed the staff report and noted that the Committee could recommend that the City Council authorize the hiring of SEH, Inc. to analyze the feasibility of modifying signal systems to add flashing yellow arrow operations for identified intersections.

Chairperson Kuzma asked if the interchanges that will be added on Highway 10 will change traffic counts/patterns.

City Engineer Westby confirmed that there are a number of improvement projects that can impact traffic patterns/counts but noted that the Highway 10 improvements are still a number of years ahead.

Councilmember Menth asked if the signal systems would be changed with the improvement projects.

City Engineer Westby stated that the signal systems would not be changed. He stated that once the improvement projects are completed, Anoka County would complete traffic counts and perhaps change the timing of the signals.

Councilmember Riley asked for details on what would be included in the initial cost.

City Engineer Westby stated that the initial cost would be for the study and to determine whether a flashing yellow light would be allowed, and if it would be feasible, the estimated cost would be provided.

Councilmember Menth noted that the original request was submitted for the intersection at Sunwood and Ramsey Boulevard and asked if there were other intersections being considered.

City Engineer Westby confirmed that the request was for that one intersection, but staff had identified additional intersections and has received comments related to other possible locations.

Chairperson Kuzma asked if the County budgets funds for sign retrofits.

City Engineer Westby confirmed that the County budgets $100,000 each year for that purpose.

Councilmember Riley stated that the presentation noted that the cost to upgrade to a flashing yellow light would have to be funded by the City. He commented that the intersection is of a County road and City road and therefore the County Commission had stated that should be a 50/50 cost share between the two. He asked for clarification from staff.

City Engineer Westby provided details on the County's cost-share policy.

Councilmember Musgrove stated that she suggested that intersection of Sunfish and Alpine. She stated that perhaps the resident that brought this forward would feel differently if the cost were known. She commented that she believes that the cost is high without participation from the County. She stated that even though she suggested an intersection, now that she knows the cost, she would prefer to wait.

Councilmember Riley asked if there are some intersections that are known to be easier updates with lower costs.

City Engineer Westby replied that none of the intersections would be considered low hanging fruit. He noted that the studies would need to be completed for the intersections.

Councilmember Menth commented that he questions this action, as the world has survived this long without flashing yellow lights. He stated that some of these intersections are fairly new and this would be considered a want and not a need. He commented that while it would be nice to have some things, there are needs in the City that have to be addressed, such as road and a water treatment center.

Councilmember Riley agreed that it would not make sense to move forward at this time but could be something to consider in the future when updates are made to intersections.

Chairperson Kuzma asked which intersections are City, County or State.

City Engineer Westby provided those details.

Councilmember Menth referenced stoplights that have been put in the last few years and asked what initiated those signals being added.

City Engineer Westby provided details on the different elements that warrant a signal system being added to an intersection.

Motion by Councilmember Riley, seconded by Councilmember Menth, to postpone hiring a consultant to conduct flashing yellow operation studies at this time but ask staff to continue to identify intersection modifications that could be completed in the future.

Further discussion: City Engineer Westby asked if staff should prepare a response to the resident that requested the improvement. Chairperson Kuzma confirmed that would be appropriate.

Motion carried. Voting Yes: Chairperson Kuzma, Councilmembers Riley and Menth. Voting No: None.

6. COMMITTEE / STAFF INPUT

6.01: Staff Updates on Improvement Projects and Items of Interest

City Engineer Westby provided an update on current and proposed City, County and MnDOT improvement projects and studies, and on other items of interest to the Committee.

6.02: Review Future Topics Calendar

No comments.

7. ADJOURNMENT

Motion by Councilmember Menth, seconded by Councilmember Riley, to adjourn the Public Works Committee meeting.

Motion carried.

The regular meeting of the Public Works Committee adjourned at 6:18 p.m.

Respectfully submitted,

Grant Riemer
Public Works Superintendent

Drafted by Amanda Staple

TimeSaver Off Site Secretarial, Inc.

CC Regular Session **5. 2.**

Meeting Date: 01/26/2021

By: Katie Schmidt, Administrative Services

Information

Title

Approve the Following Meeting Minutes:

1. City Council Work Session dated 1/12/2021
2. City Council Regular Session dated 1/12/2021

Purpose/Background:

Purpose: The purpose of this case is for Council review and approval of meeting minutes.

Background: Attached are the meeting minutes referenced above.

Recommendation:

Approve the meeting minutes.

Action:

Motion to approve the following Council meeting minutes:

1. City Council Work Session dated 1/12/2021
2. City Council Regular Session dated 1/12/2021

Attachments

1-12-2021 CCWS

01 12 21 CC Mtg

Form Review

Inbox	Reviewed By	Date
Colleen Lasher	Colleen Lasher	01/21/2021 08:10 AM
Kurt Ulrich	Kurt Ulrich	01/21/2021 04:15 PM
Form Started By: Katie Schmidt		Started On: 01/20/2021 02:19 PM

Final Approval Date: 01/21/2021

CITY COUNCIL WORK SESSION
CITY OF RAMSEY
ANOKA COUNTY
STATE OF MINNESOTA

The Ramsey City Council conducted a City Council Work Session on Tuesday, January 12, 2021, at the Ramsey Municipal Center, 7550 Sunwood Drive NW, Ramsey, Minnesota.

Members Present: Mayor Mark Kuzma
Councilmember Chelsea Howell
Councilmember Debra Musgrove
Councilmember Chris Riley
Councilmember Dan Specht
Councilmember Matt Woestehoff

Also Present: City Administrator Kurtis Ulrich
Police Chief Jeff Katers
Administrative Services Director Colleen Lasher
Deputy City Administrator Timothy Gladhill
City Engineer Bruce Westby – attended remotely
City Attorney Joe Langel

1. CALL TO ORDER

Mayor Kuzma called the City Council Work Session to order at 5:30 p.m.

2. TOPICS FOR DISCUSSION

2.01: Discuss Council Organization

Mayor Kuzma stated that it is his understanding that the Mayor appoints the EDA members and recommended that Councilmember Riley continue but the second appointment be delayed as Mr. Heineman is a current member and is running in the upcoming special election.

City Administrator Ulrich reviewed the staff report.

Councilmember Howell commented that she reviewed the appointments allocated in the staff report. She stated that she is concerned with providing balance, noting the current allocations proposed. She stated that she was only assigned one appointment whereas other members are allocated four to five appointments.

City Administrator Ulrich asked Councilmember Howell the positions that she is interested in.

Councilmember Howell stated that she is interested in the EDA as she has 17 years of experience as a small business owner. She noted that the at large members will most likely receive the most calls from businesses. She noted that Ward 2 has less than eight percent of businesses.

Mayor Kuzma stated that he would like to reserve the decision on EDA until after the special election. He noted that Councilmember Howell is listed as an alternate and he would agree with that.

Councilmember Musgrove commented that this discussion is important and asked why the EDA appointment would be tabled.

Mayor Kuzma commented that Mr. Heineman is already on the EDA and if he is elected in the special election, he would like to keep him on that group.

Councilmember Musgrove stated that it is unknown as to whether Mr. Heineman would be interested in maintaining that position and Councilmember Howell is interested now. She stated that even though the Mayor makes a recommendation, the Council still needs to ratify that decision.

City Administrator Ulrich confirmed that the Council needs to ratify the appointments.

Councilmember Musgrove stated that she also noticed a disparity when reviewing the proposed appointments. She stated that in 2018 when she joined the Council, she wanted EDA and Public Works and was instead appointed to Happy Days and the Lower Rum River Water Management Organization. She stated that she is glad to now be joining the Public Works Committee. She commented that as a newcomer to the Council she had to wait her turn to receive her desired appointments and now a newcomer is being assigned to both the EDA and Public Works Committee. She stated that the Fire Board will most likely go away in the coming months and therefore she did not believe an alternate would be needed for that group.

Mayor Kuzma stated that he did not recommend these appointments and noted that it was drafted based on the input Councilmembers provided.

Councilmember Howell asked which staff chose to allocate these positions.

Administrative Services Director Lasher stated that staff used the rankings provided by the Council in order to allocate the positions. She recognized that the allocations for Councilmember Howell are not equal and noted that was not done intentionally.

Councilmember Specht asked if there are other positions outside of the EDA that Councilmember Howell would be interested in.

Councilmember Howell stated that she tries not to overextend herself and would be interested in the Fire liaison position if the Police liaison position is not available. She stated that she would be interested in the Public Works Committee if the EDA is not an option.

Councilmember Woestehoff stated that he also put the EDA as his top priority as he also has years of experience in the business community and provided background information on his experience. He stated that he respects the decision of the Mayor to postpone that appointment until the next

member joins the Council. He stated that he was allocated to a number of positions based on his rankings. He stated that he would be willing to give up his position on the Fire Board or Public Works Committee.

Councilmember Howell commented that her preference is the EDA.

Councilmember Specht asked if the Council could agree to postpone that decision and focus the discussion on the other appointments.

Councilmember Howell stated that the difficult thing is that her highest priority is the EDA and therefore she is unsure of the perfect solution for other appointments. She stated that if she is not chosen for the EDA, Public Works Committee would be her second choice. She again stated that if the Police liaison position is not available, she would then prefer the Anoka County Fire Protection Council position.

Police Chief Katers commented that he would not be able to give up his position.

Councilmember Woestehoff stated that he would be willing to provide Councilmember Howell with the alternate position.

Councilmember Musgrove asked for clarification on the survey form filled out by the Council. She stated that it was her understanding that the Council was to choose four positions.

Administrative Services Director Lasher stated that each Board and Committee should have had some comment as there are appointees and alternates needed.

Councilmember Musgrove stated that her understanding was that only four selections were to be made and therefore only ranked four positions. She asked if that should have jumped out at staff.

Administrative Services Director Lasher commented that not all Councilmembers filled the form out in the same manner but that did not jump out at staff.

Councilmember Woestehoff stated that he separated his answers between one- and two-year appointments.

Councilmember Specht stated that he also filled the form out wrong and can use this information in the future. He asked if he could be the alternate for the River Crossing group.

Councilmember Woestehoff confirmed that he would be accepting of that change.

Councilmember Musgrove commented that she would be willing to take the Park Commission position and serve as alternate for the EPB. She confirmed that she would be willing to continue on the Lower Rum River Water Management Organization.

Councilmember Riley stated that he would be willing to serve as the alternate to the LRRWMO if no one else is interested in that position as he has attended meetings in the past.

It was confirmed that Councilmember Specht would be willing to give Councilmember Howell the position on the Joint Law Enforcement Council. It was also confirmed that Councilmember Specht would be the appointee to the Anoka County Fire Protection Council and the alternate for the Joint Law Enforcement Council.

Deputy City Administrator Gladhill reviewed the list of appointees as discussed tonight.

Administrative Services Director Lasher noted that statute states that based on the size of the EDA, two members of the Council must be a part of the EDA.

City Administrator Ulrich stated that the alternate could serve as the interim until the time a second appointment is made. It was confirmed that Councilmember Howell will serve as the alternate.

Deputy City Administrator Gladhill continued to review the appointments as discussed tonight and confirmed that with the Council.

Councilmember Musgrove commented that she appreciates TimeSaver and believes they do a good job. She did not believe there were other comparable businesses that provide that service but asked if the City goes out for bids or just remains with the same groups each year for other consulting positions.

City Administrator Ulrich stated that by policy professional services typically go up to five years, unless extended by the Council. He stated that after that period the City typically goes out for RFP but noted that can be a burdensome process and therefore the City has tended to extend for the Attorney and Auditor as the prices and services are acceptable. He stated that there is a period of time that would be necessary to bring a new auditor or attorney up to speed and therefore that is part of the consideration. He stated that from a staff and Council perspective the City is happy with the legal services and the competitive rate. He noted that the relationship with the previous City Attorney was over 30 years. He stated that there are good opportunities to test the contract and pricing and therefore would not recommend a 30-year relationship for that position. He stated that if an RFP were going to be done, he would prefer that to be done under more normal circumstances rather than remotely.

Councilmember Musgrove asked the length of the current legal services contract.

City Administrator Ulrich stated that essentially the City is on a 30-day contract for legal services.

Councilmember Musgrove used the example of the Joint Powers Agreement with the Fire Department, noting that the City was not well served and therefore just wants to ensure the City is being responsible and has checks and balances. She stated that she agrees with the legal services and contract proposed but it would be good to know how comparable these rates are.

City Administrator Ulrich stated that he would suggest continuing this contract and noted that he can check with other cities to determine what their rates are, and the Council could compare that information to determine if it would like to go out for RFP.

Councilmember Riley stated that the Council went through the RFP process seven years ago and since that time only moderate or expected increases have been involved. He stated that the process of switching representation was time consuming and painful.

Councilmember Musgrove appreciated that perspective.

Mayor Kuzma commented that the attorney was previously present at every meeting but by not requiring his presence at every meeting provided a cost savings.

City Attorney Langel stated that the original retainer included all meeting attendance, but a cost savings was able to be provided by not requiring that attendance, as 90 percent of the Ramsey meetings do not require input from the City Attorney. He stated that in the past years his hourly rate has only increased by ten dollars per hour, which is well under the typical legal fee. He noted that there is no increase proposed for the retainer.

Councilmember Specht asked the number of cities City Attorney Langel represents.

City Attorney Langel believed he represented 12 municipalities while his firm represents additional municipalities. He commented that he does not represent any cities that border Ramsey, therefore a conflict should not arise.

Councilmember Howell asked the typical length for the City contract for legal services.

City Attorney Langel commented that two to three years are typical contract lengths, going up to five years which typically establishes the retainer amount. He stated that each contract has a 30-day clause therefore the City can terminate the contract if desired.

Mayor Kuzma commented that in his experience City Attorney Langel has provided outstanding service to the City.

City Administrator Ulrich stated that the information discussed tonight will be inserted to the draft resolution for formal action at the regular meeting tonight.

Councilmember Musgrove asked if the appointed doctor provided input on the pandemic.

Police Chief Katers replied that most of the guiding information was gained through the emergency response guidance from the Minnesota Department of Health and Anoka County. He commented that at one point in time all the new hires for the Police Department had to see the appointed doctor for a physical, but that was a long time ago.

2.02: Discussion Regarding Union Contract Negotiations for LELS-Patrol & LELS-Sergeants (Discussion Closed to the Public)

Administrative Services Director Lasher suggested that the Council enter closed session to discuss contract negotiations with LELS-Patrol and LELS-Sergeants.

Motion by Councilmember Riley, seconded by Councilmember Musgrove, to recess the meeting to Closed Session at 6:27 p.m.

Motion carried. Voting Yes: Mayor Kuzma, Councilmembers Riley, Musgrove, Howell, Specht, and Woestehoff. Voting No: None.

The meeting reconvened to Open Session at 6:40 p.m.

Administrative Services Director Lasher reported that in the closed session the Council discussed union negotiations and provided staff with direction to continue to negotiate in an attempt to settle the contracts.

3. TOPICS FOR FUTURE DISCUSSION

3.01: Review Future Topics/ Calendar

Councilmember Musgrove commented for 2021 there is no monthly date, but a future work session item is listed to Review Councilmember Compensation Study. She stated that she believed there was not a consensus to bring this topic forward for discussion and recommended removing it from the future items list.

4. MAYOR / COUNCIL / STAFF INPUT

None.

5. ADJOURNMENT

The Work Session of the City Council was adjourned at 6:55 p.m.

Respectfully submitted,

_____
Kurtis G. Ulrich
City Administrator

ATTEST:

_____
Katie M. Schmidt
Deputy City Clerk

Drafted by Amanda Staple
TimeSaver Off Site Secretarial, Inc.

CITY COUNCIL CLOSED SESSION
CITY OF RAMSEY
ANOKA COUNTY
STATE OF MINNESOTA

The Ramsey City Council conducted a Closed Session on Tuesday, January 12, 2021, at the Ramsey Municipal Center, 7550 Sunwood Drive NW, Ramsey, Minnesota.

Members Present: Mayor Mark Kuzma
Councilmember Chelsea Howell
Councilmember Debra Musgrove
Councilmember Chris Riley
Councilmember Dan Specht
Councilmember Matt Woestehoff

Members Absent: None

Also Present: City Administrator Kurtis Ulrich
Police Chief Jeff Katers
Administrative Services Director Colleen Lasher
Deputy City Administrator Tim Gladhill
City Attorney Joe Langel

1. CALL TO ORDER

Mayor Kuzma called the Closed Session of the City Council to order at 6:28 p.m.

2. COUNCIL BUSINESS

2.01: Discussion Regarding Union Contract Negotiations for LELS-Patrol & LELS-Sergeants

Administrative Services Director Lasher explained that the purpose of the case is for the Council to discuss the union contract negotiations for LELS-Patrol and LELS-Sergeants.

3. ADJOURNMENT

Motion by Councilmember Riley, seconded by Councilmember Musgrove, to adjourn the Closed Session.

Motion carried.

The Closed Session was adjourned at 6:40 p.m.

Respectfully submitted,

_____
Kurtis G. Ulrich
City Administrator

ATTEST:

_____
Katie M. Schmidt
Deputy City Clerk

Drafted by Amanda Staple
TimeSaver Off Site Secretarial, Inc.

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CITY COUNCIL
CITY OF RAMSEY
ANOKA COUNTY
STATE OF MINNESOTA

The Ramsey City Council conducted a regular meeting on Tuesday, January 12, 2021, at the Ramsey Municipal Center, 7550 Sunwood Drive NW, Ramsey, Minnesota.

Members Present: Mayor Mark Kuzma
Councilmember Chelsea Howell
Councilmember Debra Musgrove
Councilmember Chris Riley
Councilmember Dan Specht
Councilmember Matt Woestehoff

Members Absent: None

Also Present: City Administrator Kurtis Ulrich
Police Chief Jeff Katers
Administrative Services Director Colleen Lasher
Deputy City Administrator Timothy Gladhill
City Engineer Bruce Westby – attended remotely
Senior Planner Chloe McGuire Brigl

1. CALL TO ORDER

Mayor Kuzma called the regular meeting of the Ramsey City Council to order at 7:00 p.m., followed by the Pledge of Allegiance led by Mayor Kuzma.

City Administrator Ulrich read a statement related to the COVID-19 pandemic and local state of emergency. In declaring this Local State of Emergency, the City of Ramsey has determined that it is not practical or prudent for all members to attend meetings in person under Minnesota Statutes Section 13D.02 because of the declared health pandemic emergency.

2. PRESENTATION

2.01: Swearing In Ceremony for the Mayor and Councilmembers

Mayor Kuzma asked each of the members of the Council to introduce themselves. All members introduced themselves and advised of the ward they represent. Mayor Kuzma also recognized that County Commissioner Matt Look was in attendance.

Administrative Services Director Lasher stated that in the November 2020 election, Mark Kuzma was elected as Mayor, Chelsea Howell was elected as Councilmember At Large, Matt Woestehoff was elected as Councilmember Ward 2, and Debra Musgrove was elected as

Councilmember Ward 4. Each Councilmember has been officially sworn in prior to the meeting to allow them to begin their duties as Councilmembers.

The ceremonial swearing in was completed for Mayor Kuzma and Councilmembers Howell, Musgrove and Woestehoff.

3. CITIZEN INPUT

Jodelle Semen, 7349 168th Circle NW, stated that she has had the opportunity to meet with many of the Councilmembers at their home in their yard. She stated that she received a bill from the City dated November 30th, which she received on December 31st. She stated that she left a message for Deputy City Administrator Gladhill and has not received a call back from him. She asked if the Council is fully aware of the information and process that has occurred related to her backyard. She stated that in speaking with staff, she has been told that the City would share cost for the issue. She stated that she has multiple emails beginning August 7, 2020 in which staff states that the City would share costs and identifies those costs. She stated that she has paid $1,750 on top of fixing the safety issues in their backyard. She stated that she has been told multiple times that they would not be charged any more money and again referenced written communication she has from City staff. She stated that the bill she received has a breakdown of different charges including civil engineering services, even though she has emails from the City stating that they would handle the engineering. She stated that she is willing to work with the City, which is why they fixed the problem because of the safety issues and have paid $1,750. She stated that she has not heard from staff since November 24th and then received a bill for $1,600 more. She asked if the City is really working with them. She stated that they have been willing and cooperative but does not feel that they are getting the same in return. She stated that they fixed a problem that the City was concerned about, noting comments that were made at a previous meeting from other residents in the area. She stated that the bill she received stated that they may have additional costs and services that will need to be paid and that is not what they agreed to.

Mayor Kuzma stated that he will speak with staff in order to follow up and provide a response.

Mrs. Semen commented that she is willing to share the documentation that she has with the Council.

Deputy City Administrator Gladhill stated that staff had said that they would cover the cost for engineering services and confirmed that he would review the information. He stated that the piece that needs to be recovered is the cost for the vacation of the conservation easement, noting that staff is still looking into that process. He committed to continue to work on the issue.

Councilmember Riley asked that the Council continue to be updated on this process to ensure that it is handled according to the previous agreement.

Councilmember Specht thanked the residents for speaking tonight. He asked that if a resolution cannot be reached that satisfies both sides, that it come back before the Council.

County Commissioner Matt Look congratulated the new members of the Council and election of the Mayor. He stated that an evaluation study was recently completed on Highway 10 in order to develop cost saving alternatives. He stated that additional funding was able to be secured and hoped that the evaluation study would help to close the gap and gain additional funding. He hoped that the findings in the plan would be acceptable to the City. He referenced the Semen issue that was just brought up, noting that he had the opportunity to meet the family. He commented that the family had a drainage problem that was sloughing dirt from the property onto the path and into the wetland. He stated that the property owners attempted to resolve that erosion issue which created problems with the easement. He stated that the constituents reached out to him, which is not uncommon. He stated that he reached out to City staff in attempt to find a quick and inexpensive resolution, but the situation has only become more expensive and lengthier. He stated that he is disappointed to hear that his involvement was a disadvantage to the residents. He stated that he hopes that this issue could be resolved quickly, and that common ground could be gained without costing the residents additional funds.

Deputy City Administrator Gladhill stated that an update on Highway 10 will be provided to the Council at its next worksession.

4. APPROVE AGENDA

Motion by Councilmember Riley, seconded by Councilmember Woestehoff, to approve the agenda as presented.

Motion carried. Voting Yes: Mayor Kuzma, Councilmembers Riley, Woestehoff, Howell, Musgrove, and Specht. Voting No: None.

5. CONSENT AGENDA

Motion by Councilmember Riley, seconded by Councilmember Woestehoff, to approve the following items on the Consent Agenda:

5.01: Receive November 2020 Financial Reports – General Fund and Enterprise Funds
5.02: Receive Cash and Investments for Period Ending November 30, 2020
5.03: Receive Cash and Investments for Period Ending December 31, 2020
5.04: Approve the following Meeting Minutes:
    1) City Council Work Session dated December 8, 2020
    2) City Council Regular dated December 8, 2020
    3) City Council Special Session dated December 15, 2020
5.05: Approve Amending City Council Meeting Schedule for 2021
5.06: Approve Business Licenses
5.07: Approve Rental Licenses
5.08: Adopt Resolution #21-013 Approving Cash Disbursements Made and Authorizing Payment of Accounts Payable Invoicing Received During the Period of December 10, 2020 through December 30, 2020

5.09: Adopt Resolution #21-019 Approving Cash Disbursements Made and Authorizing Payment of Accounts Payable Invoicing Received During the Period of January 1, 2021 through January 6, 2021
5.10: Adopt Resolution #21-002 Designating Financial Institutions as Official Depositories; Adopt Resolution #21-003 Authorizing Signatures for Financial Transactions and Adopt Resolution #21-004 Designating Bank of the West as the Official Financial Institution for the City of Ramsey Banking Services for the Year of 2021
5:11: Adopt Resolution #21-005 Approving the City of Ramsey's 2022 Budget Calendar
5:12: Adopt Resolution #21-006 Adopting 2021 Enterprise Fund Budgets
5:13: Adopt Resolution ~~#20-281~~ #21-036 Approving an Interim Use Permit for Storage Containers for Ve-Ve Inc. (Project No. 20-136); Case of John Vevea on behalf of Ve-Ve Inc.
5:14: Adopt Resolution #21-009 Ordering Plans and Specifications for Improvement Project #21-02, Tiger Street Reconstruction
5.15: Adopt Resolution #21-010 Ordering Plans and Specifications for Improvement Project #21-03, Business Park 95 Street Reconstruction
5.16: Adopt Resolution #21-011 Ordering Plans and Specifications for Improvement Project #21-04, 2021 Neighborhood Pavement Overlay Improvements
5.17: Adopt Resolution #21-012 Ordering Plans and Specification for Improvement Project #21-05, 2021 MSA Pavement Overlay Improvements
5.18: Adopt Resolution #21-016 Appointing Election Judges for the Special Election on February 9, 2021

Motion carried. Voting Yes: Mayor Kuzma, Councilmembers Riley, Woestehoff, Howell, Musgrove, and Specht. Voting No: None.

6. PUBLIC HEARING

6.01: Public Hearing: Introduce Ordinance #21-05 Vacating Easement and Resolution #21-017 Approving Development Agreement for Riverstone 5th Addition

Presentation

Deputy City Administrator Gladhill reviewed the staff report and recommendation to introduce Ordinance #21-05 vacating a 60-foot drainage and utility easement related to Riverstone Addition. And adopt Resolution #21-07 approving the Development Agreement for Riverstone 5th Addition.

Public Hearing

Mayor Kuzma called the public hearing to order at 7:25 p.m.

Citizen Input

There was none.

Motion by Councilmember Riley, seconded by Councilmember Musgrove, to close the public hearing.

Motion carried. Voting Yes: Mayor Kuzma, Councilmembers Riley, Musgrove, Howell, Specht, and Woestehoff. Voting No: None.

The public hearing was closed at 7:26 p.m.

Council Business

Motion by Councilmember Woestehoff, seconded by Councilmember Specht, to introduce Ordinance #21-05 Vacating 60 Foot Easement Related to Riverstone 4th Addition and adopt Resolution #21-017 Approving Development Agreement for Riverstone 5th Addition.

Motion carried. Voting Yes: Mayor Kuzma, Councilmembers Woestehoff, Specht, Howell, Musgrove, and Riley. Voting No: None.

7. COUNCIL BUSINESS

7.01: Adopt Resolution #21-001 Approving the 2021 Council Organization

City Administrator Ulrich reviewed the staff report and recommendation to adopt the resolution approving the 2021 Council organization.

Motion by Councilmember Riley, seconded by Councilmember Howell, to Adopt Resolution #21-001 for 2021 Council Organization.

Motion carried. Voting Yes: Mayor Kuzma, Councilmembers Riley, Howell, Musgrove, Specht, and Woestehoff. Voting No: None.

~~7.02: Introduce Ordinance #21-04 Approving an Addition to Chapter 58 of the City Code: Utilities~~ Case was removed from the agenda

7.03: Adopt Resolution #21-018 Providing Feedback for Bacon Property Sketch Plan; Case of Bill Boyum

Deputy City Administrator Gladhill reviewed the staff report and recommendation to adopt the resolution and provide the applicant feedback on which concept plan to move forward with and develop a formal sketch plan application.

Councilmember Musgrove asked for the potential to have a wider road to help with concerns that could arise from the length of the cul-de-sac. She asked if there is an easement on the northern portion of the property that could provide a connection to a future road.

Deputy City Administrator Gladhill replied that this concept does not include an easement for a future road, as it would be unlikely that a connection would be made because of the wetlands. He stated that staff has made the comment that the road be widened to 32 feet wide, recognizing that there are some wetland constraints.

Councilmember Musgrove commented that she agrees with a width of 32 feet. She stated that in the Commission there was a narrative for a proposal with 19 lots and asked if there is potential for that to move forward. She clarified that she does prefer the nine-lot configuration.

Deputy City Administrator Gladhill stated that the developer is only seeking input on the nine-lot configuration and is not submitting the 19-lot proposal.

Motion by Councilmember Musgrove, seconded by Councilmember Woestehoff, to Adopt Resolution #21-018 Providing Feedback on Proposed Subdivision on Bacon Property.

Further discussion: Councilmember Riley commented that he likes the nine-lot configuration and agreed that staff should work with the developer on the road width in order to provide the best product that everyone can support. Councilmember Musgrove asked for information on easements, recognizing that those can cause challenges. Deputy City Administrator Gladhill commented that there would not be a conservation easement or density transitioning in this case. He clarified that the process for conservation easements and density transitioning has changed to provide ownership and enforcement ability for the City.

Motion carried. Voting Yes: Mayor Kuzma, Councilmembers Musgrove, Woestehoff, Howell, Riley, and Specht. Voting No: None.

7.04: Adopt Resolution #21-020 Approving a Home Occupation Permit for Twin Cities Generator at 17040 Baugh St NW (Project No. 20-132); Case of Twin Cities Generator

Senior Planner McGuire Brigl reviewed the staff report and recommendation of the Planning Commission to approve Resolution #21-020 granting a Home Occupation Permit on the subject property.

Councilmember Musgrove provided some grammatical changes on the permit. She asked if there were violations or complaints that occurred on this site.

Senior Planner McGuire Brigl stated that this did come before staff as a violation as the appropriate home occupation permit was not obtained. She stated that there were no violations from noise or outdoor storage.

Councilmember Musgrove asked if the item should be worded differently as the language makes it appear that there were violations, but they were only complaints.

Senior Planner McGuire Brigl commented that language could be made clearer.

Councilmember Musgrove referenced the condition that customers can only visit the site once per day and commented that seems unnecessary and asked if it should be removed.

Senior Planner McGuire Brigl stated that language could be removed but noted that it is kept in order to provide enforcement should an issue arise. She noted that traffic is the main complaint

staff receives related to home businesses. She stated that the condition could be reworded but staff would like a condition related to traffic in order to provide enforcement if an issue arises.

Councilmember Musgrove referenced the condition related to hours of operation and asked if that language is standard and whether other home businesses in the area have the same limitation on hours.

Senior Planner McGuire Brigl commented that language mirrors the language for the home occupation permit for the neighboring property to ensure that the hours of operation are consistent for home-based businesses.

Councilmember Musgrove commented that her questions were to ensure that the conditions were fair and consistent with other home-based businesses. She wished the business owner success.

Councilmember Howell commented that a customer may need to stop more than once and agreed that the language for that condition should be changed to address overall traffic for the site.

Deputy City Administrator Gladhill stated that the condition should reference the Code Section related to the number of daily trips as that would provide enforcement ability should that become an issue.

Councilmember Riley asked that the applicant be provided an opportunity to speak.

Jesse Larson, applicant, attempted to speak but his internet quality was not cooperating.

Councilmember Riley asked if staff is aware as to whether the applicant agrees with the conditions as proposed.

Senior Planner McGuire Brigl commented that staff has been working with the applicant for the past few months and he has seen the draft and is comfortable with the parameters.

Motion by Councilmember Musgrove, seconded by Councilmember Howell, to Adopt Resolution #21-020 Approving the Request for a Home Occupation Permit to Operate a Generator Business on the Property Located at 17040 Baugh Street NW.

Motion carried. Voting Yes: Mayor Kuzma, Councilmembers Musgrove, Howell, Riley, Specht, and Woestehoff. Voting No: None.

7.05: Adopt Resolution #21-021 Approving REVISED Sanitary Sewer Maintenance and Rain Garden Agreement for River Walk Village; Case of N&D Management, LLC

Deputy City Administrator Gladhill reviewed the staff report and recommendation to approve the revised agreement.

Councilmember Musgrove stated that she is concerned that the information will not be disclosed at the time of sale and asked for details on when that information would be disclosed to the

homeowners. She recognized that the City agreed to complete repairs under the street and asked if there was any change in the responsibility of repairs from the pipe to the homes.

Deputy City Administrator Gladhill replied that the developer has agreed to revise the articles of incorporation for the HOA to reference this agreement. He stated that there have been additional conversations that staff would like confirmation that this information is shared with at least the first buyers of the homes. He stated that in working with the City Attorney, staff is comfortable with the approach. He stated that the policy direction from the Council has not changed and is referenced in the agreement.

Councilmember Musgrove stated that when she signs an HOA agreement she looks most at cost and not the other elements. She noted that she wants to ensure that homeowners are aware of this responsibility and does not want it to come back on the City.

Deputy City Administrator Gladhill stated that even with a separate agreement, it is glazed over by purchasers in the title work. He stated that there is final protection through the 429 assessment process, should that tool need to be utilized for emergency repairs.

Councilmember Specht referenced an email previously received by Judy Larson, who mentioned that she would be available on the meeting virtually and asked if she had any comments to share.

Deputy City Administrator Gladhill commented that Ms. Larson is on the call. He felt that it would be most important for that conversation to occur at Public Works.

Councilmember Specht asked if Ms. Larson is comfortable beginning at Public Works.

Ms. Larson confirmed that she is comfortable starting at Public Works.

Councilmember Riley commented that the first lot was sold without the agreement attached and asked if the agreement would be attached to future lots.

Deputy City Administrator Gladhill stated that the agreement will be with the HOA and on the HOA lots. He stated that the lots that originally received a certificate of occupancy were not and will not be on this force main system.

Councilmember Riley stated that he is a little concerned with some of the maintenance definitions and provided examples of his concern.

Deputy City Administrator Gladhill provided background information, noting that if excavation of the road is required that would fall to the City. He stated that the City still has the ability to assess that cost to the properties if desired.

Mayor Kuzma commented that when the Council previously discussed this it was mentioned that there were grinders before the material reached the street. He referenced the comment that the resident would go to Public Works and asked if action should still occur on this item tonight.

Deputy City Administrator Gladhill clarified that this item should have action tonight and noted that the discussion for Public Works would be related to the policy moving forward.

Councilmember Riley commented that it has been proven that HOAs cannot maintain landscaping and asked if there are concerns that the HOA would not maintain the rain gardens.

Deputy City Administrator Gladhill commented that a contractor has been identified and the City would have the option of the assessment process, should that be necessary. He stated that this situation is unique, and the future policy discussion will ensure that this situation does not occur again in the future.

Councilmember Musgrove stated that someone will end up paying, whether that be the developer up front or the homeowner later on. She referenced the language in the second provision and asked if that would apply from the home to the street or from the property line to the system.

Deputy City Administrator Gladhill replied that the City is never responsible for the line to the home. He stated that language would apply to the mainline in the street, not the individual service lines to the homes.

Councilmember Musgrove referenced the language related to the sewer line and the City's responsibility.

Deputy City Administrator Gladhill noted that the City Attorney could clarify that language if desired but again noted that the City is never responsible for the individual home lines.

Councilmember Musgrove commented that she would prefer for that language to be clarified as she would interpret private lines differently.

Deputy City Administrator Gladhill confirmed that consensus to clarify that language with the attorneys.

Motion by Councilmember Musgrove, seconded by Councilmember Specht, to Adopt Resolution #21-021 Approving Revised Sanitary Sewer and Rain Garden Maintenance Agreement for River Walk Village, subject to review and approval by the City Attorney.

Motion carried. Voting Yes: Mayor Kuzma, Councilmembers Musgrove, Specht, Riley, and Woestehoff. Voting No: Councilmember Howell.

8. MAYOR, COUNCIL AND STAFF INPUT

City Administrator Ulrich announced upcoming meetings and events.

Councilmember Musgrove thanked the constituents that voted for her in the recent election and encouraged residents to reach out with any issues they have.

Mayor Kuzma welcomed the newly elected Councilmembers, noting that he looks forward to working with them.

9. ADJOURNMENT

Motion by Councilmember Riley, seconded by Councilmember Musgrove, to adjourn the meeting.

Motion carried.

The regular meeting of the City Council adjourned at 8:09 p.m.

Respectfully submitted,

_____
Kurtis G. Ulrich
City Administrator

ATTEST:

_____
Katie M. Schmidt
Deputy City Clerk

Drafted by Amanda Staple
TimeSaver Off Site Secretarial, Inc.

A recording of this meeting is available for viewing online at www.qctv.org <http://www.qctv.org>. Recordings are available for 36 months after the date of the meeting.

CC Regular Session **5. 3.**

Meeting Date: 01/26/2021

By: JoAnn Shaw, Community Development

Information

Title

Approve Rental Licenses

Purpose/Background:

Purpose: The purpose of this case is to approve rental license requests for 2021.

Background: Detached Single-Family Homes and Attached Single-Family Homes (townhomes, duplexes, etc.) are required to obtain a license (registration), but are not subject to inspections (unless the City has sufficient evidence of a violation of City Code).

Multi-Family Units (apartments, condos, etc.) are subject to the license and inspection program as required by code.

License application requests are attached for Council approval.

Recommendation:

Staff recommends approval of license applications.

Action:

Motion to approve rental license applications.

Attachments

Rental License Applications

Form Review

Inbox	Reviewed By	Date
Tim Gladhill	Tim Gladhill	01/21/2021 09:01 AM
Kurt Ulrich	Kurt Ulrich	01/21/2021 03:26 PM
Form Started By: JoAnn Shaw		Started On: 01/14/2021 10:33 AM
Final Approval Date: 01/21/2021		

Report Name: License Report - License Types
Council Dates: 1/26/2021 to 1/26/2021
Status: Active, Inactive
License Type(s): Multi-Family Rental, Rental

City of Ramsey
License Report - License Types

Printed: 1/20/2021

Company	Applicant	Location	Complex	Exp. Date	Council Date	Status
Rental						
HPA II Borrower 2020-2 LLC		7063 168th Ave NW		2/13/2024	1/26/2021	A
Steve Wald		15420 Eland St NW		10/10/2023	1/26/2021	A
HPA II Borrower 2020-2 LLC		15395 Tungsten Way NW		2/13/2024	1/26/2021	A

Rental License Count: 3

Total Licenses: 3

CC Regular Session **5. 4.**

Meeting Date: 01/26/2021

By: Mark Riverblood, Engineering/Public Works

Information

Title:

Award Sign Addition for Loral I Armstrong Delaney Ramsey Central Park

Purpose/Background:

On June 9th, 2020 City Council renamed Central Park with an addition to formally become, Loral I Armstrong Delaney Ramsey Central Park. That case was the culmination of much discussion by the Park and Recreation Commission and City Council, and is accessible for review on the City's website on the above date, as Council case 7.2.

The purpose of this case is to acknowledge and approve the addition to the existing monument at the park to reflect the park's revised name.

Notification:

The topic of renaming for Central Park was discussed by City Council at a work session in 2019, and also by the Park & Recreation Commission in 2020, and was formally renamed by Council in June of 2020.

Observations/Alternatives:

Following through with the parks revised name, Staff issued the attached RFQ and sent it to four sign manufacturing companies, and received one quote from Signation Sign Group Inc. in the amount of $9,025 for the manufacturing and installation of the large steel sign panel. This would be installed in the coming months. Staff is also working to identify an appropriate Re-Dedication event for the park to 'unveil' the sign, likely to be held in April of 2021.

Funding Source:

Primary costs for revising the existing monument is to be the Park Trust Fund .

Recommendation:

Staff recommends approving the Quote from Signation Sign Group Inc. and ordering the monument addition for Ramsey's 37 year-old flagship park.

Action:

Motion to approve Signation Sign Group Inc.'s quote in the amount of $9,025 to revise the name of the park to read, **Loral I Armstrong Delaney Central Park.**

Attachments

RFP

Proposal from Signation

Resolution

Form Review

Inbox	Reviewed By	Date
Mary Jo Warner	MaryJo Warner	01/20/2021 10:44 AM
Grant Riemer	Grant Riemer	01/20/2021 10:50 AM
Mary Jo Warner	MaryJo Warner	01/20/2021 10:56 AM
Mark Riverblood (Originator)	Mark Riverblood	01/20/2021 11:14 AM
Kurt Ulrich	Kurt Ulrich	01/21/2021 02:58 PM
Mary Jo Warner	MaryJo Warner	01/21/2021 03:02 PM
Grant Riemer	Grant Riemer	01/21/2021 03:20 PM
Form Started By: Mark Riverblood		Started On: 12/16/2020 11:32 AM
Final Approval Date: 01/21/2021		

PROPOSALS MUST BE RECEIVED BY:
2:00 PM on Tuesday, January 19th, 2021
Deliver by e-mail ONLY to:

Mary Jo Warner
Ramsey, MN 55303
763-433-9820

E-mail to: mwarner@cityoframsey.com

REQUEST FOR QUOTATION

MANUFACTURE AND INSTALL, 18″ X 105″+ BY 1/2" THICK ROLLED COR-TEN STEEL PLATE SIGN WITH WATER JET CUT LETTERS WITH MOUNTING AND STAINLESS STEEL BACKING PLATE(S) FOR *'LORAL I ARMSTRONG DELANEY CENTRAL PARK'*

PROPOSAL SPECIFICATIONS

Provide and construct/furnish 18" high x 105.25" wide x 1/2" thick rolled Cor-Ten steel plate with water jet cut out copy "Loral I Armstrong Delaney" backed up with a rolled 1/8" stainless steel panel with a mill finish and (3) 4" wide x 1/2" thick Cor-Ten steel mounting plates as follows:

I/We agree to furnish all materials, labor and site security to perform the work below.

- Mobilization and deliver the above reference monument addition to replicate the existing sign, with the 'new' addition over the existing 'Central Park' panel.
- Quoted price must include detailed shop drawings for approval, manufacturing and installation.
- This Request for Quotation shall be a lump sum amount, with no change orders, unless upon mutual agreement, the City would add to the scope of the project.

Work and Staging Areas:

Confine work activities to the monument location, with care to minimize trampling of the perennial plants and woody plants. Contractor is responsible for maintaining safe job site conditions for the public at all times including when not present (E.g. overnight). No construction activity shall be performed before 7 AM nor after 7 PM Monday through Saturday. The contractor shall provide 72 hour advance notice before working on Saturday. City Council approval is required for Sunday work.

A dumpster is not anticipated to be needed at the immediate site, and any construction related disposal is to be hauled away, or placed in the existing dumpster, (and NOT trash receptacles) at the park.

Liquidated Damages:

Liquidated damages shall be deducted from the approved quoted amount, in a sum of $50 dollars per weekday (M-F) for non-completion after March 30th, 2021. In submitting a quote, the Contractor Warranties the project shall be complete in every way and accepted by the City on or before the first Monday in April of 2021.

Warranty/Guarantee:

The Contractor warrants and guarantees to the Owner that all Work will be of good quality and free from faults or defects in accordance with this RFQ. All defective Work may be rejected.

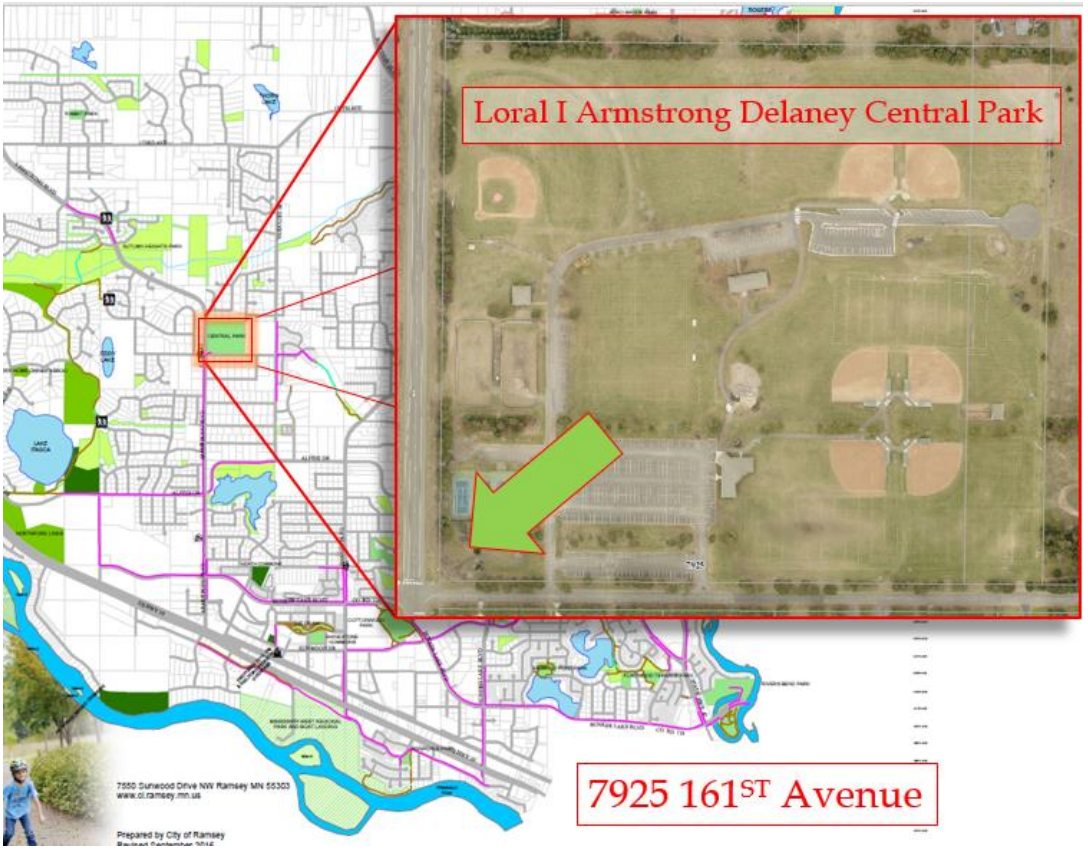
If required by the Owner, prior to payment, the Contractor will promptly without cost to the Owner, correct defective Work, or replace it with non-defective Work. If the Contractor does not correct such defective Work or remove and replace within a reasonable time, the Owner may have the deficiency corrected or the rejected Work removed and replaced. All direct or indirect costs of such correction or removal and replacement, including compensation for additional professional services shall be paid by the Contractor, or deducted by the Owner, all such costs from the quoted contract price.

If, instead of requiring correction or removal and replacement of defective Work, the Owner (prior to approval of final payment) prefers to accept it, they may do so. In such case, if the acceptance occurs prior to final payment, a Statement shall be issued incorporating the necessary revisions, including appropriate reductions in Contract Price.

Specification Reference:

The Contractor shall inspect the site in person to be considered a Qualified Bidder, and may also request an appointment to preview the project with the City, prior to issuing his/her Quotation. The Contractor shall conduct his/her work in conformance with the specifications set forth herein, and in accordance with safe construction practices. Additionally, the Contractor must be licensed to work in the City of Ramsey, at the time work may commence.

Existing Conditions



Site Location Exhibit

Quotation for the provision and construction of 18" high x 105.25" wide x 1/2" thick rolled Cor-Ten steel plate with water jet cut out copy "Loral I Armstrong Delaney" backed up with a rolled 1/8" stainless steel panel with a mill finish and (3) 4" wide x 1/2" thick Cor-Ten steel mounting plates.

$_____ **Lump Sum**.

In submitting the above quote, I/We warrant the quote valid for work to be completed on or before April 5th, 2021.

Additionally, I/we acknowledge each and all of the conditions, specifications and requirements above and within this RFQ. (Bidder need only to submit this page.)

Contractor name _____

Owner or representative _____

Signature _____

Phone(s) _____

E-mail _____

Quotation for the provision and construction of 18" high x 105.25" wide x 1/2" thick rolled Cor-Ten steel plate with water jet cut out copy "Loral I Armstrong Delaney" backed up with a rolled 1/8" stainless steel panel with a mill finish and (3) 4" wide x 1/2" thick Cor-Ten steel mounting plates.

$ 9,025.00 **Lump Sum.**

In submitting the above quote, I/We warrant the quote valid for work to be completed on or before April 5th, 2021.

Additionally, I/we acknowledge each and all of the conditions, specifications and requirements above and within this RFQ. (Bidder need only to submit this page.)

Contractor name SIGNATION SIGN GROUP

Owner or representative Doug Glienke

Signature Doug Glienke

Phone(s) 763-450-9941

E-mail dglienke@ssgix.com

Councilmember Specht introduced the following resolution and moved for its adoption:

RESOLUTION #20-121

RESOLUTION AMENDING THE NAME OF RAMSEY CENTRAL PARK TO FORMALLY BE KNOWN AS 'LORAL I ARMSTRONG DELANY CENTRAL PARK'

WHEREAS, the City Council of the City of Ramsey continues to support the development of recreation and public facilities for the betterment of the community and enhancements to the quality of life for all residents; and

WHEREAS, the City desires to appropriately name all park facilities in a manner befitting the resource and value to the community; and

WHEREAS, the City of Ramsey, has adopted a Public Facility Naming Policy within Resolution #20-120; and

WHEREAS, that policy may include, park names reflecting historical significance, original landowners, or those reflecting important contributions of local, state, national or international significance; and

WHEREAS, Loral I Armstrong Delany embodies these attributes above, is a distinguished and respected pillar of the community; and

WHEREAS, Loral I has also made innumerable contributions to shooting sports and recreation locally, as well as bolstering economic development in myriad ways in Ramsey; and

NOW THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF RAMSEY, ANOKA COUNTY, STATE OF MINNESOTA, as follows:

1) That Ramsey's flagship park on Armstrong Boulevard shall hereby be forever known as, LORAL I ARMSTRONG DELANY CENTRAL PARK.

The motion for the adoption of the foregoing resolution was duly seconded by Councilmember Musgrove, and upon vote being taken thereon, the following voted in favor thereof:

Mayor LeTourneau
Councilmember Specht
Councilmember Musgrove
Councilmember Heinrich
Councilmember Kuzma
Councilmember Menth
Councilmember Riley

and the following voted against the same:

None

and the following abstained:

None

and the following were absent:

None

Whereupon said resolution was declared duly passed and adopted by the Ramsey City Council this the 9th day of June, 2020.

Mayor

ATTEST:

City Clerk

CC Regular Session **5. 5.**

Meeting Date: 01/26/2021

By: Jackie Lipski, Finance

Information

Title

Adopt Resolution #21-033 Approving Cash Disbursements Made and Authorizing Payment of Accounts Payable Invoicing Received During the Period of January 7, 2021 through January 20, 2021

Purpose/Background:

Adopt Resolution #21-033 Approving Cash Disbursements Made and Authorizing Payment of Accounts Payable Invoicing Received During the Period of January 7, 2021 through January 20, 2021

Recommendation:

Staff Recommends to Adopt Resolution #21-033 Approving Cash Disbursements Made and Authorizing Payment of Accounts Payable Invoicing Received During the Period of January 7, 2021 through January 20, 2021.

Action:

Motion to Adopt Resolution #21-033 Approving Cash Disbursements Made and Authorizing Payment of Accounts Payable Invoicing Received During the Period of January 7, 2021 through January 20, 2021.

Attachments

Bills List 1/26/2021

Resolution 1/26/2021

Form Review

Inbox	Reviewed By	Date
Diana Lund	Diana Lund	01/20/2021 02:19 PM
Kurt Ulrich	Kurt Ulrich	01/21/2021 04:13 PM
Form Started By: Jackie Lipski		Started On: 01/20/2021 02:07 PM
Final Approval Date: 01/21/2021		

CITY OF RAMSEY - FINANCE OFFICE Printed 1/20/2021

RAMSEY CITY COUNCIL MEETING

1/26/2021

BILLS LIST

DISBURSEMENTS TO BE APPROVED THIS MEETING:

DISBURSEMENT TYPE:	SUBMITTED FOR APPROVAL
Purchase Journal:	
Prepaids 1/7/2021-1/20/2021	235,128.08
Accounts Payable 1/7/2021-1/20/2021	774,982.26
Payroll 1/8/2021	183,341.32
Pay Estimates- Projects	1,767,473.46

TOTAL SUBMITTED FOR APPROVAL THIS MEETING
(Invoices Available for Reviewal) **$ 2,960,925.12**

		APPROVED PREV. MTG	2021 Y.T.D.
DISBURSEMENTS PREVIOUSLY APPROVED AND PAID:			
	NET PAYROLL TOTAL	$	$
-	CORRECTION TO PAYROLL		
	PREPAIDS		
-	PREPAID ADJUSTMENTS		
	WIRE TRANSFERS FOR DEBT SERVICE		
-	CORRECTION TO D.S.		
	ACCOUNTS PAYABLE INVOICING - PREVIOUS MEETING:		
-	BILLS LIST SUBMITTED	109,997.14	109,997.14
	ADD (DELETE) BILLS LIST SUBMITTED		
	PAY ESTIMATE(S)		
-	CHECKS VOIDED	0.00	0.00
TOTAL CASH DISBURSEMENTS PREVIOUSLY APPROVED		**$ 109,997.14**	**$ 109,997.14**

Check #	Date	Amount	Supplier / Explanation	PO #	Doc No	Inv No	Account No	Subledger	Account Description
111852	**1/7/2021**		**115203 ALL AMERICAN TITLE CO INC**						
		26.17	UB REF 17010 AZURITE ST		105141	010521	9601.4651		WATER REVENUE
		26.17							
111853	**1/7/2021**		**115203 ALL AMERICAN TITLE CO INC**						
		80.00	UB REF 14611 OLIVINE WAY		105142	010521A	9601.4651		WATER REVENUE
		80.00							
111854	**1/7/2021**		**118147 BANDIMERE, RICHARD OR MARY**						
		11.77	UB REF 15824 NEON ST NW		105143	010521	9601.4651		WATER REVENUE
		11.77							
111855	**1/7/2021**		**118151 BERG, ALLEN OR SHANNON**						
		77.15	UB REF 7470 152ND LN NW		105144	010521	9601.4651		WATER REVENUE
		77.15							
111856	**1/7/2021**		**117923 BURNET TITLE**						
		408.54	UB REF 5671 146TH AVE NW		105145	010521	9601.4651		WATER REVENUE
		408.54							
111857	**1/7/2021**		**117923 BURNET TITLE**						
		270.56	UB REF 15422 TUNGSTEN WAY		105146	010521A	9601.4651		WATER REVENUE
		270.56							
111858	**1/7/2021**		**118154 CHOI, JUN WON**						
		113.50	UB REF 7357 E RAMSEY PKWY		105151	010521	9601.4651		WATER REVENUE
		113.50							
111859	**1/7/2021**		**100870 EDINA REALTY TITLE**						
		96.45	UB REF 14060 GERMANIUM ST NW		105152	010521	9601.4651		WATER REVENUE
		353.60	UB REF 15220 BARIUM ST NW		105153	010521A	9601.4651		WATER REVENUE
		73.89	UB REF 14751 OLIVINE ST NW		105154	010521B	9601.4651		WATER REVENUE
		35.18	UB REF 7059 139TH AVE NW		105155	010521C	9601.4651		WATER REVENUE
		559.12							
111860	**1/7/2021**		**114251 EXECUTIVE ASSOCIATES TITLE**						
		60.37	UB REF 14730 COBALT ST #12		105156	010521	9601.4651		WATER REVENUE
		60.37							
111861	**1/7/2021**		**118155 FIORAVANTI, LAWRENCE**						
		314.29	UB REF 6608 153RD CT NW		105157	010521	9601.4651		WATER REVENUE
		314.29							
111862	**1/7/2021**		**118143 FIRST AMERICAN TITLE INSURANCE CO**						
		384.17	UB REF 15548 URANIUM ST NW		105158	010521	9601.4651		WATER REVENUE
		384.17							
111863	**1/7/2021**		**118143 FIRST AMERICAN TITLE INSURANCE CO**						
		202.88	UB REF 15254 COBALT ST NW		105159	010521A	9601.4651		WATER REVENUE
		202.88							
111864	**1/7/2021**		**112588 GIBRALTAR TITLE AGENCY LLC**						
		169.98	UB REF 5731 162ND LN NW		105160	010521	9601.4651		WATER REVENUE
		169.98							
111865	**1/7/2021**		**115393 GLOBAL CLOSING AND TITLE SERVICES**						

Check #	Date	Amount	Supplier / Explanation	PO #	Doc No	Inv No	Account No	Subledger	Account Description
111865	1/7/2021		115393 GLOBAL CLOSING AND TITLE SERVICES						Contin
		292.46	UB REF 5829 142ND AVE NW		105161	010521	9601.4651		WATER REVENUE
		292.46							
111866	1/7/2021		118149 HEIFORT, JOY						
		42.42	UB REF 16041 RAMSEY BLVD NW		105162	010521	9601.4651		WATER REVENUE
		42.42							
111867	1/7/2021		118148 JOHNSON, JEFF OR ARDIS						
		14.61	UB REF 6886 139TH LN # 5		105163	010521	9601.4651		WATER REVENUE
		14.61							
111868	1/7/2021		118160 K AND S PLUMBING LLC						
		25.00	REF PERMIT RA044174-ERROR		105195	010621	9101.4206		PLUMBING PERMIT
		1.00	REF PERMIT RA044174-ERROR		105195	010621	9101.2081		SURCHARGES-PERM
		26.00							
111869	1/7/2021		113464 LAND TITLE						
		43.18	UB REF 8121 158TH LN NW		105164	010521	9601.4651		WATER REVENUE
		43.18							
111870	1/7/2021		117259 LEGACY TITLE						
		100.00	UB REF 5642 157TH AVE NW		105168	010521	9601.4651		WATER REVENUE
		100.00							
111871	1/7/2021		117358 LEGACY TITLE						
		49.67	UB REF 6995 168TH AVE NW		105166	010521	9601.4651		WATER REVENUE
		49.67							
111872	1/7/2021		117618 LEGACY TITLE						
		86.60	UB REF 14521 JUNKITE ST NW		105167	010521	9601.4651		WATER REVENUE
		86.60							
111873	1/7/2021		117685 LEGACY TITLE						
		9.20	UB REF 16266 LITHIUM CT NW		105165	010521	9601.4651		WATER REVENUE
		9.20							
111874	1/7/2021		118144 LEGACY TITLE						
		150.00	UB REF 7357 E RAMSEY PARKWAY		105169	010521	9601.4651		WATER REVENUE
		150.00							
111875	1/7/2021		115328 LENNAR						
		211.72	UB REF 7506 160TH AVE NW		105170	010521	9601.4651		WATER REVENUE
		211.72							
111876	1/7/2021		118157 MCCORMICK, ASHLEY OR JOSEPH						
		650.30	UB REF 16088 RHINESTONE ST		105171	010521	9601.4651		WATER REVENUE
		650.30							
111877	1/7/2021		118150 MEJIA, TIM						
		66.42	UB REF 15403 GERMANIUM ST NW		105172	010521	9601.4651		WATER REVENUE
		66.42							
111878	1/7/2021		116025 MINNESOTA TITLE						
		161.69	UB REF 14221 VANADIUM ST NW		105173	010521	9601.4651		WATER REVENUE
		161.69							

Check #	Date	Amount	Supplier / Explanation	PO #	Doc No	Inv No	Account No	Subledger	Account Description
111878	**1/7/2021**		**116025 MINNESOTA TITLE**						**Contin**
111879	**1/7/2021**		**118158 NGUGI, JOHN**						
		4.37	UB REF 15220 SODIUM ST NW		105174	010521	9601.4651		WATER REVENUE
		4.37							
111880	**1/7/2021**		**116184 PAYEUR, KAYLA**						
		115.25	UB REF 5485 BUNKER LAKE BLVD		105175	010521	9601.4651		WATER REVENUE
		115.25							
111881	**1/7/2021**		**118145 PRICE CUSTOM HOMES**						
		344.94	UB REF 6135 A RIVLYN AVE NW		105176	010521	9601.4651		WATER REVENUE
		344.94							
111882	**1/7/2021**		**114260 REI PROPERTY MANAGEMENT**						
		9.42	UB REF 6854 139TH LN #4		105177	010521	9601.4651		WATER REVENUE
		9.42							
111883	**1/7/2021**		**117038 RESULTS TITLE**						
		149.75	UB REF 14782 ZEOLITE ST NW		105179	010521	9601.4651		WATER REVENUE
		149.75							
111884	**1/7/2021**		**117038 RESULTS TITLE**						
		337.09	UB REF 15267 FLUORINE ST NW		105180	010521A	9601.4651		WATER REVENUE
		337.09							
111885	**1/7/2021**		**118146 RESULTS TITLE**						
		35.28	UB REF 13883 HEMATITE ST		105178	010521	9601.4651		WATER REVENUE
		35.28							
111886	**1/7/2021**		**118152 STOW, WARREN OR JENNIFER**						
		139.82	UB REF 5699 162ND LN NW		105181	010521	9601.4651		WATER REVENUE
		139.82							
111887	**1/7/2021**		**117096 TITLE SMART**						
		303.77	UB REF 5000 143RD LN NW		105183	010521	9601.4651		WATER REVENUE
		303.77							
111888	**1/7/2021**		**114606 TITLESMART INC**						
		548.28	UB REF 14884 QUINTANA CIR NW		105186	010521	9601.4651		WATER REVENUE
		548.28							
111889	**1/7/2021**		**114606 TITLESMART INC**						
		404.30	UB REF 15220 SODIUM ST NW		105187	010521A	9601.4651		WATER REVENUE
		404.30							
111890	**1/7/2021**		**114606 TITLESMART INC**						
		304.71	UB REF 14891 WACO ST NW		105188	010521B	9601.4651		WATER REVENUE
		304.71							
111891	**1/7/2021**		**116944 TITLESMART INC**						
		379.12	UB REF 5348 142ND CIR NW		105184	010521	9601.4651		WATER REVENUE
		47.76	UB REF 4830 SALISH CIR NW		105185	010521A	9601.4651		WATER REVENUE
		426.88							
111892	**1/7/2021**		**118153 TURNER, GERALD OR MARIE**						

Check #	Date	Amount	Supplier / Explanation	PO #	Doc No	Inv No	Account No	Subledger	Account Description
111892	1/7/2021		118153 TURNER, GERALD OR MARIE						Contin
		161.31	UB REF 16714 LIMONITE ST NW		105189	010521	9601.4651		WATER REVENUE
		161.31							
111893	1/7/2021		117097 WATERMARK TITLE AGENCY						
		33.54	UB REF 16879 MARBLE ST NW		105191	010521	9601.4651		WATER REVENUE
		33.54							
111894	1/7/2021		117360 WATERMARK TITLE AGENCY						
		120.11	UB REF 6152 146TH AVE NW		105192	010521	9601.4651		WATER REVENUE
		120.11							
111895	1/7/2021		113806 WATERMARK TITLE AGENCY LLC						
		457.57	UB REF 17028 GARNET ST NW		105190	010521	9601.4651		WATER REVENUE
		457.57							
111896	1/7/2021		118156 WINDOM, MATTHEW OR HOLLY						
		316.27	UB REF 15376 KRYPTON ST NW		105193	010521	9601.4651		WATER REVENUE
		316.27							
111921	1/14/2021		100012 ACE SOLID WASTE INC						
		118.93	JAN 21 RECYCLE CONTRACT		105211	6523978	0220.6374		REFUSE/RECYCLING
		118.93							
111922	1/14/2021		111557 ANOKA DANCE TEAM BOOSTER CLUB						
		100.00	REF DAMAGE DEP 2/28/2019		105212	011421	9804.1160		KEY & DAMAGE DEP(
		100.00							
111923	1/14/2021		118169 DEHN, GARY						
		400.00	WATER EFF GRANT PROGRAM		105214	011221	9601.6436		WATER EFFICIENCY I
		400.00							
111924	1/14/2021		106583 DELTA DENTAL PLAN OF MINNESOTA						
		3,657.75	DENTAL INS JAN 21		105215	RIS0003247323	9101.2170		DENTAL/DISABILITY/L
		3,657.75							
111925	1/14/2021		100351 NCPERS GROUP LIFE INS						
		432.00	LIFE INS JAN 21		105216	704800012021	9101.2170		DENTAL/DISABILITY/L
		432.00							
111926	1/14/2021		117544 QUADIENT FINANCE USA INC						
		2,000.00	POSTAGE # 7900044034448047		105217	010821	9101.1551		POSTAGE METER DE
		2,000.00							
111927	1/14/2021		109261 RIVENWICK MASTER ASSOCIATION						
		100.00	REF DAMAGE DEP 10/30/17		105218	011321	9804.1160		KEY & DAMAGE DEP(
		100.00							
1002120	1/8/2021		112663 CAPSTONE HOMES INC						
		24.21	UB REF 15005 TIGER ST NW		105147	010521	9601.4651		WATER REVENUE
		65.49	UB REF 8757 150TH LN NW		105148	010521A	9601.4651		WATER REVENUE
		101.47	UB REF 8784 149TH AVE NW		105149	010521B	9601.4651		WATER REVENUE
		156.32	UB REF 14991 TIGER ST		105150	010521C	9601.4651		WATER REVENUE
		347.49							
1002121	1/8/2021		105706 TINKLENBERG GROUP INC						

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1002121	**1/8/2021**		**105706 TINKLENBERG GROUP INC**						**Contin**
		3,500.00	JAN 2021 RETAINER		105182	010521	9400.6315		MISCELLANEOUS PR
		3,500.00							
1002135	**1/15/2021**		**116114 AVESIS THIRD PARTY ADMINISTRATORS**						
		179.51	VISION INS JAN 21		105213	2593625	9101.2170		DENTAL/DISABILITY/L
		179.51							
1002136	**1/15/2021**		**100291 MET COUNCIL SAC**						
		24.85	DEC 2020 SAC CHARGES		105219	011121	9101.4609		OTHER MISCELLANE
		27,335.00	DEC 2020 SAC CHARGES		105219	011121	9602.2083		SAC CHARGES
		273.35-	DEC 2020 SAC CHARGES		105219	011121	9602.4356		SEWER AVAILABILITY
		27,086.50							
1002137	**1/15/2021**		**111137 WRIGHT HENNEPIN COOPERATIVE ELECTRIC**						
		27.95	7550 SUNWOOD DR		105220	150-1681-6340 DEC 20	0194.6489		OTHER CONTRACTEI
		22.95	7650 SUNWOOD DR		105221	150-1681-4280 DEC 20	9240.6315		MISCELLANEOUS PR
		27.95	6701 HWY 10 YOUTH FIRST		105225	150-1687-1105 FEB 21	9410.6315	00041012	MISCELLANEOUS PR
		27.95	5650 ALPINE DR- FIRE STATION		105226	150-1691-2206 JAN 21	0220.6489		OTHER CONTRACTEI
		35.90	7550 SUNWOOD DR		105227	150-1693-4968 JAN 21	0194.6489		OTHER CONTRACTEI
		142.70							
90587913	**1/8/2021**		**100398 PUBLIC EMPLOYEES RETIREMENT ASSN**						
		23,984.73			105205	0107211453324	9101.2174		PERA-EMPLOYEE
		32,157.94			105206	0107211453325	9101.2183		PERA-EMPLOYER
		56,142.67							
93830399	**1/8/2021**		**101306 IRS**						
		26,042.26			105208	0107211453327	9101.2171		FEDERAL WITHHOLD
		14,554.00			105209	0107211453328	9101.2173		FICA & MEDICARE-EM
		14,554.00			105210	0107211453329	9101.2182		FICA & MEDICARE-EM
		55,150.26							
93849376	**1/8/2021**		**100601 MN DEPT OF REV WH**						
		11,855.43			105207	0107211453326	9101.2172		STATE WITHHOLDING
		11,855.43							
98010821	**1/8/2021**		**115568 ALERUS FINANCIAL NA**						
		4,172.38			105202	01072114533214	9101.2176		LIFE/HEALTH-EMPLO
		4,172.38							
99010721	**1/7/2021**		**100629 MN DEPT OF REV SALES TX**						
		7.82	Dec Sales/Use Tax		105194	12312020	9101.2082		SALES/USE TAX PAYA
		227.18	Dec Sales/Use Tax		105194	12312020	9601.2082		SALES/USE TAX PAYA
		235.00							
99010821	**1/8/2021**		**107962 TOTAL ADMINISTRATIVE SERVICE CORP**						
		1,756.11			105198	01072114533210	9101.2176		LIFE/HEALTH-EMPLO
		1,756.11							
99011121	**1/11/2021**		**107885 DEPARTMENT OF LABOR AND INDUSTRY**						

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99011121	**1/11/2021**		**107885 DEPARTMENT OF LABOR AND INDUSTRY**						**Contin**
		1,757.28	Dec Surcharges		105196	99123120	9101.2081		SURCHARGES-PERM
		35.49-	Dec Surcharges		105196	99123120	9101.4604		SURCHARGES
		1,721.79							
99011521	**1/15/2021**		**108768 COMDATA NETWORK INC**						
		139.95	GRAMMARLY COHZYY8IS		105229	DEC 2020 COMDATA PCARD	9101.1550		PREPAID EXPENSE
		22.07	AMAZON.COM*XX39H0CQ3		105229	DEC 2020 COMDATA PCARD	0211.6275		OTHER EQUIPMENT I
		195.95	AMAZON.COM*DR2MD23U3 A		105229	DEC 2020 COMDATA PCARD	0211.6231		UNIFORMS & TURN-C
		332.66	WEATHERTECH DIRECT LLC		105229	DEC 2020 COMDATA PCARD	0211.6550		MOTOR VEHICLES
		11.31	AMAZON.COM*RJ7HU9T83		105229	DEC 2020 COMDATA PCARD	0211.6275		OTHER EQUIPMENT I
		644.85	AMAZON.COM*M21XG8X33		105229	DEC 2020 COMDATA PCARD	0211.6231		UNIFORMS & TURN-C
		8.18	AMAZON.COM*7Q4TO62U3 A		105229	DEC 2020 COMDATA PCARD	0211.6275		OTHER EQUIPMENT I
		9.79	AMAZON.COM*7Q4TO62U3 A		105229	DEC 2020 COMDATA PCARD	0211.6275		OTHER EQUIPMENT I
		358.95	AMZN MKTP US*NU4XS4LZ3		105229	DEC 2020 COMDATA PCARD	0211.6257		OTHER VEHICLE PAR
		42.57	AMAZON.COM*VX01R4HF3		105229	DEC 2020 COMDATA PCARD	0270.6249		MISCELLANEOUS OP
		11.37	AMAZON.COM*HW9J693F3 A		105229	DEC 2020 COMDATA PCARD	0211.6275		OTHER EQUIPMENT I
		23.95	AMZN MKTP US*W73AH3V13		105229	DEC 2020 COMDATA PCARD	0211.6275		OTHER EQUIPMENT I
		14.68	AMZN MKTP US*7X1JI5393		105229	DEC 2020 COMDATA PCARD	0211.6231		UNIFORMS & TURN-C
		8.94	AMAZON.COM*NV6NS7SX3		105229	DEC 2020 COMDATA PCARD	0211.6231		UNIFORMS & TURN-C
		136.35	WEATHERTECH DIRECT LLC		105229	DEC 2020 COMDATA PCARD	0211.6257		OTHER VEHICLE PAR
		40.11	AMZN MKTP US*R290B1DI3		105229	DEC 2020 COMDATA PCARD	0194.6249		MISCELLANEOUS OP
		31.89	AMZN MKTP US*G36A833C3		105229	DEC 2020 COMDATA PCARD	0194.6249		MISCELLANEOUS OP
		93.59	AMZN MKTP US*8F2UE9IT3		105229	DEC 2020 COMDATA PCARD	0194.6281		SMALL TOOLS & MIN(
		63.00	PAYPAL *USBUIRT		105229	DEC 2020 COMDATA PCARD	0194.6249		MISCELLANEOUS OP
		39.54	LITTLE DUKES RAMSEY		105229	DEC 2020 COMDATA PCARD	0194.6225		DIESEL FUEL
		59.85	AMAZON.COM*NF6XS8YQ3		105229	DEC 2020 COMDATA PCARD	0194.6249		MISCELLANEOUS OP
		11.36	AMAZON.COM*NF6XS8YQ3		105229	DEC 2020 COMDATA PCARD	0194.6249		MISCELLANEOUS OP
		25.89	AMZN MKTP US*1V4ZM8TW3		105229	DEC 2020 COMDATA PCARD	0194.6281		SMALL TOOLS & MIN(
		44.50	DEY APPLIANCE A		105229	DEC 2020 COMDATA PCARD	0194.6259		BUILDING MAINT/REF
		34.63	LITTLE DUKES RAMSEY		105229	DEC 2020	0194.6225		DIESEL FUEL

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99011521	1/15/2021		108768 COMDATA NETWORK INC						Contin
						COMDATA PCARD			
		69.98	THE HOME DEPOT #2821		105229	DEC 2020	0280.6281		SMALL TOOLS & MIN(
						COMDATA PCARD			
		12.98	THE HOME DEPOT #2821		105229	DEC 2020	0280.6281		SMALL TOOLS & MIN(
						COMDATA PCARD			
		12.98	THE HOME DEPOT #2821		105229	DEC 2020	0280.6281		SMALL TOOLS & MIN(
						COMDATA PCARD			
		12.98	THE HOME DEPOT #2821		105229	DEC 2020	0280.6281		SMALL TOOLS & MIN(
						COMDATA PCARD			
		70.96	THE HOME DEPOT #2821		105229	DEC 2020	0280.6281		SMALL TOOLS & MIN(
						COMDATA PCARD			
		19.02	THE HOME DEPOT #2821		105229	DEC 2020	0280.6281		SMALL TOOLS & MIN(
						COMDATA PCARD			
		75.00	BCA TRAINING EDUCATION		105229	DEC 2020	0211.6335		TRAINING
						COMDATA PCARD			
		75.00	BCA TRAINING EDUCATION		105229	DEC 2020	0211.6335		TRAINING
						COMDATA PCARD			
		86.40	TLO TRANSUNION		105229	DEC 2020	0211.6315		MISCELLANEOUS PR
						COMDATA PCARD			
		250.00	NEWEGG B2B INC		105229	DEC 2020	0192.6281		SMALL TOOLS & MIN(
						COMDATA PCARD			
		50.00	NEWEGG B2B INC		105229	DEC 2020	0192.6281		SMALL TOOLS & MIN(
						COMDATA PCARD			
		331.20	SP * TERRACYCLE ZERO W		105229	DEC 2020	0192.6405		OFFICE & DATA PROC
						COMDATA PCARD			
		332.49	AMAZON.COM*9P5P18UU3		105229	DEC 2020	0130.6208		MISCELLANEOUS OF
						COMDATA PCARD			
		64.99	AMAZON.COM*GJ5J47TX3		105229	DEC 2020	0130.6208		MISCELLANEOUS OF
						COMDATA PCARD			
		36.00	NEWEGG B2B INC		105229	DEC 2020	0192.6281		SMALL TOOLS & MIN(
						COMDATA PCARD			
		20.00	REV.COM		105229	DEC 2020	0191.6315		MISCELLANEOUS PR
						COMDATA PCARD			
		116.69	ZOOM.US 888-799-9666		105229	DEC 2020	0191.6315		MISCELLANEOUS PR
						COMDATA PCARD			
		116.69	ZOOM.US 888-799-9666		105229	DEC 2020	0192.6405		OFFICE & DATA PROC
						COMDATA PCARD			
		124.45	ZOOM.US 888-799-9666		105229	DEC 2020	9101.1550		PREPAID EXPENSE
						COMDATA PCARD			
		124.45	ZOOM.US 888-799-9666		105229	DEC 2020	9101.1550		PREPAID EXPENSE
						COMDATA PCARD			
		78.21	THE UPS STORE 1957		105229	DEC 2020	0211.6322		POSTAGE
						COMDATA PCARD			
		46.36	THE UPS STORE 1957		105229	DEC 2020	0211.6322		POSTAGE
						COMDATA PCARD			
		150.00	AMERICAN PAYROLL ASSOC		105229	DEC 2020	0153.6451		MEMBERSHIP DUES
						COMDATA PCARD			
		179.00	AMERICAN PLANNING A		105229	DEC 2020	9101.1550		PREPAID EXPENSE
						COMDATA PCARD			
		116.85	AMZN MKTP US*F056G5Q53		105229	DEC 2020	0311.6249		MISCELLANEOUS OP
						COMDATA PCARD			
		183.68	MENARDS ELK RIVER MN		105229	DEC 2020	0260.6249		MISCELLANEOUS OP
						COMDATA PCARD			
		673.68	AA DRIVELINE SPECIALTI		105229	DEC 2020	0312.6257		OTHER VEHICLE PAR

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99011521	1/15/2021		108768 COMDATA NETWORK INC						Contin
						COMDATA PCARD			
		2,917.09	NOR*NORTHERN TOOL		105229	DEC 2020	0312.6257		OTHER VEHICLE PAR
						COMDATA PCARD			
		169.00	ASE TEST FEES		105229	DEC 2020	0311.6335		TRAINING
						COMDATA PCARD			
		215.25	JEFF STEIN SNAPON		105229	DEC 2020	0311.6281		SMALL TOOLS & MIN(
						COMDATA PCARD			
		23.65	JEFF STEIN SNAPON		105229	DEC 2020	0311.6281		SMALL TOOLS & MIN(
						COMDATA PCARD			
		158.00	AMZN MKTP US*V80PK4TC3		105229	DEC 2020	0301.6405		OFFICE & DATA PROC
						COMDATA PCARD			
		96.78	DOORDASH*AURELIOS PIZZ		105229	DEC 2020	0111.6249		MISCELLANEOUS OP
						COMDATA PCARD			
		69.90	COBORN'S SUPERSTORE		105229	DEC 2020	0111.6249		MISCELLANEOUS OP
						COMDATA PCARD			
		295.00	ECONOMIC DEVELOPMENT A		105229	DEC 2020	9101.1550		PREPAID EXPENSE
						COMDATA PCARD			
		26.90	AMER ASSOC NOTARIES		105229	DEC 2020	0211.6451		MEMBERSHIP DUES
						COMDATA PCARD			
		8.98	THE HOME DEPOT #2821		105229	DEC 2020	0211.6208		MISCELLANEOUS OF
						COMDATA PCARD			
		8.98	THE HOME DEPOT #2821		105229	DEC 2020	0211.6208		MISCELLANEOUS OF
						COMDATA PCARD			
		275.00	MINNESOTA COUNTY ATTOR		105229	DEC 2020	0211.6204		STATIONERY, ENVEL(
						COMDATA PCARD			
		120.00	SECRETARY OF STATE		105229	DEC 2020	0211.6451		MEMBERSHIP DUES
						COMDATA PCARD			
		28.55	AMZN MKTP US*LV0WI7NY3		105229	DEC 2020	0211.6208		MISCELLANEOUS OF
						COMDATA PCARD			
		14.99	ZOOM.US 888-799-9666		105229	DEC 2020	0130.6249		MISCELLANEOUS OP
						COMDATA PCARD			
		16.06	ZOOM.US 888-799-9666		105229	DEC 2020	0301.6249		MISCELLANEOUS OP
						COMDATA PCARD			
		149.98	ZOOM.US 888-799-9666		105229	DEC 2020	9230.6249		MISCELLANEOUS OP
						COMDATA PCARD			
		6,944.00	CINFIN-COMMERCIAL-INSU		105229	DEC 2020	9438.6520	00202007	BUILDINGS & STRUC
						COMDATA PCARD			
		12.99	NEWEGG B2B INC		105229	DEC 2020	9601.6208		MISCELLANEOUS OF
						COMDATA PCARD			
		23.00	POLLUTION CONTROL AGEN		105229	DEC 2020	9602.6335		TRAINING
						COMDATA PCARD			
		48.05	HOLIDAY STATIONS 0323		105230	DEC 2020	0452.6223		GASOLINE
						COMDATA FUEL			
		36.51	HOLIDAY STATIONS 0395		105230	DEC 2020	0452.6223		GASOLINE
						COMDATA FUEL			
		33.70	BILL'S SUPERETTE #8 (F		105230	DEC 2020	0452.6223		GASOLINE
						COMDATA FUEL			
		48.60	LITTLE DUKES RAMSEY		105230	DEC 2020	0311.6223		GASOLINE
						COMDATA FUEL			
		65.61	LITTLE DUKES RAMSEY		105230	DEC 2020	0311.6223		GASOLINE
						COMDATA FUEL			
		68.99	BILL'S SUPERETTE #8 (F		105230	DEC 2020	0452.6223		GASOLINE
						COMDATA FUEL			
		58.50	BILL'S SUPERETTE #8 (F		105230	DEC 2020	0452.6223		GASOLINE

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99011521	**1/15/2021**		**108768 COMDATA NETWORK INC**						**Contin**
		54.89	CASEYS RAMSEY		105230	COMDATA FUEL DEC 2020	0311.6223		GASOLINE
		43.22	CASEYS RAMSEY		105230	COMDATA FUEL DEC 2020	0311.6223		GASOLINE
		47.39	CASEYS RAMSEY		105230	COMDATA FUEL DEC 2020	0311.6223		GASOLINE
		61.56	BILL'S SUPERETTE #8 (F		105230	COMDATA FUEL DEC 2020	0452.6223		GASOLINE
		59.70	BILL'S SUPERETTE #8 (F		105230	COMDATA FUEL DEC 2020	0452.6223		GASOLINE
		18.23	HOLIDAY STATIONS 0323		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		30.29	HOLIDAY STATIONS 3514		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		34.68	EXXONMOBIL 47608989		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		66.12	CASEYS RAMSEY		105230	COMDATA FUEL DEC 2020	0311.6223		GASOLINE
		16.75	CASEYS RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		67.84	CASEYS RAMSEY		105230	COMDATA FUEL DEC 2020	0452.6223		GASOLINE
		37.06	CASEYS RAMSEY		105230	COMDATA FUEL DEC 2020	0220.6225		DIESEL FUEL
		26.56	CASEYS RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		30.93	CASEYS RAMSEY		105230	COMDATA FUEL DEC 2020	0311.6223		GASOLINE
		41.22	CASEYS RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		37.25	CASEYS RAMSEY		105230	COMDATA FUEL DEC 2020	0452.6223		GASOLINE
		39.13	HOLIDAY STATIONS 0323		105230	COMDATA FUEL DEC 2020	0311.6223		GASOLINE
		18.58	HOLIDAY STATIONS 0395		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		25.06	HOLIDAY STATIONS 3514		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		46.79	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0311.6223		GASOLINE
		11.81	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0311.6223		GASOLINE
		43.29	CASEYS RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		15.17	CASEYS RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		35.79	BILL'S SUPERETTE #8 (F		105230	COMDATA FUEL DEC 2020	0220.6223		GASOLINE
		46.93	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		13.85	CASEYS RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		23.12	BILL'S SUPERETTE #8 (F		105230	COMDATA FUEL DEC 2020	0220.6223		GASOLINE

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99011521	**1/15/2021**		**108768 COMDATA NETWORK INC**						**Contin**
		22.44	CASEYS RAMSEY		105230	COMDATA FUEL DEC 2020	0220.6223		GASOLINE
		13.00	CASEYS RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		29.42	HOLIDAY STATIONS 0395		105230	COMDATA FUEL DEC 2020	0220.6225		DIESEL FUEL
		31.00	HOLIDAY STATIONS 0395		105230	COMDATA FUEL DEC 2020	0220.6223		GASOLINE
		6.21	CASEYS RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		10.90	CASEYS RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		41.63	HOLIDAY STATIONS 0395		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		27.30	BILL'S SUPERETTE #8 (F		105230	COMDATA FUEL DEC 2020	0220.6223		GASOLINE
		30.16	CASEYS RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		24.55	CASEYS RAMSEY		105230	COMDATA FUEL DEC 2020	0220.6223		GASOLINE
		32.81	HOLIDAY STATIONS 0395		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		45.27	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		16.97	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		11.74	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		17.87	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0220.6223		GASOLINE
		17.27	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		12.62	HOLIDAY STATIONS 0395		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		14.72	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		12.65	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		26.40	HOLIDAY STATIONS 0323		105230	COMDATA FUEL DEC 2020	0220.6223		GASOLINE
		23.15	CASEYS RAMSEY		105230	COMDATA FUEL DEC 2020	0220.6223		GASOLINE
		12.67	CASEYS RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		15.03	CASEYS RAMSEY		105230	COMDATA FUEL DEC 2020	0220.6223		GASOLINE
		35.31	CASEYS RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		41.83	CASEYS RAMSEY		105230	COMDATA FUEL DEC 2020	0452.6223		GASOLINE
		15.66	CASEYS RAMSEY		105230	COMDATA FUEL DEC 2020	0220.6223		GASOLINE
		12.02	CASEYS RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE

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99011521	**1/15/2021**		**108768 COMDATA NETWORK INC**						**Contin**
		29.47	CASEYS RAMSEY		105230	COMDATA FUEL DEC 2020	0220.6223		GASOLINE
		16.60	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		22.94	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		11.40	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		30.63	CASEYS RAMSEY		105230	COMDATA FUEL DEC 2020	0220.6223		GASOLINE
		20.01	CASEYS RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		18.94	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		25.34	HOLIDAY STATIONS 0323		105230	COMDATA FUEL DEC 2020	0220.6223		GASOLINE
		33.75	BILL'S SUPERETTE #8 (F		105230	COMDATA FUEL DEC 2020	0220.6223		GASOLINE
		19.71	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0220.6223		GASOLINE
		28.56	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0220.6223		GASOLINE
		24.53	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		13.04	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		18.40	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0194.6223		GASOLINE
		8.62	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0194.6223		GASOLINE
		24.28	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		32.14	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		14.56	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		27.52	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		34.47	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		34.86	HOLIDAY STATIONS 0323		105230	COMDATA FUEL DEC 2020	0311.6223		GASOLINE
		43.99	HOLIDAY STATIONS 0323		105230	COMDATA FUEL DEC 2020	0220.6223		GASOLINE
		18.97	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0220.6223		GASOLINE
		14.50	HOLIDAY STATIONS 0395		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		16.20	HOLIDAY STATIONS 0395		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		53.67	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		34.62	HOLIDAY STATIONS 0395		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE

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99011521	**1/15/2021**		**108768 COMDATA NETWORK INC**						**Contin**
		38.71	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		33.62	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		35.19	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		41.35	HOLIDAY STATIONS 0323		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		42.09	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		46.80	CASEYS RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		21.07	HOLIDAY STATIONS 0395		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		13.14	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		30.93	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		36.60	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		17.65	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		23.67	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		29.73	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		20.91	CASEYS RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		18.74	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		8.17	CASEYS RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		18.59	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		30.24	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		12.97	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		27.49	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		23.17	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		27.61	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		26.25	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		15.99	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		24.45	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		24.87	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		30.02	CASEYS RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE

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99011521	**1/15/2021**		**108768 COMDATA NETWORK INC**						**Contin**
		28.93	CASEYS RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		32.45	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		27.36	CASEYS RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		29.04	CASEYS RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		33.53	CASEYS RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		25.60	HOLIDAY STATIONS 0395		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		15.51	CASEYS RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		25.86	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		7.85	CASEYS RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		15.73	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		27.38	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		24.11	CASEYS RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		21.90	CASEYS RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		16.48	HOLIDAY STATIONS 0395		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		14.70	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		8.69	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		13.41	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		5.29	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		25.09	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		11.66	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		13.94	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		26.34	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		13.91	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		20.01	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		20.76	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		15.62	CASEYS RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		24.69	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE

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99011521	1/15/2021		108768 COMDATA NETWORK INC						Contin
		29.18	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		22.30	HOLIDAY STATIONS 0395		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		15.60	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		15.33	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		28.65	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		20.50	HOLIDAY STATIONS 0395		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		37.73	HOLIDAY STATIONS 0395		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		18.05	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		38.32	HOLIDAY STATIONS 0395		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		35.17	HOLIDAY STATIONS 0395		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		23.25	HOLIDAY STATIONS 0395		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		40.11	HOLIDAY STATIONS 0395		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		13.15	HOLIDAY STATIONS 0395		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		32.74	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		40.17	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		17.06	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		17.88	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		11.20	CASEYS RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		20.37	CASEYS RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		15.36	CASEYS RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		30.67	CASEYS RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		14.99	CASEYS RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		11.98	HOLIDAY STATIONS 0395		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		18.10	HOLIDAY STATIONS 0395		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		23.82	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		22.98	CASEYS RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		25.19	CASEYS RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE

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99011521	**1/15/2021**		**108768 COMDATA NETWORK INC**						**Contin**
		29.17	HOLIDAY STATIONS 0323		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		14.97	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		21.27	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		11.94	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		17.31	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		19.30	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		25.52	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		26.06	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		38.32	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		35.53	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		21.11	CASEYS RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		29.99	CASEYS RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		16.58	CASEYS RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		17.68	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		31.85	CASEYS RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		36.94	CASEYS RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		42.08	CASEYS RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		33.77	CASEYS RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		34.57	CASEYS RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		39.77	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		14.64	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		12.86	CASEYS RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		13.54	HOLIDAY STATIONS 0395		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		12.38	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		29.53	CASEYS RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		15.69	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		11.39	CASEYS RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE

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99011521	**1/15/2021**		**108768 COMDATA NETWORK INC**						**Contin**
		23.29	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		21.00	HOLIDAY STATIONS 0395		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		24.88	BILL'S SUPERETTE #8 (F		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		17.20	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		16.18	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		18.49	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		10.40	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		22.03	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		47.31	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0194.6223		GASOLINE
		37.48	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0194.6223		GASOLINE
		34.45	BILL'S SUPERETTE #8 (F		105230	COMDATA FUEL DEC 2020	0301.6223		GASOLINE
		37.04	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0301.6223		GASOLINE
		24.06	HOLIDAY STATIONS 0395		105230	COMDATA FUEL DEC 2020	0240.6223		GASOLINE
		16.72	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0240.6223		GASOLINE
		20.70	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0240.6223		GASOLINE
		26.00	BILL'S SUPERETTE #8 (F		105230	COMDATA FUEL DEC 2020	0240.6223		GASOLINE
		18.50	BILL'S SUPERETTE #8 (F		105230	COMDATA FUEL DEC 2020	0240.6223		GASOLINE
		22.55	BILL'S SUPERETTE #8 (F		105230	COMDATA FUEL DEC 2020	0240.6223		GASOLINE
		45.86	CASEYS RAMSEY		105230	COMDATA FUEL DEC 2020	0301.6223		GASOLINE
		43.18	CASEYS RAMSEY		105230	COMDATA FUEL DEC 2020	0301.6223		GASOLINE
		43.97	CASEYS RAMSEY		105230	COMDATA FUEL DEC 2020	0301.6223		GASOLINE
		28.78	BILL'S SUPERETTE #8 (F		105230	COMDATA FUEL DEC 2020	0220.6225		DIESEL FUEL
		26.76	BILL'S SUPERETTE #8 (F		105230	COMDATA FUEL DEC 2020	0220.6225		DIESEL FUEL
		15.50	BILL'S SUPERETTE #8 (F		105230	COMDATA FUEL DEC 2020	0220.6225		DIESEL FUEL
		25.22	HOLIDAY STATIONS 0323		105230	COMDATA FUEL DEC 2020	0220.6225		DIESEL FUEL
		39.95	BILL'S SUPERETTE #8 (F		105230	COMDATA FUEL DEC 2020	0220.6223		GASOLINE
		40.00	BILL'S SUPERETTE #8 (F		105230	COMDATA FUEL DEC 2020	0220.6223		GASOLINE

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99011521	**1/15/2021**		**108768 COMDATA NETWORK INC**						**Contin**
		20.48	BILL'S SUPERETTE #8 (F		105230	COMDATA FUEL DEC 2020	0220.6225		DIESEL FUEL
		17.89	BILL'S SUPERETTE #8 (F		105230	COMDATA FUEL DEC 2020	0220.6225		DIESEL FUEL
		17.64	HOLIDAY STATIONS 0395		105230	COMDATA FUEL DEC 2020	0220.6225		DIESEL FUEL
		43.75	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0220.6225		DIESEL FUEL
		18.68	CASEYS RAMSEY		105230	COMDATA FUEL DEC 2020	0220.6225		DIESEL FUEL
		18.76	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0220.6225		DIESEL FUEL
		18.49	CASEYS RAMSEY		105230	COMDATA FUEL DEC 2020	0220.6225		DIESEL FUEL
		33.65	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0220.6225		DIESEL FUEL
		31.21	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0220.6225		DIESEL FUEL
		30.42	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0220.6225		DIESEL FUEL
		37.70	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0220.6225		DIESEL FUEL
		21.73	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0220.6225		DIESEL FUEL
		23.25	BILL'S SUPERETTE #8 (F		105230	COMDATA FUEL DEC 2020	0220.6223		GASOLINE
		20.80	BILL'S SUPERETTE #8 (F		105230	COMDATA FUEL DEC 2020	0220.6223		GASOLINE
		16.40	BILL'S SUPERETTE #8 (F		105230	COMDATA FUEL DEC 2020	0220.6223		GASOLINE
		30.20	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0220.6223		GASOLINE
		32.17	BILL'S SUPERETTE #11 (		105230	COMDATA FUEL DEC 2020	0220.6223		GASOLINE
		41.49	CASEYS GEN STORE 1988		105230	COMDATA FUEL DEC 2020	0220.6223		GASOLINE
		29.07	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0220.6223		GASOLINE
		19.91	HOLIDAY STATIONS 0395		105230	COMDATA FUEL DEC 2020	0220.6223		GASOLINE
		23.49	BILL'S SUPERETTE #8 (F		105230	COMDATA FUEL DEC 2020	0220.6223		GASOLINE
		28.04	BILL'S SUPERETTE #8 (F		105230	COMDATA FUEL DEC 2020	0220.6223		GASOLINE
		37.08	BILL'S SUPERETTE #8 (F		105230	COMDATA FUEL DEC 2020	0220.6223		GASOLINE
		28.50	BILL'S SUPERETTE #11 (		105230	COMDATA FUEL DEC 2020	0220.6223		GASOLINE
		29.60	BILL'S SUPERETTE #8 (F		105230	COMDATA FUEL DEC 2020	0220.6223		GASOLINE
		32.12	CASEYS RAMSEY		105230	COMDATA FUEL DEC 2020	0452.6223		GASOLINE
		56.16	CASEYS RAMSEY		105230	COMDATA FUEL DEC 2020	0452.6223		GASOLINE

Check #	Date	Amount	Supplier / Explanation	PO #	Doc No	Inv No	Account No	Subledger	Account Description
99011521	**1/15/2021**		**108768 COMDATA NETWORK INC**						**Contin**
		13.56	CASEYS RAMSEY		105230	COMDATA FUEL DEC 2020	0452.6223		GASOLINE
		50.76	CASEYS RAMSEY		105230	COMDATA FUEL DEC 2020	0452.6223		GASOLINE
		57.87	CASEYS RAMSEY		105230	COMDATA FUEL DEC 2020	0452.6223		GASOLINE
		49.74	CASEYS RAMSEY		105230	COMDATA FUEL DEC 2020	0311.6223		GASOLINE
		36.75	BILL'S SUPERETTE #13 (		105230	COMDATA FUEL DEC 2020	0311.6223		GASOLINE
		14.98	CASEYS RAMSEY		105230	COMDATA FUEL DEC 2020	0311.6223		GASOLINE
		27.91	BILL'S SUPERETTE #8 (F		105230	COMDATA FUEL DEC 2020	0311.6223		GASOLINE
		57.85	CASEYS RAMSEY		105230	COMDATA FUEL DEC 2020	0311.6223		GASOLINE
		91.41	CASEYS RAMSEY		105230	COMDATA FUEL DEC 2020	0452.6223		GASOLINE
		96.59	BILL'S SUPERETTE #8 (F		105230	COMDATA FUEL DEC 2020	0452.6223		GASOLINE
		45.13	HOLIDAY STATIONS 0395		105230	COMDATA FUEL DEC 2020	0452.6223		GASOLINE
		51.63	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0311.6223		GASOLINE
		56.22	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0311.6223		GASOLINE
		53.97	CASEYS RAMSEY		105230	COMDATA FUEL DEC 2020	0452.6223		GASOLINE
		43.97	BILL'S SUPERETTE #8 (F		105230	COMDATA FUEL DEC 2020	0452.6223		GASOLINE
		53.68	BILL'S SUPERETTE #8 (F		105230	COMDATA FUEL DEC 2020	0311.6223		GASOLINE
		21.72	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0311.6223		GASOLINE
		47.74	CASEYS RAMSEY		105230	COMDATA FUEL DEC 2020	0311.6223		GASOLINE
		30.93	CASEYS RAMSEY		105230	COMDATA FUEL DEC 2020	0311.6223		GASOLINE
		48.11	CASEYS RAMSEY		105230	COMDATA FUEL DEC 2020	0452.6223		GASOLINE
		11.71	BILL'S SUPERETTE #8 (F		105230	COMDATA FUEL DEC 2020	0452.6223		GASOLINE
		31.41	HOLIDAY STATIONS 3531		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		25.77	HOLIDAY STATIONS 0440		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		23.72	CASEYS RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		30.39	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		25.34	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		13.30	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE

Check #	Date	Amount	Supplier / Explanation	PO #	Doc No	Inv No	Account No	Subledger	Account Description
99011521	**1/15/2021**		**108768 COMDATA NETWORK INC**						**Contin**
		17.44	HOLIDAY STATIONS 0395		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		26.29	HOLIDAY STATIONS 0395		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		31.78	CASEYS RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		25.86	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		28.51	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		29.55	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		23.02	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		26.56	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	0211.6223		GASOLINE
		46.03	BILL'S SUPERETTE #8 (F		105230	COMDATA FUEL DEC 2020	9601.6223		GASOLINE
		55.58	CASEYS RAMSEY		105230	COMDATA FUEL DEC 2020	9601.6223		GASOLINE
		17.01	CASEYS RAMSEY		105230	COMDATA FUEL DEC 2020	9601.6223		GASOLINE
		42.01	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	9601.6223		GASOLINE
		63.19	CASEYS RAMSEY		105230	COMDATA FUEL DEC 2020	9601.6223		GASOLINE
		40.69	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	9601.6223		GASOLINE
		52.66	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	9601.6223		GASOLINE
		66.56	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	9601.6223		GASOLINE
		36.56	CASEYS RAMSEY		105230	COMDATA FUEL DEC 2020	9601.6223		GASOLINE
		47.05	HOLIDAY STATIONS 0395		105230	COMDATA FUEL DEC 2020	9601.6223		GASOLINE
		39.61	BILL'S SUPERETTE #8 (F		105230	COMDATA FUEL DEC 2020	9601.6223		GASOLINE
		40.83	LITTLE DUKES RAMSEY		105230	COMDATA FUEL DEC 2020	9601.6223		GASOLINE
		44.63	CASEYS RAMSEY		105230	COMDATA FUEL DEC 2020	9602.6223		GASOLINE
		62.43	CASEYS RAMSEY		105230	COMDATA FUEL DEC 2020	9602.6223		GASOLINE
		64.25	CASEYS RAMSEY		105230	COMDATA FUEL DEC 2020	9602.6223		GASOLINE
		26,141.47				COMDATA FUEL			
99011821	**1/18/2021**		**100219 HOME DEPOT COMMERCIAL ACCT PROGRAM**						
		25.32	DEC 2020 PURCHASES		105228	122820	0194.6249		MISCELLANEOUS OP
		27.94	DEC 2020 PURCHASES		105228	122820	0194.6281		SMALL TOOLS & MIN(
		53.26							
99466745	**1/8/2021**		**100223 ICMA RETIREMENT TRUST 457**						

CITY OF RAMSEY

Council Check Register by GL

Council Check Register and Summary

1/7/2021 -- 12/31/2021

Check #	Date	Amount	Supplier / Explanation	PO #	Doc No	Inv No	Account No	Subledger	Account Description
99466745	**1/8/2021**		**100223 ICMA RETIREMENT TRUST 457**						**Contin**
		1,971.82			105197	0107211453321	9101.2175		DEFERRED COMPEN
		1,971.82							
99554242	**1/8/2021**		**114790 GREAT WEST LIFE AND ANNUITY INS CO**						
		9,549.18			105200	01072114533212	9101.2175		DEFERRED COMPEN
		9,549.18							
99558417	**1/8/2021**		**114790 GREAT WEST LIFE AND ANNUITY INS CO**						
		19,518.40			105201	01072114533213	9101.2176		LIFE/HEALTH-EMPLO
		19,518.40							
		235,128.08	Grand Total						

Payment Instrument Totals

Checks	15,604.11
EFT Payments	188,267.77
A/P ACH Payment	31,256.20
Total Payments	235,128.08

Payment Group Control Number	3154		
Bank Account	999.1010	CASH IN BANK	00002224
Version	LOGIS004V		
Originator	JLIPSKI		
Payment Instrument	Check Payment		
Pay Through Date	12/31/2021		

Payee Number	Name / Mailing Address	Stub Message	Document Ty	Number	Itm	Co	Due Date	Invoice Number	Payment Amount
115549	3SI SECURITY SYSTEMS INC	2021 TRACKING SERVICE	PV	105304	001	09101	12/9/2020	INV860498	456.00
	3SI SECURITY SYSTEMS INC 101 LINDENWOOD DR SUITE 200 MALVERN PA 19355						Summary Total		456.00
							Payment Amount		456.00
117889	ANIMAL CARE EQUIPMENT AND SERVICE LLC	HUMANIAC RABIES GLOVES	PV	105259	001	09101	1/7/2021	88496	102.38
	ANIMAL CARE EQUIPMENT AND SERVICE LLC 555 ALTER STREET SUITE 19A BROOMFIELD CO 80020						Summary Total		102.38
							Payment Amount		102.38
100036	ANOKA COUNTY CHIEFS OF POLICE ASSN	2021 DUES-KATERS,BLUML,FRANKFU	PV	105306	001	09101	1/12/2021	011221	30.00
	ANOKA COUNTY CHIEFS OF POLICE ASSN ATTN: KELLY HAIGH (ACSO) ANOKA COUNTY SHERIFF OFFICE 13301 HANSON BLVD NW ANDOVER MN 55304						Summary Total		30.00
							Payment Amount		30.00
111377	ANOKA MUNICIPAL UTILITY	DEC 20 RAMSEY ST LIGHTS	PV	105341	001	09603	1/8/2021	22-990005-01 DEC 20	88.80
	ANOKA MUNICIPAL UTILITY CITY HALL 2015 FIRST AVENUE NO ANOKA MN 55303						Summary Total		88.80
							Payment Amount		88.80
118165	ARCHITECT MECHANICAL INC	PAY APP 1 PW CAMPUS	PV	105260	001	09438	12/21/2020	122120	51,775.00
	ARCHITECT MECHANICAL INC 2917 ANTHONY LANE NORTH ST ANTHONY MN 55418						Summary Total		51,775.00
							Payment Amount		51,775.00
101084	BATTERIES PLUS BULBS	LITHIUM BATTERY	PV	105261	001	09101	12/28/2020	P35049632	15.95

Payment Group Control Number	3154		
Bank Account	999.1010	CASH IN BANK	00002224
Version	LOGIS004V		
Originator	JLIPSKI		
Payment Instrument	Check Payment		
Pay Through Date	12/31/2021		

Payee Number	Payee Name / Mailing Address	Stub Message	Document Ty	Document Number	Itm	Co	Due Date	Invoice Number	Payment Amount
	BATTERIES PLUS BULBS 138 SOUTH DALE MABRY HWY TAMPA FL 33609			Summary Total					15.95
				Payment Amount					15.95
108513	BLAINE LOCK AND SAFE INC	REMOVE AND REPLACE LOCKS	PV	105231	001	09101	1/6/2021	25047	686.20
	BLAINE LOCK AND SAFE INC 10136 SUNSET AVENUE BLAINE MN 55014			Summary Total					686.20
				Payment Amount					686.20
100086	BLUE VELVET INC	FIRE JAN 2021 WASHES	PV	105307	001	09101	1/11/2021	011121	149.75
	BLUE VELVET INC 14101 ST FRANCIS BLVD NW RAMSEY MN 55303			Summary Total					149.75
				Payment Amount					149.75
116174	CHARGEPOINT INC	SERVICE JAN 2021-JAN 2022	PV	105309	001	09240	1/11/2021	IN91508	1,069.00
	CHARGEPOINT INC 254 EAST HACIENDA AVENUE CAMPBELL CA 95008			Summary Total					1,069.00
				Payment Amount					1,069.00
118176	CHOSEN VALLEY TESTING INC	RE: TIGER ST RECON DESIGN	PV	105342	001	09435	12/17/2020	40954	4,550.00
	CHOSEN VALLEY TESTING INC 1410 7TH STREET NW			Summary Total					4,550.00
		BUS PARK IMPRO DESIGN	PV	105343	001	09402	12/17/2020	40955	4,050.00
	ROCHESTER MN 55901			Summary Total					4,050.00
				Payment Amount					8,600.00
107724	COMCAST	JAN- APR 21 SERVICE	PV	105234	001	09101	1/7/2021	010721	7.05
	COMCAST ATTN: FINANCE 4TH FLOOR 10 RIVER PARK PLAZA ST PAUL MN 55107			Summary Total					7.05
				Payment Amount					7.05

Payment Group Control Number	3154		
Bank Account	999.1010	CASH IN BANK	00002224
Version	LOGIS004V		
Originator	JLIPSKI		
Payment Instrument	Check Payment		
Pay Through Date	12/31/2021		

Payee Number	Payee Name / Mailing Address	Stub Message	Document Ty	Document Number	Itm	Co	Due Date	Invoice Number	Payment Amount
114451	COMPASS MINERALS	ROAD SALT	PV	105311	001	09101	1/7/2021	739278	17,629.54
	COMPASS MINERALS			Summary Total					17,629.54
	P O BOX 277043	ROAD SALT	PV	105373	001	09101	1/8/2021	740280	14,470.75
	ATLANTA GA 30384-7043			Summary Total					14,470.75
				Payment Amount					32,100.29
100117	CONNEXUS ENERGY	SERVICE PW 14199 JASPAR ST	PV	105313	001	09438	1/15/2021	ATC0019092	5,753.75
	CONNEXUS ENERGY			Summary Total					5,753.75
	14601 RAMSEY BLVD NW								
	RAMSEY MN 55303			Payment Amount					5,753.75
100167	CORNERSTONE FORD	WORK ON 410	PV	105235	001	09101	1/5/2021	16315669/2	701.83
	CORNERSTONE FORD			Summary Total					701.83
	17219 HIGHWAY 10 NW								
	PO BOX 304								
	ELK RIVER MN 55330			Payment Amount					701.83
100684	EBERT CONSTRUCTION	PAY APP 1 PW CAMPUS	PV	105265	001	09438	12/22/2020	122220	1,296.75
	EBERT CONSTRUCTION			Summary Total					1,296.75
	23350 COUNTY ROAD 10								
	CORCORAN MN 55357			Payment Amount					1,296.75
106624	EHLERS AND ASSOCIATES, INC	ARBITRAGE REPORT 8/17/20	PV	105344	001	09353	1/11/2021	85938	2,500.00
	EHLERS & ASSOCIATES, INC			Summary Total					2,500.00
	3060 CENTRE POINTE DRIVE								
	ROSEVILLE MN 55113-1105			Payment Amount					2,500.00
104267	ELITE SANITATION	RENT TOILETS PARKS-DEC 20	PV	105345	001	09101	1/6/2021	27331	378.00
	ELITE SANITATION			Summary Total					378.00
	PO BOX 526								
	ELK RIVER MN 55330			Payment Amount					

Payment Group Control Number	3154		
Bank Account	999.1010	CASH IN BANK	00002224
Version	LOGIS004V		
Originator	JLIPSKI		
Payment Instrument	Check Payment		
Pay Through Date	12/31/2021		

Payee Number	Payee Name / Mailing Address	Stub Message	Document Ty	Document Number	Itm	Co	Due Date	Invoice Number	Payment Amount
									378.00
100209	HAKANSON ANDERSON ASSOC INC	PAY APP 3 PW CAMPUS	PV	105269	001	09438	12/15/2020	121520	3,504.07
	HAKANSON ANDERSON ASSOC INC 3601 THURSTON AVENUE ANOKA MN 55303-1063			Summary Total					3,504.07
				Payment Amount					3,504.07
115760	HENRY SCHEIN INC	NITRILE GLOVES	PV	105270	001	09101	12/28/2020	87880506	270.34
	HENRY SCHEIN INC DEPT CH 10241			Summary Total					270.34
		NITRILE GLOVES	PV	105271	001	09101	12/28/2020	87880535	270.34
	PALATINE IL 60055-0241			Summary Total					270.34
				Payment Amount					540.68
106719	INTEREUM INC	CHANGE ORDER- ENG AREA	PV	105380	001	09101	1/14/2021	176145	475.00
	INTEREUM INC 9800 8TH AVENUE NORTH PLYMOUTH MN 55441			Summary Total					475.00
				Payment Amount					475.00
118075	JACON LLC	PAY APP 2 PW CAMPUS	PV	105272	001	09438	12/23/2020	122320	42,769.95
	JACON LLC 3900 LABORE ROAD VADNAIS HEIGHTS MN 55110			Summary Total					42,769.95
				Payment Amount					42,769.95
107712	KLAMM MECHANICAL CONTRACTORS	PAY APP 1 PW CAMPUS	PV	105273	001	09438	12/22/2020	122220	9,880.00
	KLAMM MECHANICAL CONTRACTORS 12409 COUNTY ROAD 11 BURNSVILLE MN 55337			Summary Total					9,880.00
				Payment Amount					9,880.00
100256	LANO EQUIPMENT INC	HARNESS FOR 687	PV	105241	001	09101	1/5/2021	02-805985	239.33
	LANO EQUIPMENT INC 6140 HIGHWAY 10 NW ANOKA MN 55303			Summary Total					239.33

Payment Group Control Number	3154		
Bank Account	999.1010	CASH IN BANK	00002224
Version	LOGIS004V		
Originator	JLIPSKI		
Payment Instrument	Check Payment		
Pay Through Date	12/31/2021		

Payee Number	Name / Mailing Address	Stub Message	Document Ty	Number	Itm	Co	Due Date	Invoice Number	Payment Amount
				Payment Amount					239.33
100258	LEAGUE OF MINNESOTA CITIES	2021 PATROL SUBSCRIPTIONS	PV	105321	001	09101	1/11/2021	334137	2,610.00
	LEAGUE OF MN CITIES	2021 PATROL SUBSCRIPTIONS	PV	105321	002	09101	1/11/2021	334137	990.00
	FINANCE DEPT 145 UNIVERSITY AVE WEST ST PAUL MN 55103-2044			Summary Total					3,600.00
				Payment Amount					3,600.00
100259	LEAGUE OF MN CITIES INS TRUST	WORKERS COMP PREM 2021	PV	105242	001	09101	1/4/2021	40002633 2021	329,751.00
	LEAGUE OF MN CITIES INS TRUST C/O BERKLEY RISK SERVICES INC P O BOX 581517 MINNEAPOLIS MN 55458-1517			Summary Total					329,751.00
				Payment Amount					329,751.00
117918	MACQUEEN EMERGENCY	4 FACE SHIELDS - FIRE	PV	105276	001	09101	12/31/2020	16685	359.55
	MACQUEEN EMERGENCY			Summary Total					359.55
	1125 7TH STREET E	PRESSURE GAUGE	PV	105322	001	09101	1/7/2021	16705	285.29
	ST PAUL MN 55106			Summary Total					285.29
		DUST COVER	PV	105323	001	09101	1/8/2021	16717	56.68
				Summary Total					56.68
				Payment Amount					701.52
100270	MACQUEEN EQUIPMENT INC	2020 MT7 TRACKLESS 614	PV	105247	001	09101	1/8/2021	E01131	162,723.00
	MACQUEEN EQUIPMENT INC 1125 7TH STREET EAST ST PAUL MN 55106			Summary Total					162,723.00
				Payment Amount					162,723.00
117588	MEDART INC	MISC PARTS	PV	105357	001	09101	1/12/2021	08041444	73.65
	MEDART INC 3801 THURSTON AVENUE ANOKA MN 55303			Summary Total					73.65
				Payment Amount					73.65

Payment Group Control Number 3154
Bank Account 999.1010 CASH IN BANK 00002224
Version LOGIS004V
Originator JLIPSKI
Payment Instrument Check Payment
Pay Through Date 12/31/2021

Payee Number	Payee Name / Mailing Address	Stub Message	Document Ty	Document Number	Itm	Co	Due Date	Invoice Number	Payment Amount
108208	METRO PRODUCTS INC	HOSE CLAMP	PV	105249	001	09101	1/7/2021	156560	24.30
	METRO PRODUCTS INC				Summary Total				24.30
	7401 CENTRAL AVENUE NE	MISC PARTS	PV	105381	001	09101	1/13/2021	156674	13.40
	FRIDLEY MN 55432				Summary Total				13.40
					Payment Amount				37.70
118036	MINNESOTA UTILITIES AND EXCAVATING LLC	PAY APP 3 PW CAMPUS	PV	105277	001	09438	12/22/2020	122220	28,891.30
	MINNESOTA UTILITIES AND EXCAVATING LLC 13932 LAKE DRIVE FOREST LAKE MN 55025				Summary Total				28,891.30
					Payment Amount				28,891.30
100621	MN DNR ECO WATERS	2020 WATER APPROPERATIONS	PV	105348	001	09601	1/14/2021	011421	13,200.70
	MN DNR ECO WATERS MINNESOTA DNR- OMB 500 LAFAYETTE ROAD BOX 10 ST PAUL MN 55155-4048				Summary Total				13,200.70
					Payment Amount				13,200.70
115611	MN STATE FIRE DEPARTMENT ASSOCIATION	21 MSFDA MEMBERSHIP DUES	PV	105251	001	09101	10/28/2020	102820	450.00
	MN STATE FIRE DEPARTMENT ASSOCIATION 28711 HOLLY DRIVE NW ISANTI MN 55040				Summary Total				450.00
					Payment Amount				450.00
115868	MOLIN CONCRETE	PAY APP 1 PW CAMPUS	PV	105278	001	09438	12/22/2020	122220	1,006,881.14
	MOLIN CONCRETE 415 LILAC STREET LINO LAKES MN 55014				Summary Total				1,006,881.14
					Payment Amount				1,006,881.14
100345	NAPA AUTO PARTS ELK RIVER	OIL FILTERS/AIR FILTERS	PV	105252	001	09101	1/5/2021	094219	105.08
	NAPA AUTO PARTS ELK RIVER				Summary Total				105.08

Payment Group Control Number	3154		
Bank Account	999.1010	CASH IN BANK	00002224
Version	LOGIS004V		
Originator	JLIPSKI		
Payment Instrument	Check Payment		
Pay Through Date	12/31/2021		

Payee Number	Name / Mailing Address	Stub Message	Ty	Document Number	Itm	Co	Due Date	Invoice Number	Payment Amount
	17137 YALE STREET NW	CABIN AIR FILTER 605	PV	105253	001	09101	1/8/2021	094778	36.86
	P O BOX 1041			Summary Total					36.86
	ELK RIVER MN 55330	GARAGE SUPPLIES PD	PV	105254	001	09101	1/5/2021	094163	15.68
				Summary Total					15.68
		BATTERY CORE DEPOSIT-RETURN	PD	105280	001	09101	12/30/2020	093695	18.00-
				Summary Total					18.00-
		BATTERY FOR 563	PV	105281	001	09101	12/23/2020	092919	154.99
				Summary Total					154.99
		WIPER BLADES	PV	105282	001	09101	12/23/2020	092915	74.58
				Summary Total					74.58
				Payment Amount					369.19
115543	NATURAL ENDEAVORS LANDSCAPING INC	DEC 20 PLOWING 6701 HWY 10	PV	105349	001	09410	1/4/2021	1611 DEC 20	450.00
	NATURAL ENDEAVORS LANDSCAPING INC 2662 S COON CREEK DRIVE ANDOVER MN 55304			Summary Total					450.00
				Payment Amount					450.00
100360	NORTH STAR TOWING INC	PD TOW	PV	105284	001	09702	10/30/2020	74973	169.00
	NORTH STAR TOWING INC			Summary Total					169.00
	833 NORTH STREET	TOW PD	PV	105285	001	09101	12/15/2020	75852	88.00
	ANOKA MN 55303			Summary Total					88.00
		TOW 669	PV	105350	001	09101	12/29/2020	76244	83.33
		TOW 669	PV	105350	002	09101	12/29/2020	76244	83.33
		TOW 669	PV	105350	003	09101	12/29/2020	76244	83.34
				Summary Total					250.00
				Payment Amount					507.00
118035	NORTHLAND CONCRETE AND MASONRY CO. LLC	PAY APP 3 PW CAMPUS	PV	105283	001	09438	12/16/2020	121620	144,858.85
	NORTHLAND CONCRETE AND MASONRY CO. LLC 1125 STAGECOACH ROAD SHAKOPEE MN 55379			Summary Total					144,858.85
				Payment Amount					144,858.85
103848	PARK CONSTRUCTION CO.	PAY EST 6 VARIOLITE ST	PV	105352	001	09402	1/14/2021	011421	18,487.66

Payment Group Control Number 3154
Bank Account 999.1010 CASH IN BANK 00002224
Version LOGIS004V
Originator JLIPSKI
Payment Instrument Check Payment
Pay Through Date 12/31/2021

Payee Number	Name / Mailing Address	Stub Message	Document Ty	Number	Itm	Co	Due Date	Invoice Number	Payment Amount
	PARK CONSTRUCTION CO. 1481 81ST AVENUE NE MINNEAPOLIS MN 55432			Summary Total					18,487.66
				Payment Amount					18,487.66
118162	PROFESSIONAL SERVICE INDUSTRIES INC	PAY APP 1 PW CAMPUS	PV	105288	001	09438	12/28/2020	122820	11,568.15
	PROFESSIONAL SERVICE INDUSTRIES INC 2915 WATERS ROAD SUITE 112 EAGAN MN 55121			Summary Total					11,568.15
				Payment Amount					11,568.15
100418	RDO EQUIPMENT CO	FILTER ELEMENT	PV	105386	001	09101	1/13/2021	P2879014	152.93
	RDO EQUIPMENT CO P O BOX 7160 FARGO ND 58106-7160			Summary Total					152.93
				Payment Amount					152.93
117956	RJM CONSTRUCTION LLC	PAY APP 4 PW CAMPUS	PV	105289	001	09438	1/6/2021	010621	126,559.15
	RJM CONSTRUCTION LLC 830 BOONE AVENUE NORTH GOLDEN VALLEY MN 55427			Summary Total					126,559.15
				Payment Amount					126,559.15
118164	RTL CONSTRUCTION INC	PAY APP 1 PW CAMPUS	PV	105290	001	09438	12/29/2020	122920	7,600.00
	RTL CONSTRUCTION INC 290 SARAZIN STREET SHAKOPEE MN 55379			Summary Total					7,600.00
				Payment Amount					7,600.00
117456	SAFARILAND LLC	LESS LETHAL INSTR CLASS (2)	PV	105330	001	09101	1/12/2021	72639	1,790.00
	SAFARILAND LLC 13386 INTERNATIONAL PARKWAY JACKSONVILLE FL 32218			Summary Total					1,790.00
				Payment Amount					1,790.00
107711	SCHINDLER ELEVATOR	DEC 14, 20 SERVICE CALL	PV	105292	001	09240	12/16/2020	7153235169	596.29

CITY OF RAMSEY
Create Payment Control Groups

Payment Group Control Number	3154		
Bank Account	999.1010	CASH IN BANK	00002224
Version	LOGIS004V		
Originator	JLIPSKI		
Payment Instrument	Check Payment		
Pay Through Date	12/31/2021		

Payee Number	Payee Name / Mailing Address	Stub Message	Document Ty	Document Number	Itm	Co	Due Date	Invoice Number	Payment Amount
	SCHINDLER ELEVATOR				Summary Total				596.29
	P O BOX 93050								
	CHICAGO IL 60673-3050								
					Payment Amount				596.29
118168	SERVICE GRINDING AND SHARPENING INC	SHARPEN CHIPPER BLADES	PV	105387	001	09101	1/7/2021	43003	36.00
	SERVICE GRINDING AND SHARPENING INC	SHARPEN CHIPPER BLADES	PV	105387	002	09101	1/7/2021	43003	36.00
	1630 91ST AVENUE NE SUITE 102				Summary Total				72.00
	BLAINE MN 55449								
					Payment Amount				72.00
118034	STEENBERG WATRUD CONSTRUCTION LLC	PAY APP 2 PW CAMPUS	PV	105293	001	09438	12/18/2020	121820	104,342.30
	STEENBERG WATRUD CONSTRUCTION LLC				Summary Total				104,342.30
	10967 CLARK ROAD								
	INNER GROVE HEIGHTS MN 55077								
					Payment Amount				104,342.30
114151	TASC (FEES)	DEC 20 ADMIN FEES	PV	105354	001	09101	12/31/2020	IN1941943	370.50
	TASC				Summary Total				370.50
	CLIENT INVOICES								
	P O BOX 88278								
	MILWAUKEE WI 53288-0001								
					Payment Amount				370.50
118076	THORNBERG STEEL	PAY APP 3 PW CAMPUS	PV	105294	001	09438	12/30/2020	123020	35,787.45
	THORNBERG STEEL				Summary Total				35,787.45
	23604 UNIVERSITY AVENUE NW								
	BETHEL MN 55005								
					Payment Amount				35,787.45
118163	TOP LITE CONTRACT GLAZING INC	PAY APP 1 PW CAMPUS	PV	105296	001	09438	12/21/2020	122120	6,840.00
	TOP LITE CONTRACT GLAZING INC				Summary Total				6,840.00
	15548 260TH STREET	PAY APP 2 PW CAMPUS	PV	105297	001	09438	1/6/2021	010621	3,230.00
	LINDSTROM MN 55045				Summary Total				3,230.00
					Payment Amount				10,070.00

CITY OF RAMSEY
Create Payment Control Groups

Payment Group Control Number	3154		
Bank Account	999.1010	CASH IN BANK	00002224
Version	LOGIS004V		
Originator	JLIPSKI		
Payment Instrument	Check Payment		
Pay Through Date	12/31/2021		

Payee Number	Name / Mailing Address	Stub Message	Ty	Document Number	Itm	Co	Due Date	Invoice Number	Payment Amount
118175	TRITECH SOFTWARE SYSTEMS	EVIDENCE ROOM PRINTER/MISC	PV	105331	001	09101	1/8/2021	304749	237.69
	TRITECH SOFTWARE SYSTEMS	EVIDENCE ROOM PRINTER/MISC	PV	105331	002	09101	1/8/2021	304749	1,570.99
	12709 COLLECTION CENTER DRIVE CHICAGO IL 60693						Summary Total		1,808.68
							Payment Amount		1,808.68
116648	WATER CONSERVATION SERVICES, INC	WATER LEAK SURVEY DEC 20	PV	105355	001	09402	1/8/2021	10994	290.00
	WATER CONSERVATION SERVICES, INC	WATER LEAK SURVEY DEC 20	PV	105355	002	09402	1/8/2021	10994	290.00
	6251 WEST SHADOW LAKE DR LINO LAKES MN 55014						Summary Total		580.00
							Payment Amount		580.00
118166	WOLF RIVER ELECTRIC	PAY APP 1 PW CAMPUS	PV	105298	001	09438	12/14/2020	121420	18,601.00
	WOLF RIVER ELECTRIC						Summary Total		18,601.00
	101 ISANTI PARKWAY NE # G	PAY APP 2 PW CAMPUS	PV	105299	001	09438	12/28/2020	122820	39,258.75
	ISANTI MN 55040						Summary Total		39,258.75
							Payment Amount		57,859.75
							Total Amount to be Processed		2,233,259.69
							Total Number of Payments to be Processed		52

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CITY OF RAMSEY

Create Payment Control Groups

Payment Group Control Number	3155		
Bank Account	999.1010	CASH IN BANK	00002224
Version	LOGIS004V		
Originator	JLIPSKI		
Payment Instrument	T	A/P ACH Payment	
Pay Through Date	12/31/2021		

Payee Number	Payee Name / Mailing Address	Stub Message	Ty	Document Number	Itm	Co	Due Date	Invoice Number	Payment Amount
110402	ADVANCE AUTO PARTS	DEC 2020 PURCHSES	PV	105338	001	09101	12/31/2020	123120	516.50
	ADVANCE AUTO PARTS	DEC 2020 PURCHSES	PV	105338	002	09101	12/31/2020	123120	15.68
	AAP FINANCIAL SERVICES	DEC 2020 PURCHSES	PV	105338	003	09101	12/31/2020	123120	56.85
	P O BOX 742063	DEC 2020 PURCHSES	PV	105338	004	09101	12/31/2020	123120	211.94
	ATLANTA GA 30374-2063	DEC 2020 PURCHSES	PV	105338	005	09101	12/31/2020	123120	83.94
					Summary Total				884.91
					Payment Amount				884.91
100017	AIRGAS USA, LLC	MISC SUPPLIES	PV	105339	001	09101	12/31/2020	9108531603	27.50
	AIRGAS USA LLC				Summary Total				27.50
	P O BOX 802576	MISC GASES	PV	105340	001	09101	12/31/2020	9976022099	32.12
	CHICAGO IL 60680-2576				Summary Total				32.12
					Payment Amount				59.62
100043	ANOKA COUNTY PROPERTY RECORDS TAXATION	DEC 20 FILING FEES	PV	105389	001	09804	12/31/2020	123120	46.00
	ANOKA COUNTY PROPERTY RECORDS TAXATION	DEC 20 FILING FEES	PV	105389	002	09804	12/31/2020	123120	92.00
	2100 - 3RD AVENUE				Summary Total				138.00
	ANOKA MN 55303				Payment Amount				138.00
107587	ANOKA COUNTY TREASURY DEPARTMENT	JAN 2021 CAC FIBER	PV	105305	001	09101	1/6/2021	B210106M	492.00
	ANOKA COUNTY TREASURY DEPARTMENT				Summary Total				492.00
	2100 THIRD AVENUE	4TH QTR 20 STATE ACCESS	PV	105358	001	09101	12/31/2020	AR017084	900.00
	ANOKA MN 55303				Summary Total				900.00
		MICROPHONE	PV	105359	001	09101	12/31/2020	AR017088	99.75
					Summary Total				99.75
					Payment Amount				1,491.75
103641	BOYER TRUCKS ROGERS	TUBE OIL/GASKET 636	PV	105232	001	09101	1/8/2021	89228R	309.61
	BOYER TRUCKS				Summary Total				309.61
	P O BOX 18338	WORK ON 644	PV	105308	001	09101	1/13/2021	485526	2,524.60
	MINNEAPOLIS MN 55418	WORK ON 644	PV	105308	002	09101	1/13/2021	485526	1,586.80
					Summary Total				4,111.40
					Payment Amount				4,421.01

Payment Group Control Number 3155
Bank Account 999.1010 CASH IN BANK 00002224
Version LOGIS004V
Originator JLIPSKI
Payment Instrument T A/P ACH Payment
Pay Through Date 12/31/2021

Payee Number	Name / Mailing Address	Stub Message	Ty	Document Number	Itm	Co	Due Date	Invoice Number	Payment Amount
112019	CENTRAL HYDRAULICS INC	MISC PIPE/COUPLERS	PV	105262	001	09101	12/29/2020	68115	208.08
	CENTRAL HYDRAULICS INC			Summary Total					208.08
	21877 INDUSTRIAL COURT	MISC PARTS	PV	105371	001	09101	1/12/2021	68307	189.84
	ROGERS MN 55374			Summary Total					189.84
		MISC PARTS	PV	105372	001	09101	1/4/2021	68163	140.77
				Summary Total					140.77
				Payment Amount					538.69
117484	CHET S SHOES LLC	BOOTS- M. NIELSEN	PV	105310	001	09101	1/12/2021	LLC9233	146.99
	CHET S SHOES LLC			Summary Total					146.99
	8355 UNIVERSITY AVENUE NE								
	SPRING LAKE PARK MN 55432			Payment Amount					146.99
114549	CHETS SHOES INC	BOOTS- S. BERSCHEID	PV	105360	001	09101	12/1/2020	50346	150.00
	CHETS SHOES INC			Summary Total					150.00
	8870 RENDOVA STREET NE								
	CIRCLE PINES MN 55014			Payment Amount					150.00
116197	CINTAS CORPORATION	UNIFORM CLEANING	PV	105233	001	09101	1/6/2021	4072224420	28.00
	CINTAS CORPORATION	UNIFORM CLEANING	PV	105233	002	09101	1/6/2021	4072224420	4.00
	CINTAS LOC #4K	UNIFORM CLEANING	PV	105233	003	09101	1/6/2021	4072224420	24.79
	P O BOX 650838	UNIFORM CLEANING	PV	105233	004	09101	1/6/2021	4072224420	24.79
	DALLAS TX 75265-0838			Summary Total					81.58
		FIRE- MATS	PV	105263	001	09101	12/29/2020	4071479677	13.20
				Summary Total					13.20
				Payment Amount					94.78
100120	CONTINENTAL RESEARCH CORP	MISTER FRESH	PV	105312	001	09101	1/6/2021	0022417	212.00
	CONTINENTAL RESEARCH CORP			Summary Total					212.00
	PO BOX 15204								
	ST LOUIS MO 63110			Payment Amount					212.00
100129	CRYSTEEL TRUCK EQUIPMENT	MISC PARTS 678	PV	105236	001	09101	1/8/2021	FP180162	778.39

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Payment Instrument	T A/P ACH Payment		
Pay Through Date	12/31/2021		

Payee Number	Name / Mailing Address	Stub Message	Ty	Document Number	Itm	Co	Due Date	Invoice Number	Payment Amount
	CRYSTEEL MANUFACTURING			Summary Total					778.39
	1130 73RD AVENUE NE	HOSE/HYDRO FLUID	PV	105374	001	09101	1/14/2021	FP180350	152.32
	FRIDLEY MN 55432			Summary Total					152.32
				Payment Amount					930.71
113306	DEFINITIVE TECHNOLOGY SOLUTIONS INC	DEC 2020 COPIER/PRINTERS	PV	105264	001	09101	12/22/2020	INV211854	614.82
	DEFINITIVE TECHNOLOGY SOLUTIONS INC			Summary Total					614.82
	9401 JAMES AVENUE SOUTH SUITE 120	PD 2 COPIERS	PV	105375	001	09101	1/13/2021	INV212379	11,055.00
	BLOOMINGTON MN 55431			Summary Total					11,055.00
				Payment Amount					11,669.82
100144	DEHN OIL COMPANY	LUBE	PV	105314	001	09101	1/12/2021	25166344	285.34
	DEHN OIL COMPANY			Summary Total					285.34
	6735 141ST AVENUE NW	TERSUS DEF SS 55 GAL	PV	105376	001	09101	1/14/2021	25166445	162.36
	RAMSEY MN 55303			Summary Total					162.36
		DIESEL FUEL	PV	105377	001	09101	1/14/2021	80130	1,480.37
				Summary Total					1,480.37
		DIESEL FUEL	PV	105378	001	09101	1/15/2021	80135	842.07
				Summary Total					842.07
				Payment Amount					2,770.14
101185	DO ALL PRINTING COM INC	COUNCIL BUSINESS CARDS	PV	105315	001	09101	1/7/2021	50105	111.00
	DO ALL PRINTING COM INC			Summary Total					111.00
	6360 HIGHWAY 10 NW	ENVELOPES	PV	105379	001	09101	1/18/2021	50206	39.33
	RAMSEY MN 55303	ENVELOPES	PV	105379	002	09101	1/18/2021	50206	196.67
				Summary Total					236.00
				Payment Amount					347.00
118116	DTN LLC	FEB 21 CLEAR PATH	PV	105237	001	09101	1/8/2021	5875054	400.00
	DTN LLC			Summary Total					400.00
	18205 CAPITOL AVENUE SUITE 100								
	OMAHA NE 68022								
				Payment Amount					400.00
100158	ECM PUBLISHERS INC	AD PW PARKS POSTION	PV	105266	001	09101	12/31/2020	813018	175.00

Payment Group Control Number	3155		
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Originator	JLIPSKI		
Payment Instrument	T	A/P ACH Payment	
Pay Through Date	12/31/2021		

Payee Number	Name / Mailing Address	Stub Message	Document Ty	Number	Itm	Co	Due Date	Invoice Number	Payment Amount
	ECM PUBLISHERS INC			Summary Total					175.00
	4095 COON RAPIDS BLVD	AD PATROL POSTIONS	PV	105267	001	09101	12/31/2020	813019	206.00
	COON RAPIDS MN 55433			Summary Total					206.00
		PH 20-135	PV	105361	001	09804	12/25/2020	811893	80.63
				Summary Total					80.63
		PH 20-142	PV	105362	001	09101	12/25/2020	811894	75.25
				Summary Total					75.25
		PH 20-137	PV	105363	001	09804	12/25/2020	811895	80.63
				Summary Total					80.63
		PH GIGIS SALON	PV	105364	001	09804	12/25/2020	811896	75.25
				Summary Total					75.25
		PH 19-152	PV	105365	001	09804	12/25/2020	811897	96.75
				Summary Total					96.75
		PH 19-149	PV	105366	001	09804	12/25/2020	811898	75.25
				Summary Total					75.25
				Payment Amount					864.76
114680	ELECTRICAL PRODUCTION SERVICES INC	SERVICE CALL 12/3/20	PV	105367	001	09240	1/18/2021	6577	245.00
	ELECTRICAL PRODUCTION SERVICES INC 2431 GALPIN COURT SUITE 140 CHANHASSEN MN 55317			Summary Total					245.00
				Payment Amount					245.00
107099	FASTENAL	MISC PARTS	PV	105316	001	09101	1/11/2021	MNTC8191948	11.92
	FASTENAL COMPANY P O BOX 1286 WINONA MN 55987			Summary Total					11.92
				Payment Amount					11.92
100186	FRANKENSIGNS INC	DIRECTORY CITY HALL MAPS	PV	105317	001	09101	1/8/2021	276862	825.00
	FRANKENSIGNS			Summary Total					825.00
	9991 GOODHUE STREET NE	NAME PLATES/LIBRARY LOGO	PV	105318	001	09101	1/8/2021	276864	125.00
	P O BOX 490301			Summary Total					125.00
	BLAINE MN 55449	CITY OF RAMSEY FROSTED LOGO	PV	105319	001	09101	1/8/2021	276863	130.00

Payment Group Control Number 3155
Bank Account 999.1010 CASH IN BANK 00002224
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Originator JLIPSKI
Payment Instrument T A/P ACH Payment
Pay Through Date 12/31/2021

Payee Number	Name / Mailing Address	Stub Message	Ty	Document Number	Itm	Co	Due Date	Invoice Number	Payment Amount
				Summary Total					130.00
				Payment Amount					1,080.00
100200	GOPHER STATE ONE CALL INC	DEC 2020 129 TICKETS	PV	105346	001	09601	12/31/2020	0120690	58.05
	GOPHER STATE ONE CALL	DEC 2020 129 TICKETS	PV	105346	002	09601	12/31/2020	0120690	58.05
	7223 PARKWAY DRIVE SUITE 210	DEC 2020 129 TICKETS	PV	105346	003	09601	12/31/2020	0120690	58.05
	HANOVER MD 21076-1317			Summary Total					174.15
				Payment Amount					174.15
112564	GROUP HEALTH INC WORKSITE	EAP DEC 2020	PV	105268	001	09101	12/31/2020	W818232	92.00
	GROUP HEALTH INC WORKSITE MAIL STOP # 21109A P O BOX 1309 MINNEAPOLIS MN 55440-1309			Summary Total					92.00
				Payment Amount					92.00
112475	INNOVATIVE OFFICE SOLUTIONS	RETURNS- CALENDARS	PD	105238	001	09601	1/8/2021	SCN-104476	41.96-
	INNOVATIVE OFFICE SOLUTIONS	RETURNS- CALENDARS	PD	105238	002	09601	1/8/2021	SCN-104476	33.68-
	P O BOX 860627			Summary Total					75.64-
	MINNEAPOLIS MN 55486-0001	MISC OFFICE SUPPLIES	PV	105239	001	09101	1/8/2021	IN3223731	25.34
		MISC OFFICE SUPPLIES	PV	105239	002	09101	1/8/2021	IN3223731	21.45
		MISC OFFICE SUPPLIES	PV	105239	003	09101	1/8/2021	IN3223731	82.39
				Summary Total					129.18
		MISC OFFICE SUPPLIES	PV	105240	001	09101	1/6/2021	IN3220174	55.17
				Summary Total					55.17
		OFFICE SUPPLIES	PV	105320	001	09101	1/11/2021	IN3225312	18.69
				Summary Total					18.69
				Payment Amount					127.40
100266	LOGIS	VM WARE RENEWAL 11/20-11/21	PV	105243	001	09101	12/31/2020	49882	652.65
	LOCAL GOVERNMENT INFORMATION SYSTEMS ASS			Summary Total					652.65
	5750 DULUTH STREET	JAN 2021 SERVICES	PV	105244	001	09101	1/1/2021	49788	18,355.00
	GOLDEN VALLEY MN 55422-4036			Summary Total					18,355.00

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Payment Instrument T A/P ACH Payment
Pay Through Date 12/31/2021

Payee Number	Name / Mailing Address	Stub Message	Ty	Document Number	Itm	Co	Due Date	Invoice Number	Payment Amount
		SYSTEM DEV 2021	PV	105245	001	09101	1/1/2021	49717	15,275.00
				Summary Total					15,275.00
		NETWORK WELLNESS	PV	105246	001	09101	1/1/2021	49752	4,510.00
				Summary Total					4,510.00
		NETWORK SERVICES DEC 2020	PV	105274	001	09101	12/31/2020	49849	125.00
				Summary Total					125.00
				Payment Amount					38,917.65
113658	MARCO	2021 SUPPORT	PV	105248	001	09101	12/31/2020	INV8303336	3,652.25
	MARCO	2021 SUPPORT	PV	105248	002	09101	12/31/2020	INV8303336	3,982.75
	NW 7128 PO BOX 1450			Summary Total					7,635.00
	MINNEAPOLIS MN 55485-7128	JAN 21 SERVICE	PV	105324	001	09101	1/4/2021	INV8307710	60.00
				Summary Total					60.00
				Payment Amount					7,695.00
100284	MENARDS ELK RIVER	MISC SUPPLIES	PV	105326	001	09601	1/5/2021	24054	75.66
	MENARDS ELK RIVER 19521 EVANS STREET NW ELK RIVER MN 55330-1077			Summary Total					75.66
				Payment Amount					75.66
100285	MET COUNCIL ENVIRONMENTAL SRV	FEB 21 WASTE WATER	PV	105250	001	09602	1/7/2021	0001118292	70,433.39
	MET COUNCIL ENVIRONMENTAL SRV P O BOX 856513 MINNEAPOLIS MN 55485-6513			Summary Total					70,433.39
				Payment Amount					70,433.39
100289	METRO SALES INC	COPIER CONTRACT JAN 21	PV	105327	001	09101	1/5/2021	INV1731839-21	325.00
	METRO SALES INC			Summary Total					325.00
	1620 EAST 78TH STEET	OCT/DEC 20 COPIER CHARGE	PV	105347	001	09101	1/5/2021	INV1731839-20	1,249.38
	MINNEAPOLIS MN 55423	OCT/DEC 20 COPIER CHARGE	PV	105347	002	09101	1/5/2021	INV1731839-20	207.36
				Summary Total					1,456.74
				Payment Amount					1,781.74

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Payee Number	Name / Mailing Address	Stub Message	Ty	Document Number	Itm	Co	Due Date	Invoice Number	Payment Amount
115167	NET TRANSCRIPTS INC	DEC 2020 TRANSCRIPTIONS	PV	105369	001	09101	12/30/2020	NT1523	164.05
	NET TRANSCRIPTS INC 3707 N. 7TH STREET SUITE 320 PHOENIX AZ 85014			Summary Total					164.05
				Payment Amount					164.05
100354	NEWMAN SIGNS INC	SIGN MATERIAL	PV	105328	001	09101	1/12/2021	TRFINV027623	762.96
	NEWMAN SIGNS INC PO BOX 1728 JAMESTOWN ND 58402-1728			Summary Total					762.96
				Payment Amount					762.96
117130	NORTHERN LINES CONTRACTING INC	PAY EST FINAL COR INFIL BASIN	PV	105351	001	09605	1/14/2021	011421	105,341.94
	NORTHERN LINES CONTRACTING INC 9705 UPTON CIRCLE SOUTH BLOOMINGTON MN 55431			Summary Total					105,341.94
				Payment Amount					105,341.94
100988	NORTHERN SAFETY TECHNOLOGY	REPLACE CORNER STROBE	PV	105329	001	09101	1/7/2021	51684	342.78
	NORTHERN SAFETY TECHNOLOGY 5708 UPPER 147TH STREET W SUITE 107 APPLE VALLEY MN 55124			Summary Total					342.78
				Payment Amount					342.78
116698	NORTHERN SALT INC	SALT BRINE	PV	105255	001	09101	1/7/2021	21015	2,030.00
	NORTHERN SALT INC P O BOX 1028 FOREST LAKE MN 55025-5028			Summary Total					2,030.00
				Payment Amount					2,030.00
100363	NORTHERN SANITARY SUPPLY CO	MISC SUPPLIES	PV	105256	001	09101	1/5/2021	200638	225.88
	NORTHERN SANITARY SUPPLY CO 341 COON RAPIDS BLVD			Summary Total					225.88
		MISC SUPPLIES	PV	105382	001	09101	1/14/2021	200714	327.95
	MINNEAPOLIS MN 55433			Summary Total					327.95
				Payment Amount					

CITY OF RAMSEY
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Payment Instrument	T	A/P ACH Payment	
Pay Through Date	12/31/2021		

Payee Number	Payee Name / Mailing Address	Stub Message	Document Ty	Document Number	Itm	Co	Due Date	Invoice Number	Payment Amount
									553.83
115071	NORTHLAND OCCUPATIONAL HEALTH	DRUG SCREEN/TESTS	PV	105383	001	09101	1/19/2021	9252	150.00
	NORTHLAND OCCUPATIONAL HEALTH			Summary Total					150.00
	7533 SUNWOOD DRIVE NW SUITE 212	DRUG SCREEN/TESTS	PV	105384	001	09101	1/14/2021	9224	300.00
	RAMSEY MN 55303			Summary Total					300.00
				Payment Amount					450.00
110547	NORTHWEST LIGHTING SYSTEMS CO.	MISC LIGHTING	PV	105385	001	09101	1/15/2021	119651	215.00
	NORTHWEST LIGHTING SYSTEMS CO. 746 CRAIG AVENUE TRACY MN 56175			Summary Total					215.00
				Payment Amount					215.00
117474	OERTEL ARCHITECTS LTD	RE: PUBLIC WORKS CAMPUS	PV	105257	001	09438	1/6/2021	9	40,342.77
	OERTEL ARCHITECTS LTD 1795 ST CLAIR AVENUE ST PAUL MN 55105			Summary Total					40,342.77
				Payment Amount					40,342.77
110480	OPUS 21 MANAGEMENT SOLUTIONS	DEC 20 SERVICES	PV	105286	001	09601	1/9/2021	201210	30.29
	OPUS 21 MANAGEMENT SOLUTIONS	DEC 20 SERVICES	PV	105286	002	09601	1/9/2021	201210	30.29
	680 COMMERCE DRIVE SUITE 160	DEC 20 SERVICES	PV	105286	003	09601	1/9/2021	201210	30.29
	WOODBURY MN 55125	DEC 20 SERVICES	PV	105286	004	09601	1/9/2021	201210	30.29
		DEC 20 SERVICES	PV	105286	005	09601	1/9/2021	201210	30.27
				Summary Total					151.43
				Payment Amount					151.43
112421	PERRILL	JAN 21 SERVICE	PV	105258	001	09101	1/1/2021	253327	200.00
	PERRIL 110 CHESHIRE LANE SUITE 105 MINNETONKA MN 55305			Summary Total					200.00
				Payment Amount					200.00

Payment Group Control Number 3155
Bank Account 999.1010 CASH IN BANK 00002224
Version LOGIS004V
Originator JLIPSKI
Payment Instrument T A/P ACH Payment
Pay Through Date 12/31/2021

Payee Number	Name / Mailing Address	Stub Message	Document Ty	Number	Itm	Co	Due Date	Invoice Number	Payment Amount
111488	POPP.COM INC	DEC 20 SERVICES	PV	105287	001	09101	12/31/2020	992653476	84.69
	POPP.COM INC	DEC 20 SERVICES	PV	105287	002	09101	12/31/2020	992653476	37.64
	620 MENDELSSOHN AVE NO	DEC 20 SERVICES	PV	105287	003	09101	12/31/2020	992653476	47.05
	SUITE 101								
	GOLDEN VALLEY MN 55427	DEC 20 SERVICES	PV	105287	004	09101	12/31/2020	992653476	178.80
		DEC 20 SERVICES	PV	105287	005	09101	12/31/2020	992653476	28.23
		DEC 20 SERVICES	PV	105287	006	09101	12/31/2020	992653476	108.22
		DEC 20 SERVICES	PV	105287	007	09101	12/31/2020	992653476	42.36
		DEC 20 SERVICES	PV	105287	008	09101	12/31/2020	992653476	111.78
		DEC 20 SERVICES	PV	105287	009	09101	12/31/2020	992653476	89.37
		DEC 20 SERVICES	PV	105287	010	09101	12/31/2020	992653476	109.32
		DEC 20 SERVICES	PV	105287	011	09101	12/31/2020	992653476	59.58
								Summary Total	897.04
								Payment Amount	897.04
116092	ROADKILL ANIMAL CONTROL	DEC 2020 DEER CALLS 3	PV	105353	001	09101	1/11/2021	011121	279.00
	ROADKILL ANIMAL CONTROL							Summary Total	279.00
	520 HAROLD DRIVE								
	BURNSVILLE MN 55337							Payment Amount	279.00
117285	RUM RIVER CONSTRUCTION CONSULTANTS	DEC 2020 SERVICE	PV	105291	001	09101	1/3/2021	337	1,012.50
	RUM RIVER CONSTRUCTION CONSULTANTS							Summary Total	1,012.50
	32134 111 1\2 STREET								
	PRINCETON MN 55371							Payment Amount	1,012.50
100431	SAFETY KLEEN CORPORATION	RECYCLE PARTS WASHER FLUID	PV	105370	001	09101	1/7/2021	CN12131970	110.97
	SAFETY KLEEN CORPORATION							Summary Total	110.97
	PO BOX 975201								
	DALLAS TX 75397-5201							Payment Amount	110.97
112079	TOKLE INSPECTIONS INC	DEC 2020 SERVICE	PV	105295	001	09101	1/5/2021	010521	3,801.60
	TOKLE INSPECTIONS INC							Summary Total	3,801.60
	1748 123RD AVENUE NW								

Payment Group Control Number	3155		
Bank Account	999.1010	CASH IN BANK	00002224
Version	LOGIS004V		
Originator	JLIPSKI		
Payment Instrument	T	A/P ACH Payment	
Pay Through Date	12/31/2021		

Payee Number	Name / Mailing Address	Stub Message	Document Ty	Number	Itm	Co	Due Date	Invoice Number	Payment Amount
	COON RAPIDS MN 55448								
				Payment Amount					3,801.60
106351	WATER LABORATORIES, INC	DEC 20 WATER TESTS	PV	105356	001	09601	1/2/2021	8343	615.00
	WATER LABORATORIES, INC 333 EAST MAIN STREET PO BOX 388 ELK RIVER MN 55330			Summary Total					615.00
				Payment Amount					615.00
112318	WINTER EQUIPMENT COMPANY	MISC PLOW EQUIPMENT	PV	105388	001	09101	1/8/2021	IV46516	6,171.07
	WINTER EQUIPMENT COMPANY 1900 JOSEPH LLOYD PARKWAY WILLOUGHBY OH 44094			Summary Total					6,171.07
				Payment Amount					6,171.07
				Total Amount to be Processed					309,196.03
				Total Number of Payments to be Processed					45

Councilmember introduced the following resolution and moved for its adoption:

RESOLUTION #21-033

RESOLUTION APPROVING CASH DISBURSEMENTS MADE AND AUTHORIZING PAYMENT OF ACCOUNTS PAYABLE INVOICING RECEIVED DURING THE PERIOD OF JANUARY 7, 2021 THROUGH JANUARY 20, 2021

WHEREAS, the City of Ramsey Finance Department has made cash disbursements and received accounts payable invoicing during the period of January 7, 2021, through January 20, 2021, in the amount of $ 2,960,925.12 and

WHEREAS, the City Council of the City of Ramsey is required to authorize payment for all disbursement transactions.

NOW THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF RAMSEY, ANOKA COUNTY, STATE OF MINNESOTA, as follows:

1) That the Ramsey City Council hereby approves the cash disbursements made and authorizes payment of the accounts payable invoices as detailed in the attached Bills List for the period January 7, 2021, through January 20, 2021, in the amount of $ 2,960,925.12.

The motion for the adoption of the foregoing resolution was duly seconded by Councilmember , and upon vote being taken thereon, the following voted in favor thereof:

Mayor Kuzma
Councilmember
Councilmember
Councilmember
Councilmember
Councilmember

and the following voted against the same:

None

and the following abstained:

None

and the following were absent:

Existing Vacancy

Whereupon said resolution was declared duly passed and adopted by the Ramsey City Council this the 26th day of January, 2021.

_____
Mayor

ATTEST:

_____
City Clerk

CC Regular Session **5. 6.**

Meeting Date: 01/26/2021

By: Brian McCann, Community Development

Information

Title:

Adopt Resolution #21-014 Approving an Interim Use Permit for Storage Containers and Gravel Parking at 8049 146th Ave NW (Project No. 20-137); Case of JBR Ramsey, LLC on behalf of Richard Lee

Purpose/Background:

This request comes from Richard Lee (the "Applicant"), owner of JBR Ramsey LLC which owns 8049 146th Avenue NW (the "Subject Property"). The Applicant is seeking recommendation of approval for an Interim Use Permit for outdoor storage on gravel surfacing for vehicles, storage containers, and various equipment for Fred Outdoor Services (the "Tenant). The Planning Commission tabled this topic at their December 3, 2020 Planning Commission meeting, recommending that the Applicant work with City Staff to revise their Application to include additional screening for the storage containers. Since that meeting, the Applicant has revised their application.

The current proposal is to:

- Align all storage containers (except one outlined below) to the east side of the building. The storage containers will remain in a neat and orderly line.
- The ends of the storage containers will be painted to match the building. The paint will be maintained and kept in neat appearance.
- One remaining storage container will be on the west side of the building, to remain screened from adjacent properties to the north and east.
- The Applicant is open to additional screening including a white PVC fence or wrapping the end container.

Staff is comfortable with this compromise scenario, as the property is likely to redevelop in future years. Staff is supportive of utilizing storage containers for this unique situation instead of investing in a new building on the property that will likely be torn down in future years.

The Planning Commission recommended approval of the IUP.

Notification:

The Public Hearing was held at the January Planning Commission meeting, no notification is required for this step.

Observations/Alternatives:

Summary

The Subject Property was discovered to be in violation of City Code in regards to overgrown vegetation, outdoor storage on unapproved surfacing, and off-street parking regulations. The property owner, Richard Lee, has been working with the City for an extended period of time to resolve these violations, and receive approval for outdoor storage on approved surfacing. The only outstanding violation on the property is the outdoor storage. Fred Outdoor Services uses the area for equipment, vehicle, and material storage which includes six (6) storage containers. According to the Applicant, two (2) of the six (6) storage containers have been there for at least 15 years, but Staff does not have any records of permits for these units, nor for the gravel parking area that the property owner installed.

Mr. Lee is requesting that the Planning Commission recommend approval so that he may install an additional layer of Class V gravel, and utilize the area in the manner it has been for the last 15 years, with the inclusion of the storage containers currently on site. Staff has suggested a 20 foot buffer surrounding the property to refrain from parking vehicles and equipment in the drainage and utility easement. The Applicant has noted that the containers

would be managed and maintained by the tenant, and would like to utilize the containers for an extended period of time, at least five (5) years. Staff anticipates that the storage containers will remain onsite until the property redevelops, if this permit is approved.

Site Information
The Subject Property is approximately 1.43 acres, and zoned COR, but functions as an older industrial district. It is a unique property in the City of Ramsey, slated for redevelopment.The current location of the containers is noted in the attached site plan. Currently, the outdoor storage area consists entirely of dirt and grass. The southwest parking area of the parcel is made entirely of asphalt and concrete surfacing, but the storage area does not have any Class V left after consistent use over the years. The containers are currently placed on grass or dirt, but the City requests that they be placed on Class V crushed concrete, which will be installed at a later date.

Current Regulations
At this time, the City does not allow shipping containers or these large metal storage containers in lieu of an accessory building in any district. The request for these types of containers is becoming more and more common as the containers become more trendy and readily available. Staff is aware of at least one other request from an industrial-type user for these types of shipping containers, and has numerous requests from residents to allow these types of storage containers on residential properties.

Previous direction has been to improve the image of Ramsey and work with property owners throughout the City to incrementally improve properties. These containers do require upkeep and the metal containers are not an ideal architectural feature. However, Staff is empathetic to the recent economic downturn and wants to help a Ramsey business remain in their current location.

The outdoor storage has been debated internally since the only documentation consists of aerial photographs added to this case, as well as the signed copy of the site plan presented from the former tenant from 1986 through 2018, Chalich Trucking. It is also noted that Class V was installed without City approval in 2016, based on the proposed site plan. Recent inspections indicate that an additional layer of Class V will need to be approved by the City and installed if the Interim Use Permit is approved.

Code Sections

- COR Section of Code, Chapter 117-118
- Public Nuisances Section of Code, Chapter 30-3

Alternatives
Alternative 1: Approve the Interim Use Permit for gravel parking and storage containers as written, which includes aligning the containers to the east of the building, and painting the ends of the containers for additional screening.
Alternative 2: Approve the Interim Use Permit for gravel parking and storage containers with modifications which could include putting up a white PVC fence around the north and east sides of the containers for additional screening.
Alternative 3: Deny the application.

The Planning Commission recommended Alternative 1.

Funding Source:
All costs associated with this request are the responsibility of the Applicant.

Recommendation:
The Planning Commission recommended Alternative 1, including painting the containers for additional screening.

Action:
Motion to adopt Resolution #21-014 approving an Interim Use Permit for gravel parking and use of storage containers on the Subject Property.

Attachments

Resolution #21-014
Site Location Map
Aerial Photographs
Site Plan
Draft January Planning Commission Minutes

Form Review

Inbox	Reviewed By	Date
Tim Gladhill	Tim Gladhill	01/21/2021 08:57 AM
Tim Gladhill	Tim Gladhill	01/21/2021 11:52 AM
Kurt Ulrich	Kurt Ulrich	01/21/2021 04:12 PM
Form Started By: Chloe McGuire Brigl		Started On: 01/20/2021 08:34 AM
Final Approval Date: 01/21/2021		

Councilmember _____ introduced the following resolution and moved for its adoption:

RESOLUTION #21-014

A RESOLUTION APPROVING THE ISSUANCE OF AN INTERIM USE PERMIT TO ALLOW OUTDOOR STORAGE ON GRAVEL PARKING AND THE USE OF STORAGE CONTAINERS ON THE PROPERTY LOCATED AT 8049 146TH AVE NW AND DECLARING TERMS OF SAME

RECITALS

1. Richard Lee, hereinafter referred to as the "**Permittee**" has properly applied for an Interim Use Permit to allow the use of six (6) storage containers and gravel parking on the property generally known as 8049 146th Ave NW and legally described as follows:

   LOT 4 BLK 2 HY-10 RAMSEY SUBJ TO EASE OF REC, Anoka County, Minnesota

   (the "**Subject Property**")

2. That Richard Lee of JBR Ramsey, LLC, owns the Subject Property and has signed off on the application.

3. That the **Subject Property** is zoned COR Industrial District and is approximately 1.43 acres in size.

4. That the **Subject Property** abuts 146th Ave NW to the south and Ferret St NW to the west, and parcels to the east and north of the Subject Property are zoned COR Industrial District.

5. That there are existing Zoning Code violations on the **Subject Property** regarding outdoor storage.

6. That the **Permittee** is proposing to utilize the parking and outdoor storage areas as they currently stand on the property.

7. That the **Subject Property** has some lawful, nonconforming rights associated with outdoor storage and gravel parking.

8. That the Planning Commission held a public hearing on January 7, 2021 and recommended approval of the Permit.

9. That the City Council approved the permit on January 26, 2021.

FINDINGS OF FACT

1. That the **Containers and Gravel Parking** will not be unduly dangerous or detrimental to persons residing or working in the vicinity of the use, or to the public welfare.

2. That the **Containers and Gravel Parking** will not substantially adversely impair the use, enjoyment or market value of any of the surrounding properties.

3. That the **Containers and Gravel Parking** will be harmonious with and in accordance with the specific objectives of the comprehensive plan.

4. That the **Containers and Gravel Parking** will be maintained so as to be harmonious and appropriate in appearance with the existing or intended character of the general vicinity and will not change the essential character of the area.

5. That the **Containers and Gravel Parking** will not be hazardous to existing or future neighboring uses.

6. That the **Containers and Gravel Parking** will not impact essential public facilities and services, such as highways, streets, police and fire protection.

7. That the **Containers and Gravel Parking** will not create excessive additional requirements at public cost for public facilities and services and will not be detrimental to the economic welfare of the community.

8. That the **Containers and Gravel Parking** will not involve uses, activities and equipment that will be detrimental to any persons, property, or the general welfare by reason of excessive production of traffic, noise, smoke, fumes, glare or odors.

9. That the **Containers and Gravel Parking** will be consistent with the intent and purposes of the Zoning Chapter.

NOW THEREFORE, BE IT RESOLVED BY THIS CITY COUNCIL OF THE CITY OF RAMSEY, ANOKA COUNTY, STATE OF MINNESOTA, as follows:

That the Ramsey City Council hereby grants approval of an Interim Use Permit for Gravel Parking and Use of Storage Containers on the **Subject Property** contingent upon the following conditions:

CONDITIONS

1. That this **Permit** allows for use on the **Subject Property** for five (5) years.

2. That the **Permittee** shall obtain all necessary permits on the **Subject Property**.

3. That the **Permittee** shall be in compliance with the attached Site Plan seen in Exhibit A.

4. That the **Permittee** shall maintain the Subject Property in compliance with City Code Sections 117-356 (Commercial and Industrial Development Off-Street Parking) and 117-118 (The COR District), Chapter 117 (Zoning and Subdivisions) Article II (Zoning) Division 6 (Performance Standards); and Chapter 30 (Nuisances) at all times.

5. That the **Permittee** shall obtain all necessary permits to complete any required building modifications.

6. That this **Permit** shall be perpetual in duration as long as the terms are herein complied with.

7. That the **Permittee** shall be responsible for all City costs incurred in administering and enforcing this Permit.

8. That the City Administrator, or his/her designee, shall have the right to inspect the premises for compliance and safety purposes annually or at any time, upon reasonable request.

9. That this **Permit** approves the gravel parking lot and six (6) storage containers as seen in Exhibit A. No gravel shall be expanded past this point, and there shall not be any additional outdoor storage without an amendment to this **Permit**.

10. That this **Permit** shall automatically expire if the use is not initiated by December 3rd, 2021.

The motion for the adoption of the foregoing resolution was duly seconded by Councilmember _____, and upon vote being taken thereon, the following voted in favor thereof:

and the following voted against the same:

and the following abstained:

and the following were absent:

whereupon said resolution was declared duly passed and adopted by the Ramsey City Council this the 26th day of January, 2021.

CITY OF RAMSEY:

By:_____ By:_____
Mayor City Clerk

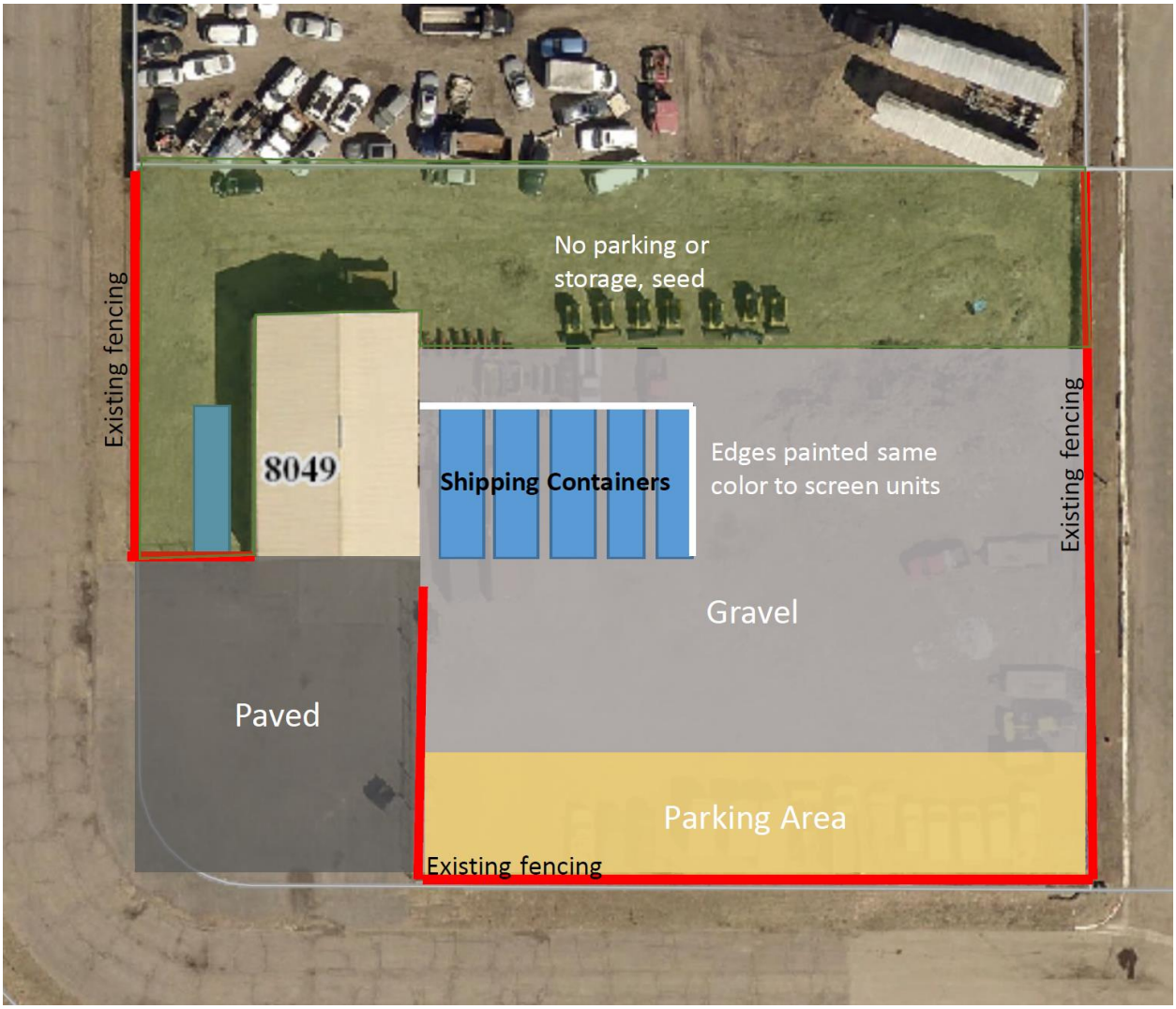
STATE OF MINNESOTA)
) ss.
COUNTY OF ANOKA)

On this _____ day of _____, 2021, before me a Notary Public personally appeared Mayor John LeTourneau and Colleen Lasher, to me personally known, who, being each by me duly sworn, did say that they are respectively the Mayor and City Clerk of the City of Ramsey, the Municipal Corporation named in the foregoing instrument, and seal affixed to said instrument is the corporate seal of said Municipal corporation, and the said instrument was signed and sealed on behalf of said Municipal Corporation by authority of its City Council, and said John LeTourneau and Colleen Lasher acknowledge said instrument to be the free act and deed of said Municipal Corporation.

_____
Notary Public

This document drafted by:
City of Ramsey
7550 Sunwood Dr NW
Ramsey, MN 55303

Exhibit A: Site Plan



City of RAMSEY

Site Location Map

JBR Ramsey LLC

8049 146th Ave NW

29-32-25-14-0011

Legend

Site

Parcels

N

November 20th, 2020

0 0.0225 0.045 mi

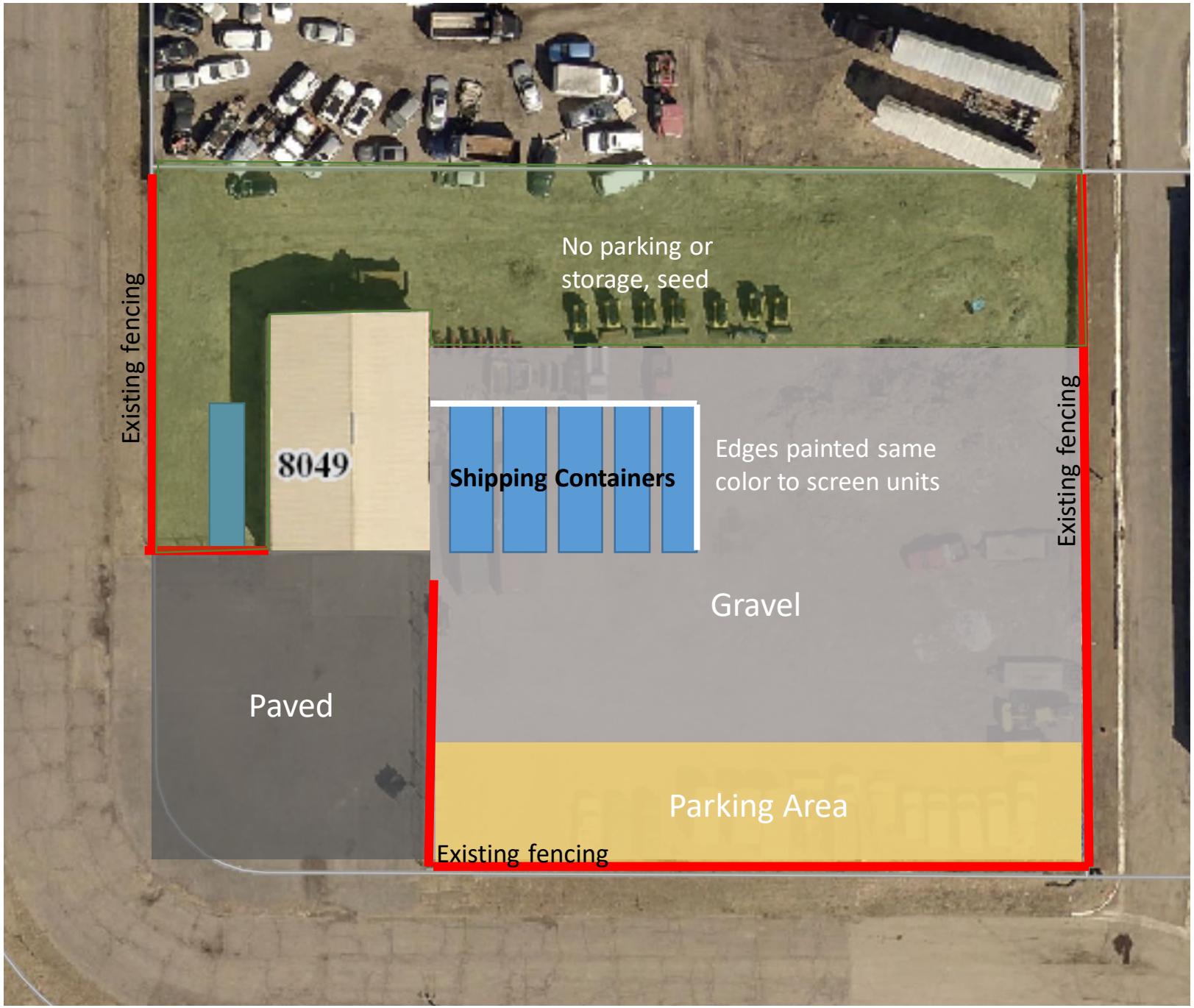
2020

2014

2011

2008

2005


No parking or
storage, seed
Existing fencing
8049
Shipping Containers
Edges painted same
color to screen units
Existing fencing
Gravel
Paved
Parking Area
Existing fencing

PLANNING COMMISSION
CITY OF RAMSEY
ANOKA COUNTY
STATE OF MINNESOTA

The Ramsey Planning Commission conducted a regular meeting on Thursday, January 7, 2021, at the Ramsey Municipal Center, 7550 Sunwood Drive NW, Ramsey, Minnesota.

Members Present:	Chairperson Randy Bauer Commissioner Bruce Anderson Commissioner Cheri Gengler Commissioner Eric Peters Commissioner Gary VanScoy
Members Absent:	None
Also Present:	Senior Planner Chloe McGuire Brigl Deputy City Administrator Tim Gladhill City Council Liaison Debra Musgrove City Planner Chris Anderson Park and Assistant Public Works Superintendent Mark Riverblood City Engineer Bruce Westby

1. CALL TO ORDER

Chairperson Bauer called the regular meeting to order at 7:00 p.m.

2. PLEDGE OF ALLEGIANCE

Chairperson Bauer led the group in the Pledge of Allegiance.

3. CITIZEN INPUT

None.

4. APPROVAL OF AGENDA

Motion by Commissioner VanScoy, seconded by Commissioner Peters, to approve the agenda as presented.

A roll call vote was performed:

Commissioner Gengler	aye
Commissioner Anderson	aye

DRAFT

Commissioner Peters aye
Commissioner VanScoy aye
Chairperson Bauer aye

Motion carried.

5. CONSENT AGENDA

5.01: Approve the December 3, 2020 Planning Commission Meeting Minutes
5.02: Review Revised Sketch Plan for Hunt Addition, Case of Platinum Land (Project 20-105)
5.03: Consider Resolution #21-014 Approving an Interim Use Permit for Storage Containers and Gravel Outdoor Storage Area at 8049 146th Ave NW (Project No. 20-137); Case of JBR Ramsey, LLC on Behalf of Richard Lee
5.04: Provide Feedback for Site Plan and Final Plat for Gigi's Salon (Project #20-140)

Motion by Commissioner Anderson, seconded by Commissioner Peters, to approve the consent agenda as presented.

A roll call vote was performed:

Commissioner Anderson aye
Commissioner Peters aye
Commissioner Gengler aye
Commissioner VanScoy aye
Chairperson Bauer aye

Motion carried.

6. PUBLIC HEARINGS/COMMISSION BUSINESS

6.01: Public Hearing: Review Resolution #21-007 Approving Preliminary Plat for Northfork Meadows, Case of Lennar (Project #20-135)

Public Hearing

Chairperson Bauer called the public hearing to order at 7:04 p.m.

Presentation

Senior Planner McGuire Brigl presented the staff report stating that staff recommends adoption of Resolution #21-007.

Chairperson Bauer stated that it was indicated that the number of trees were less than required and asked for more information.

Senior Planner McGuire Brigl replied that per the applicant's calculations they would be approximately 14 trees short on the shared property line, which would equate to being about one tree short per lot in the backyards along that line. She stated that staff has not had an extensive amount of time to review the information as it was submitted earlier today.

Commissioner VanScoy asked the number of trees listed.

Councilmember Musgrove asked for information on the tree growth and coverage as the trees grow and whether that is a factor in the proposal before the Commission.

Senior Planner McGuire Brigl replied that 133 trees would be required on the shared property line and the applicant is proposing 119 trees on the shared property line. She stated that part of the request is to allow slightly less trees in order to prevent trees from dying off as they grow. She stated that typically the City requires more smaller trees in order to provide screening with the understanding that some will die off in the process because of how closely packed together they are.

Commissioner VanScoy asked if there has been input from City Planner Anderson as to the trees.

Senior Planner McGuire Brigl commented that she did have a chance to speak with City Planner Anderson who recommended that input be obtained from the Planning Commission and that he be allowed additional time to review the request. She stated that he was open to a compromise, noting that had been done in Harvest Estates 2nd Addition, if adequate screening was provided and the neighbors were amenable.

Citizen Input

Josh Metzer, Lennar, stated that if approved they would like to begin grading activities in the early spring of this year with street and utility construction during the summer and hoped that a model could be ready for the fall parade of 2021. He stated that they would look for a mixture of three and four car garages with prices would begin in the mid-$300,000's and go up from there. He estimated that overall construction would run about three years for all of the homes. He stated that they like to provide landscape buffers for the benefit of both their own residents and adjacent property owners. He stated that they would be exceeding the two trees per yard requirement by two trees. He stated that their initial landscaping plan showed less trees than the 119 proposed, simply from the recommendation on spacing trees from their landscape architect. He stated that in discussions with staff they made the decision to add quite a few more trees to the eastern boundary to get closer to the required number. He recognized that a buffer is needed but commented that they would like to create a buffer that will live and succeed to maturity. He stated that while more dense planting would provide a nice buffer when planted, once those trees get to maturity, trees will die off and need to be removed and the trees that remain will not be of the best quality because they were crowded as they grew and therefore not able to live to their full potential. He commented that by their calculation they are only 14 trees short of the requirement and hoped the Commission could support that. He stated that if the Commission feels strongly, they will find

space to plant those additional trees but would prefer to provide adequate spacing to allow the trees to grow.

Chairperson Bauer referenced the comment made during the beginning of the applicant's presentation that the homes would have three or four car garages and asked if that was meant to address the number of bedrooms.

Mr. Metzer stated that the homes would be a mix of three and four bedroom homes, noting that the basements would be unfinished and therefore an additional bedroom could be added. He confirmed that his previous statement was correct, the smaller lots would have three car garages while the larger lots would have four car garages.

Commissioner VanScoy asked the species of tree that would be planted along the buffer area.

Mr. Metzer review the mix of overstory, ornamental and evergreen trees that would be planted. He confirmed that a combination of the different types of trees would be planted to create the buffer. He stated that four of the six adjacent lots to the east have a significant number of trees in their yard, which also adds to the buffer. He stated that they would plan to plant more evergreen trees to buffer the two lots that do not have a lot of trees in their yards.

Councilmember Musgrove stated that as the trees are planted and grow, if there are trees that fail, would those be required to be replaced by the developer.

Senior Planner McGuire Brigl stated that the standard Development Agreement includes a two year guarantee on all trees. She stated that agreement calculates a one third die off rate.

Councilmember Musgrove stated that planting, failing and requiring the applicant to replant and fail again could setup a cycle that does not provide a successful barrier.

Leslie Clark, 15150 Kangaroo Street, stated that her property is one of those referred to as one without trees. She stated that she would like to see as many trees planted as possible. She recognized that Lennar has just taken on this project but throughout the history of the site itself the residents have done a lot of compromising as to what could be developed on that parcel. She stated that she wants a buffer that provides a clear delineation between the properties.

City Planner Anderson commented that when landscaping is used as the tool for density transitioning there is a fine line in regard to survivability of trees. He stated that in the beginning the trees planted are small and even a fairly dense planting at the onset will not provide a tremendous visual barrier between the two neighborhoods. He agreed that 15 to 20 years down the road as the trees start to reach maturity there may be some overcrowding and some that dominate more than others. He commented that you do have to plant trees tighter in the beginning in order to provide that buffer. He stated that there is a 35 foot wide corridor and the trees can be staggered. He believed that there are ways to accomplish the goal with the recognition that some trees may be lost in the long-term due to overcrowding. He provided an example of the 4th Addition of Brookfield where trees were planted as density transitioning and 15 years later there

is still quite a bit of space between the trees. He commented that typically the Development Agreement requires a two year guarantee to replace trees that die. He stated that when speaking of density transitioning, that is intended to be there in perpetuity and are viewed differently than typical boulevard trees.

__ Brock, 15240 Kangaroo Street NW, stated that when she looked at the map, she did not notice the berm, but recognized that it was mentioned in the presentation. She asked if the berm would remain in perpetuity and when the homes adjacent to Kangaroo would be planned for construction.

Mr. Metzer commented that the entire site would be graded during the 2021 construction season and estimated less than one month for grading. He estimated that street and utility construction would take a few months, therefore there would be continual construction through the summer and fall with continual construction of homes for another two years. He stated that once the grading and street and utility construction is completed, the homes would be constructed individually with two or three homes constructed at a time. He stated that if they receive the approvals from the City, they would like to begin grading in late March or in April, depending upon weather conditions.

Ms. Clark asked when the berm would be constructed and whether trees would be removed to construct the berm.

Mr. Metzer replied that the grading would occur this year. He commented that they are not allowed to remove trees that are not on their property. He commented that the only existing trees that would be preserved are to the south end of the site. He stated that after grading is completed they would plant the trees, estimated that those buffer trees could be planted in late summer.

Ms. Clark asked if a tree partially over the property line would be removed.

Mr. Metzer replied that anything on the property in that area would be removed in order to complete grading. He stated that the homes would have full basements and therefore only two floors would be visible. He provided additional details on the grading and berm, noting that the berm would be four feet in height.

Ms. Brock asked if these homes would be connected to City sewer and water. She asked if the homes along Kangaroo would be able to connect to City services.

Mr. Metzer confirmed that these homes would be connected to City sewer and water.

Senior Planner McGuire Brigl commented that homes with private sewer and water would not be forced to connect to City services. She noted that she could follow up with Ms. Brock.

Motion by Commissioner Peters, seconded by Commissioner VanScoy, to close the public hearing.

A roll call vote was performed:

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Commissioner Gengler	aye
Commissioner Peters	aye
Commissioner Anderson	aye
Commissioner VanScoy	aye
Chairperson Bauer	aye

Motion carried.

Chairperson Bauer closed the public hearing closed at 7:42 p.m.

Commission Business

Commissioner Gengler asked if the resolution as proposed would require the applicant to meet the full tree requirement.

Senior Planner McGuire Brigl confirmed that to be correct.

Commissioner Anderson stated that he is disappointed to see that the berm is only four feet high as that seems like a small berm for that number of trees. He stated that he expected to see a minimum of ten feet for the berm. He stated that he is not happy with the berm because of all the compromise that has been done on this project.

City Planner Anderson commented that the plantings would occur on the berm and both sides of the crown of the berm. He stated that the higher the berm gets, the wider it must be in order to provide a safe slope and that would take up a larger piece of land and would press the required corridor. He believed that four feet is acceptable by City Code.

Commissioner Anderson stated that he would like that issue further explored. He asked how wide the berm would be.

Nate Hermer, ISG and engineer for the project, stated that with a four foot berm there would be a four to one side slope. He stated that a four foot berm would be 32 feet wide. He stated that you could not go much higher and remain within the buffer easement.

Commissioner Anderson asked if some of the trees would be going into the 80 foot lot yards in order to accomplish the number of trees being planted. He stated that a focus of this project has been on the density transition and the residents have made it clear that is something they want.

Senior Planner McGuire Brigl commented that the four foot berm does meet the City Code requirements for the density transition zone with the plantings on top. She noted that the additional 14 trees can be required and the applicant has stated that they can make that work, but the berm would meet the City requirements.

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Commissioner VanScoy commented that the City has done a lot of work to ensure that the transitioning will be adequate and believed that the Commission should follow the requirements and recommendations of staff.

Motion by Commissioner VanScoy, seconded by Commissioner Gengler, to recommend that City Council adopt Resolution #21-007 with the recommended number of trees.

A roll call vote was performed:

Commissioner Gengler	aye
Commissioner Peters	aye
Commissioner Anderson	aye
Commissioner VanScoy	aye
Chairperson Bauer	aye

Motion carried.

6.02: Public Hearing: Consider Ordinance #20-01 Amending City Code Sections 117-111 (R-1 Residential District) and 117-112 (R-2 Residential District) Clarifying Subdistricts based on Lot Size

Public Hearing

Chairperson Bauer called the public hearing to order at 7:51 p.m.

Presentation

Deputy City Administrator Gladhill presented the staff report stating that staff recommends adoption of Ordinance #20-01.

Citizen Input

No comments.

Motion by Commissioner Peters, seconded by Commissioner Anderson, to close the public hearing.

A roll call vote was performed:

Commissioner Peters	aye
Commissioner Anderson	aye
Commissioner Gengler	aye
Commissioner VanScoy	aye
Chairperson Bauer	aye

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Motion carried.

Chairperson Bauer closed the public hearing closed at 7:56 p.m.

Commission Business

Commissioner Anderson asked how these changes would affect projects like Trott Brook.

Deputy City Administrator Gladhill commented that this would not change the outcome. He stated that this is a tool that would allow for smaller lots sizes. He confirmed that a zoning change would still be necessary to achieve this zoning and therefore the Council would have final control over any requests.

Commissioner VanScoy asked if in the past the smaller lots have been allowed that has been done through PUD. He asked if there would be an issue in terms of negotiations.

Deputy City Administrator Gladhill confirmed that has been the process, which has been challenging in order to equate the tradeoff benefits. He commented that the zoning amendment, and often times Comprehensive Plan amendment, would be needed therefore the ability to negotiate would be available. He commented that this would be a better tool to use rather than attempting to go through a PUD process, which would also be less burdensome on applicants.

Commissioner VanScoy commented that he believes that this would be a helpful tool as the Commission has recommended approvals in the past that have in turn been denied by the Council because it did not believe that a PUD was achieved. He commented that he does see the benefit of having this tool available.

Commissioner Anderson stated that this would then open up R-1 to 55 foot wide lots, which he could see becoming an advantage for a developer. He stated that it is important to control where 55 foot wide lots are placed, especially in the northern part of Ramsey.

Chairperson Bauer commented that the City would still have control as this would be a subzone, therefore R-1 would still require 80 foot lots and smaller lots could only be achieved with a zoning change.

Deputy City Administrator Gladhill confirmed that this would be a separate zoning district and would require a zoning amendment. He stated that this would only apply where the City allows and does not provide rights to a developer. He commented that nothing would actively be zoned for 55 foot lots, this would simply be a tool that could be used.

Motion by Commissioner Peters, seconded by Commissioner Gengler, to recommend that City Council adopt Ordinance #20-01.

A roll call vote was performed:

Commissioner Anderson	nay
Commissioner Peters	aye
Commissioner Gengler	aye
Commissioner VanScoy	aye
Chairperson Bauer	aye

Motion carried.

6.03: Public Hearing: Consider Ordinance #21-02 Amending City Code Section 117-148 Entitled Mississippi River Corridor Critical Area

Public Hearing

Chairperson Bauer called the public hearing to order at 8:06 p.m.

Presentation

Deputy City Administrator Gladhill presented the staff report stating that staff recommends adoption of the ordinance.

Councilmember Musgrove asked if staff has worked with other cities in this area and how those cities are adjusting to the changes.

Deputy City Administrator Gladhill noted that there were two attempts at rule making, noting that the first did not go well and the DNR took a step back and reevaluated. He stated that the second attempt was much more successful with community input. He stated that staff worked extensively with communities on the upper pool of the Coon Rapids Dam (Anoka, Dayton, Brooklyn Park and Coon Rapids). He stated that while there was frustration in the beginning, throughout the process there was improvement. He commented that Ramsey may be one of the first to bring forward the ordinance amendment, but all cities should have submitted their Comprehensive Plan and will be updating their ordinance as well.

Citizen Input

No comments.

Motion by Commissioner VanScoy, seconded by Commissioner Peters, to close the public hearing.

A roll call vote was performed:

Commissioner Peters	aye
Commissioner Gengler	aye
Commissioner Anderson	aye
Commissioner VanScoy	aye
Chairperson Bauer	aye

Motion carried.

Chairperson Bauer closed the public hearing closed at 8:16 p.m.

Commission Business

Motion by Commissioner Gengler, seconded by Commissioner VanScoy, to recommend that City Council adopt Ordinance #21-02 amending City Code Section 117-148 (Mississippi River Corridor Critical Area).

Further discussion

Councilmember Musgrove asked if these changes could result in more project opportunities, such as riverbank stabilization and whether there would be additional funding opportunities for river property owners. Deputy City Administrator Gladhill stated that changing the zoning ordinance may not directly result in that action but having compliant regulations will assist. He advised of work that was done through the EPB that reviewed the condition of the shoreline and could result in additional funding opportunities for residents.

A roll call vote was performed:

Commissioner Gengler	aye
Commissioner Peters	aye
Commissioner Anderson	aye
Commissioner VanScoy	aye
Chairperson Bauer	aye

Motion carried.

6.04: Public Hearing: Consider Recommendations Related to Riverstone South; Case of Capstone Homes/Riverstone Development

1. **Adopt Resolution #21-015 Approving Comprehensive Plan Amendment from Low Density Residential to Medium Density Residential for Detached Townhome Section and Preliminary Plat for Riverstone South**
2. **Adopt Ordinance #21-03 Approving Zoning Amendment from R-1 Residential (MUSA – 80) District to R-1 Residential (MUSA – 65) District, R-1 Residential MUSA – 50) District and R-2 Residential (Detached Townhome) District**

Public Hearing

Chairperson Bauer called the public hearing to order at 8:20 p.m.

Presentation

Deputy City Administrator Gladhill presented the staff report stating staff recommends approval of the project with the contingencies noted in the staff report.

Commissioner VanScoy stated that in general he likes the plan but is concerned with the safety of the residents on Bowers Drive. He recognized that those residents do not like the concept of an additional access but stated that he believes that is critical for safety and without that he cannot support this request.

Deputy City Administrator commented that originally staff proposed that connection, but it did not move forward. He stated that he would not want to tie that to this project as the developer is not responsible for that.

Chairperson Bauer commented that this development has nothing to do with a second access for Bowers Drive, as that will continue to be an issue regardless of this proposal.

Commissioner Anderson asked if this development would have an HOA and private streets. He commented that the street width seems narrow.

Deputy City Administrator Gladhill commented that he would let the developer speak to whether there would be an HOA. He stated that in terms of road widths there is a menu of options that can be selected with different levels of parking allowed. He stated that a 32-foot width road would allow parking on both sides of the street, whereas parking would only be allowed on one side of the street for the road width proposed. He stated that the main street that goes through this development would be a little wider, whereas the spur roads would be 29 feet in width with no parking on one side of the street.

Commissioner Anderson commented that he has been plowing snow for the City this season and the narrower roads can be tough, therefore he would support wider streets where possible.

Councilmember Musgrove commented that she would also prefer a wider road. She asked if there would be sidewalks, and whether that would be on one side or both sides. She also asked if there would be fencing between the homes and solar garden.

Deputy City Administrator Gladhill replied that sidewalks would be along one side of the road, as required by the City. He stated that the smaller lot homes will be adjacent to the solar garden and noted that he would allow the developer to provide details on the buffering between those homes and solar garden.

Citizen Input

Tom Bakritges, Capstone Homes, acknowledged the landowners noting that the Pearson family has trusted them with developing a project to preserve their legacy. He also expressed appreciation to City staff, the Commissions and City Council for the communication and cooperation throughout the past year of planning. He stated that the overall site is about 78 acres and it was

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important for them to figure out the right transition of density transitioning throughout the site. He noted that the larger lots are proposed on the south side, adjacent the existing homes and preserved trees, transitioning to smaller lots as you move towards the solar garden. He stated that there would be a landscaping buffer along the length of Riverdale Drive. He stated that as you enter into the site onto Pearson Drive, people would pass the preserved area of trees and park area. He commented that there will be seven acres of tree preservation that will be dedicated to the City along with another eight acres of open space and ponding. He stated that they have created a 15-acre area to act as a buffer between this development and adjacent development. He stated that they developed this plan after receiving input from City staff, the City Council and advisory groups, and residents. He stated that the townhomes will have a lawn maintenance HOA while the single-family homes would be under a master that includes the buffer area along Riverdale Drive. He stated that the street widths proposed match the road width in Riverstone North and has worked very well. He stated that they are required to provide sidewalks on one side of the road and have those proposed on the plans. He stated that there is vegetation on the other side of the existing fence around the solar garden site. He noted that with the existing vegetation they would not propose additional screening for that area.

Steve Bona, Capstone Homes, stated that throughout the site they would have homes similar to Riverstone North but noted that they would have more of the larger homes in this development. He commented that there will a great variety of homes throughout the development. He provided details on the townhome product offerings that they would propose for this development in order to match the desires of home buyers. He stated that there is a large variety of front elevations and home plans included in the preliminary plat for the detached townhome product, noting that they have been selling extremely well in their other developments. He commented that the 29-foot width for streets has worked well in Riverstone North, noting that this would be similar with amenities provided in return for the 29-foot-wide streets. He commented that Unicorn is proposed for a street name. He recognized that the City has a street naming policy but asked that a different name be selected for that roadway in order to assist in marketing.

Commissioner Peters stated that he lives in the Brookfield development, in a Capstone home, and asked if the front porches would be wood or concrete.

Mr. Bona replied that they do wood front porches because they continue building in the winter and therefore concrete cannot be poured in the winter months.

Commissioner Peters asked if the wood would be treated or left raw.

Mr. Bona was unsure but noted that he could follow up on that.

Commissioner Peters stated that in his neighborhood some of the homeowners were not aware of how to treat a porch and used paint, which does not hold up well. He suggested that the porches be stained/treated to ensure they look the same.

Mr. Bona commented that he would be happy to pass those comments on and can recommend that to their production team. He stated that it is a significant process to make a change to every home but would be happy to share the comment and get feedback.

Commissioner Anderson referenced the northeast corner, specifically lots 16 through 20, noting that those lots appear to be less than 40 feet in width and asked for details.

Mr. Bakritges stated that those lots are not less than 40 feet, as they are measured at the setback and not the right-of-way.

Chairperson Bauer commented that he lives in Riverstone North and has not had a problem with the 29-foot width.

Mr. Bona commented that the narrower road provides a benefit to calming traffic, as traffic travels at higher speeds on wider roads.

John Dionne, 14806 Bowers Drive, stated that he was previously a member of the Ramsey City Council before transitioning to being a District Court Judge. He commented that virtually no one along Bowers Drive likes the density higher than it needs to be. He recognized the concept that if someone does not want something to be built next to them, they should purchase the land themselves. He commented that with the required amendments, it is an ability for the City to follow the plan that was set forth before them. He asked why the number of houses is being packed in above what is allowed by the Comprehensive Plan and zoning. He used the example of 29-foot roads, which developers like because they are less costly and allow more lots, but they are not good for cities and maintenance. He believed that higher density housing should continue to be concentrated around The COR rather than increasing the density in this area. He stated that often sidewalks are setback into yards with tree planting between the road and sidewalk while other times sidewalks are against the road and asked which option this plan would propose. He stated that this is an opportunity for the Commission to require the developer to follow the guidance of the Comprehensive Plan and not increase the density in this more rural area. He appreciated the architectural considerations included in this plan to ensure that all the homes would not look the same. He commented that developers will come and go but residents often remain in the community for longer terms. He asked the Commission to deny the amendment to the Comprehensive Plan and require the developer to rework its plan to meet the guidance of the Comprehensive Plan.

Dave Nathe, 14453 Llama Street, stated that he owns the adjoining property. He asked what would happen with Lazy Dayz RV, as that business parks on both sides of the street. He asked if there would be a buffer zone or fence buffering his property. He asked if the ponding area on the site would be increased or whether another ponding area would be added.

Deputy City Administrator Gladhill commented that he will work with Lazy Dayz to evaluate the parking as he believed the intent was to only allow parking on one side of the street. He commented that as the connection for this development is made that parking issue will become more important. He stated that the Nathe property is undeveloped and abuts 65-foot lots. He

stated that he could follow up with Mr. Nathe to speak in further detail. He stated that this development will need to treat its own stormwater and its plans will be reviewed by the City and Lower Rum River Water Management Organization and confirmed that new ponds will be created on the site.

Mr. Dionne commented that anyone coming out of Bowers Drive would need to travel one mile down onto Armstrong to get onto Highway 10 to head west to Elk River, which would dramatically change the access to the highway for those residents.

Deputy City Administrator Gladhill commented that is not a Capstone improvement but a highway planning process for the City and encouraged residents to continue to provide input as they continue to walk through the design for Riverdale Drive.

Eric Nathe, 14453 Llama Street, asked for clarification on the lift station on the east. He stated that the plot shows Pearson Drive almost coming into their property and commented that he would love to see a buffer zone between this development and his property. He stated that people from Bowers Drive often come onto their property and believed that additional residents in this area would only increase this problem.

Deputy City Administrator Gladhill commented that the lift station is the sanitary sewer connection for wastewater and provided details on that system. He stated that the connection is shown in order to provide a connection in the case the property to the east is developed. He stated that pavement could be put in or a sign could be placed stating of a possible connection in the future, noting that it is important for residents to know of a possible road connection to prevent issues in the future.

John Jacobson, 14691 Bowers Drive, stated that he is concerned with vehicles entering Highway 10 to go towards Anoka from Bowers Drive, noting a slight turn to the northwest which makes it difficult to see if cars are coming from the Elk River direction. He asked if there would be a way to add an acceleration lane to allow Bowers Drive traffic to reach the traveling speed.

Deputy City Administrator Gladhill provided details on the Riverdale Drive project which would be setup before new motorists are added to the area. He noted that the City would develop plans and specifications which would be reviewed and approved by MnDOT. He agreed that an at grade acceleration lane could be considered, as there is right-of-way available. He stated that the constraining factor will be the distance between Bowers Drive and Armstrong on Highway 10. He stated that staff will discuss that option as the Riverdale Drive process moves forward and hoped that process would begin later this year.

Gretchen Morris, 14820 Bowers Drive, commented that she believes the issue of density was previously discussed. She stated that while she is not a fan of ten feet between townhouses, she recognizes that there is a return on investment that is necessary to make a project feasible. She asked the number of homes that would be needed to make the development work.

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Deputy City Administrator Gladhill commented that there were multiple open houses for the project, which incorporated a lot of input from residents on Bowers Drive. He stated that changes were made to the design to increase the lots sizes for the properties nearest Bowers Drive along with the additional buffer in order to provide a compromise. He stated that this is the model that the Planning Commission and City Council agreed to move forward in terms of neighborhood design and variety of housing products.

Mr. Bona stated that they have been working on this process for one year with six or more meetings with neighbors on the design along with concept design meetings with the Planning Commission and City Council. He stated that the tree preservation land and buffer area was provided as a compromise, removing 21 lots, in order to address the input received from the Bowers Drive residents. He stated that the five-foot side yard setback is the typical setback for detached townhome products. He noted that he would be willing to meet with the Nathe family to discuss buffering concerns. He noted that they do not have buffering proposed in that area because of existing vegetation and the tree preservation and landscaping that would be provided on the overall plan.

Motion by Commissioner VanScoy, seconded by Commissioner Peters, to close the public hearing.

A roll call vote was performed:

Commissioner Gengler	aye
Commissioner Anderson	aye
Commissioner VanScoy	aye
Commissioner Peters	aye
Chairperson Bauer	aye

Motion carried.

Chairperson Bauer closed the public hearing closed at 9:31 p.m.

Commission Business

Commissioner VanScoy stated that he expressed his concern with the disregard for public safety and feeling very strongly about that. He stated that staff made the comment that the issue is not related to this case and asked for clarification.

Deputy City Administrator Gladhill stated that the Commission could take action on this proposal, and if desired could provide a second motion asking the City Council to reconsider a second access for Bowers Drive.

Chairperson Bauer commented that a second access for Bowers Drive is a separate issue from this specific development. He noted that although that connection was part of one of the original sketch plans, it was removed as a result of the input from the Bowers Drive residents and not the position of Capstone.

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Motion by Commissioner Gengler, seconded by Commissioner Peters, to recommend that City Council adopt Ordinance #21-03 and Resolution #21-015 approving actions related to the Riverstone South Preliminary Plat.

Further discussion

Commissioner Anderson asked for a friendly amendment to the motion to request the Council to review the second access to Bowers Drive as he is also opposed to not having a second access for that neighborhood. Chairperson Bauer asked for input from the Council discussion on that topic. Councilmember Musgrove commented that the consensus was divided, but overall, the Council respected the concerns from the Bowers Drive residents related to safety concerns that would arise from adding additional traffic onto the narrow Bowers Drive. Deputy City Administrator Gladhill commented that the was a strong consensus from the Council to not have that connection. He noted that there were even concerns from the Bowers Drive neighborhood with a pedestrian connection because of the narrow road and lack of sidewalk. He stated that while one or two members of the Council may have still favored the connection, the strong majority opposed that. Chairperson Bauer stated that the issue of a second access to Bowers Drive is separate of this request and stated that this action should first be considered and then a separate action could be taken related to a secondary access for Bowers Drive.

A roll call vote was performed:

Commissioner Gengler	aye
Commissioner Peters	aye
Commissioner Anderson	nay
Commissioner VanScoy	aye
Chairperson Bauer	aye

Motion carried.

Motion by Commissioner VanScoy, seconded by Commissioner Anderson, to recommend that City Council reconsider the connection to Bowers Drive, at some form, for public safety reasons.

Further discussion

Commissioner Peters stated that he thought he recalled different ways to manage an emergency pathway for vehicles and asked what happened with that. Deputy City Administrator Gladhill stated that option was discussed internally but there was not enough support to move anything forward that would allow pedestrians or vehicles.

A roll call vote was performed:

Commissioner Anderson	aye
Commissioner VanScoy	aye

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Commissioner Gengler	nay
Commissioner Peters	nay
Chairperson Bauer	aye

Motion carried.

Chairperson Bauer asked that Councilmember Musgrove share the input from the Commission when the issue is considered by the Council.

7. COMMISSION BUSINESS

7.01: Center Street Framework and Policy Plan

Presentation

Parks and Assistant Public Works Superintendent Riverblood presented the Staff Report and highlighted the Center Street Area Framework and Policy Plan and welcomed any comments or feedback the Commission may have on draft plans or its elements.

Commission Business

Commissioner Gengler commented that this is a great plan and appreciated the thought and details that went into the plan. She stated that the pumphouse treatment stands out as being something that will add so much value to the center of the city. She also appreciated the thoughtful amenities and stormwater treatments. She asked where public art might come into this as it could be an additional amenity that could attract more visitors.

Parks and Assistant Public Works Superintendent Riverblood provided an example of public art/display. He stated that he appreciated the notion of more traditional public art and identified concrete placeholders that could be foundational elements for public sculpture that could become wayfinding areas and provide a sense of community. He stated that he is excited about public art in this location as well as throughout the park system. He recognized that there would need to be additional discussion on possible funding for public art elements in the parks.

Commissioner Anderson stated that he also likes the plan. He stated that if he were asked to prioritize, he would suggest beginning with the pumphouse and then Municipal Plaza as that was promised to Affinity. He stated that the remaining items could fall in line after those two items.

Chairperson Bauer commented that some of the projects within The COR are on hold right now with the challenges of the past year and stated that perhaps this would be the right time to begin on these elements which would continue to attract people to this area. He stated that housing in this area continues to fill up as soon as it is built and that increase in population will continue to attract the interest of retailers when the economy opens up more and restrictions are lifted.

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Parks and Assistant Public Works Superintendent Riverblood commented that activity within The COR has continued regardless of the economic climate, between public improvement and infrastructure and housing developments which shows retailers the confidence that the City and residents have in this community.

7.02: Consider Water Treatment Plant Site Selection Recommendation

Presentation

City Engineer Westby presented the Staff Report stating that based on the tabulated information in the staff report, as well as other operational benefits and cost savings that would be realized over time, engineering and public works staff recommend locating the proposed WTP on the public works site. It was noted that the City has been primarily running only two to four of its municipal wells to supply water to the City since mid-2019. Since these wells are constantly in operation they are not able to be taken off-line for routine maintenance. Staff therefore recommends proceeding with the proposed WTP construction in as timely a manner as possible to ensure that the City is able to continue providing water in compliance with the MDH HBV for manganese. If the City elects to proceed with construction of the WTP, it could be operational by spring of 2023.

Commission Business

Chairperson Bauer commented that the construction costs are the same no matter the site but when looking at operation, convenience and ease it would make the most sense to locate on the public works site.

Commissioner Peters and Gengler agreed.

Commissioner Anderson agreed that this site would be the most efficient of the choices and that it would make sense to have the buildings close together for staff. He asked if they have considered placing the facility on the west corner as that would leave the east portion for sale/development in the future.

City Engineer Westby replied that the west side would be more marketable as it has access from two different roads and provides more development/redevelopment opportunities. He stated that the proposed location would also be across from Moline Concrete and therefore the uses would compatible. He noted that Moline also provided concrete panels for the public works facility and would perhaps do the same for this facility, as it also provides Moline with the opportunity to easily show those panels to customers.

Commissioner Anderson asked if the City is considering pulling water from the river for treatment, on a longer-term scale.

City Engineer Westby stated that the City just completed a study that looked at using surface water, in conjunction with the Metropolitan Council and nearby communities but the cost for each community would be many times over the $32,000,000 for a water treatment plant. He noted that

the other communities all have their own water treatment facilities and have no desire to move to surface water systems. He confirmed that the option was reviewed but the cost was prohibitive.

Chairperson Bauer confirmed the consensus of the Planning Commission to support the public works site for the proposed Water Treatment Plant.

8. COMMISSION / STAFF INPUT

8.01: Receive Update on Ramsey Gateway Project (US Highway 10/169 Plan)

Deputy City Administrator Gladhill provided a brief update on the status of the preliminary engineering efforts by Anoka County on the Ramsey Gateway Project. The update focused on history, recent progress and the schedule moving forward. It was noted that over half of the funding for the project has been secured and is now a reality for a 2023/2024 construction start date.

9. ADJOURNMENT

Motion by Commissioner Peters, seconded by Commissioner Anderson, to adjourn the meeting.

A roll call vote was performed:

Commissioner Anderson	aye
Commissioner Peters	aye
Commissioner Gengler	aye
Commissioner VanScoy	aye
Chairperson Bauer	aye

Motion carried.

The regular meeting of the Planning Commission adjourned at 10:39 p.m.

Respectfully submitted,

_____

Chloe McGuire Brigl
Senior Planner

ATTEST:

_____

JoAnn Shaw
Planning Division Secretary

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Drafted by Amanda Staple
TimeSaver Off Site Secretarial, Inc.

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CC Regular Session **5. 7.**

Meeting Date: 01/26/2021

By: Bruce Westby, Engineering/Public Works

Information

Title

Adopt Resolution #21-024 Prohibiting Parking on Riverdale Drive between Feldspar Street and Sunfish Lake Boulevard for Improvement Project #21-00

Purpose/Background:

Purpose:

The purpose of this case is to adopt Resolution #21-024 prohibiting parking of motor vehicles at all times on the north side of Riverdale Drive NW between Feldspar Street NW and Sunfish Lake Boulevard to comply with Municipal State Aid requirements as related to Improvement Project #21-00.

Background:

City of Ramsey Improvement Project #21-00 proposes to reconstruct approximately 2,925 lineal feet (0.55 miles) of Riverdale Drive between Feldspar Street and Sunfish Lake Boulevard.

The overall width of Riverdale Drive is proposed to be reduced 10-feet throughout the corridor, resulting in a total width of 34-feet from face-of-curb to face-of-curb. To accomplish this, two existing 6-foot wide on-street bike lanes on the west end of Riverdale Drive are proposed to be removed, along with on-street parking lanes along the north side. An 8-foot wide on-street parking lane will be provided along the south side of Riverdale Drive to accommodate over-flow parking for adjacent properties.

The existing 10-foot wide off-street bituminous trail north of Riverdale Drive that terminates approximately 300 feet east of Dolomite Street is proposed to be extended to Feldspar Street. This will allow pedestrians and bicyclists to use the off-street trail, which will be separated from Riverdale Drive by a boulevard ranging between 6 and 8-feet wide that will better accommodate snow storage and reduce drifting of snow along the corridor, compared to the existing 0 to 2-foot wide boulevard.

Riverdale Drive is part of the City's Municipal State Aid Street (MSAS) system and is therefore subject to the requirements of the Minnesota Department of Transportation's (MnDOT) State Aid Division. MnDOT's State Aid Division requires that a City pass a parking prohibition resolution whenever parking is restricted along one or both sides of any portion of an improved MSAS street.

Bolton & Menk completed final plans and specifications for the proposed improvements and must submit the plans to MnDOT State Aid for review and approval prior to advertising for bids. Since the proposed improvements do not provide adequate width for parking on both sides of Riverdale Drive, approval of the proposed street improvements as a Municipal State Aid project must be conditioned upon a parking ban resolution.

Upon adopting the attached resolution, parking will be prohibited at all times on the north side of Riverdale Drive NW between Feldspar Street NW and Sunfish Lake Boulevard to comply with Municipal State Aid requirements as related to Improvement Project #21-00.

Notification:

No notifications are required for this case.

Observations/Alternatives:

Observations:
In a separate case on tonight's regular City Council agenda, Council will consider approving plans and specifications and authorizing advertisements for bids for City Improvement Project #21-00. An executed parking prohibition resolution must be submitted to MnDOT State Aid before the State Aid Engineer will approve and sign the construction plans, which is necessary to allow the project to be advertised for bids.

Alternatives:
Alternative #1 – Adopt Resolution #21-024 to prohibit the parking of motor vehicles at all times on the north side of Riverdale Drive NW between Feldspar Street NW and Sunfish Lake Boulevard, State Aid Route No. 199-108-020 from Feldspar Street NW to Dolomite Street NW, and State Aid Route No. 199-108-030 from Dolomite Street NW to Sunfish Lake Boulevard.

Funding Source:
No costs are associated with this case, other than the time Staff spent preparing the case and Resolution.

Recommendation:
Staff recommends adopting the attached resolution to prohibit the parking of motor vehicles at all times on the north side of Riverdale Drive NW between Feldspar Street NW and Sunfish Lake Boulevard to comply with Municipal State Aid requirements as related to Improvement Project #21-00.

Action:
Motion to adopt Resolution #21-024 to prohibit the parking of motor vehicles at all times on the north side of Riverdale Drive NW between Feldspar Street NW and Sunfish Lake Boulevard, State Aid Route No. 199-108-020 from Feldspar Street NW to Dolomite Street NW, and State Aid Route No. 199-108-030 from Dolomite Street NW to Sunfish Lake Boulevard.

Attachments

Resolution 21-024

Form Review

Inbox	Reviewed By	Date
Kurt Ulrich	Kurt Ulrich	01/21/2021 03:36 PM
Form Started By: Bruce Westby		Started On: 01/19/2021 12:07 PM
Final Approval Date: 01/21/2021		

Councilmember _____ introduced the following resolution and moved for its adoption:

RESOLUTION #21-024

RESOLUTION PROHIBITING PARKING ON RIVERDALE DRIVE NW BETWEEN FELDSPAR STREET AND SUNFISH LAKE BOULEVARD NW FOR IMPROVEMENT PROJECT NO. 21-00, STATE AID PROJECT NO. 199-108-004

WHEREAS, City Improvement Project No. 21-00 proposes to improve Riverdale Drive NW between Feldspar Street NW and Sunfish Lake Boulevard, State Aid Route No. 199-108-020 from Feldspar Street NW to Dolomite Street NW, and State Aid Route No. 199-108-030 from Dolomite Street NW to Sunfish Lake Boulevard, located within the City of Ramsey, Minnesota; and

WHEREAS, the proposed street improvements do not provide adequate width for parking on both sides of Riverdale Drive NW, and approval of the proposed street improvements as a Municipal State Aid Street project must therefore be conditioned upon certain parking restrictions.

NOW THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF RAMSEY, ANOKA COUNTY, STATE OF MINNESOTA, as follows:

1) That the City of Ramsey shall prohibit the parking of motor vehicles at all times on the north side of Riverdale Drive NW between Feldspar Street NW and Sunfish Lake Boulevard, State Aid Route No. 199-108-020 from Feldspar Street NW to Dolomite Street NW, and State Aid Route No. 199-108-030 from Dolomite Street NW to Sunfish Lake Boulevard.

The motion for the adoption of the foregoing resolution was duly seconded by Councilmember _____, and upon vote being taken thereon, the following voted in favor thereof:

and the following voted against the same:

and the following abstained:

and the following were absent:

Existing Vacancy

Whereupon said resolution was declared duly passed and adopted by the Ramsey City Council this the 26th day of January, 2021.

Mayor

ATTEST:

City Clerk

CC Regular Session **5. 8.**

Meeting Date: 01/26/2021

Submitted For: Sean Sullivan, Community Development

By: Sean Sullivan, Community Development

Information

Title:

Adopt Resolution #21-025 Approving Second Amendment to Purchase Agreement and Right of Re-Entry Agreement with Gigi's Salon and Spa, Inc. (Portions of case may be closed to the public)

Purpose/Background:

Purpose:

Gigi's Salon and Spa has requested the City extend the Closing Date from 1/31/21 to April 30, 2021 due to the Covid-19 Pandemic and its impact on the operations of Salons and Spas and the timing of its Site Plan submittal.

Background:

The Covid-19 Pandemic has impacted retail and service businesses greatly. Many of these businesses have been closed completely or have been able to operate on a very limited basis. GiGi's has been able to operate on a limited basis and business has been good. Gigi's has given a "Notice to Proceed" and has provided $7,000 in non-refundable earnest money. Gigi's is still working on its site plan and plans to submit a complete application for the February 2021 Planning Commission meeting. The timing of this submittal will not align with the terms of the PA and receipt of Site Plan approval. This project is slated for a Spring construction start and the April 30, 2021 deadline extension would allow for a smooth development process. Staff believes the request to extend the Closing Date through a Second Amendment to Purchase Agreement to reasonable based on the project timelines proposed. As part of the closing a Right of Re-Entry Agreement will need to be executed and filed on the real estate. Staff has also provided this draft agreement for consideration

Notification:

N/A

Observations/Alternatives:

Staff has drafted the attached Second Amendment to Purchase Agreement. The only change from the Original Purchase Agreement and First Amendment to Purchase Agreement is to change the **Closing Date** from January 31, 2021 to April 30, 2021. Staff is not recommending the collection of "additional non-refundable earnest money" as part of this amendment.

Alternatives include:

1. Adopt Resolution #21-025 Approving Second Amendment to Purchase Agreement and Right-of Re-Entry Agreement with Gigi's Salon and Spa, Inc. (as presented)
2. Adopt Resolution #21-025 Approving Second Amendment to Purchase Agreement and Right-of Re-Entry Agreement with Gigi's Salon and Spa, Inc. (with amendments)
3. Something else

Funding Source:

This action is being covered under Staff duties.

Recommendation:

On January 14, 2020, the EDA recommended approval of the attached Second Amendment to Purchase Agreement and Right of Re-Entry Agreement with Gigi's Salon and Spa, Inc.; subject to City Attorney review.

Action:

Motion to adopt Resolution #21-025 Approving Second Amendment to Purchase Agreement and Right of Re-Entry Agreement with Gigi's Salon and Spa, Inc.; subject to City Attorney review.

Attachments

ACTION - Resolution #21-025

ACTION - Draft Second Amendment to PA

ACTION - Draft Right of Re-Entry Agreement

First Amendment to PA

Original Purchase Agreement

Request for Closing Extension

Form Review

Inbox	Reviewed By	Date
Sean Sullivan (Originator)	Sean Sullivan	01/19/2021 04:46 PM
Tim Gladhill	Tim Gladhill	01/21/2021 08:55 AM
Kurt Ulrich	Kurt Ulrich	01/21/2021 03:11 PM
Form Started By: Sean Sullivan		Started On: 01/08/2021 09:13 AM
Final Approval Date: 01/21/2021		

Councilmember _____ introduced the following resolution and moved for its adoption:

RESOLUTION #21-025

RESOLUTION APPROVING SECOND AMENDMENT TO PURCHASE AGREEMENT AND RIGHT OF RE-ENTRY AGREEMENT WITH GIGI'S SALON AND SPA, INC.

WHEREAS, the City of Ramsey, herein referred to as the "Seller," owns various parcels throughout the City of Ramsey; and

WHEREAS, the Seller executed a Purchase Agreement with an Effective Date of November 26, 2019 with GiGi's Salon and Spa, Inc. a Minnesota Corporation (the "Buyer"); and

WHEREAS, the Seller and Buyer have negotiated a Purchase Price of $4.00 per usable square foot of City owned land subject to a lot split as approved in Final Plat for the Property referenced in the Purchase Agreement; and

WHEREAS, the Seller executed a First Amendment to Purchase Agreement with an Effective Date of November 26, 2019 with GiGi's Salon and Spa, Inc. a Minnesota Corporation (the "Buyer") extending the Inspection Period to August 31, 2020; and

WHEREAS, due to the Covid-19 Pandemic, amendments to the preliminary site plan and the Spring construction schedule the Buyer has requested to extend the Closing Date from January 31, 2021 to April 30, 2021; and

WHEREAS, the Ramsey EDA has reviewed the Second Amendment to Purchase Agreement and Right of Re-Entry Agreement at the January 14, 2021 EDA meeting and recommends approval; and

WHEREAS, GiGi's Salon and Spa, Inc. is a company that is active and in good standing as documented in the Office of the Secretary of State as of January 8, 2021; and

NOW THEREFORE, BE IT RESOLVED BY THE CITY OF RAMSEY, ANOKA COUNTY, STATE OF MINNESOTA, as follows:

1) That the City approves and authorizes execution of the Second Amendment to Purchase Agreement and Right of Re-Entry Agreement with a Closing Date on or before April 30, 2021 and requires a Right-of-Re-Entry Agreement to be recorded at the closing of this land transaction.

That the motion for the adoption of the foregoing resolution was duly seconded by _____, and upon vote being taken thereon, the following voted in favor:

and the following voted against the same:

and the following abstained:

and the following were absent:

whereupon said resolution was declared duly passed and adopted by the Ramsey City Council this 26th day of January, 2021.

_____
Mayor

ATTEST:

_____
City Clerk

SECOND AMENDMENT
TO
PURCHASE AGREEMENT

This is the Second Amendment to the Purchase Agreement and First Amendment to Purchase Agreement by and between the **City of Ramsey**, a Minnesota municipal corporation ("Seller"), and **GIGI'S SALON AND SPA, INC.** and/or its assigns, a Minnesota Corporation ("Buyer"), with an Effective Date of November 26, 2019.

Recitals

1. **EFFECTIVE DATE.** The Effective Date remains November 26, 2019.

2. **CLOSING** The Buyer and Seller agree to extend the Closing Date from January 31, 2021 to April 30, 2021.

Agreement

1. **AMENDMENT APPROVAL.** Buyer and Seller hereby approve this Second Amendment to Purchase Agreement and First Amendment to Purchase Agreement as modified by above Recitals which are hereby incorporated herein.

2. **REMAINING TERMS.** All other provisions of the Purchase Agreement, as amended, remain unchanged except to the extent inconsistent with the terms of this Second Amendment to Purchase Agreement. The terms used in this Second Amendment to Purchase Agreement have the same meaning as in the Purchase Agreement and First Amendment to Purchase Agreement.

SELLER: The City of Ramsey, a Minnesota municipal corporation

By: _____ Dated: _____, 2021
Mark E. Kuzma, Mayor

By: _____ Dated: _____, 2021
Kurt Ulrich, City Administrator

BUYER: GIGI'S SALON AND SPA, INC.

By: _____ Dated: _____, 2021
Ginger Edin, President

[Reserved for Recording Data]

RIGHT OF RE-ENTRY AGREEMENT

This Right of Re-entry Agreement is entered into on _____, 2021, by and between the **City of Ramsey**, a Minnesota municipal corporation ("Seller"), and **GiGi's Salon and Spa, Inc.**, a Minnesota Corporation ("Buyer").

Recitals

A. On _____, 2021, Seller conveyed title of the following Property to Buyer:

The west half of Outlot A, COR Stone Brook Academy, to be platted as:

Lot 1, Block 1, GIGI ADDITION, Anoka County, Minnesota

B. Title to the Property was conveyed subject to Buyer fulfilling certain Conditions as set forth below.

C. As indicated in the Purchase Agreement between the City of Ramsey and GiGi's Salon and Spa, Inc., with an Effective Date of **November 26, 2019**, Section 28, it is the intent of the parties to create and set forth a right to impose a penalty or a right of re-entry in favor of Seller in the event Buyer fails to satisfy the Conditions.

Agreement

1. The recitals are incorporated herein as if fully set forth.

2. Seller shall have the right, but not the obligation, to either impose a penalty against the Property pursuant to Paragraph 3, or to re-enter and take possession of the

Property pursuant to Paragraph 4, in the event that any of the following Conditions are not satisfied by Buyer:

a. Buyer must obtain a certificate of occupancy from the City of Ramsey, for the project described below by (Insert Date 1 Year from Closing Date).

Project Description:

i. GiGi's Salon and Spa, Inc. Site Plan, approved by the City of Ramsey on _____, 2021 by Resolution #21-XXX.

ii. Development Agreement for GiGi's Salon and Spa, Inc., approved by the City of Ramsey on _____, 2021 by Resolution #21-_____.

3. Seller may impose a penalty of $50,000.00 against the Property if the certificate of occupancy is not obtained, for the construction of a minimum 5,000 square foot retail building, pursuant to the deadline set forth above. The penalty is due upon written notice to Buyer from Seller of the failure to satisfy a contingency. In the event the penalty is not paid within 30 days of receipt of the notice, Seller may, but is not required to, certify the penalty to Anoka County as an assessment against the Property. Buyer waives any and all rights under Minnesota Statutes, chapter 429, and any other applicable law, including any right to notice of hearing and hearing, the right to object, and the right to appeal the assessment. Buyer further waives any requirements of the City Charter that may apply to said assessment.

4. As an alternative to imposition of a financial penalty and not in addition thereto, Seller may re-enter and take physical possession of the Property. Title to the Property shall be restored in Seller, and Buyer shall execute whatever documents and undertake whatever steps are necessary to establish and confirm Seller's fee simple interest in the Property free of any claims or encumbrances, including mechanic's liens.

5. This document constitutes the entire Right of Re-entry Agreement between the parties. Any modifications or amendments to this Agreement must be in writing and signed by both parties.

CITY OF RAMSEY

By: _____
Mark E. Kuzma, Mayor

By: _____
Kurtis G. Ulrich, City Administrator

This instrument was acknowledged before me on _____, 2021, by Mark E. Kuzma and Kurtis G. Ulrich as Mayor and City Administrator, respectively, of the City of Ramsey, Minnesota.

_____
Notary Public

GiGi's Salon and Spa, Inc., a Minnesota Corporation.

By: _____
Ginger Edin, President

This instrument was acknowledged before me on _____, 2021, by Ginger Edin, President of GiGi's Salon and Spa, Inc. on behalf of the Minnesota Corporation.

_____
_____
Notary Public

This instrument drafted by:
Ratwik, Roszak & Maloney, P.A.
730 Second Ave. S., Suite 300
Minneapolis, MN 55402
(612) 339-0060
(JJL)

FIRST AMENDMENT
TO
PURCHASE AGREEMENT

This is the First Amendment to the Purchase Agreement by and between the **City of Ramsey**, a Minnesota municipal corporation ("Seller"), and **GIGI'S SALON AND SPA, INC.** and/or its assigns, a Minnesota Corporation ("Buyer"), with an Effective Date of November 26, 2019.

Recitals

1. **EFFECTIVE DATE.** The Effective Date remains November 26, 2019.

2. **INSPECTION PERIOD.** The Buyer and Seller agree to extend the Inspection Period from May 30, 2020 to August 31, 2020.

Agreement

1. **AMENDMENT APPROVAL.** Buyer and Seller hereby approve this First Amendment to Purchase Agreement as modified by above Recitals which are hereby incorporated herein.

2. **REMAINING TERMS.** All other provisions of the Purchase Agreement, as amended, remain unchanged except to the extent inconsistent with the terms of this First Amendment to Purchase Agreement. The terms used in this First Amendment to Purchase Agreement have the same meaning as in the Purchase Agreement.

SELLER: The City of Ramsey, a Minnesota municipal corporation

By: _____ Dated: 06-01, 2020
John Lefourneau, Mayor

By: _____ Dated: 6/1, 2020
Kurt Ulrich, City Administrator

BUYER: GIGI'S SALON AND SPA, INC.

By: _____ Dated: June 1, 2020
Ginger Edin, President

PURCHASE AGREEMENT

This Agreement is entered into by and between the **City of Ramsey**, a Minnesota municipal corporation ("Seller"), and **GIGI'S SALON AND SPA, INC.** and/or its assigns, a Minnesota Corporation ("Buyer").

In consideration of the Earnest Money, the mutual covenants set forth below, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Seller and Buyer agree as follows:

1. **EFFECTIVE DATE.** The effective date of this Agreement is **November 26, 2019** (the "Effective Date").

2. **SALE OF PROPERTY.** Seller agrees to sell to Buyer, and Buyer agrees to buy from Seller approximately 1.5 acres of vacant land, legally described as follows:

   The West Half of Outlot A, COR Stone Brook Academy, to be platted as:

   T.B.D. Anoka County PID Number: Portion of 28-32-25-0018

3. **PURCHASE PRICE.** The purchase price for the Property is $4.00 per usable square foot including the easement area on +/- 1.5 acres (65,340 square feet) subject to a lot split as outlined in Exhibit B plus or minus the prorations and credits as provided for herein (the "Purchase Price").

4. **EARNEST MONEY AND ADDITIONAL EARNEST MONEY.** Within five business days after the Effective Date, Buyer must deposit the sum of $5,000.00 (the "Earnest Money") with Commercial Partners Title Company ("Escrow Agent"), via wire transfer or delivery of a certified check payable to Escrow Agent.

   a. If Buyer does not deposit the Earnest Money as required above, then Seller may terminate this Agreement by written notice to Buyer; provided, however, if Buyer deposits the Earnest Money with Escrow Agent before Seller exercises Seller's right to terminate, Seller's right to terminate is extinguished.

   b. Upon Seller's receipt of a Notice to Proceed from Buyer in accordance with Section 9(b), all of the Earnest Money becomes non-refundable (except in accordance with Section 22 as a result of a default by Seller).

c. If Buyer does not provide a Notice to Proceed to Seller in accordance with Section 9(b), this Agreement automatically terminates, and Escrow Agent must disburse all Earnest Money Escrow Agent holds to Buyer.

d. At Closing, Escrow Agent shall disburse to Seller any Earnest Money not previously disbursed to Seller, and Buyer shall receive a credit against the Purchase Price owing at Closing in an amount equal to the amount of the Earnest Money.

5. **SURVEY.** Seller has provided the Buyer an ALTA/NSPS 2016 survey (Table A, items 1-4 and 6, 8, and 11) for Outlot B, COR One (the "Survey") from a duly licensed surveyor dated April 18, 2017. Buyer may arrange with the surveyor to include additional information on the Survey at Buyer's expense.

6. **TITLE COMMITMENT.**

a. Seller makes no representations or warranties with respect to the status of title to the Property. Within thirty (30) business days after the Effective Date, Seller shall, at Seller's expense, obtain a commitment from Escrow Agent to issue an owner's policy of title insurance insuring Buyer's title to the Property (the "Title Commitment") and deliver the Title Commitment and copies of or internet access to copies of all recorded documents referenced in the Title Commitment to Buyer.

b. Buyer shall have until the date thirty (30) days after the receipt of the Title Commitment and the Survey (collectively, "**Title/Survey**") to review Title/Survey and to give Seller written notice of (i) any defects in the marketability of Seller title to the Property or any encumbrances on Seller's title to the Property that are objectionable to Buyer, and (ii) the specific actions Buyer requests that Seller take with respect to each such defect or encumbrance (a "**Title Objection Notice**"). Any defects in or encumbrances on Seller's title that Buyer does not identify in a timely Title Objection Notice are each a "**Permitted Exception**." Within three (3) business days after Seller's receipt of a Title Objection Notice from Buyer, Seller will notify Buyer, in writing, of the actions, if any, that Seller is willing to take with respect to each of the matters identified in the Title Objection Notice and the time frame in which Seller will take those actions ("**Seller's Title Notice**"). If Seller's Title Notice indicates that Seller unconditionally agrees to make Seller's title to the Property marketable on or before the closing date established pursuant to Section 10, the parties shall proceed to closing pursuant to the terms of this Agreement. If Seller's Title Notice indicates that Seller does not unconditionally agree to make Seller's Title to the Property marketable on or before the closing date established in Section 10, Buyer may, at any time with three (3) business days after Buyer's receipt of Seller's Title Notice, terminate this Agreement by written notice to Buyer in which case this Agreement is terminated and Escrow Agent must disburse any Earnest Money to Buyer ("**Buyer's Title Termination Notice**"). If Buyer does not deliver a Buyer's Title Termination Notice to Seller within the three (3)

business days after Buyer's receipt of Seller's Title Notice, than Seller must perform in accordance with Seller's Title Notice, Buyer shall be deemed to have waived Buyer's objections to the extent Seller has not agreed to address them in Seller's Title Notice, the matters to which Buyer objected and Seller did not agree to resolve are deemed Permitted Exceptions, and the parties shall proceed to Closing in accordance with the terms of this Agreement and the terms of Seller's Title Notice.

7. **RIGHT OF ENTRY.** At all times after Buyer has deposited the Earnest Money with Seller and before the Closing, Buyer (and its employees, agents, and contractors) may enter the Property for the purpose of conducting soil tests, environmental tests and additional survey work, subject to the following conditions:

   a. Within one week after the termination of this Agreement, if either Seller or Buyer terminate this Agreement in accordance with the provisions hereof prior to Closing, Buyer must repair and or restore any damage Buyer or its employees, agents or contractors cause to the Property and remove any personal property, refuse or debris Buyer or its employees, agents or contractors brought onto or authorized third parties to bring onto the Property.

   b. Buyer must defend and indemnify Seller from and against and hold Seller harmless Seller from all "Claims," as defined in Section 10, arising out of, resulting from or relating to any loss of or damage to any property or business or out of any injury to or death of any person, if the loss, damage, injury, or death arises or is alleged to arise either directly or indirectly and either wholly or in part from: (a) any action or omission of Buyer or its employees, agents, or contractors, while on the Property pursuant to this Section; or (b) actions or omissions of Buyer or Buyer's employees, agents, or contractors that cause or result in the release of any Hazardous Substance onto the Property or onto other property.

   c. Buyer must comply with and shall cause it employees, agents, and contractors to comply with all applicable laws, while on the Property.

   d. Other than a standard Phase 1 environmental assessment, Buyer may not commence any environmental testing on the Property until Buyer submits a work plan for such testing to Seller and Seller approves the work plan, in writing. Seller may not unreasonably withhold, condition or delay Seller's approval of a work plan.

   e. Buyer must, promptly and without demand from Seller, provide Seller with true and complete copies of all draft and final reports relating to Buyer's geotechnical and environmental investigations and testing of the Property including, without limitation, any reports relating to any Phase I Environmental Site Assessment of the Property.

   f. The cost of any test or additional survey work will be borne solely by Buyer.

8. **PROPERTY SOLD AS IS.** Subject to Buyer's right to terminate this Agreement pursuant to Section 9, Buyer agrees to accept the Property in its current condition, including, without limitation, its current environmental and geological condition, and in an "AS-IS" and with "ALL FAULTS" condition. Buyer's payment of the Purchase Price at Closing constitutes Buyer's acknowledgment and agreement that:

   a. Seller has not made any written or oral representations or warranties of any kind with respect to the Property (including without limitation express or implied warranties of title, merchantability, or fitness for a particular purpose);

   b. Buyer has not relied on any written or oral representation or warranty made by Seller, its agents or employees with respect to the condition or value of the Property;

   c. Buyer has had an adequate opportunity to inspect the condition of the Property, including without limitation any environmental testing, and to inspect documents applicable thereto, and Buyer is relying solely on such inspection and testing; and

   d. The condition of the Property is fit for Buyer's intended use.

   e. Buyer accepts all risk of Claims (including without limitation all Claims under any Environmental Law and all Claims arising at common law, in equity or under a federal, state or local statute, rule or regulation) whether past, present or future, existing or contingent, known or unknown, arising out of, resulting from or relating to the condition of the Property, known or unknown, contemplated or uncontemplated, suspected or unsuspected, including without limitation the presence of any Hazardous Substance on the Property, whether such Hazardous Substance is located on or under the Property, or has migrated from or to the Property.

9. **INSPECTION PERIOD.**

   a. Except as otherwise provided in Section 6, Buyer shall have from the date that Buyer deposits the Earnest Money with Escrow Agent to **May 30, 2020** (the "**Inspection Period**") to investigate the Property and determine, in Buyer's sole judgment, whether (i) the condition of the Property is suitable to Buyer's intended use; and (ii) Buyer will be able to obtain all governmental approvals (including, but not limited to, approvals necessary to subdivide and re-plat the Property) and utilities necessary for Buyer's intended use of the Property. Buyer acknowledges and agrees that Seller has not made any covenants, representations or warranties regarding Buyer's ability to obtain governmental approvals from the City of Ramsey or any other governmental entity. The City of Ramsey will review, consider and act on any applications Buyer submits to the City for governmental approvals in accordance with City Code.

b. Buyer may, at any time on or before 5:00 p.m. on the last day of the Inspection Period, terminate the Agreement by written notice to Seller based on Buyer's determination, in Buyer's sole and absolute discretion, that the condition of the Property is not suitable for Buyer's intended use or that Buyer may not be able to obtain all governmental approvals and utilities necessary for Buyer's intended use of the Property. In addition, this Agreement automatically terminates at 5:00 p.m. on the last day of the Inspection Period unless, prior to that time Buyer delivers a written notice of Buyer's intention to proceed (a "**Notice to Proceed**") to Seller.

c. If, pursuant to Section 9(b) either Buyer terminates this Agreement or this Agreement is automatically terminated, the Escrow Agent must disburse to Buyer any Earnest Money Escrow Agent holds.

10. DEFINITIONS. As used in this Agreement:

"**Claim**" or "**Claims**" means any and all liabilities, suits, claims, counterclaims, causes of action, demands, penalties, debts, obligations, promises, acts, fines, judgments, damages, consequential damages, losses, costs, and expenses of every kind (including without limitation any attorney's fees, consultant's fees, costs, remedial action costs, cleanup costs and expenses which may be related to any claims).

"**Environmental Law**" means the Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA"), 42 U.S.C. § 9601 et seq., the Resource Conservation and Recovery Act, 42 U.S.C. § 6901 et seq., the Federal Water Pollution Control Act (the Clean Water Act), 33 U.S.C. § 1251 et seq. the Clean Air Act, 42 U.S.C. § 7401 et seq., and the Toxic Substances Control Act, 15 U.S.C. § 2601 et seq., all as amended from time to time, and any other federal, state, local or other governmental statute, regulation, rule, law or ordinance dealing with the protection of human health, safety, natural resources or the environment now existing or hereafter enacted.

"**Hazardous Substance**" or "**Hazardous Substances**" means any pollutant, contaminant, hazardous substance or waste, solid waste, petroleum product, distillate, or fraction, radioactive material, chemical known to cause cancer or reproductive toxicity, polychlorinated biphenyl or any other chemical, substance or material listed or identified in or regulated by any Environmental Law.

11. RELEASE. By accepting the deed to the Property, Buyer, for itself, its directors, officers, stockholders, divisions, agents, affiliates, subsidiaries, predecessors, successors, and assigns and anyone acting on its behalf or their behalf hereby fully releases and forever discharges Seller from any and all Claims (including without limitation all Claims arising under any Environmental Law and all Claims arising at common law, in equity or under a federal, state or local statute, rule or regulation), past, present and future, known and unknown, existing and contingent, arising out of, resulting from, or relating to the condition of the Property, and Buyer hereby waives any and all causes of action (including without limitation any right of contribution) Buyer had, has or may have against Seller and anyone acting on its behalf with respect to the condition of the

Property, whether arising at common law, in equity or under a federal, state or local statute, rule or regulation. The foregoing shall apply to any condition of the Property, known or unknown, contemplated or uncontemplated, suspected or unsuspected, including without limitation the presence of any Hazardous Substance on the Property, whether such Hazardous Substance is located on or under the Property, or has migrated from or to the Property.

12. **NOTICES.** Notices permitted or required by this Agreement must be in writing and shall be deemed given when delivered in legible form to the party to whom addressed. Notices may be sent by certified mail or e-mail. Notices are effective two business days after they are mailed via certified mail, return receipt requested or, if sent by email, upon email transmission (provided that any email transmission that occurs after 5:00 pm Pacific Time will be deemed provided on the following day). If delivered at the Closing, a notice shall be deemed given when hand-delivered to the party's representative at the Closing. The business addresses of the parties are as follows:

Seller: City Administrator
City of Ramsey
7550 Sunwood Drive N.W.
Ramsey, MN 55303
Email: kulrich@cityoframsey.com

Buyer: GIGI'S SALON AND SPA, INC.
Ginger Edin
36296 Xenon St NW
Princeton, MN 55371
Email: gingerberg80@yahoo.com

Notices not given in the manner or within the time limits set forth in this Agreement are of no effect and may be disregarded by the party to whom they are directed.

13. **CLOSING.** This transaction shall close within 30 days after Buyer delivers a Notice to Proceed to Seller or on such earlier date as Seller and Buyer may establish by mutual, written agreement; provided, however, Buyer may extend the Closing a total of two (2) times, each time for a period of sixty (60) days, by depositing an additional One Thousand and 00/100 Dollars ($1,000.00) earnest money with Escrow Agent for each extension. Each $1,000 extension payment shall be non-refundable, but applicable to the Purchase Price. The Closing shall take place at the offices of the Escrow Agent, or at some other place as the parties may mutually agree prior to such date. At the option of either Party, the executed closing documents, Purchase Price and closing costs may be deposited with the Escrow Agent and disbursed by the Escrow Agent pursuant to avoid the necessity for a Closing at which the Parties are present.

a. **Seller's Obligations at Closing.** At Closing, Seller must deliver to Escrow Agent, for delivery to Buyer:

i. A limited warranty deed, duly executed and acknowledged on behalf of the City and with the City's seal affixed, conveying title to the Property, subject to (A) the lien of real estate taxes, if any, not yet due and payable and any installments of special assessments certified for payment therewith; (B) Building, Subdivision and Zoning Ordinances; (C) Matters that would be disclosed by an accurate survey of the Property; and (D) matters that constitute Permitted Exceptions pursuant to Section 6;

ii. A certified copy of a duly adopted City Ordinance and Resolution authorizing Seller's sale of the Property to Buyer; and

iii. Seller's affidavits, well disclosure certificate (if required), settlement statement approved by Seller and Buyer, and any other documents required by the Escrow Agent.

b. **Buyer's Obligations at Closing.** At Closing, Buyer must:

i. Wire Transfer (or deliver a certified check in) an amount equal to the amount of the Purchase Price adjusted for to reflect Buyer's prior payment of the Earnest Money and to reflect amounts Buyer must pay or will receive pursuant to Section 14(c), to Escrow Agent for disbursement to Seller and others pursuant to this Agreement and the Settlement Statement; and

ii. File or cause Escrow Agent to file an Electronic Certificate of Real Estate Value, if required and necessary.

c. **Closing Costs.**

i. At Closing, the following Seller closing costs and expenses must be paid from the Purchaser Price or, if the Purchase Price is not sufficient, paid by Seller:

1. Seller shall pay all outstanding property taxes, including but not limited to, Payable 2019 for the Property.
2. Seller's own attorney's fees.
3. One-half the cost of any closing fees.
4. The cost of real estate broker commission fees as prescribed in Section 14.
5. State Deed Tax

ii. At Closing Buyer must pay the Purchase Price to Seller and the following costs and expenses:

1. Buyer's portion of prorated property taxes.

2. Buyer's own attorney's fees.
3. One-half the cost of any closing fees.
4. Documentary and recording fees for the deed(s).
5. The cost of the owner's title insurance policy, if Buyer elects to purchase an Owner's title insurance policy.

d. **Possession.** Seller must deliver possession of the Property to Buyer at Closing.

14. **REAL ESTATE BROKERS.** Seller and Buyer represent and warrant to each other that they have dealt with no brokers, real estate agents, finders or the like in connection with this transaction, other than Premier Commercial Properties LLC ("Buyer's Broker") and CBRE, Inc. ("Sellers Broker"). Seller shall pay Seller's Broker as required by their agreement 6% of final gross sale price to be evenly split between Premier Commercial Properties, LLC and CBRE, Inc.. Seller and Buyer agree to indemnify each other and to hold each other harmless against all claims, damages, costs or expenses of or for any broker's fees or commissions resulting for their actions or agreements regarding the execution or performance of this Agreement, other than the fees payable to Seller's Broker, and will pay all costs of defending any action or lawsuit brought to recover any such fees or commissions incurred by the other party, including reasonable attorney's fees.

15. **ASSIGNMENT.** This Agreement may not be assigned without the written consent of the non-assigning Party. The Seller recognizes the Buyer intends to assign this Agreement to an affiliated special purpose entity that will be registered officially with the State of Minnesota.

16. **THIRD PARTY BENEFICIARY.** There are no third-party beneficiaries of this Agreement, intended or otherwise.

17. **JOINT VENTURE.** Seller and Buyer, by entering into this Agreement and completing the transactions described herein, shall not be considered joint ventures or partners.

18. **CAPTIONS.** The paragraph headings or captions appearing in this Agreement are for convenience only, are not a part of this Agreement, and are not to be considered in interpreting this Agreement.

19. **ENTIRE AGREEMENT / MODIFICATION.** This written Agreement constitutes the complete agreement between the parties and supersedes any prior oral or written agreements between the parties regarding the Property. There are no verbal agreements that change this Agreement and no waiver or modification of any of its terms will be effective unless in writing executed by the parties.

20. **BINDING EFFECT.** This Agreement binds and benefits the Parties and their successors and assigns.

21. **CONTROLLING LAW.** This Agreement is made under the laws of the State of Minnesota and such laws will control its interpretation.

22. **REMEDIES.**

    a. If Buyer fails to perform any of the terms or conditions of this Agreement within the specified time limits, Seller may declare this Agreement terminated pursuant to Minnesota Statutes section 559.21. Seller's sole remedy in the event of Buyer's default is retention of the Earnest Money, unless Buyer defaults under Section 7 or 12 of this Agreement, in which case Seller may retain the Earnest money or suspend the performance of its obligations under this Agreement and commence an action in Anoka County District Court to recover its actual damages arising from the default.

    b. If Seller fails to perform any of the terms or conditions of this Agreement within the specified time limits, Buyer may, as its sole remedy, declare this Agreement terminated in which case Escrow Agent and, if applicable, Seller, shall refund the Earnest Money (both the Initial Disbursement and the Remaining Earnest Money) to Buyer, or, in the alternative, Buyer may have this Agreement specifically enforced and recover any incidental damages. Buyer waives all claims for consequential damages against Seller based on Seller's breach or alleged default hereunder.

23. **WAIVER.** Failure of Seller or Buyer to insist upon the performance of any of the covenants, agreements and/or conditions of this Agreement or to exercise any right or privilege herein shall not be deemed a waiver of any such covenant, condition or right.

24. **SURVIVAL OF TERMS AND CONDITIONS.** The terms and conditions of this Agreement shall survive and be in full force and effect after the delivery of the deed, and shall not be deemed to have merged therein.

25. **SEVERABILITY.** Each provision of this Agreement shall apply to the extent permitted by applicable law and is intended to be severable. If any provision is illegal or invalid for any reason whatsoever, such illegality or invalidity shall not affect the legality or validity of the remainder of the Agreement.

26. **CONSTRUCTION.** The Parties acknowledge that this Agreement was initially prepared by Seller solely as a convenience and that all Parties and their counsel hereto have read and full negotiated all the language used in this Agreement. The Parties acknowledge that because all Parties and their counsel participated in negotiating and drafting this Agreement, no rule of construction shall apply to this Agreement to construe ambiguous or unclear language in favor of or against any Party.

27. **COUNTERPARTS; DIGITAL COPIES.** This Agreement may be executed in any number of counterparts and the signature pages of the separate counterparts combined into a single copy of this Agreement which will then constitute a fully executed version

of this Agreement. A facsimile, .pdf file or digital copy of a signed counterpart or of an assemblage of counterparts of this Agreement shall be deemed to be an original thereof.

28. **CONSTRUCTION DEADLINE.** Buyer shall obtain a certificate of occupancy from the City of Ramsey for the construction of a minimum 5,000 SF building compliant with COR Zoning requirements to be further defined by an approved Site Plan a year after closing. At Closing, a "Right of Re-Entry Agreement" must be executed and recorded to the Property providing that, in the event the above deadline is not met, Seller has the right to reclaim title to the parcel(s) for which a certificate of occupancy was not obtained.

29. **TIME PERIODS.** The time for performance of any obligation or taking any action under this Agreement shall be deemed to expire at 5:00 p.m. Pacific Time on the last day of the applicable time period provided for in this Agreement. If the time for the performance of any obligation or taking any action under this Agreement expires on a Saturday, Sunday or legal holiday, the time for performance or taking such action shall be extended to the next succeeding day which is not a Saturday, Sunday or legal holiday.

30. **PLATTING & DEVELOPMENT AGREEMENT.** Buyer must be in the process of obtaining an approved final plat, development agreement, and building exterior visual renderings with the City of Ramsey for its intended project before Closing. The Development Agreement and Site Plan must comply with all local zoning ordinances and design standards, including The COR Design Standards. City of Ramsey will reimburse Buyer up to $3500 for re-platting expense. The reimbursement will only take place upon a successful closing and City of Ramsey is not responsible for any cost reimbursement if Buyer does not close on subject property. Buyer to provide written documentation of platting costs for reimbursement.

SELLER: The City of Ramsey, a Minnesota municipal corporation

By: _____ Dated: 12-12-, 2019
John LeTourneau, Mayor

By: _____ Dated: 12-12, 2019
Kurt Ulrich, City Administrator

BUYER: GIGI'S SALON AND SPA, INC.

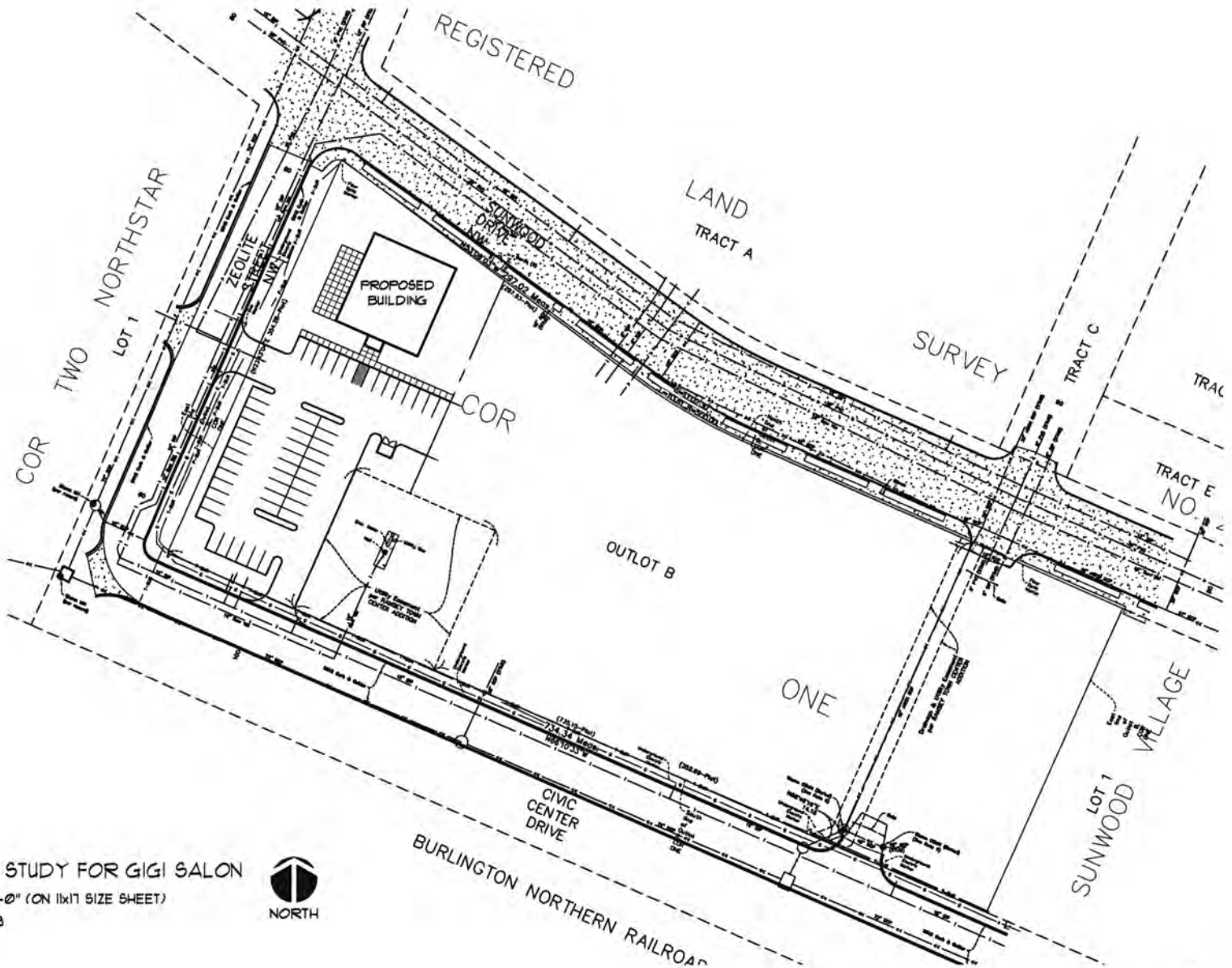
By: _____ Dated: 12-4-19, 2019
Ginger Edin, President

Exhibit A

The West Half of Outlot A, COR Stone Brook Academy, to be platted as:

T.B.D. Anoka County PID Number: Portion of 28-32-25-0018

EXHIBIT B



SITE PLAN STUDY FOR GIGI SALON

SCALE: 1" = 80'-0" (ON 11x17 SIZE SHEET)

DATE: 9-27-2019

NORTH

ROSA ARCHITECTURAL GROUP
CLASSIC CONSTRUCTION

3132

GIGI'S SALON & SPA, INC.
7962 SUNWOOD DR. NW SUITE 100
RAMSEY, MN 55303
763-367-6425

75-574-919

DATE Dec 4, 2019.

PAY TO THE ORDER OF Commercial Partners Title Company $ 5000.00

five thousand dollars and 00/xx DOLLARS

Security Features Included. Details on Back.

Village Bank
www.villagebankonline.com

FOR Earnist Money for Land.

MP

⑈003132⑈ ⑆091905745⑆ 1 01 8867 5⑈

January 4, 2021

Sean Sullivan
City of Ramsey

RE: Purchase Agreement Extension – Gigi's Salon

Dear Sean and City Staff:

This letter shall serve as a request to extend the current Purchase Agreement Closing Date as outline in the Purchase Agreement with Gigi's Salon (Buyer) and the City of Ramsey (Seller)

Gigi's has been through several delays and the SBA financing has taken much longer than anticipated. We would like to formally request a new closing date of April 30, 2021. This will allow us ample time to go through the city process. We believe that this additional time will allow us to have a building permit in hand by the time we close. Our goal would be to break ground as soon as we close on the land.

We are committed open a new facility in the City of Ramsey, and we are committed to this project. We are not asking for any additional changes to the Purchase Agreement. We would just like additional time to properly go through the city process and SBA loan process.

Please feel free to reach out with any questions or comments.

Thank you,

Ginger Edin and Gillian Rote

CC Regular Session **5. 9.**

Meeting Date: 01/26/2021

Submitted For: Grant Riemer, Engineering/Public Works

By: MaryJo Warner, Engineering/Public Works

Information

Title

Adopt Resolution #21-028 Authorizing Partial Payment #4 to RJM Construction for Improvement Project 20-07 New Public Works Facility

Purpose/Background:

Resolution and Pay Estimate #4 attached.

Observations/Alternatives:

Checks are made payable and addressed to contractors, payments will be sent to RJM Construction, LLC for disbursement as listed in the attached Resolution #21-028.

Funding Source:

Funding for this this item was budgeted as part of the public works building project.

Recommendation:

The Public Works Superintendent has inspected the completed work and recommends approving partial payment #4 in the amount of $1,643,643.86 to RJM Construction for Improvement Project #20-07, New Public Works Facility.

Action:

Motion to adopt Resolution #21-028 authorizing partial payment #4 to RJM Construction for Improvement Project #20-07, New Public Works Facility.

Attachments

Resolution

Pay Request

Form Review

Inbox	Reviewed By	Date
Bruce Westby	Bruce Westby	01/21/2021 03:30 PM
Grant Riemer	Grant Riemer	01/21/2021 03:34 PM
Kurt Ulrich	Kurt Ulrich	01/21/2021 03:35 PM
Form Started By: MaryJo Warner		Started On: 01/14/2021 11:09 AM
Final Approval Date: 01/21/2021		

Councilmember introduced the following resolution and moved for its adoption:

RESOLUTION #21-028

RESOLUTION AUTHORIZING PARTIAL PAYMENT #4 TO RJM CONSTRUCTION AND ITS CONTRACTORS FOR THE NEW RAMSEY PUBLIC WORKS FACILITY, IMPROVEMENT PROJECT #20-07

WHEREAS, the City of Ramsey has planned for a new public works facility and added it to our Capital Improvement Plan in 2006; and

WHEREAS, the property for the new public works facility was purchased in 2008 adjacent to the current facility and that purchase was finalized in 2013; and

WHEREAS, a third party architectural firm (BKV Group) was hired in 2015 to perform a space needs analysis to determine the size of facility needed to serve the public works departments needs for now and 30-50 years into the future.; and

WHEREAS, the old facility consists of three buildings and multiple off site storage locations, the new site will contain all public works functions and equipment at one centralized location; and

WHEREAS, on September 10th 2019 Ramsey City Council entered into a contract with RJM Construction to provide construction management services for the new Ramsey public works facility; and

WHEREAS, as of January 26, 2020 $3,531,042.77 has been paid to date; and

WHEREAS, the Public Works Superintendent has inspected the completed work and recommends authorizing partial payment #4 to RJM Construction for Improvement Project #20-07, New Ramsey Public Works Facility; and

WHEREAS, checks are made payable and addressed to contractors, payments will be sent to RJM Construction, LLC for disbursment as listed below:

CONTRACTOR	PAY REQUEST AMOUNT
Professional Service Industries	$11,568.15
Hakanson Anderson Associates	$3,504.07
Northland· Concrete & Masonry	$144,858.85
Molin Concrete	$1,006,881.14
Steenberg-Watrud Constriction	$104,342.30
Thornberg Steel	$35,787.45
Ebert Construction	$1,296.75
Top Light Contract Glazing	$10,070.00
RTL Construction	$7,600.00
Klamm Mechanical Contractors	$9,880.00
Architect Mechanical	$51,775.00
Wolf River Electric	$57,859.75

Minnesota Utilities & Excavating	$28,891.30
Jacon LLC	$42,769.95
RJM Construction	$126,559.15
Total	$1,643,643.86

NOW THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF RAMSEY, ANOKA COUNTY, STATE OF MINNESOTA, as follows:

1) The City Council authorizes partial payment #1 to RJM Construction for disbursement for Improvement Project #20-07, New Public Works Facility, in the amount of $1,643,643.86.

2) The City Council hereby authorizes the Mayor or City Administrator to sign the release from for payment.

3) That the total amount of this payment is not included in resolutions approving payment of bills for the date of January 26, 2021.

4) That the City of Ramsey Finance Department will be given a signed copy of this resolution.

That the motion for the adoption of the foregoing resolution was duly seconded by Councilmember _____, and upon vote being taken thereon, the following voted in favor thereof

and the following voted against the same:

and the following abstained:

and the following were absent:

Whereupon said resolution was declared duly passed and adopted by the Ramsey City Council this the 26th day of January, 2021.

_____
Mayor

ATTEST:

_____
City Clerk

DocuSign Envelope ID: 60EC62BC-B8BB-4552-A798-143BEA18E4DE

PAYMENT SUMMARY
FOR PERIOD ENDING 12-31-20
PROJECT: City of Ramsey Public Works
Job #19520-0180

CONTRACT PAYMENTS

*Checks are to be made payable and address to the contractors. Payments should then be sent to RJM Construction, LLC for disbirsement.

Contractor	Application #	Certified Amount
Professional Service Industries	4	11,568.15
Hakanson Anderson Associates	4	3,504.07
Northland Concrete & Masonry	4	144,858.85
Molin Concrete	4	1,006,881.14
Steenberg-Watrud Constriction	4	104,342.30
Thornberg Steel	4	35,787.45
Ebert Construction	4	1,296.75
Top Light Contract Glazing	4	10,070.00
RTL Construction	4	7,600.00
Klamm Mechanical Contractors	4	9,880.00
Architect Mechanical	4	51,775.00
Wolf River Electric	4	57,859.75
Minnesota Utilities & Excavating	4	28,891.30
Jacon LLC	4	42,769.95
RJM Construction	4	126,559.15
	Totals	1,643,643.86

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Please Remit Payment to: RJM Construction, LLC

RJM CONSTRUCTION

APPLICATION AND CERTIFICATE FOR PAYMENT

To Owner: City of Ramsey
7550 Sunwood Drive NW
Ramsey, MN 55303

Project: 19520-0180 City of Ramsey Public Works
14100 Jasper Street NW
Ramsey, MN 55303

Architect:

Invoice #: 0180-04
Application No.: 4
Application Date: 12/31/2020
Period From: 12/1/2020
To: 12/31/2020

Distribution to :
☐ Owner
☐ Architect
☐ Contractor

CONTRACTOR'S APPLICATION FOR PAYMENT

Application is made for payment, as shown below, in connection with the Contract.
Continuation Sheet is attached.

1. Original Contract Sum				$16,361,624.00
2. Net Change By Change Order				$0.00
3. Contract Sum To Date				$16,361,624.00
4. Total Completed and Stored To Date				$3,531,042.77
5. Retainage:				
a.	5.00%	of Completed Work	$176,552.15	
b.	0.00%	of Stored Material	$0.00	
Total Retainage				$176,552.15
6. Total Earned Less Retainage				$3,354,490.62
7. Less Previous Certificates For Payments				$1,710,846.76
8. Current Payment Due				$1,643,643.86
9. Balance To Finish, Plus Retainage				$13,007,133.38

CHANGE ORDER SUMMARY	Additions	Deductions
Total changes approved in previous months by Owner	$0.00	$0.00
Total Approved this Month	$0.00	$0.00
TOTALS	$0.00	$0.00
Net Changes By Change Order	**$0.00**	

The undersigned Contractor certifies that to the best of the Contractor's knowledge, information, and belief, the work covered by this Application for Payment has been completed in accordance with the Contract Documents. That all amounts have been paid by the Contractor for Work for which previous Certificates for Payment were issued and payments received from the Owner, and that current payment shown herein is now due.

CONTRACTOR: **RJM Construction LLC**

By: DocuSigned by: Curtis Sell Date: 1/7/2021

State of: County of:
Subscribed and sworn to before me this day of
Notary Public:
My Commission expires:

In accordance with the Contract Documents, based on on-site observations and the data comprising the above application, the Architect certifies to the Owner that to the best of the Architect's knowledge, information, and belief, the Work has progressed as indicated, the quality of the Work is in accordance with the Contract Documents, and the Contractor is entitled to payment of the AMOUNT CERTIFIED.

ARCHITECT'S CERTIFICATE FOR PAYMENT

AMOUNT CERTIFIED **$ 1,643,643.86**

(Attach explanation if amount certified differs from the amount applied. Initial all figures on this Application and on the Continuation Sheet that are changed to conform with the amount certified.)

ARCHITECT:

By: Date:

This Certificate is not negotiable. The AMOUNT CERTIFIED is payable only to the Contractor named herein. Issuance, payment, and acceptance of payment are without prejudice to any rights of the Owner or Contractor under this Contract.

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CONTINUATION SHEET

Application and Certification for Payment, containing
Contractor's signed certification is attached.
In tabulations below, amounts are stated to the nearest dollar.
Use Column I on Contracts where variable retainage for line items may apply.

Application No. : 4
Application Date : 12/31/20
To: 12/31/20
Architect's Project No.:

Invoice # : 0180-04 **Contract :** 19520-0180 City of Ramsey Public Works

A	B	C	D	E	F	G		H	I
Item No.	Description of Work	Scheduled Value	Work Completed		Materials Presently Stored	Total Completed and Stored To Date	% (G / C)	Balance To Finish (C-G)	Retainage
			From Previous Application (D+E)	This Period In Place	(Not in D or E)	(D+E+F)			
1	City of Ramsey Public Works	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	
1A	Special Inspections	52,800.00	0.00	12,177.00	0.00	12,177.00	23.06%	40,623.00	
1B	Survey	22,160.00	6,250.00	3,688.50	0.00	9,938.50	44.85%	12,221.50	
1C	Final Cleaning	52,047.00	0.00	0.00	0.00	0.00	0.00%	52,047.00	
3A	Concrete	1,350,392.50	377,735.00	152,483.00	0.00	530,218.00	39.26%	820,174.50	
3B	Architectural Precast Concrete	1,555,458.00	0.00	1,059,874.90	0.00	1,059,874.90	68.14%	495,583.10	
3C	Polished and Sealed Concrete	87,325.00	0.00	0.00	0.00	0.00	0.00%	87,325.00	
4A	Masonry	213,240.00	2,635.00	109,834.00	0.00	112,469.00	52.74%	100,771.00	
5A	Structural Steel/Misc. Metals - Material	823,894.00	355,682.00	37,671.00	0.00	393,353.00	47.74%	430,541.00	
5B	Structural Steel/Misc. Metals - Erection	283,714.56	0.00	0.00	0.00	0.00	0.00%	283,714.56	
6A	Carpentry Materials and Install	154,400.00	0.00	1,365.00	0.00	1,365.00	0.88%	153,035.00	
7A	Waterproofing & Weatherproofing	44,000.00	5,000.00	0.00	0.00	5,000.00	11.36%	39,000.00	
7B	Architectural Metal Panels	224,200.00	0.00	0.00	0.00	0.00	0.00%	224,200.00	
7C	EPDM Roofing	874,000.00	0.00	0.00	0.00	0.00	0.00%	874,000.00	
7D	Joint Sealants	9,448.00	0.00	0.00	0.00	0.00	0.00%	9,448.00	
8A	Doors, Frames, and Hardware - Materials	111,795.00	0.00	0.00	0.00	0.00	0.00%	111,795.00	
8B	Overhead Coiling Doors	17,000.00	0.00	0.00	0.00	0.00	0.00%	17,000.00	
8C	Accordian Security Doors	20,273.00	0.00	0.00	0.00	0.00	0.00%	20,273.00	
8D	Sectional Overhead Doors	207,900.00	0.00	0.00	0.00	0.00	0.00%	207,900.00	
8E	Aluminum Framed Storefronts & Entrances	143,000.00	0.00	10,600.00	0.00	10,600.00	7.41%	132,400.00	
8F	Translucent Wall Panels	90,551.00	0.00	0.00	0.00	0.00	0.00%	90,551.00	
9A	Gypsum Board Assemblies	234,733.00	0.00	8,000.00	0.00	8,000.00	3.41%	226,733.00	
9B	Tiling	35,882.00	0.00	0.00	0.00	0.00	0.00%	35,882.00	
9C	Acoustical Ceilings	32,500.00	0.00	0.00	0.00	0.00	0.00%	32,500.00	
9D	Carpet and Resilient Base	16,572.00	0.00	0.00	0.00	0.00	0.00%	16,572.00	
9E	Painting	165,781.00	0.00	0.00	0.00	0.00	0.00%	165,781.00	
10A	Signage	16,431.00	0.00	0.00	0.00	0.00	0.00%	16,431.00	
10B	Specialties Materials	16,011.00	0.00	0.00	0.00	0.00	0.00%	16,011.00	
10C	Lockers	52,713.00	0.00	0.00	0.00	0.00	0.00%	52,713.00	
10D	Operable Partitions	19,497.00	0.00	0.00	0.00	0.00	0.00%	19,497.00	
11A	Vehicle Wash Equipment	75,000.00	0.00	0.00	0.00	0.00	0.00%	75,000.00	

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CONTINUATION SHEET

Application and Certification for Payment, containing
Contractor's signed certification is attached.
In tabulations below, amounts are stated to the nearest dollar.
Use Column I on Contracts where variable retainage for line items may apply.

Application No. : 4
Application Date : 12/31/20
To: 12/31/20
Architect's Project No.:

Invoice # : 0180-04 **Contract :** 19520-0180 City of Ramsey Public Works

A	B	C	D	E	F	G		H	I
Item No.	Description of Work	Scheduled Value	Work Completed		Materials Presently Stored	Total Completed and Stored To Date	% (G / C)	Balance To Finish (C-G)	Retainage
			From Previous Application (D+E)	This Period In Place	(Not in D or E)	(D+E+F)			
11B	Vehicle Fueling System	292,572.00	0.00	0.00	0.00	0.00	0.00%	292,572.00	
11C	Loading Dock Equipment	11,695.00	0.00	0.00	0.00	0.00	0.00%	11,695.00	
12A	Window Treatments	45,000.00	0.00	0.00	0.00	0.00	0.00%	45,000.00	
12B	Casework Materials	58,672.00	0.00	0.00	0.00	0.00	0.00%	58,672.00	
14A	Vehicle Lifts	281,054.00	0.00	0.00	0.00	0.00	0.00%	281,054.00	
21A	Fire Supression Systems	158,300.00	0.00	0.00	0.00	0.00	0.00%	158,300.00	
22A	Plumbing Systems	1,041,250.00	0.00	10,400.00	0.00	10,400.00	1.00%	1,030,850.00	
23A	HVAC Systems	1,279,432.69	0.00	54,500.00	0.00	54,500.00	4.26%	1,224,932.69	
26A	Electrical Systems	850,808.73	0.00	60,905.00	0.00	60,905.00	7.16%	789,903.73	
31A	Earthwork	656,679.98	231,112.00	30,411.90	0.00	261,523.90	39.83%	395,156.08	
32A	Asphalt Paving	597,000.00	0.00	0.00	0.00	0.00	0.00%	597,000.00	
32B	Site Concrete	131,595.00	0.00	0.00	0.00	0.00	0.00%	131,595.00	
32C	Fences and Gates	313,330.00	0.00	0.00	0.00	0.00	0.00%	313,330.00	
32D	Landscaping	68,219.00	0.00	0.00	0.00	0.00	0.00%	68,219.00	
33A	Site Utilities	475,146.00	413,405.00	45,021.00	0.00	458,426.00	96.48%	16,720.00	
41A	Overhead Crane System	83,348.00	0.00	0.00	0.00	0.00	0.00%	83,348.00	
01-00	General Conditions & Requirements	1,084,566.00	137,515.07	111,744.87	0.00	249,259.94	22.98%	835,306.06	
01-80	Preconstruction	19,985.00	19,985.00	0.00	0.00	19,985.00	100.00%	0.00	
90-40	Building Permit	74,470.00	0.00	0.00	0.00	0.00	0.00%	74,470.00	
90-50	General Liability Insurance	184,462.00	184,462.00	0.00	0.00	184,462.00	100.00%	0.00	
90-65	Construction Contigency	1,382,879.54	0.00	0.00	0.00	0.00	0.00%	1,382,879.54	
99-99	Contractors Fee	268,441.00	67,110.25	21,475.28	0.00	88,585.53	33.00%	179,855.47	
	Grand Totals	**16,361,624.00**	**1,800,891.32**	**1,730,151.45**	**0.00**	**3,531,042.77**	**21.58%**	**12,830,581.23**	**176,552.15**

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INVOICE

From:	**RJM Construction, LLC**	*Invoice:*	**0180-04**
	830 Boone Avenue North	*Invoice Date:*	**12/31/20**
	Golden Valley, MN 55427	*Due Date:*	**01/30/21**
		Disc Date:	
To:	**City of Ramsey**		
	7550 Sunwood Drive NW		
	Ramsey, MN 55303		

Contract : 19520-0180 City of Ramsey Public Works

Special Inspections

SUBCONTRACTS

Professional Service Industries	Special Inspections	Inv#	19520-01801	12,177.00
	Total SUBCONTRACTS			**12,177.00**
	Special Inspections Sub-Total:			**12,177.00**

Survey

SUBCONTRACTS

Hakanson Anderson Associates	Survey	Inv#	19520-01803	3,688.50
	Total SUBCONTRACTS			**3,688.50**
	Survey Sub-Total:			**3,688.50**

Concrete

SUBCONTRACTS

Northland Concrete & Masonry Co, Ll	Concrete	Inv#	19520-01803	152,483.00
	Total SUBCONTRACTS			**152,483.00**
	Concrete Sub-Total:			**152,483.00**

Architectural Precast Concrete

SUBCONTRACTS

Molin Concrete Products Co.	Architectural Precast Concrete	Inv#	19520-01801	1,059,874.90
	Total SUBCONTRACTS			**1,059,874.90**
	Architectural Precast Concrete Sub-Total:			**1,059,874.90**

Masonry

SUBCONTRACTS

Steenberg-Watrud Construction LLC	Masonry	Inv#	19520-01802	109,834.00
	Total SUBCONTRACTS			**109,834.00**
	Masonry Sub-Total:			**109,834.00**

Structural Steel/Misc. Metals - Material

SUBCONTRACTS

Thornberg Steel	Structural Steel	Inv#	19520-01803	37,671.00
	Total SUBCONTRACTS			**37,671.00**
	Structural Steel/Misc. Metals - Material Sub-Total:			**37,671.00**

Carpentry Materials and Install

SUBCONTRACTS

Ebert Construction	Rough Carpentry	Inv#	19520-01801	1,365.00
	Total SUBCONTRACTS			**1,365.00**
	Carpentry Materials and Install Sub-Total:			**1,365.00**

Aluminum Framed Storefronts & Entrances

DocuSign Envelope ID: 60EC62BC-B8BB-4552-A798-143BEA18E4DE

INVOICE

From: **RJM Construction, LLC**	*Invoice:*	**0180-04**
830 Boone Avenue North	*Invoice Date:*	**12/31/20**
Golden Valley, MN 55427	*Due Date:*	**01/30/21**
	Disc Date:	
To: **City of Ramsey**		
7550 Sunwood Drive NW		
Ramsey, MN 55303		
Contract : 19520-0180 City of Ramsey Public Works		

Aluminum Framed Storefronts & Entrances				
SUBCONTRACTS				
Top Lite Contract Glazing Inc.	Glass	Inv#	19520-01801	7,200.00
	Glass		19520-01802	3,400.00
	Total SUBCONTRACTS			**10,600.00**
	ıminum Framed Storefronts & Entrances Sub-Total:			**10,600.00**
Gypsum Board Assemblies				
SUBCONTRACTS				
RTL Construction, Inc.	Drywall	Inv#	19520-01801	8,000.00
	Total SUBCONTRACTS			**8,000.00**
	Gypsum Board Assemblies Sub-Total:			**8,000.00**
Plumbing Systems				
SUBCONTRACTS				
Klamm Mechanical Contractors	Plumbing	Inv#	19520-01801	10,400.00
	Total SUBCONTRACTS			**10,400.00**
	Plumbing Systems Sub-Total:			**10,400.00**
HVAC Systems				
SUBCONTRACTS				
Architect Mechanical Inc.	HVAC	Inv#	19520-01801	54,500.00
	Total SUBCONTRACTS			**54,500.00**
	HVAC Systems Sub-Total:			**54,500.00**
Electrical Systems				
SUBCONTRACTS				
Wolf River Electric	Electrical	Inv#	19520-01801	19,580.00
	Electrical		19520-01802	41,325.00
	Total SUBCONTRACTS			**60,905.00**
	Electrical Systems Sub-Total:			**60,905.00**
Earthwork				
SUBCONTRACTS				
Minnesota Utilities & Excavating, LLC	Earthwork	Inv#	19520-01803	30,411.90
	Total SUBCONTRACTS			**30,411.90**
	Earthwork Sub-Total:			**30,411.90**
Site Utilities				
SUBCONTRACTS				
Jacon LLC	Site Utilities	Inv#	19520-01802	45,021.00
	Total SUBCONTRACTS			**45,021.00**

DocuSign Envelope ID: 60EC62BC-B8BB-4552-A798-143BEA18E4DE

INVOICE

From:	**RJM Construction, LLC**	*Invoice:*	**0180-04**
	830 Boone Avenue North	*Invoice Date:*	**12/31/20**
	Golden Valley, MN 55427	*Due Date:*	**01/30/21**
		Disc Date:	
To:	**City of Ramsey**		
	7550 Sunwood Drive NW		
	Ramsey, MN 55303		

Contract : 19520-0180 City of Ramsey Public Works

			Site Utilities Sub-Total:		**45,021.00**
General Conditions & Requirements					
SUBCONTRACTS					
RJM Construction, LLC	General Requirements		Inv#	9520018004	111,744.87
		Total SUBCONTRACTS			**111,744.87**
		General Conditions & Requirements Sub-Total:			**111,744.87**
Contractors Fee					
SUBCONTRACTS					
RJM Construction, LLC	Contractors Fee		Inv#	9520018004	21,475.28
		Total SUBCONTRACTS			**21,475.28**
		Contractors Fee Sub-Total:			**21,475.28**

DocuSign Envelope ID: 60EC62BC-B8BB-4552-A798-143BEA18E4DE

INVOICE

Summary

1A Special Inspections			12,177.00
Retainage	1,730,151.45 @	5.00%	(608.85)
1B Survey			3,688.50
Retainage	1,730,151.45 @	5.00%	(184.43)
3A Concrete			152,483.00
Retainage	1,730,151.45 @	5.00%	(7,624.15)
3B Architectural Precast Concrete			1,059,874.90
Retainage	1,730,151.45 @	5.00%	(52,993.75)
4A Masonry			109,834.00
Retainage	1,730,151.45 @	5.00%	(5,491.70)
5A Structural Steel/Misc. Metals - Material			37,671.00
Retainage	1,730,151.45 @	5.00%	(1,883.55)
6A Carpentry Materials and Install			1,365.00
Retainage	1,730,151.45 @	5.00%	(68.25)
8E Aluminum Framed Storefronts & Entrances			10,600.00
Retainage	1,730,151.45 @	5.00%	(530.00)
9A Gypsum Board Assemblies			8,000.00
Retainage	1,730,151.45 @	5.00%	(400.00)
22A Plumbing Systems			10,400.00
Retainage	1,730,151.45 @	5.00%	(520.00)
23A HVAC Systems			54,500.00
Retainage	1,730,151.45 @	5.00%	(2,725.00)
26A Electrical Systems			60,905.00
Retainage	1,730,151.45 @	5.00%	(3,045.25)
31A Earthwork			30,411.90
Retainage	1,730,151.45 @	5.00%	(1,520.60)
33A Site Utilities			45,021.00
Retainage	1,730,151.45 @	5.00%	(2,251.05)
01-00 General Conditions & Requirements			111,744.87
Retainage	1,730,151.45 @	5.00%	(5,587.24)
99-99 Contractors Fee			21,475.28
Retainage	1,730,151.45 @	5.00%	(1,073.76)
CURRENT DUE :			1,643,643.87

CC Regular Session **5. 10.**

Meeting Date: 01/26/2021

Submitted For: Bruce Westby, Engineering/Public Works

By: Marsha Weidner, Engineering/Public Works

Information

Title

Adopt Resolution #21-029 Authorizing Final Payment to Northern Lines Contracting, Inc. for Improvement Project 18-09, COR Infiltration Basin Improvements.

Purpose/Background:

Resolution and Pay Request Attached.

Observations/Alternatives:

Issuing final payment will be contingent on receipt of the following items from Northern Lines Contracting, Inc.:

1. IC 134 (Contractor's Withholding Affidavit showing compliance with the provisions of Minnesota Statute 290.92 requiring withholding state income tax).
2. Waiver of Mechanic's Lien Rights (Affidavits that all claims against Northern Lines Contracting, Inc. by reasons of the contract have been fully paid or satisfactorily secured).
3. Consent of Surety to final Payment (Certification from the contractor's surety)

Following receipt of these items, final payment will be issued.

Recommendation:

The Engineering Technician IV has inspected the completed work and recommends final payment to Northern Lines Contracting, Inc. for Improvement Project #18-09, COR Infiltration Basin Improvements, in the amount of $105,341.94.

Action:

Motion to adopt Resolution #21-029 Authorizing Final Payment to Northern Lines Contracting, Inc. for Improvement Project #18-09, COR Infiltration Basin Improvements, in the amount of $105,341.94.

Attachments

Resolution 21-029

Pay Estimate Final

Form Review

Inbox	Reviewed By	Date
Bruce Westby	Bruce Westby	01/21/2021 03:30 PM
Kurt Ulrich	Kurt Ulrich	01/21/2021 03:32 PM
Form Started By: Marsha Weidner		Started On: 01/13/2021 11:39 AM
Final Approval Date: 01/21/2021		

Councilmember _____ introduced the following resolution and moved for its adoption:

RESOLUTION #21-029

RESOLUTION AUTHORIZING FINAL PAYMENT TO NORTHERN LINES CONTRACTING, INC. FOR IMPROVEMENT PROJECT #18-09, COR INFILTRATION BASIN IMPROVEMENTS.

WHEREAS, pursuant to Ramsey City Council Resolution #18-056, adopted March 27, 2018, a Feasibility Report was prepared by the City Engineer with reference to construction of storm water infiltration basins, a storm water lift station and other appurtenant work; and

WHEREAS, pursuant to Ramsey City Council Resolution #18-072, adopted April 9, 2018, the City Council approved the Feasibility Report, and ordered the City Engineer to prepare plans and specifications for the making of such improvements; and

WHEREAS, pursuant to Ramsey City Council Resolution #19-093, adopted April 23, 2019, the City has acquired title to Part of Outlot A, Ramsey Town Center 13th Addition to be used in the infiltration basins; and

WHEREAS, pursuant to Ramsey City Council Resolution #19-115, adopted May 14, 2019, the City Council accepted final plans and specifications and authorized advertisements for bids for said improvements; and

WHEREAS, bids were advertised in the Anoka Union Herald and in Finance and Commerce on May 17 and May 24, 2019; and

WHEREAS, bids were received, opened, and tabulated on June 7, 2019, and the following bids were found to comply with the advertisement for bids; and

WHEREAS, the bid of Northern Lines Contracting, Inc. of Bloomington, Minnesota, in the amount of $607,136.11 for the total bid for construction of the improvements in accordance with the approved plans and specifications and advertisement for bids, is the lowest responsible bidder and their bid shall be and hereby is accepted; and

WHEREAS, the City has sufficient funds in the Stormwater fund to cover the project, and the City has collected infiltration mitigation funds from projects that cannot infiltrate on site due to proximity to municipal wells or contaminated soils which currently amount to one quarter of the cost of this project with revenues from future projects anticipated to fully reimburse the Stormwater fund; and

WHEREAS, as of January 26, 2021, $454,712.56 has been paid to date; and

WHEREAS, the Engineering Technician IV has inspected the completed work and recommends final payment to Northern Lines Contracting, Inc. for Improvement Project #18-09, COR Infiltration Basin Improvements, in the amount of $105,341.94.

NOW THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF RAMSEY, ANOKA COUNTY, STATE OF MINNESOTA, as follows:

1) That the City Council hereby authorizes final payment to Northern Lines Contracting, Inc. for Improvement Project #18-09, COR Infiltration Basin Improvements, in the amount of $105,341.94.

2) That the City Council hereby accepts the project and authorizes the Mayor or City Administrator to sign the release form for this payment.

3) That the total amount of this payment is not included in resolutions approving payment of bills for the date of January 26, 2021.

4) That the City of Ramsey Finance Department will be given a signed copy of this resolution.

The motion for the adoption of the foregoing resolution was duly seconded by Councilmember _____, and upon vote being taken thereon, the following voted in favor thereof:

and the following voted against the same:

and the following abstained:

and the following were absent:

Whereupon said resolution was declared duly passed and adopted by the Ramsey City Council this the 26th day of January, 2021.

_____
Mayor

ATTEST:

_____
City Clerk

Pay Estimate Summary Sheet
18-09 COR INFILTRATION BASIN IMPROVEMENTS

City of Ramsey

FINAL PAY ESTIMATE

Estimate no **4**

TOTAL CONTRACT	$	607,136.11
TOTAL CHANGE ORDERS	$	1,500.00
TOTAL CONTRACT WITH CHANGE ORDERS	$	608,636.11
STORED MATERIALS		
TOTAL, COMPLETED WORK TO DATE	$	560,054.50
TOTAL WORK COMPLETED PLUS STORED MATERIALS	$	560,054.50
	$	-
NET AMOUNT DUE TO CONTRACTOR TO DATE	$	560,054.50
TOTAL AMOUNT PAID ON PREVIOUS ESTIMATES	$	454,712.56
PAY CONTRACTOR PER ESTIMATE NO. 4	$	105,341.94

Certificate for Final Payment

I hereby certify that, to the best of my knowledge and belief, all items, quantities and prices of work and material shown on the this Estimate are correct and that all work has been performed in full accordance with the terms and conditions of the Contract for this project between owner and the undersigned Contractor, and as amended by any authorized changes and the foregoing is a true and correct statement of the amount for the Final Estimate, the provisions of M.S. 290.92 have been complied with and that all claims against me by reason of the contract have been paid or satisfactorily secured.

Contractor: Northern Lines Contracting

By _____ Project Manager
Name Title

Date 12-4-20

CHECKED AND APPROVED AS TO QUANTITIES AND AMOUNT:
ENGINEER: CITY OF RAMSEY

By _____ Civil Engineer IV
Leonard Linton, PE

Date 12-7-20

APPROVED FOR PAYMENT:
OWNER: City of Ramsey

By _____ City Engineer 1/14/21
Name Title Date

IP 18-09; COR Infiltration Basin Improvments
PAY ESTIMATE

PAY ESTIMATE NO. 4

BASE BID	**$607,136.11**	**$79,909.70**	**$558,554.50**
CHANGE ORDER No. 1	$1,500.00	$1,500.00	$1,500.00
SUBTOTAL CHANGE ORDERS	**$ 1,500.00**	**$ 1,500.00**	**$ 1,500.00**
TOTAL BID WITH CHANGE ORDERS	**$ 608,636.11**	**$ 81,409.70**	**$ 560,054.50**

					CONTRACT AMOUNT			PAY THIS PERIOD		PAID TO DATE	
ITEM No.	**MnDOT No.**	**ITEM DESCRIPTION**	**UNIT**	**TOTAL ESTIMATE QUANTITY**	**UNIT COST**	**TOTAL COST**	**QUANTITY**	**EXTENSION**		**QUANTITY**	**EXTENSION**
		SITE WORK									
1	2021.501	MOBILIZATION	LS	1	$27,500.00	$27,500.00	0.00	$	-	1.00	$ 27,500.00
2	2101.505	CLEARING	ACRE	0.94	$0.01	$0.01	0.00	$	-	0.15	$ -
3	2105.505	GRUBBING	ACRE	0.15	$0.01	$0.00	0.00	$	-	0.15	$ -
4	2104.502	REMOVE STORM SEWER STRUCTURE	EA	3	$480.00	$1,440.00	0.00	$	-	0.00	$ -
5	2104.502	BULKHEAD OPENING EXISTING STORM SEWER STRUCTURE	EA	3	$290.00	$870.00	0.00	$	-	0.00	$ -
6	2104.503	REMOVE STORM SEWER PIPE 15" - 18"	LF	114	$15.00	$1,710.00	0.00	$	-	0.00	$ -
7	2104.503	SAWCUT EXISTING BITUMINOUS FULL DEPTH	LF	12	$20.00	$240.00	0.00	$	-	0.00	$ -
8	2104.504	REMOVE SAWCUT BITUMINOUS	SY	2	$20.00	$40.00	0.00	$	-	0.00	$ -
9	2105.601	DEWATERING	LS	1	$32,000.00	$32,000.00	0.00	$	-	1.00	$ 32,000.00
10	2105.507	COMMON EXCAVATION (EV)	CY	35000	$4.45	$155,750.00	0.00	$	-	33,000.00	$ 146,850.00
11	2105.507	TOPSOIL EXCAVATION (LV)	CY	6500	$2.15	$13,975.00	0.00	$	-	6,500.00	$ 13,975.00
12	2112.501	SUBGRADE PREPARATION	RDST	8	$300.00	$2,400.00	0.00	$	-	8.00	$ 2,400.00
13	2211.503	AGGREGATE BASE CLASS 5 MODIFIED (CV)	TON	300	$20.00	$6,000.00	0.00	$	-	294.00	$ 5,880.00
14	2232.501	MILL BITUMINOUS 1.5" DEEP	SY	3	$115.00	$345.00	0.00	$	-	0.00	$ -
15	2357.502	BITUMINOUS MATERIAL FOR TACK COAT	GAL	60	$4.20	$252.00	0.00	$	-	0.00	$ -
16	2360.501	TYPE SP 9.5 WEARING COURSE MIXTURE (SPWEA340C) (1.5")	TON	110	$140.00	$15,400.00	0.00	$	-	93.50	$ 13,090.00
17	2360.502	TYPE SP 12.5 NON WEARING COURSE MIXTURE (SPNWB330C)	TON	150	$116.00	$17,400.00	0.00	$	-	135.30	$ 15,694.80
18	2503.541	24" RC PIPE SEWER, DESIGN 3006 CLASS III	LF	151	$66.00	$9,966.00	0.00	$	-	156.00	$ 10,296.00
19	2504.603	10" DUCTILE IRON PIPE CL 52	LF	167	$62.00	$10,354.00	0.00	$	-	191.00	$ 11,842.00
20	2504.608	DUCTILE IRON FITTINGS	LB	1265	$6.50	$8,222.50	0.00	$	-	1,265.00	$ 8,222.50
21	2506.501	CONSTRUCT DRAINAGE STRUCTURE DESIGN 48-4020	LF	7.5	$525.00	$3,937.50	0.00	$	-	7.50	$ 3,937.50
22	2505.601	FURNISH AND INSTALL LIFT STATION	LS	1	$195,000.00	$195,000.00	0.40	$	78,000.00	1.00	$ 195,000.00
23	2506.502	ADJUST EXISTING FRAME AND CASTING	EA	6	$460.00	$2,760.00	0.00	$	-	6.00	$ 2,760.00
24	2506.516	FURNISH AND INSTALL CASTING ASSEMBLY	EA	5	$660.00	$3,300.00	0.00	$	-	5.00	$ 3,300.00
25	2511.502	FURNISH AND INSTALL RANDOM RIP RAP, CL III	TON	40	$140.00	$5,600.00	0.00	$	-	38.40	$ 5,376.00
26	2511.502	PLACE RANDOM RIP RAP, CL V (ONSITE)	TON	145	$80.00	$11,600.00	0.00	$	-	145.00	$ 11,600.00
27	2573.501	STABILIZED CONSTRUCTION ENTRANCE	LS	3	$1,500.00	$4,500.00	0.00	$	-	2.00	$ 3,000.00
28	2573.502	SILT FENCE, TYPE MS	LF	9100	$1.30	$11,830.00	1,469.00	$	1,909.70	5,876.00	$ 7,638.80
29	2573.53	STORM DRAIN INLET PROTECTION	EA	23	$250.00	$5,750.00	0.00	$	-	3.00	$ 750.00
30	2574.505	SEED BED PREPARATION	ACRE	12.5	$160.00	$2,000.00	0.00	$	-	10.00	$ 1,600.00
31	2575.505	SEEDING, INFILTRATION BASIN	ACRE	4.6	$132.00	$607.20	0.00	$	-	9.00	$ 1,188.00
32	2575.505	SEEDING, NON INFILTRATION BASIN AREAS	ACRE	7.9	$132.00	$1,042.80	0.00	$	-	3.00	$ 396.00
33	2575.508	SEED MIXTURE 25-121 (61 LB/ ACRE) UPLAND AREAS	LB	482	$3.65	$1,759.30	0.00	$	-	366.00	$ 1,335.90
34	2575.508	SEED MIXTURE 33-261 (35 LB/ ACRE) INFILTRATION WETTED A	LB	161	$25.00	$4,025.00	0.00	$	-	175.00	$ 4,375.00
35	2575.504	EROSION CONTROL BLANKET CATEGORY 3 N	SY	23246	$1.30	$30,219.80	0.00	$	-	9,000.00	$ 11,700.00

36	2575.511	MULCH MATERIAL TYPE 1	TON	16	$265.00	$4,240.00	0.00	$ -	8.80	$	2,332.00
37	2575.519	DISC ANCHORING	ACRE	12.5	$90.00	$1,125.00	0.00	$ -	6.00	$	540.00
38	2575.525	SPREAD COMMON TOPSOIL BORROW (LV)	CY	6500	$2.15	$13,975.00	0.00	$ -	6,500.00	$	13,975.00
					TOTAL BID	$607,136.11		$79,909.70			$558,554.50

CHANGE ORDER No. 1

ITEM No.	MnDOT No.	ITEM DESCRIPTION	UNIT	TOTAL ESTIMATE QUANTITY	UNIT COST	TOTAL COST	QUANTITY	EXTENSION	QUANTITY	EXTENSION
		SITE WORK								
1		Add Muskrat Protection	LS	1	$1,500.00	$1,500.00	1.00	$ 1,500.00	1.00	$ 1,500.00
					TOTAL BID	$1,500.00		$1,500.00		$1,500.00

CC Regular Session **5. 11.**

Meeting Date: 01/26/2021

Submitted For: Bruce Westby, Engineering/Public Works

By: Marsha Weidner, Engineering/Public Works

Information

Title

Adopt Resolution #21-032 Authorizing Partial Payment #6 to Park Construction for Improvement Project 20-01, Variolite Street Reconstruction Project.

Purpose/Background:

Resolution and Pay Estimate Attached.

Recommendation:

The Engineer Technician IV has inspected the completed work and recommends authorizing partial payment #6 to Park Construction Company of Spring Lake Park, MN. for Improvement Project #20-01, Variolite Street Reconstruction, in the amount of $18,487.66.

Action:

Motion to adopt Resolution #21-032 authorizing partial payment #6 to Park Construction Company of Spring Lake Park, MN for Improvement Project #20-01, Variolite Street Reconstruction, in the amount of $18,487.66.

Attachments

Resolution 21-032

Pay Estimate #6

Form Review

Inbox	Reviewed By	Date
Bruce Westby	Bruce Westby	01/21/2021 03:29 PM
Kurt Ulrich	Kurt Ulrich	01/21/2021 03:33 PM
Form Started By: Marsha Weidner		Started On: 01/15/2021 03:36 PM
Final Approval Date: 01/21/2021		

Councilmember _____ introduced the following resolution and moved for its adoption:

RESOLUTION #21-032

RESOLUTION AUTHORIZING PARTIAL PAYMENT #6 TO PARK CONSTRUCTION COMPANY FOR IMPROVEMENT PROJECT #20-01, VARIOLITE STREET RECONSTRUCTION

WHEREAS, the City of Ramsey proposes to reconstruct Variolite Street between Alpine Drive and 173rd Avenue in 2020; and

WHEREAS, pursuant to Ramsey City Council Resolution #19-219 adopted September 10, 2019, the City Council approved and authorized Staff to execute proposals from Hakanson Anderson and Associates for required topographic survey in the amount of $12,800, and from Northern Technologies Inc. for required geotechnical work in the amount of $29,750; and

WHEREAS, pursuant to Ramsey City Council Resolution #19-285 adopted December 10, 2019, the City Council ordered the City Engineer to prepare a Feasibility Report for Improvement Project #20-01, Variolite Street Reconstruction; and

WHEREAS, the Ramsey Public Works Committee directed Staff to explore options for reducing speeds and improving pedestrian accommodations along Variolite Street; and

WHEREAS, one of the primary purposes of a Feasibility Report is to explore alternative design options and provide recommendations on which options to construct; and

WHEREAS, pursuant to Ramsey City Council Resolution #20-071 adopted April 14, 2020, the City Council accepted the Feasibility Report and ordered the City Engineer to prepare plans and specifications for Improvement Project #20-01, Variolite Street Reconstruction; and

WHEREAS, pursuant to Ramsey City Council Resolution #20-089 adopted May 12, 2020, the City Council approved plans and specifications and authorized advertisements for bids for said improvements; and

WHEREAS, bids were advertised in the Anoka Union Herald and in Finance and Commerce on May 15 and May 22, 2020; and

WHEREAS, bids were received, opened, and tabulated on June 5, 2020, and the following bids were found to comply with the advertisement for bids; and

WHEREAS, pursuant to Ramsey City Council Resolution #20-124 adopted June 9, 2020, Park Construction Company of Minneapolis, Minnesota, was awarded the construction contract in the amount of $2,811,859.49 for said improvements in accordance with the approved plans and specifications and advertisement for bids, including Alternate Bid A and Alternate Bid B; and

WHEREAS, pursuant to Ramsey City Council Resolution #20-165 adopted August 10, 2020 the City Council approved Change Order #1 in the amount of $43,410.80 to prevent impacts to existing trees, landscaping, and private utilities, and will prevent the need to reconstruct a portion of Variolite Street in the future by extending trunk sanitary sewer 160 linear feet to the

north, and will allow for the connection to City sewer and water services as requested by the residents at 7600 163rd Lane NW; and

WHEREAS, as of January 26th, 2021 $2,495,865.17 has been paid to date; and

WHEREAS, the Engineer Technician IV has inspected the completed work and recommends authorizing partial payment #6 to Park Construction Company of Spring Lake Park, MN for Improvement Project #20-01, Variolite Street Reconstruction, in the amount of $18,487.66.

NOW THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF RAMSEY, ANOKA COUNTY, STATE OF MINNESOTA, as follows:

1) The City Council authorizes partial payment #6 to Park Construction Company of Spring Lake Park, MN for Improvement Project #20-01, Variolite Street Reconstruction, in the amount of $18,487.66.

2) The City Council hereby authorizes the Mayor or City Administrator to sign the release form for this payment.

3) That the total amount of this payment is not included in resolutions approving payment of bills for the date of January 26, 2021.

4) That the City of Ramsey Finance Department will be given a signed copy of this resolution.

That the motion for the adoption of the foregoing resolution was duly seconded by Councilmember _____, and upon vote being taken thereon, the following voted in favor thereof:

and the following voted against the same:

and the following abstained:

and the following were absent:

Whereupon said resolution was declared duly passed and adopted by the Ramsey City Council this the 26th day of January, 2021.

_____
Mayor

ATTEST:

_____
City Clerk

21-02

Pay Estimate Summary Sheet
IP 20-01 Variolite Street Reconstruction

City of Ramsey

Estimate no **6**

TOTAL BASE BID PLUS ALTERNATES	$	2,811,859.49
TOTAL CHANGE ORDERS	$	43,410.80
TOTAL CONTRACT WITH CHANGE ORDERS	$	2,855,270.29
STORED MATERIALS		
TOTAL COMPLETED WORK TO DATE	$	2,646,687.19
TOTAL WORK COMPLETED PLUS STORED MATERIALS	$	2,646,687.19
RETAINED PERCENTAGE 5%	$	132,334.36
NET AMOUNT DUE TO CONTRACTOR TO DATE	$	2,514,352.83
TOTAL AMOUNT PAID ON PREVIOUS ESTIMATES	$	2,495,865.17
PAY CONTRACTOR PER ESTIMATE NO. 6	$	18,487.66

Certificate for Partial Payment

I hereby certify that, to the best of my knowledge and belief, all items, quantities and prices of work and material shown on the this Estimate are correct and that all work has been performed in full accordance with the terms and conditions of the Contract for this project between owner and the undersigned Contractor, and as amended by any authorized changes and the foregoing is a true and correct statement of the contract amount for the period covered by this estimate.

Contractor: Park Construction Company

By _____ Chad Grady Project Manager
Name Title

Date 1/13/2021

CHECKED AND APPROVED AS TO QUANTITIES AND AMOUNT:
ENGINEER: CITY OF RAMSEY

By _____ Civil Engineer II
Joe Feriancek, PE

Date 1/14/2021

APPROVED FOR PAYMENT:
OWNER: City of Ramsey

By _____ City Engineer 1/14/21
Name Title Date

IP 20-01 Variolite Street Reconstruction
Pay Estamite

PAY ESTIMATE NO 6

BASE BID	$ 2,813,756.09	$ 19,460.70	$ 2,379,167.89
ALTERNATIVE A	$ 40,200.00	$ -	$ 40,200.00
ALTERNATIVE B	$ (42,096.60)	$ -	$ 182,709.20
CHANGE ORDER No.1	$ 43,410.80	$ -	$ 44,610.10
BASE BID PLUS ALTERNATIVES	$ 2,855,270.29	$ 19,460.70	$ 2,646,687.19

BASE BID

Item No.	MnDot No.	Item Description	Unit	CONTRACT AMOUNT			PAY THIS PERIOD		PAID TO DATE	
				Estimated Quantity	Unit Price	Extension	Quantity	Extension	Quantity	Extension
1	2021.501	MOBILIZATION	LS	1.00	$ 150,000.00	$ 150,000.00	0.10	$ 15,000.00	1.00	$ 150,000.00
2	2101.524	GRUBBING	TREE	1	$ 132.00	$ 132.00	0	$ -	3	$ 396.00
3	2101.524	CLEARING	TREE	1	$ 295.00	$ 295.00	0	$ -	3	$ 885.00
4	2104.502	REMOVE MANHOLE (SANITARY)	EA	2	$ 869.00	$ 1,738.00	0	$ -	2	$ 1,738.00
5	2104.502	SALVAGE MAIL BOX SUPPORT	EA	12	$ 50.00	$ 600.00	7	$ 350.00	11	$ 550.00
6	2104.503	REMOVE PIPE CULVERT	LF	513	$ 8.25	$ 4,232.25	0	$ -	486	$ 4,009.50
7	2104.503	REMOVE CONCRETE CURB AND GUTTER	LF	58	$ 7.35	$ 426.30	0	$ -	58	$ 426.30
8	2104.503	REMOVE PIPE SEWER (SANITARY)	LF	33	$ 15.60	$ 514.80	0	$ -	18	$ 280.80
9	2104.503	SAWING CONCRETE PAVEMENT (FULL DEPTH)	LF	40	$ 5.00	$ 200.00	0	$ -	22	$ 110.00
10	2104.503	SAWING BITUMINOUS PAVEMENT (FULL DEPTH)	LF	710	$ 2.65	$ 1,881.50	0	$ -	612	$ 1,621.80
11	2104.504	REMOVE BITUMINOUS PAVEMENT (DRIVEWAY)	SY	154	$ 11.00	$ 1,694.00	0	$ -	154	$ 1,694.00
12	2104.504	REMOVE BITUMINOUS PAVEMENT (TRAIL)	SY	477	$ 4.85	$ 2,313.45	0	$ -	512	$ 2,483.20
13	2104.504	REMOVE GRAVEL PAVEMENT (DRIVEWAY)	SY	216	$ 15.10	$ 3,261.60	0	$ -	198	$ 2,989.80
14	2104.518	REMOVE CONCRETE PAVEMENT	SF	280	$ 1.50	$ 420.00	0	$ -	360	$ 540.00
15	2105.507	COMMON EXCAVATION (EV)	CY	2,098	$ 5.55	$ 11,643.90	0	$ -	2,134	$ 11,843.70
16	2105.507	SUBGRADE EXCAVATION, REMOVE UNSUITABLE MATERIAL (EV)	CY	7,000	$ 2.55	$ 17,850.00	0	$ -	491	$ 1,252.05
17	2105.601	TEMPORARY ACCESS ROAD	LS	1	$ 17,900.00	$ 17,900.00	0	$ -	1	$ 17,900.00
18	2105.601	DEWATERING	LS	1	$ 122,100.00	$ 122,100.00	0.0	$ -	1	$ 122,100.00
19	2106.507	SELECT GRANULAR BORROW (CV)	CY	8,750	$ 19.40	$ 169,750.00	0	$ -	491	$ 9,525.40
20	2106.507	GRANULAR EMBANKMENT (LV)	CY	1,001	$ 5.25	$ 5,255.25	0	$ -	360	$ 1,890.00
21	2112.519	SUBGRADE PREPARATION	RDST	119	$ 492.00	$ 58,548.00	0	$ -	119	$ 58,548.00
22	2118.507	AGGREGATE SURFACING (LV); CLASS 5 MODIFIED (DRIVEWAYS)	CY	37	$ 99.00	$ 3,663.00	0	$ -	37	$ 3,663.00
23	2130.523	WATER	MGAL	400	$ 54.50	$ 21,800.00	0	$ -	120	$ 6,540.00
24	2211.507	AGGREGATE BASE (CV) CLASS 5 MODIFIED	CY	2,919	$ 31.20	$ 91,072.80	0	$ -	2,919	$ 91,072.80
25	2215.504	STABILIZED FULL DEPTH RECLAMATION	SY	37,705	$ 1.75	$ 65,983.75	0	$ -	37,705	$ 65,983.75
26	2215.504	FULL DEPTH RECLAMATION	SY	19,543	$ 1.05	$ 20,520.15	0	$ -	19,543	$ 20,520.15
27	2215.507	HAUL FULL DEPTH RECLAMATION (LV)	CY	6,189	$ 11.50	$ 71,173.50	0	$ -	7,646	$ 87,929.00
28	2215.509	BITUMINOUS MATERIAL FOR MIXTURE	TON	546	$ 395.00	$ 215,670.00	0	$ -	368	$ 145,360.00
29	2232.504	MILL BITUMINOUS SURFACE (2.0")	SY	145	$ 7.00	$ 1,015.00	0	$ -	145	$ 1,015.00
30	2357.506	BITUMINOUS MATERIAL FOR TACK COAT	GAL	4,076	$ 0.01	$ 40.76	0	$ -	745	$ 7.45
31	2360.509	TYPE SP 9.5 WEARING COURSE MIXTURE (SPWEA340C) (2.0")	TON	6,114	$ 69.50	$ 424,923.00	0	$ -	6,763	$ 470,028.50
32	2360.509	TYPE SP 9.5 WEARING COURSE MIXTURE (SPWEA340C) (2.0") (DRIVEWAYS)	TON	22	$ 149.00	$ 3,278.00	0	$ -	22	$ 3,278.00
33	2360.509	TYPE SP 9.5 WEARING COURSE MIXTURE (SPWEA340C) (2.5") (BITUMINOUS TRAIL)	TON	31	$ 107.00	$ 3,317.00	0	$ -	31	$ 3,317.00
34	2360.509	TYPE SP 12.5 NON WEARING COURSE MIXTURE (SPNWB330C) (2.0")	TON	6,405	$ 61.90	$ 396,469.50	0	$ -	6,759	$ 418,382.10
35	2501.502	15" CS PIPE APRON	EA	1	$ 224.00	$ 224.00	0	$ -	1	$ 224.00
36	2501.502	18" CS PIPE APRON	EA	24	$ 229.00	$ 5,496.00	0	$ -	26	$ 5,954.00
37	2501.503	15" CS PIPE CULVERT	LF	21	$ 35.60	$ 747.60	0	$ -	21	$ 747.60
38	2501.503	18" CS PIPE CULVERT	LF	516	$ 38.50	$ 19,866.00	0	$ -	521	$ 20,058.50
39	2502.502	4" PRECAST CONCRETE HEADWALL	EA	14	$ 441.00	$ 6,174.00	0	$ -	14	$ 6,174.00
40	2502.503	4" PERF PVC PIPE DRAIN	LF	371	$ 10.50	$ 3,895.50	0	$ -	350	$ 3,675.00
41	2503.503	8" PVC PIPE SEWER (SDR 26)	LF	33	$ 40.60	$ 1,339.80	0	$ -	33	$ 1,339.80
42	2503.503	21" PVC PIPE SEWER (SDR 26)	LF	2,328	$ 88.70	$ 206,493.60	0	$ -	2,311	$ 204,985.70
43	2503.602	CONNECT TO EXISTING STORM SEWER	EA	1	$ 1,170.00	$ 1,170.00	0	$ -	1	$ 1,170.00
44	2503.602	CONNECT TO EXISTING SANITARY SEWER	EA	2	$ 1,560.00	$ 3,120.00	0	$ -	2	$ 3,120.00
45	2503.602	21" PVC PIPE PLUG	EA	1	$ 641.00	$ 641.00	0	$ -	1	$ 641.00
46	2503.603	CLEAN AND VIDEO TAPE PIPE SEWER (SANITARY)	LF	2,361	$ 1.40	$ 3,305.40	0	$ -	2,361	$ 3,305.40
47	2503.603	PLUG FILL AND ABANDON PIPE SEWER (SANITARY FORCE MAIN)	LF	2,277	$ 4.95	$ 11,271.15	0	$ -	2,275	$ 11,261.25
48	2503.618	MANHOLE COATING	SF	751	$ 0.01	$ 7.51	0	$ -	751	$ 7.51
49	2504.602	ADJUST VALVE BOX	EA	17	$ 301.00	$ 5,117.00	0	$ -	17	$ 5,117.00
50	2504.602	HYDRANT	EA	6	$ 4,630.00	$ 27,780.00	0	$ -	6	$ 27,780.00
51	2504.602	6" GATE VALVE & BOX	EA	5	$ 1,630.00	$ 8,150.00	0	$ -	5	$ 8,150.00
52	2504.602	8" GATE VALVE & BOX	EA	1	$ 2,110.00	$ 2,110.00	0	$ -	1	$ 2,110.00
53	2504.602	12" GATE VALVE & BOX	EA	8	$ 3,630.00	$ 29,040.00	0	$ -	8	$ 29,040.00
54	2504.602	CONNECT TO EXISTNG WATERMAIN	EA	1	$ 1,590.00	$ 1,590.00	0	$ -	1	$ 1,590.00
55	2504.603	6" WATERMAIN DUCTILE IRON CLASS 53	LF	100	$ 51.90	$ 5,190.00	0	$ -	79	$ 4,100.10
56	2504.603	8" WATERMAIN DUCTILE IRON CLASS 52	LF	20	$ 55.70	$ 1,114.00	0	$ -	4	$ 222.80

57	2504.603	12" WATERMAIN DUCTILE IRON CLASS 52	LF	3,341	$ 68.00	$ 227,188.00	0	$ -	40	$ 2,720.00
58	2504.603	12" WATERMAIN HDPE (DIRECTIONAL DRILLED)	LF	1,204	$ 72.10	$ 86,808.40	0	$ -	1,204	$ 86,808.40
59	2504.608	DUCTILE IRON FITTINGS	LBS	968	$ 6.35	$ 6,146.80	0	$ -	2,436	$ 15,468.60
60	2506.502	CASTING ASSEMBLY (SANITARY)	EA	7	$ 801.00	$ 5,607.00	0	$ -	7	$ 5,607.00
61	2506.502	ADJUST FRAME AND RING CASTING	EA	9	$ 439.00	$ 3,951.00	0	$ -	9	$ 3,951.00
62	2506.503	CONSTRUCT SANITARY STRUCTURE DESIGN 48-4007	LF	98.3	$ 306.00	$ 30,079.80	0.0	$ -	98.0	$ 29,988.00
63	2506.503	CONSTRUCT SANITARY STRUCTURE DESIGN 60-4007	LF	23.9	$ 747.00	$ 17,853.30	0.0	$ -	24.4	$ 18,226.80
64	2506.602	RESET CATCH BASIN CASTING	EA	2	$ 366.00	$ 732.00	0	$ -	2	$ 732.00
65	2506.603	CONSTRUCT 15" INSIDE DROP	LF	15.0	$ 592.00	$ 8,880.00	0.0	$ -	12.0	$ 7,104.00
66	2521.518	6" CONCRETE WALK	SF	1,331	$ 13.20	$ 17,569.20	0	$ -	1,267	$ 16,724.40
67	2531.503	CONCRETE CURB & GUTTER DESIGN B418	LF	580	$ 30.50	$ 17,690.00	0	$ -	564	$ 17,202.00
68	2531.504	6" CONCRETE DRIVEWAY PAVEMENT	SY	45	$ 88.70	$ 3,991.50	0	$ -	24	$ 2,128.80
69	2531.504	CONCRETE MEDIAN	SY	10	$ 72.00	$ 720.00	0	$ -	11	$ 792.00
70	2531.604	CONCRETE DRAINAGE FLUME	SY	5	$ 135.00	$ 675.00	0	$ -	0	$ -
71	2531.618	TRUNCATED DOMES	SF	206	$ 60.00	$ 12,360.00	0	$ -	200	$ 12,000.00
72	2540.601	LANDSCAPE RESTORATION	LS	1	$ 3,490.00	$ 3,490.00	0	$ -	1	$ 3,490.00
73	2540.602	TEMPORARY MAIL BOX CLUSTER	EA	4	$ 250.00	$ 1,000.00	1	$ 250.00	2	$ 500.00
74	2540.602	INSTALL MAIL BOX SUPPORT	EA	12	$ 75.00	$ 900.00	11	$ 825.00	11	$ 825.00
75	2563.601	TRAFFIC CONTROL	LS	1	$ 5,800.00	$ 5,800.00	0.1	$ 580.00	1	$ 5,800.00
76	2573.502	STORM DRAIN INLET PROTECTION	EA	5	$ 197.00	$ 985.00	0	$ -	4	$ 788.00
77	2573.503	SILT FENCE, TYPE MS	LF	13,255	$ 1.80	$ 23,859.00	1,327	$ 2,388.60	9,162	$ 16,491.60
78	2573.503	SEDIMENT CONTROL LOG TYPE STRAW	LF	1,795.0	$ 2.40	$ 4,308.00	0	$ -	600	$ 1,440.00
79	2574.507	TOPSOIL (LV)	CY	1,992	$ 33.70	$ 67,130.40	0	$ -	1,700	$ 57,290.00
80	2574.508	FERTILIZER TYPE 3	LBS	555	$ 0.53	$ 294.15	0	$ -	345	$ 182.85
81	2575.504	SODDING TYPE LAWN	SY	100	$ 8.25	$ 825.00	0	$ -	0	$ -
82	2575.505	SEEDING	ACRE	5.45	$ 475.00	$ 2,588.75	0.00	$ -	3.45	$ 1,638.75
83	2575.508	SEED MIXTURE 25-151	LBS	665	$ 3.10	$ 2,061.50	0	$ -	414	$ 1,283.40
84	2575.508	HYDRAULIC MUCLH MATRIX	LBS	21,800	$ 0.69	$ 15,042.00	0	$ -	13,800	$ 9,522.00
85	2582.503	24" SOLID LINE PAINT (EPOXY)	LF	142	$ 7.00	$ 994.00	0	$ -	67	$ 469.00
86	2582.503	4" DOUBLE SOLID LINE PAINT (EPOXY)	LF	2,825	$ 0.44	$ 1,243.00	0	$ -	2,827	$ 1,243.88
87	2582.503	4" SOLID LINE PAINT (EPOXY)	LF	27,935	$ 0.22	$ 6,145.70	305	$ 67.10	28,255	$ 6,216.10
88	2582.503	4" BROKEN LINE PAINT (EPOXY)	LF	1,860	$ 0.22	$ 409.20	0	$ -	2,530	$ 556.60
89	2582.503	4" DOTTED LINE PAINT (EPOXY)	LF	300	$ 0.22	$ 66.00	0	$ -	0	$ -
90	2582.518	CROSSWALK PAINT (EPOXY)	SF	408.00	$ 5.00	$ 2,040.00	0	$ -	504	$ 2,520.00
91	2582.518	PAVEMENT MESSAGE PAINT (EPOXY)	SF	124	$ 6.43	$ 797.32	0	$ -	125	$ 803.75
					TOTAL BID	$ 2,813,756.09		$ 19,460.70		$ 2,379,167.89

ALTERNATE A

Item No.	MnDot No.	Item Description	Unit	CONTRACT AMOUNT			PAY THIS PERIOD		PAID TO DATE	
				Estimated Quantity	Unit Price	Extension	Quantity	Extension	Quantity	Extension
A1	2565.616	PEDESTRIAN CROSSWALK FLASHER SYSTEM	SYS	1	$ 40,200.00	$ 40,200.00	0.0	$ -	1	$ 40,200.00
					TOTAL BID	$ 40,200.00		$ -		$ 40,200.00

ALTERNATIVE B

Item No.	MnDot No.	Item Description	Unit	CONTRACT AMOUNT			PAY THIS PERIOD		PAID TO DATE	
				Estimated Quantity	Unit Price	Extension	Quantity	Extension	Quantity	Extension
B1	2504.603	12" WATERMAIN DUCTILE IRON CLASS 52	LF	-3,341	$ 68.00	$ (227,188.00)	0	$ -	0	$ -
B2	2504.603	12" WATERMAIN HDPE (DIRECTIONAL DRILLED)	LF	3,341	$ 55.40	$ 185,091.40	0	$ -	3,298	$ 182,709.20
					TOTAL BID	$ (42,096.60)		$ -		$ 182,709.20

CHANGE ORDER No.1

Item No.	MnDot No.	Item Description	Unit	CONTRACT AMOUNT			PAY THIS PERIOD		PAID TO DATE	
				Estimated Quantity	Unit Price	Extension	Quantity	Extension	Quantity	Extension
18	2105.601	ADDITIONAL DEWATERING	LS	1	$ 11,985.00	$ 11,985.00	0	$ -	1	$ 11,985.00
42	2503.503	21" PVC PIPE SEWER (SDR 26)	LF	160	$ 88.70	$ 14,192.00	0	$ -	177	$ 15,699.90
92	2503.503	4" PVC SANITARY SEWER SERVICE PIPE (SDR 26)	LF	58	$ 42.00	$ 2,436.00	0	$ -	55	$ 2,310.00
93	2503.602	21" X 4" PVC WYE (SDR 26)	EA	1	$ 2,292.00	$ 2,292.00	0	$ -	1	$ 2,292.00
94	2503.602	4" PVC CAP	EA	1	$ 50.00	$ 50.00	0	$ -	1	$ 50.00
46	2503.603	CLEAN AND VIDEO TAPE PIPE SEWER (SANITARY)	LF	160	$ 1.40	$ 224.00	0	$ -	117	$ 163.80
95	2504.602	1" CORPORATION STOP	EA	1	$ 787.00	$ 787.00	0	$ -	1	$ 787.00
96	2504.602	1" CURB STOP AND BOX	EA	1	$ 768.00	$ 768.00	0	$ -	1	$ 768.00
97	2504.603	1" COPPER PIPE TYPE K	LF	75	$ 43.00	$ 3,225.00	0	$ -	75	$ 3,225.00
60	2506.502	CASTING ASSEMBLY (SANITARY)	EA	1	$ 801.00	$ 801.00	0	$ -	1	$ 801.00
61	2506.502	ADJUST FRAME AND RING CASTING	EA	1	$ 439.00	$ 439.00	0	$ -	1	$ 439.00
62	2506.503	CONSTRUCT SANITARY STRUCTURE DESIGN 48-4007	LF	20.3	$ 306.00	$ 6,211.80	0.0	$ -	19.9	$ 6,089.40
					TOTAL BID	$ 43,410.80		$ -		$ 44,610.10

CC Regular Session **5. 12.**

Meeting Date: 01/26/2021

By: Colleen Lasher, Administrative Services

Information

Title:

Adopt Resolution #21-034 to Approve the City's 2021 Union Contracts for LELS Patrol and LELS Sergeants

Purpose/Background:

The most recent labor agreements with Law Enforcement Labor Services (LELS) Patrol and Sergeants expired on December 31, 2020. Staff met with the unions and the City Council several times to discuss contract negotiations specific to wages and health insurance and to address the other outstanding negotiations items. As a result of the meetings, staff reached a tentative agreement between the City of Ramsey and the two remaining unions (Patrol and Sergeants) to settle the 1-year labor agreements, effective January 1, 2021 through December 31, 2021.

Staff recommends the City Council approve the 2021 labor agreements with LELS Patrol and LELS Sergeants as follows:

1) Duration: one year contracts, effective January 1, 2021 through December 31, 2021 for LELS Patrol and LELS Sergeants groups; and

2) Wages: LELS Patrol and LELS Sergeants groups, as follows:

a. LELS Patrol: 2021: 2.75% cost of living increase, plus a 1% wage scale adjustment added to the 2020 wage scale, effective 01-01-21; and

b. LELS Sergeants: 2021: 2.75% cost of living increase added to the 2020 wage scale, effective 01-01-21; and a onetime payment to the Sergeants of $850.00 to be paid within 30 days of this Agreement being executed by all parties; and

3) Health Insurance: LELS Patrol and LELS Sergeants group, as follows:
The City will make the following contributions toward group health insurance coverage for employees; as well as to purchase $20,000 of basic life insurance for full-time regular employees working 30 hours per week or more and employees participating in PERA phased retirement; and

a. 2021 monthly health insurance contributions, including the health reimbursement or health savings account contributions as follows; Employee Only (Single) $942.00 to $1,034.50, Employee and Children at $1,246.00, Employee and Spouse at $1,300.30, and Family at $1,603.80; and

b. 2021 City payment toward the Waiver/Credit in lieu of Coverage will remain at $370.00 per month; and

Note: Employees are responsible for paying the difference between the premium and the City’s contribution.

4) Other negotiated contract items specific to LELS Patrol and LELS Sergeants unions are shown in the attached red-line contracts and will administered as per the language in each respective labor agreement

Notification:

Funding Source:

The funding required to settle both 1-year contracts is included in the 2021 budget.

Recommendation:

To settle one-year labor agreements with LELS Patrol and LELS Sergeants unions subject to final review and approval of contract language by the City Attorney.

Action:

Motion to adopt resolution #21-034, to settle one-year labor agreements with LELS Patrol and LELS Sergeants unions subject to final review and approval of contract language by the City Attorney.

Attachments

Resolution 21-034

Draft 2021 Patrol Contract

Draft 2021 Sergeants Contract

Form Review

Inbox	Reviewed By	Date
Kurt Ulrich	Kurt Ulrich	01/21/2021 03:52 PM
Colleen Lasher (Originator)	Colleen Lasher	01/21/2021 04:04 PM
Kurt Ulrich	Kurt Ulrich	01/21/2021 04:09 PM
Form Started By: Colleen Lasher		Started On: 01/19/2021 12:10 PM
Final Approval Date: 01/21/2021		

Councilmember introduced the following resolution and moved for its adoption:

RESOLUTION #21-034

RESOLUTION TO APPROVE THE 2021 LELS PATROL AND LELS SERGEANTS UNION CONTRACTS

WHEREAS, the current LELS Patrol and LELS Sergeants union contracts expired on December 31, 2020; and

WHEREAS, the City has reached a tentative agreement with LELS Patrol and LELS Sergeants groups on all articles within the contracts; and

WHEREAS Staff recommends approving the one-year contract with LELS Patrol and LELS Sergeants groups, effective January 1, 2021 through December 31, 2021; and

WHEREAS, the City will administer the 2021 contracts as follows:

1) Duration: one year contracts, effective January 1, 2021 through December 31, 2021 for LELS Patrol and LELS Sergeants groups; and

2) Wages: LELS Patrol and LELS Sergeants groups, as follows:

   LELS Patrol: 2021: 2.75% cost of living increase, plus a 1% wage scale adjustment added to the 2020 wage scale, effective 01-01-21; and

   LELS Sergeants: 2021: 2.75% cost of living increase added to the 2020 wage scale, effective 01-01-21; and a onetime payment to the Sergeants of $850.00 to be paid within 30 days of this Agreement being executed by all parties; and

3) Health Insurance: LELS Patrol and LELS Sergeants group, as follows:

   The City will make the following contributions toward group health insurance coverage for employees; as well as to purchase $20,000 of basic life insurance; and

   a. 2021 monthly health insurance contributions, including the health reimbursement or health savings account contributions as follows; Employee Only (Single) $942.00 to $1,034.50, Employee and Children at $1,246.00, Employee and Spouse at $1,300.30, and Family at $1,603.80; and
   b. 2021 City payment toward the Waiver/Credit in lieu of Coverage will remain at $370.00 per month; and

4) Other negotiated contract items specific to LELS Patrol and LELS Sergeants unions are shown in the attached red-line contracts and will administered as per the language in each respective labor agreement:

NOW THEREFORE BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF RAMSEY, ANOKA COUNTY, STATE OF MINNESOTA, as follows:

Motion to adopt resolution #21-034, to settle one-year labor agreements with LELS Patrol and LELS Sergeants unions subject to final review and approval of contract language by the City Attorney.

The motion for the adoption of the `foregoing resolution was duly seconded by Council Member, , and upon vote being taken thereon, the following voted in favor thereof:

and the following voted against the same:

and the following abstained:

and the following were absent:

Whereupon said resolution was declared duly passed and adopted by the Ramsey City Council this the 26th January 2021.

LABOR AGREEMENT BETWEEN

CITY OF RAMSEY AND

LAW ENFORCEMENT LABOR SERVICES, INC.

LICENSED PATROL OFFICERS

January 1, 20~~19~~21 – December 31, 20~~20~~21

Prepared by Colleen Lasher, Administrative Services Director

DRAFT

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ARTICLE ONE (1) PURPOSE OF AGREEMENT

THIS AGREEMENT is entered into as of January 1, ~~2019~~ 2021, between the CITY OF RAMSEY, thereinafter called the Employer, and LAW ENFORCEMENT LABOR SERVICES, INC., hereinafter called LELS.

It is the intent and purpose of this Agreement to:

1.1 Assure sound and mutually beneficial working and economic relationships between the parties hereto;

1.2 Establish procedures for the resolution of disputes concerning this Agreement's interpretation and/or application; and

1.3 Place in written form the parties' agreement upon terms and conditions of employment for the duration of this Agreement.

The Employer and LELS, through this Agreement, shall continue their dedication to the highest quality of police service and protection to the residents of the City of Ramsey. Both parties recognize this Agreement as a pledge of this dedication.

ARTICLE TWO (2) RECOGNITION

2.1 The Employer recognizes LELS as the exclusive representative under Minnesota Statutes, Section 179A.03, Subdivision 8, for all patrol officers.

2.2 In the event the Employer and LELS are unable to agree as to the inclusion or exclusion of a new or modified job class, the issue shall be submitted to the Bureau of Mediation Services for determination.

ARTICLE THREE (3) DEFINITIONS

3.1 LELS. Law Enforcement Labor Services, Inc.

3.2 LELS Member. A member of Law Enforcement Labor Services, Inc.

3.3 Employee. A member of the exclusively recognized bargaining unit.

3.4 Department. The Ramsey Police Department.

3.5 Employer. The City of Ramsey.

3.6 Chief. The Chief of the Ramsey Police Department.

3.7 LELS Officer. Officer elected or appointed by Law Enforcement Labor Services, Inc.

3.8 Overtime. Work performed at the express authorization of the Employer in excess of the employee's scheduled shift.

3.9 Scheduled Shift. A consecutive work period including two rest breaks and a lunch break.

3.10 Rest Breaks. Two periods during the Scheduled Shift during which the employee remains on continual duty and is responsible for assigned duties.

3.11 Lunch Break. A period during the Scheduled Shift during which the employee remains on continual duty and is responsible for assigned duties.

3.12 Strike. Concerted Action in failing to report for duty, the willful absence from one's position, the stoppage of work, slowdown or abstinence in whole or in part from the full, faithful and proper performance of the duties of employment for the purpose of inducing, influencing or coercing a change in the conditions or compensation or the rights, privileges or obligations of employment.

ARTICLE FOUR (4) EMPLOYER AUTHORITY

4.1 Employer retains the full and unrestricted right to operate and manage all staff, facilities and equipment; to establish functions and programs; to set and amend budgets; to determine the utilization of technology; to establish and modify the organizational structure; to select, direct and determine the number of personnel; to establish work schedules and to perform any inherent managerial function not specifically limited by this Agreement.

4.2 Any term and condition of employment not specifically established or modified by this Agreement shall remain solely within the discretion of the Employer to modify, establish or eliminate.

ARTICLE FIVE (5) UNION SECURITY

5.1 The Employer shall deduct from the wages of employees who authorize such a deduction in writing an amount necessary to cover monthly LELS dues. Such monies shall be remitted as directed by LELS.

5.2 LELS may designate employees from the bargaining unit to act as a representative and an alternate and shall inform the Employer in writing of such choice and changes in the position of representative and/or alternate.

5.3 The Employer shall make space available on the employee bulletin board for posting LELS notice(s) and announcement(s).

5.4 LELS agrees to indemnify and hold the Employer harmless against any and all claims, suits, orders or judgments brought or issued against the Employer as a result of any action taken or not taken by the Employer under the provisions of this ARTICLE.

ARTICLE SIX (6) EMPLOYEE RIGHTS-GRIEVANCE PROCEDURE

6.1 Definition of a Grievance. A grievance is defined as a dispute or disagreement as to the interpretation or application of the specific terms and conditions of this Agreement.

6.2 LELS Representatives. The Employer will recognize Representatives designated by LELS as the grievance representatives of the bargaining unit having the duties and responsibilities established by this ARTICLE. LELS shall notify the Employer in writing of the names of such LELS Representatives and of their successors when so designated as provided by Article 5.2 of this Agreement.

6.3 Processing of a Grievance. It is recognized and accepted by LELS and the Employer that the processing of grievances as hereinafter provided is limited by the job duties and responsibilities of the Employees and shall, therefore, be accomplished during normal working hours only when consistent with such Employee duties and responsibilities. The aggrieved Employee and a LELS Representative shall be allowed a reasonable amount of time without loss of pay when a grievance is investigated and presented to the Employer during normal working hours, provided that the Employee and the LELS representative have notified and received the approval of the designated supervisor who has determined that such absence is reasonable and would not be detrimental to the work programs of the Employer.

6.4 Procedure. Grievances, as defined by Article 6.1, shall be resolved in conformance with the following procedure:

Step 1. An Employee claiming a violation concerning the interpretation or application of the Agreement shall, within twenty-one (21) calendar days after such alleged violation has occurred, present such grievance to the Employee's supervisor as designated by the Employer. The Employer designated representative will discuss and give an answer to such Step 1 grievance within ten (10) calendar days after receipt. A grievance not resolved in Step 1 and appealed to Step 2 shall be placed in writing setting forth the nature of the grievance, the facts on which it is based, the provision or provisions of the Agreement allegedly violated, the remedy requested and shall be appealed to Step 2 within ten (10) calendar days after the Employer designated representative's final answer in Step 1. Any grievance not appealed in writing to Step 2 by LELS within ten (10) calendar days shall be considered waived.

Step 2. If appealed, the written grievance shall be presented by LELS and discussed with the Employer designated Step 2 representative. The Employer designated representative shall

give LELS the Employer's Step 2 answer in writing within ten (10) calendar days after receipt of such Step 2 grievance. A grievance not resolved in Step 2 may be appealed to Step 3 within ten (10) calendar days following the Employer designated representative's final Step 2 answer. Any grievance not appealed in writing to Step 3 by LELS within ten (10) calendar days shall be considered waived.

Step 3. If appealed, the written grievance shall be presented by LELS and discussed with the Employer designated Step 3 representative. The Employer designated representative shall give LELS the Employer's answer in writing within ten (10) calendar days after receipt of such Step 3 grievance. A grievance not resolved in Step 3 may be appealed to Step 4 within ten (10) calendar days following the Employer designated representative's final answer in Step 3. Any grievance not appealed in writing to Step 4 by LELS within ten (10) calendar days shall be considered waived.

Step 3A. A grievance unresolved in Step 2 and appealed to Step 3 by LELS may be submitted to mediation subject to Public Employees Labor Relations Act (PELRA).

Step 4. A grievance unresolved in Step 3 or 3A and appealed to Step 4 by LELS shall be submitted to arbitration subject to the provisions of the Public Employment Labor Relations Act of 1971, as amended. The selection of an arbitrator shall be made in accordance with the "Rules Governing the Arbitration of Grievances" as established by state law.

6.5 Arbitrator's Authority.

A. The arbitrator shall have no right to amend, modify, nullify, ignore, add to or subtract from the terms and conditions of this Agreement. The arbitrator shall consider and decide only the specific issue(s) submitted in writing by the Employer and LELS, and shall have no authority to make a decision on any other issue not so submitted.

B. The arbitrator shall be without power to make decisions contrary to or inconsistent with or modifying or varying in any way the application of laws, rules or regulations having the force and effect of law. The arbitrator's decision shall be submitted in writing within thirty (30) days following the close of the hearing or the submission of briefs by the parties, whichever be later, unless the parties agree to an extension. The decision shall be binding on both the Employer and LELS and shall be based solely on the arbitrator's interpretation or application of the express terms of this Agreement and to the facts of the grievance presented.

C. The fees and expenses for the arbitrator's services and proceedings shall be borne equally by the Employer and LELS provided that each party shall be responsible for compensating its own representatives and witnesses. If either party desires a verbatim record of the proceedings, it may cause such a record to be made providing it pays for the record. If both parties desire a verbatim record of the proceedings, the cost shall be shared equally.

6.6 Waiver. If a grievance is not presented within the time limits set forth above, it shall be considered "waived". If a grievance is not appealed to the next step within the specified time limit or any agreed extension thereof, it shall be considered settled on the basis of the Employer's last answer. If the Employer does not answer a grievance or an appeal thereof within the specified time

limits, LELS may elect to treat the grievance as denied at that step and immediately appeal the grievance to the next step. The time limit in each step may be extended by mutual written agreement of the Employer and LELS in each step.

6.7 Choice of Remedy. If, as a result of the written Employer response in Step 3, the grievance remains unresolved and if the grievance involves the suspension, demotion or discharge of any employee who has completed the required probationary period, the grievance may be appealed either by Step 4 of ARTICLE Six (6) or a procedure such as: Veteran's Preference or Fair Employment. If appealed to any procedure other than Step 4 of ARTICLE Six (6), the grievance is not subject to the arbitration procedure as provided in Step 4 of ARTICLE Six (6). The aggrieved employee shall indicate in writing which procedure is to be utilized - Step 4 of ARTICLE five (five) or another appeal procedure - and shall sign a statement to the effect that the choice of any other hearing precludes the aggrieved employee from making a subsequent appeal through Step 4 of ARTICLE six (6).

ARTICLE SEVEN (7) SENIORITY

7.1 Seniority shall be determined by the Employee's length of continuous employment with the Police Department and may be posted in an appropriate location. Seniority rosters may be maintained by the Chief on the basis of time in grade and time within specific classifications.

7.2 During the one year probationary period, a newly hired or rehired Employee may be discharged at the sole discretion of the Employer. During the one year probationary period, a promoted or reassigned Employee may be replaced in his/her previous position at the sole discretion of the Employer.

7.3 A reduction of work force will be accomplished on the basis of seniority. Employees shall be recalled from layoff on the basis of seniority. An Employee on layoff shall have an opportunity to return to work within two (2) years of the time of his/her layoff before any new Employee is hired.

7.4 Annual leave shall be selected according to the following procedure:

Employees shall submit first and second choices for continuous vacation periods by March 1 of each year. By April 1 the City shall approve Employee's first and second choices based on seniority. Senior Employees shall have preference over junior Employees for their first choice. Then, senior Employees shall have preference in their second choice. In no event shall senior Employees' second choice supersede the first choice of junior Employees unless the senior Employees' first choice was not granted. Senior employees shall have preference for shift bid at the start of each calendar year. Holidays, when approved, shall be selected on the basis of seniority up until ten (10) days prior to the requested day off. Thereafter, holidays, when approved, will be granted on a first-come first- served basis.

ARTICLE EIGHT (8) DISCIPLINE

8.1 The Employer will discipline Employees for just cause only. Discipline will be in one or more of the following forms:

a) Oral reprimand;
b) Written reprimand;
c) Suspension;
d) Demotion; or
e) Discharge

8.2 Suspensions, demotions and discharges will be in written form.

8.3 Written reprimands, notices of suspension and notices of discharge which are to become part of an Employee's personnel file shall be read and acknowledged by signature of the Employee. Employees and LELS will receive a copy of such reprimands and/or notices.

8.4 Employees may examine their own individual personnel files at reasonable times under the direct supervision of the Employer.

8.5 A five (5) day (regularly scheduled consecutive work days) suspension, without pay, will precede any discharge order, except for those employees who are defined as Veterans pursuant to Minnesota Statutes Annotated 197.46.

8.6 An Employee will not be questioned concerning an investigation of disciplinary action against that Employee unless said Employee has been given an opportunity to have an LELS representative present at such questioning.

8.7 Grievances relating to this ARTICLE shall be initiated by LELS in Step 3 of the grievance procedure under ARTICLE Six (6).

ARTICLE NINE (9) WORK SCHEDULES

9.1 The normal work year for full-time Employees shall consist of the number of Monday through Friday days in each calendar year multiplied by eight (8) hours. These hours are to be accounted for by each Employee through:

a) Scheduled hours of work;
b) Scheduled department meetings;
c) Holidays;
d) Authorized training; and
e) Authorized leave time; and
f) Authorized compensatory time off.

9.2 Nothing contained in this or any other ARTICLE shall be interpreted to be a guarantee of a minimum or maximum number of hours the Employer may assign Employees.

9.3 Employees are scheduled to work over 2080 hours during the year. Because of this, the employee will earn "KELLY TIME" at the rate of 4 hours per pay period. Employees will not be allowed to take any time off that they have not yet earned, other than the last pay period of the year. Employees will be able to bank up to a total of 48 hours. Employees are expected to manage their own time off and be responsible for not going over the cap.

All accrued Kelly time and projected earned Kelly Time, will need to be entered on the duty Schedule by December 1st or it will be assigned by Ramsey Police Administration.

ARTICLE TEN (10) OVERTIME/COMPENSATORY TIME

10.1 Employees will be compensated at one and one-half (1 ½) times the Employee's regular base pay rate for working beyond their regular shift and for hours worked in excess of the Employee's regularly scheduled shift. Changes of shifts do not qualify an Employee for overtime under this ARTICLE.

10.2 Overtime will be distributed as equally as practicable.

10.3 Overtime offered and refused by Employees will, for record purposes under ARTICLE 10.2, be considered as unpaid overtime worked.

10.4 For the purpose of computing overtime compensation, overtime hours worked shall not be pyramided, compounded or paid twice for the same hours worked; for the purpose of computing overtime compensation, an Employee using earned vacation leave, compensatory time off, sick leave or paid holidays is considered to be working.

10.5 Overtime will be calculated to the nearest fifteen (15) minutes.

10.6 Employees have the obligation to work overtime or call backs if requested by the Employer unless unusual circumstances prevent the Employees from so working.

10.7 Employees may elect to take compensatory time off in lieu of receiving overtime compensation except for the following: 1) Court time will be paid as overtime, 2) Hold-overs will be paid as overtime, 3) Early shift starts over two hours to cover the schedule will be paid as overtime (two hours and under may be taken as compensatory time off or overtime) 4) Scheduled overtime will be paid as overtime.

Compensatory time off is computed at one and one-half (1 ½) times the time worked. Accrued and banked compensatory time off shall not exceed 36 hours at any time and employees may not earn more than 60 hours of compensatory time off annually

Compensatory time off may only be used with prior approval from the employee's department head. Upon separation from employment, accrued and unused compensatory

time off will be paid to the employee at the then current rate. Compensatory time off will be approved pending scheduling. Pay back time must be satisfied before compensatory time off will be approved.

10.8 For the purpose of computing overtime compensaton and/or compensatory time off, Employees who are scheduled and attend training on a scheduled day off and the training is less than six hours (6 hours), the Employee will earn compensatory time off or overtime.

10.9 Employees who are scheduled and attend training on a scheduled day off and the training is six hours (6 hours) or more, the Employee will earn "Training time off" at straight time (hour for hour). Training time off must be used by the end of the calendar year.

ARTICLE ELEVEN (11) COURT TIME

11.1 An Employee who is required to appear in Court during his/her scheduled off-duty time shall receive a minimum of three (3) hours pay at one and one-half (1-1/2) times the Employee's base pay rate. An extension or early report to a regularly scheduled shift for Court appearance does not qualify the Employee for the three (3) hour minimum.

11.2 An Employee who is required to appear in court within twelve (12) hours of the end of a scheduled shift and within twelve (12) hours of the start of a scheduled shift shall receive a minimum of three (3) hours pay at Two (2) times the Employees base pay rate.

ARTICLE TWELVE (12) STANDBY TIME

12.1 If the Employer requires any Police Department Employee (Patrol Officer or Investigator) to standby, the Employee shall receive one hundred dollars ($100.00) pay. If the Employee is called into court after being on standby, he or she will forfeit the standby pay and shall receive the three (3) hour minimum court overtime payment instead. The Employer shall notify any Employee on standby when said Employee is no longer on such duty status.

ARTICLE THIRTEEN (13) CALL BACK TIME

13.1 An Employee who is called to duty during his/her scheduled off-duty time shall receive a minimum of ~~two (2)~~ three (3) hours pay at one and one-half (1-1/2) times the Employee's base pay rate. An extension or early report to a regularly scheduled shift for duty does not qualify the Employee for the ~~two (2)~~ three (3) hour minimum.

ARTICLE FOURTEEN (14) VACATION

14.1 Every regular Employee having less than six (6) years consecutive full-time service shall earn vacation leave at the rate of 5/6ths of a working day for each calendar month of full-

time service. Each regular Employee with at least six (6), but less than twelve (12), consecutive years of full-time service shall earn vacation leave at the rate of 1.25 working days for each calendar month of full-time service. Each regular Employee with at least twelve (12), but less than seventeen (17), years of consecutive full-time service shall earn vacation leave at the rate of 1.666 working days for each calendar month of full-time service. After sixteen years of service, each regular Employee will receive one additional day of vacation each year in excess of sixteen (16) years of service, to a maximum of 25 days per year.

14.2 An Employee's accrued or "banked" vacation leave must be equal to or less than two times the yearly accrual by December 31st of each year; any accruals exceeding this amount will be forefeited.

14.3 Vacation leave may be used as earned subject to approval by the department head at the time at which it may be taken.

14.4 Any Employee leaving the municipal service in good standing after giving a proper notice of at least fourteen days advance notice of such termination of employment, shall be compensated for vacation leave accrued and unused to the date of separation.

14.5 For the purpose of accumulating additional vacation leave, an Employee using earned vacation leave, sick leave or paid holidays is considered to be working.

ARTICLE FIFTEEN (15) SICK LEAVE

15.1 Every probationary and regular Employee is entitled to sick leave with pay at the rate of 1 day for each calendar month of full-time service or major fraction thereof. Sick leave may be accumulated to a maximum of 960 hours and may be granted in units of not less than 2 hours. Unused sick leave in excess of 960 hours at the end of a calendar year (January 1st) shall be converted to vacation at a rate of one hour vacation for each two hours of sick leave in excess of 960 hours.

15.2 Sick leave may be granted by the Employee's Department Head when the Employee has communicated the request to a Police Supervisor, and is unable to perform work duties due to illness, disability, the necessity for medical, dental or chiropractic care, childbirth or exposure to contagious disease where such exposure may endanger the health of others with whom the Employee could come in contact in the course of performing work duties. Sick leave may also be authorized when the Employee's presence is necessary, for actual illness, injury, legal quarantine, or medical treatment in the Employee's immediate family. Immediate family, for the purposes of this Article, shall be defined as spouse, parent, step-parent, children, step-children, brother, sister, grandparents, grandchildren or a like member of Employee's spouse's family.

15.3 Employees are allowed funeral leave up to 24 hours twice annually per occurrence (a maximum of 48 hours annually) for a death in the immediate family as defined under Article 15.2. That time is not chargeable against any accrued vacation, sick or compensatory time. Hours must be taken within 5 (five) calendar days from start to finish

per occurrence. Additional funeral leave may be taken (with prior approval from a supervisor) and is deductible from sick leave (up to three (3) consecutive days), vacation or compensatory time as the EMPLOYEE may choose and have available.

15.4 To be eligible for sick leave with pay, an Employee shall:

1) report as soon as possible to the employee's immediate supervisor the reason for the absence;
2) keep the employee's immediate supervisor informed of such employee's condition;
3) for any absence that exceeds three consecutive days, upon the employee's return to work, submit a medical certificate from a physician 1) when the nature of the illness warranted being seen by a health care professional or 2) at a minimum, the employee must submit his or her own written documentation with a brief explanation of the nature of the absences;
4) if requested by the City Administrator or the Chief of Police, submit a medical certificate from a physician for absence.

15.5 Using or claiming sick leave for a purpose not authorized by Article 15.2 shall be cause for disciplinary action.

15.6 For the purpose of accumulating additional sick leave, an Employee using earned vacation leave, sick leave, compensatory time off or paid holidays is considered to be working.

15.7 EMPLOYEES shall receive a lump sum payment upon termination of employment with the EMPLOYER based upon thirty-three percent (33%) of said EMPLOYEE'S unused accumulated sick leave after five (5) years of continuous employment. Severance pay shall not be available in any sum to an EMPLOYEE if that EMPLOYEE is discharged for just cause; severance pay shall not be paid if an EMPLOYEE voluntarily terminates his or her employment prior to five (5) years of continuous employment service; or the EMPLOYEE voluntarily terminates his or her employment without giving the EMPLOYER fourteen (14) days written notice. After fifteen (15) years of continuous employment service, the EMPLOYEE will receive thirty-five percent (35%) of said EMPLOYEE'S unused, accumulated sick leave. After twenty (20) years of continuous employment service, the EMPLOYEE will receive thirty-seven percent (37%) of unused, accumulated sick leave. After twenty-five (25) years of continuous employment service the EMPLOYEE will receive forty percent (40%) of said EMPLOYEE'S unused, accumulated sick leave.

ARTICLE SIXTEEN (16) INJURY ON DUTY (IOD)

16.1 Employees injured during the performance of their duties for the EMPLOYER and thereby rendered unable to work for the EMPLOYER will be paid the difference between the Employee's regular pay and Worker's Compensation insurance payments for a period not to exceed ninety (90) working days per injury, not charged to the Employee's vacation, sick leave or other accumulated paid benefits, after a three (3) working day initial waiting period per injury. The three (3) working day waiting period shall be charged to the employee's sick leave account less Worker's Compensation insurance payments. Employees drawing Workers' Compensation benefits will not receive supplementary IOD pay or sick leave pay,

which provides for more after-tax pay than the Employee made while working.

ARTICLE SEVENTEEN (17) HOLIDAYS

17.1 Employees will receive or be given credit in the work schedule for ninety-six (96) holiday hours per year; including the holiday's listed in 17.3, plus a Floating Holiday.

17.2 Employees may take holiday time only with specific scheduled permission of the Employer.

17.3 Employees required to work on any of the holidays of:

New Year's Day
Martin Luther King's Day
President's Day
Memorial Day
Independence Day (4th of July)
Labor Day
Columbus Day
Veteran's Day
Thanksgiving Day
Christmas Eve Day
Christmas Day

shall receive an additional 1/2 time for the time they work on such holiday. All holidays specified in this paragraph will be paid in dollars, rather than time accumulation. An employee who is required to work overtime on a holiday shall receive pay at two (2) times the Employees base pay rate for that time worked in addition to their regular shift.

17.4 Each Employee shall have the option to sell any or all of his/her holiday hours back to the employer at his/her current rate of pay. This holiday buy back option may be taken during two time periods annually: January 1 through January 15, and November 1 through November 15. In any event, no holiday hours shall carry over to the next year.

17.5 Employees who leave employment prior to December 31st will only be paid for unused holiday hours from holidays that occurred prior to the termination date.

Employees who use holiday hours or receive compensation for holiday hours before the holiday occurs and leave employment prior to December 31st, must pay the City back holiday hours for any holiday that has not occurred prior to the termination date. Funds owed to the City must be paid prior to ending the employment relationship.

ARTICLE EIGHTEEN (18) FITNESS-ON-DUTY

18.1 The purpose of this Article is to give each Officer the option to exercise while on duty. This is a voluntary Fitness-on-Duty program which provides an opportunity for employees engaged in stressful and somewhat sedentary jobs an opportunity to: 1) Improve job

performance, 2) Reduce health risks, 3) Reduce job-related injuries, 4) Reduce absenteeism, and 5) Improve overall fitness.

18.2 This program is subject to the following terms and conditions: The employee will be given the option to work out one hour per shift. The average should not exceed six hours of workout time over two weeks. This option is available if allowed by shift's minimums set forth by the Chief of Police and call load. The workout time will consist to thirty minutes of the employees daily break time and up to thirty minutes of regular duty time.

18.3 Employees will earn one hour of "training time off" for each fitness testing event the Employee scores in the "excellent" range or above based on the Employee's age level category as determined by the Cooper Institute chart. Earned training time off will not exceed twelve hours per calendar year.

18.4 Any employee participating in the program will partake in semi-annual fitness testing. The standards for testing will be set by the fitness coordinator and approved by the Chief of Police. All participants will adhere to the department Physical Fitness Program policy and testing standards.

ARTICLE NINETEEN (19) INSURANCE

19.1 The EMPLOYER shall contribute to EMPLOYEE health and life insurance as stated in the attached Memorandum of Understanding.

19.2 The EMPLOYER, agrees to contribute the dollar value equivalent to the cost of the monthly employee only dental premium as established by the EMPLOYER. Credit in lieu of coverage will not be granted.

ARTICLE TWENTY (20) CLOTHING AND UNIFORMS

20.1 The Employer shall provide uniforms (including boots) and equipment and replacement as outlined by the department policy that currently exists.

ARTICLE TWENTY ONE (21) PROFIENCY PAY PROGRAM

21.1 The Employer and Employees mutually agree to a program whereby it will be recognized that during their years of employment as peace officers, the Employees' accumulation and assimilation of experience and training has enhanced their intrinsic worth. The length of service and its corresponding applicable rate of pay in dollars per month for purposes of this Proficiency Pay Program shall be pursuant to Exhibit A.

ARTICLE TWENTY TWO (22) SAVINGS CLAUSE

22.1 This Agreement is subject to the laws of the United States, the State of Minnesota and the City of Ramsey. In the event any provision of this Agreement shall be held contrary to law by a court of competent jurisdiction from whose final judgment or decree no appeal has been taken within the time provided, such provisions shall be voided. All other provisions of this Agreement shall continue in full force and effect. The voided provisions shall be renegotiated at the written request of either party.

ARTICLE TWENTY THREE (23) SALARIES

23.1 The Employees' wages payable during the term of this Agreement shall be in accord with the salary schedule attached hereto as Exhibit "A" and incorporated herein by reference. Employees reaching Top Patrol are subject to the proficiency pay steps as follows:

After 5, 8, 12 and 16 years of service.

23.2 Employer to pay license fees for officer's POST license. ~~up to $90.00 every three (3) years.~~

23.3 Field Training Officer Supplemental Pay: Employees assigned in writing by the Employer to fulfill this assignment shall receive $3.00 per hour over base pay while working in that capacity.

23.4 The EMPLOYER will pay to the person(s) assigned to Investigator positions $250.00/month.

ARTICLE TWENTY FOUR (24) WAIVER

24.1 Any and all prior agreements, resolutions, practices, policies, rules and regulations regarding terms and conditions of employment to the extent inconsistent with the provisions of this Agreement are hereby superseded.

24.2 The parties mutually acknowledge that during the negotiations which resulted in this Agreement, each had the unlimited right and opportunity to make demands and proposals with respect to any term or condition of employment not removed by law from bargaining. All agreements and understandings arrived at by the parties are set forth in writing in this Agreement for the stipulated duration of this Agreement. The Employer and LELS each voluntarily and unqualifiedly waive the right to meet and negotiate regarding any and all terms and conditions of employment referred to or covered in this Agreement or with respect to any term or condition of employment not specifically referred to or covered by this Agreement even though such terms or conditions may not have been within the knowledge or contemplation of either or both of the parties at the time this Agreement was negotiated or executed.

ARTICLE TWENTY FIVE (25) DURATION

Except as herein provided, this Agreement shall be in effect commencing January 1, ~~2019~~ 2021 and shall remain in full force and effect through and including December 31, ~~2020~~2021, and thereafter until modified or amended by mutual agreement of the parties.

IN WITNESS WHEREOF, The parties hereto have executed this Agreement on this _____ day of _____ ~~2018~~ 2021; per resolution #_____.

FOR THE CITY OF RAMSEY:

BY: _____ _____
Mayor Date

ATTEST: _____ _____
City Administrator Date

FOR LAW ENFORCEMENT LABOR SERVICES, INC.

BY: _____ _____
Nicholas Dahlberg, Steward Date

BY: _____ _____
Adam Burnside, LELS Date

ARTICLE TWENTY THREE (23) SALARIES--EXHIBIT "A" SALARY SCHEDULE

~~2019 Wages~~

~~As a result of a Cost of Living Adjustment, wages will increase by 2.75% over the 2018 wage scale.~~

- ~~The following salaries are calculated for January 1, 2019 through December 31, 2019, adding 2.75% to December 31, 2018 wages.~~

~~January 1 to December 31, 2019 Wages~~

		~~Hourly~~	~~Annual~~
~~First Year~~	~~70% of Top Patrol~~	~~$26.522~~	~~$55,166~~
~~Second Year~~	~~80% of Top Patrol~~	~~$30.311~~	~~$63,047~~
~~Third Year~~	~~90% of Top Patrol~~	~~$34.100~~	~~$70,928~~
~~Fourth Year~~	~~95% of Top Patrol~~	~~$35.995~~	~~$74,869~~
~~Top Patrol~~	~~100% of Top Patrol~~	~~$37.889~~	~~$78,809~~

~~Pro-pay per the terms in Article 20:~~

~~After 5 years of service / 2% Over Top Patrol~~	~~$38.647~~	~~$80,385~~
~~After 8 years of service / 4% Over Top Patrol~~	~~$39.405~~	~~$81,962~~
~~After 12 years of service / 6% Over Top Patrol~~	~~$40.162~~	~~$83,538~~
~~After 16 years of service / 8% Over Top Patrol~~	~~$40.920~~	~~$85,114~~

2021Wages

- As a result of a Cost of Living Adjustment of, 2.75% and a wage adjustment of 1%, wages will increase by 3% 3.75% over the 2019 2020 wage scale. The following salaries are calculated for January 1, 20202021 through December 31, 20202021, adding 3% 3.75% to December 31, 2019 2020 wages, effective on January 1, 2020 2021.

January 1 to December 31, 2020 2021Wages

		Hourly	Monthly	Annually
First Year	70% of Top Patrol	$27.318 $28.350	$4,914	$56,821 $58,968
Second Year	80% of Top Patrol	$31.221 $32.400	$5,616	$64,939 $67,391
Third Year	90% of Top Patrol	$35.123 $36.450	$6,318	$73,056 $75,815
Fourth Year	95% of Top Patrol	$37.074 $38.475	$6,669	$77,115 $80,027
Top Patrol	**100% of Top Patrol**	$39.026 $40.500	$7,020	$81,173 $84,239

Pro-pay per the terms in Article 20:

After 5 years of service / 2% Over Top Patrol	$39.806 $41.310	$7,160	$82,797 $85,924
After 8 years of service / 4% Over Top Patrol	$40.587 $42.120	$7,301	$84,420 $87,609
After 12 years of service / 6% Over Top Patrol	$41.367 $42.930	$7,441	$86,044 $89,294
After 16 years of service / 8% Over Top Patrol	$42.148 $43.740	$7,582	$87,667 $90,978

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MEMORANDUM OF UNDERSTANDING

BETWEEN THE CITY OF RAMSEY
AND
LAW ENFORCEMENT LABOR SERVICES - PATROL

ARTICLE SEVENTEEN (17) M.O.U. HOLIDAYS

For ~~2019 and 2020~~2021 only, the following changes apply to Article 17, Section and 17.4 of the 2017/2018 LELS Patrol Labor Agreement:

Section 17.4 Each employee shall have the option to sell a maximum of 54 of his/her holiday hours back to the employer at his/her current rate of pay. This holiday buy back option may be taken during two times annually: January 1 through January 15, and November 1 through November 15. In any event, no holiday hours shall carry over to the next year.

All other provisions of Article Seventeen (17) shall apply normally.

This Memorandum of Understanding will sunset on December 31, ~~2020~~2021

FOR THE CITY OF RAMSEY:

BY: _____ _____
Mayor Date

ATTEST: _____ _____
City Administrator Date

FOR LAW ENFORCEMENT LABOR SERVICES, INC.

BY: _____ _____
Nicholas Dahlberg, Steward Date

BY: _____ _____
Adam Burnside, Business Agent Date

MEMORANDUM OF UNDERSTANDING

BETWEEN THE CITY OF RAMSEY
AND
LAW ENFORCEMENT LABOR SERVICES - PATROL

ARTICLE NOT ASSIGNED M.O.U. POST EMPLOYMENT HCSP

January 1, ~~2019~~ 2021to December 31, ~~2020~~ 2021as described below:

This Memorandum of Understanding is made between the City of Ramsey ("City") and Law Enforcement Labor Services ("Union.")

WHEREAS, the City and the Union are parties to a ~~2019-2020~~ 2020 collective bargaining agreement; and

WHEREAS, Law Enforcement Labor Services Patrol Union employees are eligible to participate in the Minnesota Post Employment Health Care Savings Plan (HCSP) established under Minnesota Statues, section 352.98 (Minn. Supp. 2001) and as outlined in the Minnesota State Retirement System's Trust and Plan Documents; and

WHEREAS, all funds collected by the employer (City of Ramsey) on the behalf of the employee will be deposited into the employee's post-employment health care savings plan account; and

WHEREAS, all LELS-Patrol Officers have agreed to contribute an ongoing percent of pay and shall contribute 2% of gross pay; and

WHEREAS, employees will be responsible for the administrative fees.

THEREFORE, the parties met, negotiated and agreed upon the following:

Effective January 1, ~~2019~~ 2021– December 31, ~~2020~~ 2021 Law Enforcement Labor Services Patrol Union employees are eligible to participate in the Minnesota Post Employment Health Care Savings Plan (HCSP) established under Minnesota Statues, section 352.98 (Minn. Supp. 2001) and as outlined in the Minnesota State Retirement System's Trust and Plan Documents. All funds collected by the employer (City of Ramsey) on the behalf of the employee will be deposited into the employee's post-employment health care savings plan account. All related fees will be paid by the employees. Employees have agreed to contribute an ongoing percent of pay as described below:

All employees shall contribute 2% of pay.

This Memorandum of Understanding sunsets on December 31, ~~2020~~2021.

FOR THE CITY OF RAMSEY:

BY:

_____ _____

Mayor Date

ATTEST:

_____ _____

City Administrator Date

FOR LAW ENFORCEMENT LABOR SERVICES, INC.

BY: _____ _____

Nick Dahlberg, Steward Date

BY: _____ _____

Adam Burnside, Business Agent Date

MEMORANDUM OF UNDERSTANDING

BETWEEN THE CITY OF RAMSEY
AND
LAW ENFORCEMENT LABOR SERVICES - PATROL

ARTICLE NINETEEN (19) M.O.U. INSURANCE

January 1, ~~2019~~ 2021 to December 31, ~~2020~~ 2021 as described below:

~~1) City total monthly contributions for 2019 health insurance, as follows:~~

~~The employer will make the following contributions toward group health insurance coverage for employees enrolled in the City's health plan during 2019. In addition, the City will purchase $20,000 of basic life insurance for full-time regular employees.~~

~~The City's monthly contribution to health insurance in 2019, including the contribution to the health insurance premium and the H.R.A./V.E.B.A. or H.S.A. (total city contribution per month) are listed below.~~

~~Total Monthly City Contributions~~

- ~~Employee only (single) City contribution from: $789.00 to $858.00~~
- ~~Employee and Children City contribution: $1,033.60~~
- ~~Employee and Spouse City contribution: $1,077.40~~
- ~~Family City contribution: $1,327.80~~

~~Total monthly city contributions listed above include the H.R.A./V.E.B.A. or H.S.A. shown below, as follows:~~

- ~~Single plans with a $4000 deductible receive $194.00 per month toward the H.R.A./V.E.B.A. or H.S.A.~~
- ~~Other single plans receive $130.00 per month toward the H.R.A./V.E.B.A. or H.S.A.~~
- ~~All employee + children and employee + spouse plans will receive $160.00 per month toward the H.R.A./V.E.B.A. or H.S.A.~~
- ~~All family plans will receive $192.00 per month toward the H.R.A./V.E.B.A. or H.S.A.~~

~~Or~~

~~Provide cash in lieu of City's insurance contribution of $370 per month in 2019. Employees receiving the waiving benefit prior to 2013 will continue to be grandfathered in to the waiving benefit. Other employees to the program are subject to the following terms: Employee must show proof of other coverage and agrees to the terms of the waiving benefit as described within the City's policy, signing the acknowledgement form~~

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~~2) City total monthly contributions for 2020 health insurance, as follows:~~

~~A. 2020 Premium Contributions Based on Existing Insurance Premiums~~

~~The employer will make the following contributions toward group health insurance coverage for employees enrolled in the City's health plan during 2020. In addition, the City will purchase $20,000 of basic life insurance for full-time regular employees.~~

~~The City's monthly contribution to health insurance in 2020, including the contribution to the health insurance premium and the H.R.A./V.E.B.A. or H.S.A. (total city contribution per month) are listed below.~~

~~Total Monthly City Contributions~~

- ~~Employee only (single) City contribution from: $861.49 to $938.08~~
- ~~Employee and Children City contributions: $1,129.70~~
- ~~Employee and Spouse City contribution: $1,178.31~~
- ~~Family City contribution: $1,452.74~~

~~Total monthly city contributions listed above include the H.R.A./V.E.B.A. or H.S.A. shown below, as follows:~~

- ~~Single plans with a $4000 deductible receive $194.00 per month toward the H.R.A./V.E.B.A. or H.S.A.~~
- ~~Other single plans receive $130.00 per month toward the H.R.A./V.E.B.A. or H.S.A.~~
- ~~All employee + children and employee + spouse plans will receive $160.00 per month toward the H.R.A./V.E.B.A. or H.S.A.~~
- ~~All family plans will receive $192.00 per month toward the H.R.A./V.E.B.A. or H.S.A.~~

~~Or~~

~~Provide cash in lieu of City's insurance contribution of $370 per month in 2020. Employees receiving the waiving benefit prior to 2013 will continue to be grandfathered in to the waiving benefit. Other employees to the program are subject to the following terms: Employee must show proof of other coverage and agrees to the terms of the waiving benefit as described within the City's policy, signing the acknowledgement form~~

~~B. 2020 Premium Contributions If There is a Change in Total Premium Cost Due to Change in Insurance Band or Affordable Care Act Premium Taxes~~

~~The parties understand and agree that the Total Monthly City Contributions described in Paragraph A, above, are based on the currently anticipated total cost of the premiums for the City's $2,500 Perform Network insurance program ("Perform Network"). In the event that there are changes to the Perform Network premiums for 2020 due to either: (1) a reduction in premiums; or (2) an increase in premiums due to the imposition of premium taxes under the Affordable Care Act, the Total Monthly City Contribution will be adjusted as follows:~~

~~1. Reduction in Premium Due to Change in Insurance Band~~

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If the total premium cost of the Perform Network decreases in 2020 due to the City being rated in a different insurance band or classification, the Total Monthly City Contribution described in Paragraph A, above, will be adjusted as follows:

- Employee only (single): The City will contribute the total cost of the Perform Network premium, not to exceed the amount described in Paragraph A.
- Employee and Children: The City's contribution will be reduced to 60% of the cost of the Perform Network premium.
- Employee and Spouse: The City's contribution will be reduced to 60% of the cost of the Perform Network premium.
- Family: The City's contribution will be reduced to 60% of the cost of the Perform Network premium.

2. Increase in Premium Due to Imposition of Taxes Under the Affordable Care Act

If the total premium cost of the Perform Network increases in 2020 due to the imposition of taxes under the Affordable Care Act, the Total Monthly City Contribution described in Paragraph A, above, will be adjusted as follows:

- Employee only (single): The City will contribute the amount described in Paragraph A, plus the total increase in the premium cost for single coverage under the Perform Network due to the imposition of taxes under the Affordable Care Act.
- Employee and Children: The City will contribute the amount described in Paragraph A, plus 60% of the increase in the premium cost for Employee and Children coverage under the Perform Network due to the imposition of taxes under the Affordable Care Act.
- Employee and Spouse: The City will contribute the amount described in Paragraph A, plus 60% of the increase in the premium cost for Employee and Spouse coverage under the Perform Network due to the imposition of taxes under the Affordable Care Act.
- Family: The City will contribute the amount described in Paragraph A, plus 60% of the increase in the premium cost for Family coverage under the Perform Network due to the imposition of taxes under the Affordable Care Act.

3. Application of Paragraphs 1 and 2. In 2020, if the total premium cost for the Perform Network is decreased due to the City being classified in a more favorable band or classification, and the total premium cost is impacted by the imposition of taxes under the Affordable Care Act, the Total Monthly City Contribution, as described in Paragraph A, will be adjusted as follows:

- Employee only (single): The City will contribute the total cost of the Perform Network premium, including the amount of any increase in that premium due to the imposition of taxes under the Affordable Care Act. Employees electing an Employee only (single) plan priced less than the Perform Network plan will receive a City contribution to the

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~~premium equal to the elected plan premium.~~

- ~~Employee and Children: The City's contribution will be reduced to 60% of the cost of the Perform Network premium, including the amount of any increase in that premium due to the imposition of taxes under the Affordable Care Act.~~

- ~~Employee and Spouse: The City's contribution will be reduced to 60% of the cost of the Perform Network premium, including the amount of any increase in that premium due to the imposition of taxes under the Affordable Care Act.~~

- ~~Family: The City's contribution will be reduced to 60% of the cost of the Perform Network premium, including the amount of any increase in that premium due to the imposition of taxes under the Affordable Care Act.~~

The City will make the following contributions toward group health insurance coverage for employees working 30 hours per week or more; as well as to purchase $20,000 of basic life insurance for full-time regular employees working 30 hours per week.

a. 2021 monthly health insurance contributions, including the health reimbursement or health savings account contributions as follows: Employee Only (Single) $942.00 to $1,034.50, Employee and Children at $1,246.00, Employee and Spouse at $1,300.30, and Family at $1,603.80; and

b. 2021 City payment toward the Waiver/Credit in lieu of Coverage will remain at $370.00 per month.

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FOR THE CITY OF RAMSEY:

BY:

_____ _____

Mayor Date

ATTEST:

_____ _____

City Administrator Date

FOR LELS - PATROL

BY:

_____ _____

Nicholas Dahlberg, Steward Date

BY:

_____ _____

Adam Burnside, Business Agent Date

LABOR AGREEMENT BETWEEN

CITY OF RAMSEY AND

LAW ENFORCEMENT LABOR SERVICES, INC.

LOCAL 313: LICENSED SERGEANTS

January 1, ~~2019~~ 2021 – December 31, ~~2020~~2021

Prepared by Colleen Lasher, Administrative Services Director

DRAFT

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ARTICLE 1: PURPOSE OF AGREEMENT

THIS AGREEMENT is entered into between the CITY OF RAMSEY, hereinafter called the Employer, and LAW ENFORCEMENT LABOR SERVICES, INC., hereinafter called LELS.

It is the intent and purpose of this Agreement to:

1.1 Assure sound and mutually beneficial working and economic relationships between the parties hereto;

1.2 Establish procedures for the resolution of disputes concerning this Agreement's interpretation and/or application; and

1.3 Place in written form the parties' agreement upon terms and conditions of employment for the duration of this Agreement.

The Employer and LELS, through this Agreement, shall continue their dedication to the highest quality of police service and protection to the residents of the City of Ramsey. Both parties recognize this Agreement as a pledge of this dedication.

ARTICLE 2: RECOGNITION

2.1 The Employer recognizes LELS as the exclusive representative for "All essential licensed Sergeants employed by the City of Ramsey Police Department, Ramsey, Minnesota, who are public employees within the meaning of Minn. Stat. 179A.03, subd. 14, excluding confidential and all other employees.

2.2 In the event the Employer and LELS are unable to agree as to the inclusion or exclusion of a new or modified job class, the issue shall be submitted to the Bureau of Mediation Services for determination.

ARTICLE 3: DEFINITIONS

3.1 LELS. Law Enforcement Labor Services, Inc.

3.2 LELS Member. A member of Law Enforcement Labor Services, Inc

3.3 Employee. A member of the exclusively recognized bargaining unit.

3.4 Department. The Ramsey Police Department.

3.5 Employer. The City of Ramsey.

3.6 Chief. The Chief of the Ramsey Police Department.

3.7 LELS Officer. Officer elected or appointed by Law Enforcement Labor Services, Inc.

3.8 Overtime. Work performed at the express authorization of the Employer in excess of the employee's scheduled shift.

3.9 Scheduled Shift. A consecutive work period including two rest breaks and a lunch break.

3.10 Rest Breaks. Two periods during the Scheduled Shift during which the employee remains on continual duty and is responsible for assigned duties.

3.11 Lunch Break. A period during the Scheduled Shift during which the employee remains on continual duty and is responsible for assigned duties.

3.12 Strike. Concerted Action in failing to report for duty, the willful absence from one's position, the stoppage of work, slowdown or abstinence in whole or in part from the full, faithful and proper performance of the duties of employment for the purpose of inducing, influencing or coercing a change in the conditions of compensation or the rights, privileges or obligations of employment.

ARTICLE 4: EMPLOYER AUTHORITY

4.1 Employer retains the full and unrestricted right to operate and manage all staff, facilities and equipment; to establish functions and programs; to set and amend budgets; to determine the utilization of technology; to establish and modify the organizational structure; to select, direct and determine the number of personnel; to establish work schedules and to perform any inherent managerial function not specifically limited by this Agreement.

4.2 Any term condition of employment not specifically established or modified by this Agreement shall remain solely within the discretion of the Employer to modify, establish or eliminate.

ARTICLE 5: UNION SECURITY

5.1 The Employer shall deduct from the wages of employees who authorize such a deduction in writing an amount necessary to cover monthly LELS dues. Such monies shall be remitted as directed by LELS.

5.2 LELS may designate employees from the bargaining unit to act as a representative and an alternate and shall inform the Employer in writing of such choice and changes in the position of representative and/or alternate.

5.3 The Employer shall make space available on the employee bulletin board for posting LELS notice(s) and announcement(s).

5.4 LELS agrees to indemnify and hold the Employer harmless against any and all claims, suits orders or judgments brought or issued against the Employer as a result of any action taken or not taken by the Employer under the provision of this ARTICLE.

ARTICLE 6: EMPLOYEE RIGHTS – GRIEVANCE PROCEDURE

6.1 Definition of a Grievance. A grievance is defined as a dispute or disagreement as to the interpretation or application of the specific terms and conditions of this Agreement.

6.2 LELS Representatives. The Employer will recognize Representatives designated by LELS as the grievance representatives of the bargaining unit having the duties and responsibilities established by this ARTICLE. LELS shall notify the Employer in writing of the names of such LELS Representatives and of their successors when so designated as provided by Article 5.2 of this Agreement.

6.3 Processing of a Grievance. It is recognized and accepted by LELS and the Employer that the processing of grievances as hereinafter provided is limited by the job duties and responsibilities of the Employees and shall, therefore, be accomplished during normal working hours only when consistent with such Employee duties and responsibilities. The aggrieved Employee and a LELS Representative shall be allowed a reasonable amount of time without loss of pay when a grievance is investigated and presented to the Employer during normal working hours, provided that the Employee and the LELS representative have notified and received the approval of the designated supervisor who has determined that such absence is reasonable and would not be detrimental to the work programs of the Employer.

6.4 Procedure. Grievances, as defined by Article 6.1, shall be resolved in conformance with the following procedure:

Step 1. An Employee claiming a violation concerning the interpretation or application of the Agreement shall, within twenty-one (21) calendar days after such alleged violation has occurred, present such grievance to the Employee's direct supervisor as designated by the Employer. The Employer designated representative will discuss and give an answer to such Step 1 grievance within ten (10) calendar days after receipt. A grievance not resolved in Step 1 and appealed to Step 2 shall be placed in writing setting forth the nature of the grievance, the facts on which it is based, the provision or provisions of the Agreement allegedly violated, the remedy requested and shall be appealed to Step 2 within ten (10) calendar days after the Employer designated representative's final answer in Step 1. Any grievance not appealed in writing to Step 2 by LELS within ten (10) calendar days shall be considered waived.

Step 2. If appealed, the written grievance shall be presented by LELS and discussed with the Chief of Police, who is the designated Step 2 representative. The Employer designated representative shall give LELS the Employer's Step 2 answer in writing within ten (10) calendar days after receipt of such Step 2 grievance. A grievance not resolved in Step 2 may be appealed to Step 3 within ten (10) calendar

days following the Employer designated representative's final Step 2 answer. Any grievance not appealed in writing to Step 3 by LELS within ten (10) calendar days shall be considered waived.

Step 3. If appealed, the written grievance shall be presented by LELS and discussed with the Ramsey City Administrator who is the Employer's designated Step 3 representative. The Employer designated representative shall give LELS the Employer's answer in writing within ten (10) calendar days after receipt of such Step 3 grievance. A grievance not resolved in Step 3 may be appealed to Step 4 within ten (10) calendar days following the Employer designated representative's final answer in Step 3. Any grievance not appealed in writing to Step 4 by LELS within ten (10) calendar days shall be considered waived

Step 3A. A grievance unresolved in Step 2 and appealed to Step 3 by LELS may be submitted to mediation subject to Public Employees Labor Relations Act (PELRA).

Step 4. A grievance unresolved in Step 3 or 3A and appealed to Step 4 by LELS shall be submitted to arbitration subject to the provisions of the Public Employment Labor Relations Act of 1971, as amended. The selection of an arbitrator shall be made in accordance with the "Rules Governing the Arbitration of Grievances" as established by state law.

6.5 Arbitrator's Authority

A. The arbitrator shall have no right to amend, modify, nullify, ignore, add to or subtract from the terms and conditions of this Agreement. The arbitrator shall consider and decide only the specific issue(s) submitted in writing by the Employer and LELS, and shall have no authority to make a decision on any other issue not so submitted.

B. The arbitrator shall be without power to make decisions contrary to or inconsistent with or modifying or varying in any way the application of laws, rules or regulations having the force and effect of law. The arbitrator's decision shall be submitted in writing within thirty (30) days following the close of the hearing or the submission of briefs by the parties, whichever be later, unless the parties agree to an extension. The decision shall be binding on both the Employer and LELS and shall be based solely on the arbitrator's interpretation or application of the express terms of this Agreement and to the facts of the grievance presented.

C. The fees and expenses for the arbitrator's services and proceedings shall be borne equally by the Employer and LELS provided that each party shall be responsible for compensating its own representatives and witnesses. If either party desires a verbatim record of the proceedings, it may cause such a record to be made providing it pays for the record. If both parties desire a verbatim record of the proceedings, the cost shall be shared equally.

6.6 Waiver. If a grievance is not presented within the time limits set forth above, it shall be considered "waived". If a grievance is not appealed to the next step within the specified time limit or any agree extension thereof, it shall be considered settled on the basis of the Employer's last answer. If the Employer does not answer a grievance or an appeal thereof within the specified time limits, LELS may elect to treat the grievance as denied at that step and immediately appeal the grievance to the next step. The time limit in each step may be extended by mutual written agreement of the Employer and LELS in each step.

6.7 Choice of Remedy. If, as a result of the written Employer response in Step 3, the grievance remains unresolved and if the grievance involves the suspension, demotion or discharge of any employee who has completed the required probationary period, the grievance may be appealed either by step 4 of ARTICLE 6 or a procedure such as: Veteran's Preference or Fair Employment. If appealed to any procedure other than Step 4 of ARTICLE 6, the grievance is not subject to the arbitration procedure as provided in Step 4 of ARTICLE 6. The aggrieved employee shall indicate in writing which procedure is to be utilized – Step 4 of ARTICLE 6 or another appeal procedure – and shall sign a statement to the effect that the choice of any other hearing precludes the aggrieved employee from making a subsequent appeal through step 4 of ARTICLE 6.

ARTICLE 7: SENIORITY

7.1 Seniority shall be determined by the Employee's time in grade and may be posted in an appropriate location. Seniority rosters shall be maintained by the Chief on the basis of time in grade and time within specific classifications.

7.2 During the one year probationary period, a newly hired or rehired Employee may be discharged at the sole discretion of the Employer. During the six month probationary period, a promoted or reassigned Employee may be replaced in the employee's previous position at the sole discretion of the Employer.

7.3 A reduction of work force will be accomplished on the basis of seniority. Employees shall be recalled from layoff on the basis of seniority. An Employee on layoff shall have an opportunity to return to work within two (2) years of the time of the employee's layoff before any new Employee is hired.

7.4 Annual leave shall be selected according to the following procedure:

Employees shall submit first and second choices for continuous vacation periods by March 1 of each year. By April 1 the City shall approve Employee's first and second choices based on seniority. Senior Employees shall have preference over junior Employees for their first choice. Then, senior Employees shall have preference in their second choice. In no event shall senior Employee's second choice supersede the first choice of junior Employees unless the senior Employees' first choice was not granted. Senior employees shall have preference for shift bid at the start of each calendar year.

Holidays, when approved, shall be selected on the basis of seniority up until (10) days prior to the requested day off. Thereafter, holidays when approved, will be granted on a first-come first-served basis.

ARTICLE 8: DISCIPLINE

8.1 The Employer will discipline Employees for just cause only. Discipline will be in one or more of the following forms:

a) Oral reprimand;
b) Written reprimand;
c) Suspension;
d) Demotion; or
e) Discharge

8.2 Suspensions, demotions and discharges will be in written form.

8.3 Written reprimands, notices of suspension and notices of discharge which are to become part of an Employee's personnel file shall be read and acknowledge by signature of the Employee. Employees and LELS shall receive a copy of such reprimands and/or notices.

8.4 Employees may examine their own individual personnel files at reasonable times under the direct supervision of the Employer.

8.5 A five (5) day (regularly scheduled consecutive work days) suspension, without pay, will precede any discharge order, except for those employees who are defined as Veterans pursuant to Minnesota Statutes Annotated 197.46.

8.6 An Employee will not be questioned concerning an investigation of disciplinary action against that Employee unless said Employee has been given an opportunity to have an LELS representative present at such questioning.

8.7 Grievances relating to this ARTICLE shall be initiated by LELS in Step 3 of the grievance procedure under ARTICLE 6.

ARTICLE 9: WORK SCHEDULES

9.1 The normal work year for full-time Employees shall consist of the number of Monday through Friday days in each calendar year multiplied by eight (8) hours. These hours are to be accounted for by each Employee through:

a) Scheduled hours of work;
b) Scheduled department meetings;
c) Holidays;
d) Authorized training;

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e) Authorized leave time; and
f) Authorized compensatory time off

9.2 Nothing contained in this or any other ARTICLE shall be interpreted to be a guarantee of a minimum or maximum number of hours the Employer may assign Employees.

9.3 Employees are scheduled to work over 2080 hours during the year. Because of this, the employee will earn "Kelly Time" at the rate of 4 hours per pay period. Employees will not be allowed to take any time off that they have not yet earned, other than the last pay period of the year. Employees will be able to bank up to a total of 48 hours. Employees are expected to manage their own time off and be responsible for not going over the cap.

All accrued Kelly Time and projected earned Kelly Time, will need to be entered on the duty Schedule by December 1st or it will be assigned by Ramsey Police Administration

ARTICLE 10: OVERTIME

10.1 Employees will be compensated at one and one-half (1 ½) times the Employee's regular base pay rate for hours worked in excess of the Employee's regularly scheduled shift. Changes of shifts do not qualify an Employee for overtime under this ARTICLE.

10.2 Overtime will be distributed as equally as practicable.

10.3 Overtime offered and refused by Employees will, for record purposes under ARTICLE 10.2, be considered as unpaid overtime worked.

10.4 For the purpose of computing overtime compensation, overtime hours worked shall not be pyramided, compounded or paid twice for the same hours worked.

10.5 Overtime will be calculated to the nearest fifteen (15) minutes.

10.6 Employees have the obligation to work overtime or call backs if requested by the Employer unless unusual circumstances prevent the Employees from so working.

10.7 Employees will be compensated at one and one-half (1 ½) times the Employee's regular base pay rate for working beyond their regular shift.

10.8 For the purposes of calculating overtime, an EMPLOYEE using paid holidays, vacation leave, sick leave, or compensatory time off is considered to be working.

10.9 Employees may elect to take compensatory time off in lieu of receiving overtime compensation except for the following: 1) Court time will be paid as overtime, 2) Hold-overs will be paid as overtime, 3) Early shift starts over two hours to cover the

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schedule will be paid as overtime (two hours and under may be taken as compensatory time off or overtime) 4) Scheduled overtime will be paid as overtime.

Compensatory time off is computed at one and one-half (1 ½) times the time worked. Accrued and banked compensatory time off shall not exceed 36 hours at any time and employees may not earn more than 60 hours of compensatory time off annually.

Compensatory time off may only be used with prior approval from the employee's department head. Upon separation from employment, accrued and unused compensatory time off will be paid to the employee at the then current rate. Compensatory time off will be approved pending scheduling. Payback time must be satisfied before compensatory time off will be approved.

10.10 For the purpose of computing overtime compensation and/or compensatory time off, Employees who are scheduled and attend training on a scheduled day off and the training is less than six hours, the Employee will earn compensatory time off or overtime.

10.11 Employees who are scheduled and attend training on a scheduled day off and the training is six hours or more, the Employee will earn "Training time off" at straight time (hour for hour). Training time off must be used by the end of the calendar year.

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ARTICLE 11: COURT TIME

11.1 An Employee who is required to appear in Court during their scheduled off-duty time shall receive a minimum of three (3) hours pay at one and one-half (1½) times the Employee's base pay rate. An extension or early report to a regularly scheduled shift for Court appearance does not qualify the Employee for the three (3) hour minimum.

11.2 An Employee who is required to appear in court within twelve (12) hours of the end of a scheduled shift and within twelve (12) hours to the start of a scheduled shift shall receive a minimum of three (3) hours pay at two (2) times the Employees base pay rate.

ARTICLE 12: STANDBY TIME

12.1 If the Employer requires an Employee to standby, the Employee shall receive one hundred dollars ($ 100.00) pay. If the Employee is called into court after being on standby, he or she will forfeit the standby pay and shall receive the three (3) hour minimum court overtime payment instead. The Employer shall notify any Employee on standby when said Employee is no longer on such duty status.

ARTICLE 13: CALL BACK TIME

13.1 An Employee who is called to duty during their scheduled off-duty time shall receive a minimum of ~~two (2)~~ three (3) hours pay at one and one-half (1 ½) times the Employee's base pay rate. An extension or early report to a regularly scheduled shift for duty does not qualify the Employee for the ~~two (2)~~ three (3) hour minimum.

ARTICLE 14: VACATION

14.1 Every regular Employee having less than six (6) years consecutive full-time service shall earn vacation leave at the rate of 5/6ths of a working day for each calendar month of full-time service. Each regular Employee with at least six (6), but less than twelve (12), consecutive years of full-time service shall earn vacation leave at the rate of 1.25 working days for each calendar month of full-time service. Each regular Employee with at least twelve (12), but less than seventeen (17), years of consecutive full-time service shall earn vacation leave at the rate of 1.666 working days for each calendar month of full-time service. After sixteen years of service, each regular Employee will receive one additional day of vacation each year in excess of sixteen (16) years of service, to a maximum of 25 days per year.

For the purpose of accumulating additional vacation, an Employee using paid holidays, earned vacation leave or sick leave is considered to be working.

14.2 An Employee's accrued or "banked" vacation leave must be equal to or less than two times the yearly accrual by December 31st of each year; any accruals exceeding this amount will be forfeited.

14.3 Vacation leave may be used as earned subject to approval by the department head at the time at which it may be taken.

14.4 Any Employee leaving the municipal service in good standing after giving proper notice of such termination of employment shall be compensated for vacation leave accrued and unused to the date of separation.

ARTICLE 15: SICK LEAVE

15.1 Every probationary and regular Employee is entitled to sick leave with pay at the rate of 1 day for each calendar month of full-time service or major fraction thereof. Sick leave may be accumulated to a maximum of 960 hours and may be granted in units of not less than 2 hours. Unused sick leave in excess of 960 hours at the end of a calendar year (January 1st) shall be converted to vacation at a rate of one hour vacation for each two hours of sick leave in excess of 960 hours.

15.2 Sick leave may be granted by the Employee's Department Head when the Employee is unable to perform work duties due to illness, disability, the necessity for medical, dental

or chiropractic care, childbirth or exposure to contagious disease where such exposure may endanger the health of others with whom the Employee could come in contact in the course of performing work duties. Sick leave may also be authorized when the Employee's presence is necessary, for actual illness, injury, legal quarantine or medical treatment in the Employee's immediate family. Immediate family, for the purposes if this Article, shall be defines as spouse, parent, step parent, children, step children, brother, sister, grandparents, grandchildren or a like member of the Employee's spouse's family. The employee shall, when taking sick leave, make sure that the department duty schedule is adjusted as to maintain the department's minimal coverage requirements during the time the Employee is on sick leave.

15.3 Employees are allowed funeral leave up to 24 hours twice annually per occurrence (a maximum of 48 hours annually) for a death in the immediate family as defined under Article 15.2. That time is not chargeable against any accrued vacation, sick or compensatory time. Hours must be taken within five (5) calendar days from start to finish per occurrence. Additional funeral leave may be taken (with prior approval from a supervisor) and is deductible from sick leave (up to three (3) consecutive days), vacation or compensatory time as the EMPLOYEE may choose and have available.

15.4 To be eligible for sick leave with pay, an Employee shall:

1) report as soon as possible to the employee's immediate supervisor the reason for the absence;
2) keep the employee's immediate supervisor informed of such employee's condition;
3) for any absence that exceeds three (3) consecutive days, upon the employee's return to work, submit a medical certificate from a physician 1) when the nature of the illness warranted being seen by a health care professional or 2) at a minimum, the employee must submit his or her own written documentation with a brief explanation of the nature of the absences;
4) if requested by the City Administrator or the Chief of Police, submit a medical certificate from a physician for absence.

15.5 Using or claiming sick leave for a purpose not authorized by Article 15.2 shall be cause for disciplinary action.

15.6 For the purpose of accumulating additional sick leave, an Employee using paid holidays, earned vacation leave or sick leave is considered to be working.

15.7 EMPLOYEES shall receive a lump sum payment upon termination of employment with the EMPLOYER based upon thirty-three percent (33%) of said EMPLOYEE'S unused accumulated sick leave after five (5) years of continuous employment. Severance pay shall not be available in any sum to an EMPLOYEE if that EMPLOYEE is discharged for just cause; severance pay shall not be paid if an EMPLOYEE voluntarily terminates his or her employment prior to five (5) years of continuous employment service; or the EMPLOYEE voluntarily terminates his or her employment

without giving the EMPLOYER fourteen (14) days written notice. After fifteen (15) years of continuous employment service, the EMPLOYEE will receive thirty-five percent (35%) of said EMPLOYEE'S unused, accumulated sick leave. After twenty (20) years of continuous employment service, the EMPLOYEE will receive thirty-seven percent (37%) of unused, accumulated sick leave. After twenty-five (25) years of continuous employment service the EMPLOYEE will receive forty percent (40%) of said EMPLOYEE'S unused, accumulated sick leave.

ARTICLE 16: INJURY ON DUTY (IOD)

16.1 Employees injured during the performance of their duties for the EMPLOYER and thereby rendered unable to work for the EMPLOYER will be paid the difference between the Employee's regular pay and Worker's Compensation insurance payments for a period not to exceed ninety (90) working days per injury, not charged to the Employee's vacation, sick leave or other accumulated paid benefits, after a three (3) working day initial waiting period per injury. The three (3) working day waiting period shall be charged to the employee's sick leave account less Worker's Compensation insurance payments. In the event that the three (3) day working waiting period is waived by the Worker's Compensation carrier, IOD pay will begin immediately. Employees drawing Worker's Compensation benefits will not receive supplementary IOD pay or sick leave pay, which provides for more after-tax pay than the Employee made while working.

ARTICLE 17: HOLIDAYS

17.1 Employees will receive or be given credit in the work schedule for ninety-six (96) holiday hours per year; including the holidays listed in 17.3, plus a Floating Holiday.

17.2 Employees may take holiday time only when the duty schedule allows for the time off while maintaining the department minimum staffing levels for the time the Employee takes the holiday.

17.3 Employees required to work on any of the holidays of:

New Year's Day
Martin Luther King's Day
President's Day
Memorial Day
Independence Day (4th of July)
Labor Day
Columbus Day
Veteran's Day
Thanksgiving Day
Christmas Eve Day
Christmas Day

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shall receive an additional ½ time for the time they work on such holiday. All holidays specified in this paragraph will be paid in dollars, rather than time accumulation. An employee who is required to work overtime on a holiday shall receive pay at two (2) times the EMPLOYEES base pay for that time worked in addition to their regular shift.

17.4 Each Employee shall have the option to sell up to a maximum of forty (40) of the Employee's holiday hours back to the employer at the Employee's current rate of pay. This holiday buy back option may be taken during two time periods annually: January 1 through January 15, and November 1 through November 15. In any event, no holiday hours shall carry over to the next year.

17.5 Employees shall receive credit for 96 holiday hours at the beginning of each year. The City will buy back holiday hours in January and November of each year.

Employees who leave employment prior to December 31st will only be paid for unused holiday hours from holidays that occurred prior to the termination date.

Employees who use holiday hours or receive compensation for holiday hours before the holiday occurs and leave employment prior to December 31st, must pay the City back holiday hours for any holiday that has not occurred prior to the termination date. Funds owed to the City must be paid prior to ending the employment relationship.

ARTICLE 18: FITNESS-ON-DUTY

18.1 The purpose of this Article is to give each Officer the option to exercise while on duty. This is a voluntary Fitness-on-Duty program which provides an opportunity for employees engaged in stressful and somewhat sedentary jobs an opportunity to: 1) Improve job performance, 2) Reduce health risks, 3) Reduce job-related injuries, 4) Reduce absenteeism, and 5) Improve overall fitness.

18.2 This program is subject to the following terms and conditions: The employee will be given the option to work out- one hour per shift. The average should not exceed- six hours of workout time over -two weeks. This option is available if allowed by shift's minimums set forth by the Chief of Police and call load. The workout time will consist of -thirty minutes of the employee's daily break time and up to -thirty minutes of regular duty time.

18.3 Employees will earn one hour of "training time off" for each fitness testing event the Employee scores in the "excellent" range or above based on the Employee's age level category as determined by the Cooper Institute chart. Earned training time off will not exceed twelve hours per calendar year.

18.4 Any employee participating in the program will partake in semi-annual fitness testing. The standards for testing will be set by the fitness coordinator and approved by the Chief of Police. All participants will adhere to the department Physical Fitness Program policy and testing standards.

ARTICLE 19: INSURANCE

19.1 The EMPLOYER shall contribute to EMPLOYEE health and life insurance as stated in the attached Memorandum of Understanding.

19.2 The EMPLOYER, effective January 1, 2018, agrees to contribute the dollar value equivalent to the cost of the monthly employee only dental premium as established by the EMPLOYER. Credit in lieu of coverage will not be granted.

ARTICLE 20: CLOTHING AND UNIFORMS

20.1 The EMPLOYER shall provide uniforms (including boots) and equipment and replacement as outlined by the department policy that currently exists.

ARTICLE 21: SAVINGS CLAUSE

21.1 This Agreement is subject to the laws of the United States, the State of Minnesota and the City of Ramsey. In the event any provision of this Agreement shall be held contrary to law by a court of competent jurisdiction from whose final judgment or decree no appeal has been taken within the time provided, such provisions shall be voided. All other provisions of this Agreement shall continue in full force and effect. The voided provisions shall be renegotiated at the written request of either party.

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ARTICLE 22: SALARIES

22.1 The Employees' wages payable during the term of this Agreement shall be as follows;

~~**2019 Wages**~~

~~As a result of a Cost of Living Adjustment, wages will increase by 2.75% over the 2018 wage scale.~~

- ~~The following salaries are calculated for January 1, 2019 through December 31, 2019, adding 2.75% to December 31, 2018 wages.~~

	~~January 1, 2019 through December 31, 2019~~		
	~~Hourly~~	~~Monthly~~	~~Yearly~~
~~Step 1.....(85%)~~	~~$39.415~~	~~$6,832~~	~~$81,982~~
~~Step 2.....(88%)~~	~~$40.806~~	~~$7,073~~	~~$84,876~~
~~Step 3.....(91%)~~	~~$42.197~~	~~$7,314~~	~~$87,769~~
~~Step 4.....(94%)~~	~~$43.588~~	~~$7,555~~	~~$90,663~~
~~Step 5.....(97%)~~	~~$44.979~~	~~$7,796~~	~~$93,556~~
~~Step 6.....(100%)~~	~~$46.370~~	~~$8,037~~	~~$96,450~~

~~2020~~ 2021 Wages

- As a result of a Cost of Living Adjustment, wages will increase by ~~3%~~ 2.75% over the ~~2019~~ 2020 wage scale. The following salaries are calculated for January 1, ~~2020~~ 2021 through December 31, ~~2020~~2021, adding ~~3%~~ 2.75% to December 31, ~~2019~~ 2020 wages effective on January 1, ~~2020~~ 2021.

- In addition to being paid pursuant to the following wage grid, each Employee shall be paid a one-time, off-schedule payment of $850.00 to be paid within 30 days of this Agreement being executed by all parties.

	January 1, ~~2020~~ 2021 through December 31, ~~2020~~2021		
	Hourly	Monthly	~~Yearly~~Annually
Step 1.....(85%)	~~$40.597~~ $41.713	~~$7,037~~ $7,230	~~$84,442~~ $86,764
Step 2.....(88%)	~~$42.030~~ $43.186	~~$7,285~~ $7,485	~~$87,422~~ $89,826
Step 3.....(91%)	~~$43.463~~ $44.658	~~$7,534~~ $7,741	~~$90,402~~ $92,888
Step 4.....(94%)	~~$44.895~~ $46.130	~~$7,782~~ $7,996	~~$93,383~~ $95,950
Step 5.....(97%)	~~$46.328~~ $47.602	~~$8,030~~ $8,251	~~$96,363~~ $99,013
Step 6.....(100%)	~~$47.761~~ $49.074	~~$8,279~~ $8,506	~~$99,343~~ $102,075

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~~Longevity through December 31, 2019~~
~~Longevity Pay: After 5 Years in Bargaining Unit: 1% increase over Step 6~~
~~Longevity Pay: After 8 Years in Bargaining Unit: 2% increase over Step 6~~
~~Longevity Pay: After 12 Years in Bargaining Unit: 3% increase over Step 6~~

Longevity Effective January 1, ~~2020~~2021	Hourly	Monthly	Annually
~~Longevity Pay:~~ After 5 Years in Bargaining Unit: 2% increase over Step 6	$50.056	$8,676	$104,116
~~Longevity Pay:~~ After 8 Years in Bargaining Unit: ~~3~~ 4% increase over Step 6	$51.037	$8,846	$106,158
~~Longevity Pay:~~ After 12 Years in Bargaining Unit: ~~4~~ 6% increase over Step 6	$52.019	$9,017	$108,199

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22.2 Employer will pay POST license fees for all licensed sergeants. ~~up to $90.00 every three (3) years.~~

22.3 The EMPLOYER will pay to the person(s) assigned to the Administrative Sergeant position $200.00 per month compensation.

22.4 Field Training Officer Supplemental Pay: Employees assigned in writing by the Employer to fulfill this assignment shall receive $3.00 per hour over base pay while working in that capacity.

ARTICLE 23: WAIVER

23.1 Any and all prior agreements, resolutions, practices, policies, rules and regulations regarding terms and conditions of employment to the extent inconsistent with the provisions of this Agreement are hereby superseded.

23.2 The parties mutually acknowledge that during the negotiations which resulted in this Agreement, each had the unlimited right and opportunity to make demands and proposals with respect to any term or condition of employment not removed by law from bargaining. All agreements and understandings arrived at by the parties are set forth in writing in this Agreement for the stipulated duration of this Agreement. The Employer and LELS each voluntarily and unqualifiedly waive the right to meet and negotiate regarding any and all terms and conditions of employment referred to or covered in this Agreement or with respect to any term or condition of employment not specifically referred to or covered by this Agreement even though such terms or conditions may not have been within the knowledge or contemplation of either or both of the parties at the time this Agreement was negotiated or executed.

ARTICLE 24: DURATION

Except as herein provided, this Agreement shall be in effect commencing January 1, ~~2019~~ 2021 and shall remain in full force and effect through and including December 31, ~~2020~~2021, and thereafter until modified or amended by mutual agreement of the parties.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement on this _____day of _____ ~~2018;~~ 2021, per resolution # _____

FOR THE CITY OF RAMSEY:

BY: _____ _____
Mayor Date

ATTEST: _____ _____
City Administrator Date

FOR LAW ENFORCEMENT LABOR SERVICES, INC.

BY: _____ _____
Richard Webb, Steward Date

BY: _____ _____
Mr. ~~Jay Maher~~ Rick Mathwig LELS, Business Agent Date

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MEMORANDUM OF UNDERSTANDING

BETWEEN THE CITY OF RAMSEY
AND
LAW ENFORCEMENT LABOR SERVICES - SERGEANTS

M.O.U. POST EMPLOYMENT HCSP

January 1, ~~2019~~ 2021to December 31, ~~2020~~ 2021 as described below:

This Memorandum of Understanding is made between the City of Ramsey ("City") and Law Enforcement Labor Services ("Union.")

WHEREAS, the City and the Union are parties to a ~~2019-2020~~2021 collective bargaining agreement; and

WHEREAS, Law Enforcement Labor Services Patrol Union employees are eligible to participate in the Minnesota Post Employment Health Care Savings Plan (HCSP) established under Minnesota Statues, section 352.98 (Minn. Supp. 2001) and as outlined in the Minnesota State Retirement System's Trust and Plan Documents; and

WHEREAS, all funds collected by the employer (City of Ramsey) on the behalf of the employee will be deposited into the employee's post-employment health care savings plan account; and

WHEREAS, all LELS Sergeants have agreed to contribute an ongoing percent of pay and shall contribute ~~1% of gross pay effective January 1, 2019 through December 31, 2019 and~~ 2% of gross pay effective January 1, ~~2020~~ 2021 through December 31, ~~2020~~2021; and

WHEREAS, employees will be responsible for the administrative fees.

THEREFORE, the parties met, negotiated and agreed upon the following:

Effective January 1, ~~2019~~ 2021 – December 31, ~~2020~~ 2021Law Enforcement Labor Services Sergeants Union employees are eligible to participate in the Minnesota Post Employment Health Care Savings Plan (HCSP) established under Minnesota Statues, section 352.98 (Minn. Supp. 2001) and as outlined in the Minnesota State Retirement System's Trust and Plan Documents. All funds collected by the employer (City of Ramsey) on the behalf of the employee will be deposited into the employee's post-employment health care savings plan account. All related fees will be paid by the employees. Employees have agreed to contribute an ongoing percent of pay as described below:

All employees shall contribute ~~1% of gross pay effective January 1, 2019 through December 31, 2019 and~~ 2% of gross pay effective January 1, ~~2020~~ 2021 through December 31, ~~2020~~2021

This Memorandum of Understanding sunsets on December 31, ~~2020~~2021.

FOR THE CITY OF RAMSEY:

BY:

_____ _____

Mayor Date

ATTEST:

_____ _____

City Administrator Date

FOR LAW ENFORCEMENT LABOR SERVICES, INC.

BY: _____ _____

Rich Webb, Steward Date

BY: _____ _____

~~Jay Maher~~Rick Mathwig, Business Agent Date

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MEMORANDUM OF UNDERSTANDING
BETWEEN THE CITY OF RAMSEY AND LAW ENFORCEMENT LABOR SERVICES - SERGEANTS

M.O.U. **INSURANCE**

~~**January 1, 2019 to December 31, 2020 as described below:**~~

~~**1) City total monthly contributions for 2019 health insurance, as follows:**~~

~~The employer will make the following contributions toward group health insurance coverage for employees enrolled in the City's health plan during 2019. In addition, the City will purchase $20,000 of basic life insurance for full-time regular employees.~~

~~The City's monthly contribution to health insurance in 2019, including the contribution to the health insurance premium and the H.R.A./V.E.B.A. or H.S.A. (total city contribution per month) are listed below.~~

~~Total Monthly City Contributions~~

- ~~Employee only (single) City contribution from: $789.00 to $858.00~~
- ~~Employee and Children City contribution: $1,033.60~~
- ~~Employee and Spouse City contribution: $1,077.40~~
- ~~Family City contribution: $1,327.80~~

~~Total monthly city contributions listed above include the H.R.A./V.E.B.A. or H.S.A. shown below, as follows:~~

- ~~Single plans with a $4000 deductible receive $194.00 per month toward the H.R.A./V.E.B.A. or H.S.A.~~
- ~~Other single plans receive $130.00 per month toward the H.R.A./V.E.B.A. or H.S.A.~~
- ~~All employee + children and employee + spouse plans will receive $160.00 per month toward the H.R.A./V.E.B.A. or H.S.A.~~
- ~~All family plans will receive $192.00 per month toward the H.R.A./V.E.B.A. or H.S.A.~~

~~Or~~

~~Provide cash in lieu of City's insurance contribution of $370 per month in 2019. Employees receiving the waiving benefit prior to 2013 will continue to be grandfathered in to the waiving benefit. Other employees to the program are subject to the following terms: Employee must show proof of other coverage and agrees to the terms of the waiving benefit as described within the City's policy, signing the acknowledgement form~~

~~2) City total monthly contributions for 2020 health insurance, as follows:~~

~~A. 2020 Premium Contributions Based on Existing Insurance Premiums~~

~~The employer will make the following contributions toward group health insurance coverage for employees enrolled in the City's health plan during 2020. In addition, the City will purchase $20,000 of basic life insurance for full-time regular employees.~~

~~The City's monthly contribution to health insurance in 2020, including the contribution to the health insurance premium and the H.R.A./V.E.B.A. or H.S.A. (total city contribution per month) are listed below.~~

~~Total Monthly City Contributions~~

- ~~Employee only (single) City contribution from: $861.49 to $938.08~~
- ~~Employee and Children City contributions: $1,129.70~~
- ~~Employee and Spouse City contribution: $1,178.31~~
- ~~Family City contribution: $1,452.74~~

~~Total monthly city contributions listed above include the H.R.A./V.E.B.A. or H.S.A. shown below, as follows:~~

- ~~Single plans with a $4000 deductible receive $194.00 per month toward the H.R.A./V.E.B.A. or H.S.A.~~
- ~~Other single plans receive $130.00 per month toward the H.R.A./V.E.B.A. or H.S.A.~~
- ~~All employee + children and employee + spouse plans will receive $160.00 per month toward the H.R.A./V.E.B.A. or H.S.A.~~
- ~~All family plans will receive $192.00 per month toward the H.R.A./V.E.B.A. or H.S.A.~~

~~Or~~

~~Provide cash in lieu of City's insurance contribution of $370 per month in 2020. Employees receiving the waiving benefit prior to 2013 will continue to be grandfathered in to the waiving benefit. Other employees to the program are subject to the following terms: Employee must show proof of other coverage and agrees to the terms of the waiving benefit as described within the City's policy, signing the acknowledgement form~~

~~B. 2020 Premium Contributions If There is a Change in Total Premium Cost Due to Change in Insurance Band or Affordable Care Act Premium Taxes~~

~~The parties understand and agree that the Total Monthly City Contributions described in Paragraph A, above, are based on the currently anticipated total cost of the premiums for the City's $2,500 Perform Network insurance program ("Perform Network"). In the event that there are changes to the Perform Network premiums for 2020 due to either: (1) a reduction in premiums; or (2) an increase in premiums due to the imposition of premium taxes under the Affordable Care Act, the Total Monthly City Contribution will be adjusted as follows:~~

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~~1. Reduction in Premium Due to Change in Insurance Band~~

~~If the total premium cost of the Perform Network decreases in 2020 due to the City being rated in a different insurance band or classification, the Total Monthly City Contribution described in Paragraph A, above, will be adjusted as follows:~~

- ~~Employee only (single): The City will contribute the total cost of the Perform Network premium, not to exceed the amount described in Paragraph A.~~
- ~~Employee and Children: The City's contribution will be reduced to 60% of the cost of the Perform Network premium.~~
- ~~Employee and Spouse: The City's contribution will be reduced to 60% of the cost of the Perform Network premium.~~
- ~~Family: The City's contribution will be reduced to 60% of the cost of the Perform Network premium.~~

~~2. Increase in Premium Due to Imposition of Taxes Under the Affordable Care Act~~

~~If the total premium cost of the Perform Network increases in 2020 due to the imposition of taxes under the Affordable Care Act, the Total Monthly City Contribution described in Paragraph A, above, will be adjusted as follows:~~

- ~~Employee only (single): The City will contribute the amount described in Paragraph A, plus the total increase in the premium cost for single coverage under the Perform Network due to the imposition of taxes under the Affordable Care Act.~~
- ~~Employee and Children: The City will contribute the amount described in Paragraph A, plus 60% of the increase in the premium cost for Employee and Children coverage under the Perform Network due to the imposition of taxes under the Affordable Care Act.~~
- ~~Employee and Spouse: The City will contribute the amount described in Paragraph A, plus 60% of the increase in the premium cost for Employee and Spouse coverage under the Perform Network due to the imposition of taxes under the Affordable Care Act.~~
- ~~Family: The City will contribute the amount described in Paragraph A, plus 60% of the increase in the premium cost for Family coverage under the Perform Network due to the imposition of taxes under the Affordable Care Act.~~

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~~3. Application of Paragraphs 1 and 2. In 2020, if the total premium cost for the Perform Network is decreased due to the City being classified in a more favorable band or classification, and the total premium cost is impacted by the imposition of taxes under the Affordable Care Act, the Total Monthly City Contribution, as described in Paragraph A, will be adjusted as follows:~~

- ~~Employee only (single): The City will contribute the total cost of the Perform Network premium, including the amount of any increase in that premium due to the imposition of taxes under the Affordable Care Act. Employees electing an Employee only (single) plan priced less than the Perform Network plan will receive a City contribution to the premium equal to the elected plan premium.~~

- ~~Employee and Children: The City's contribution will be reduced to 60% of the cost of the Perform Network premium, including the amount of any increase in that premium due to the imposition of taxes under the Affordable Care Act.~~

- ~~Employee and Spouse: The City's contribution will be reduced to 60% of the cost of the Perform Network premium, including the amount of any increase in that premium due to the imposition of taxes under the Affordable Care Act.~~

- ~~Family: The City's contribution will be reduced to 60% of the cost of the Perform Network premium, including the amount of any increase in that premium due to the imposition of taxes under the Affordable Care Act.~~

The City will make the following contributions toward group health insurance coverage for employees working 30 hours per week or more; as well as to purchase $20,000 of basic life insurance for full-time regular employees working 30 hours per week.

a. 2021 monthly health insurance contributions, including the health reimbursement or health savings account contributions as follows: Employee Only (Single) $942.00 to $1,034.50, Employee and Children at $1,246.00, Employee and Spouse at $1,300.30, and Family at $1,603.80; and

b. 2021 City payment toward the Waiver/Credit in lieu of Coverage will remain at $370.00 per month.

FOR THE CITY OF RAMSEY:

BY:

_____ _____

Mayor Date

ATTEST:

City Administrator _____ Date _____

FOR LELS - SERGEANTS

BY: _____ _____

Rich Webb, Negotiating Team Member Date

BY: _____ _____

Rick Mathwig, Business Agent Date

DRAFT

CC Regular Session **5. 13.**

Meeting Date: 01/26/2021

By: Colleen Lasher, Administrative Services

Information

Title

Adopt Resolution #21-035 Directing Staff to Submit the 2021 Pay Equity Report

Purpose/Background:

The purpose of this case is to seek direction from the City Council to submit the 2021 Pay Equity Report.

The law requires each local government to analyze its pay structure for evidence of inequities, and to report this information to the Department of Management and Budget every three years. Most Minnesota cities are also subject to the Equal Pay for Equal Work Law, which is a different law from the Pay Equity Act but also prohibits discrimination in pay based on sex.

Pay equity is designed to address the problem of a wage structure in which there is one pay pattern for jobs performed mostly by men and another pay pattern for jobs performed mostly by women. Pay equity primarily affects pay structure, not pay level or pay method. An employer can still have a pay level that is different than other employers.

Attached is the City's 2021 pay equity report which shows that the City is currently out of compliance with the Local Government Pay Equity Act. The report includes four tests: the completeness and accuracy test, the statistical analysis test, the salary range test and exceptional service pay test. Of the four tests, one test (statistical analysis) is noncompliant with a score of 62.06896 which required a minimum score of 80. Per the League's memo (attached) If a city is found not in compliance, a notice will be issued to that city. A city in disagreement with such a finding may notify the Commissioner and will be given a defined period of time during which additional information may be submitted for reconsideration of the finding. In the event compliance is not achieved within the defined time period set by the commissioner, the commissioner will notify the city and the commissioner of revenue the city is subject to a five percent reduction in the aid that would otherwise be payable to that city, or to a fine of $100 per day, whichever is greatest. Cities may appeal the imposition of a penalty by filing a notice of appeal with the commissioner within 30 days of the commissioner's notification to the city of the penalty. No penalty may be imposed while an appeal is pending.

Staff will be working closely with the Pay Equity Coordinator, the League of Minnesota Cities, as well as the City Attorney in order to form a recommendation to overturn or correct the findings of the report.

As required by state law, the Pay Equity Compliance Report must be approved by the City Council.

There are multiple attachments for review.

Funding Source:

There is no cost associated with approving and submitting this report.

Recommendation:

Direct staff to submit the 2021 Pay Equity Report.

Action:

Motion to adopt resolution #21-035 Directing Staff to Submit the 2021 Pay Equity Report

Attachments

Resolution 21-035
2021 Pay Equity Reports
League Overview
Tests

Form Review

Inbox	Reviewed By	Date
Kurt Ulrich	Kurt Ulrich	01/22/2021 02:15 PM
Form Started By: Colleen Lasher		Started On: 01/22/2021 07:21 AM
Final Approval Date: 01/22/2021		

Councilmember introduced the following resolution and moved for its adoption:

RESOLUTION #21-035

RESOLUTION DIRECTING STAFF TO SUBMIT THE 2021 PAY EQUITY REPORT

WHEREAS, the State of Minnesota requires submission of a pay equity compliance report every three years; and

WHEREAS, the City of Ramsey is committed to ensuring that all jobs will be evaluated and given points according to the level of knowledge and responsibility required to do the job; and

WHEREAS, the Pay Equity Act requires City Council approval in order to be submitted.

NOW, THEREFORE, BE IT RESOLVED THAT THE CITY COUNCIL OF THE CITY OF RAMSEY, ANOKA COUNTY, STATE OF MINNESOTA,

1) Motion to adopt resolution #21-035 directing Staff to submit the 2021 Pay Equity Report

The motion for the adoption of the foregoing resolution was duly seconded by Councilmember , and upon vote being taken thereon, the following voted in favor thereof:

and the following voted against the same:

and the following abstained:

and the following were absent:

Whereupon said resolution was declared duly passed and adopted by the Ramsey City Council this the 26th day of January, 2021.

_____

Mayor

ATTEST:

_____

City Clerk

MANAGEMENT AND BUDGET

Compliance Report

Jurisdiction: Ramsey
7550 Sunwood Drive NW

Ramsey, MN 55303

Report Year: 2021
Case: 1 - 2021 DATA (Private (Jur Only))

Contact: Colleen Lasher Phone: (763) 433-9867 E-Mail: clasher@cityoframsey.com

The statistical analysis, salary range and exceptional service pay test results are shown below. Part I is general information from your pay equity report data. Parts II, III and IV give you the test results.

For more detail on each test, refer to the Guide to Pay Equity Compliance and Computer Reports.

I. GENERAL JOB CLASS INFORMATION

	Male Classes	Female Classes	Balanced Classes	All Job Classes
# Job Classes	28	18	1	47
# Employees	66	26	2	94
Avg. Max Monthly Pay per employee	7100.75	5663.66		6646.82

II. STATISTICAL ANALYSIS TEST

A. Underpayment Ratio = 64.28572 *

	Male Classes	Female Classes
a. # At or above Predicted Pay	11	1
b. # Below Predicted Pay	17	17
c. TOTAL	28	18
d. % Below Predicted Pay (b divided by c = d)	60.71	94.44

*(Result is % of male classes below predicted pay divided by % of female classes below predicted pay.)

B. T-test Results

Degrees of Freedom (DF) = 90 Value of T = 6.149

a. Avg. diff. in pay from predicted pay for male jobs = -26

b. Avg. diff. in pay from predicted pay for female jobs = -536

III. SALARY RANGE TEST = 120.71 (Result is A divided by B)

A. Avg. # of years to max salary for male jobs = 6.04

B. Avg. # of years to max salary for female jobs = 5.00

IV. EXCEPTIONAL SERVICE PAY TEST = 0.00 (Result is B divided by A)

A. % of male classes receiving ESP = 0.00 *

B. % of female classes receiving ESP = 0.00

*(If 20% or less, test result will be 0.00)

MANAGEMENT AND BUDGET

Job Class Data Entry Verification List

Case: 2021 DATA | Ramsey | LGID: 963

Job Nbr	Class Title	Nbr Males	Nbr Females	Non-Binary	Class Type	Jobs Points	Min Mo Salary	Max Mo Salary	Yrs to Max Salary	Yrs of Service	Exceptional Service Pay
1	Building Maintenance	3	0	0	M	47	3336.17	4170.21	5.00	0.00	
2	Community Service Officer	1	1	0	B	48	3558.65	4448.31	5.00	0.00	
3	Fire Tech	0	1	0	F	55	3665.19	4581.49	5.00	0.00	
4	Police Tech	0	3	0	F	55	3665.19	4581.49	5.00	0.00	
5	Secretary/Receptionist	0	1	0	F	55	3665.19	4581.49	5.00	0.00	
6	Admin Assistant	0	6	0	F	55	3809.89	4762.36	5.00	0.00	
7	Recreation Specialist	0	1	0	F	55	3809.89	4762.36	5.00	0.00	
8	PW Maint Worker	12	0	0	M	55	3994.51	4993.14	5.00	0.00	
9	IT Tech	1	0	0	M	60	4022.75	5028.43	5.00	0.00	
11	Auto Mechanic	2	0	0	M	61	4339.38	5424.23	5.00	0.00	
10	Permit Tech	0	2	0	F	62	4065.83	5082.29	5.00	0.00	
18	Engr Tech IV	1	0	0	M	63	5422.40	6778.00	5.00	0.00	
12	Senior Acct Clerk	0	1	0	F	63	3954.88	4943.61	5.00	0.00	
13	Engr Tech II	0	1	0	F	63	4612.49	5765.61	5.00	0.00	
14	Police Tech LEAD	0	1	0	F	64	3954.88	4943.61	5.00	0.00	
15	Communications and Events Coor	0	1	0	F	64	4235.19	5293.98	5.00	0.00	
16	Comm Dev Assistant	0	1	0	F	64	4422.30	5527.87	5.00	0.00	
17	Public Works Lead Worker	2	0	0	M	64	4593.11	5741.39	5.00	0.00	
19	Building Maint Supervisor	1	0	0	M	68	4875.47	6094.33	5.00	0.00	
20	HR Generalist	0	1	0	F	69	4421.93	5527.41	5.00	0.00	
21	Accountant II	0	1	0	F	69	4898.28	6122.85	5.00	0.00	
22	Planning Technician	1	0	0	M	69	4938.92	6173.65	5.00	0.00	
23	Parks Supervisor	1	0	0	M	69	5709.55	7136.94	5.00	0.00	
24	City Planner	1	0	0	M	70	5564.86	6956.08	5.00	0.00	
25	Patrol	16	4	0	M	70	4735.03	7305.58	16.00	0.00	
27	Fire Inspector/Firefighter	1	0	0	M	70	5420.82	6776.03	5.00	0.00	
28	Civil Engr II	1	0	0	M	75	5865.87	7332.33	5.00	0.00	
26	Office Supervisor	0	1	0	F	75	5420.82	6776.03	5.00	0.00	
29	Civil Engr IV	1	0	0	M	85	6393.08	7991.35	5.00	0.00	
30	PW Utilities Supervisor	1	0	0	M	86	5709.55	7136.94	5.00	0.00	
31	Sergeants	4	0	0	M	86	7036.80	8609.71	12.00	0.00	
32	Senior Planner	0	1	0	F	86	6239.93	7799.91	5.00	0.00	

MANAGEMENT AND BUDGET

Job Class Data Entry Verification List

Case: 2021 DATA | Ramsey | LGID: 963

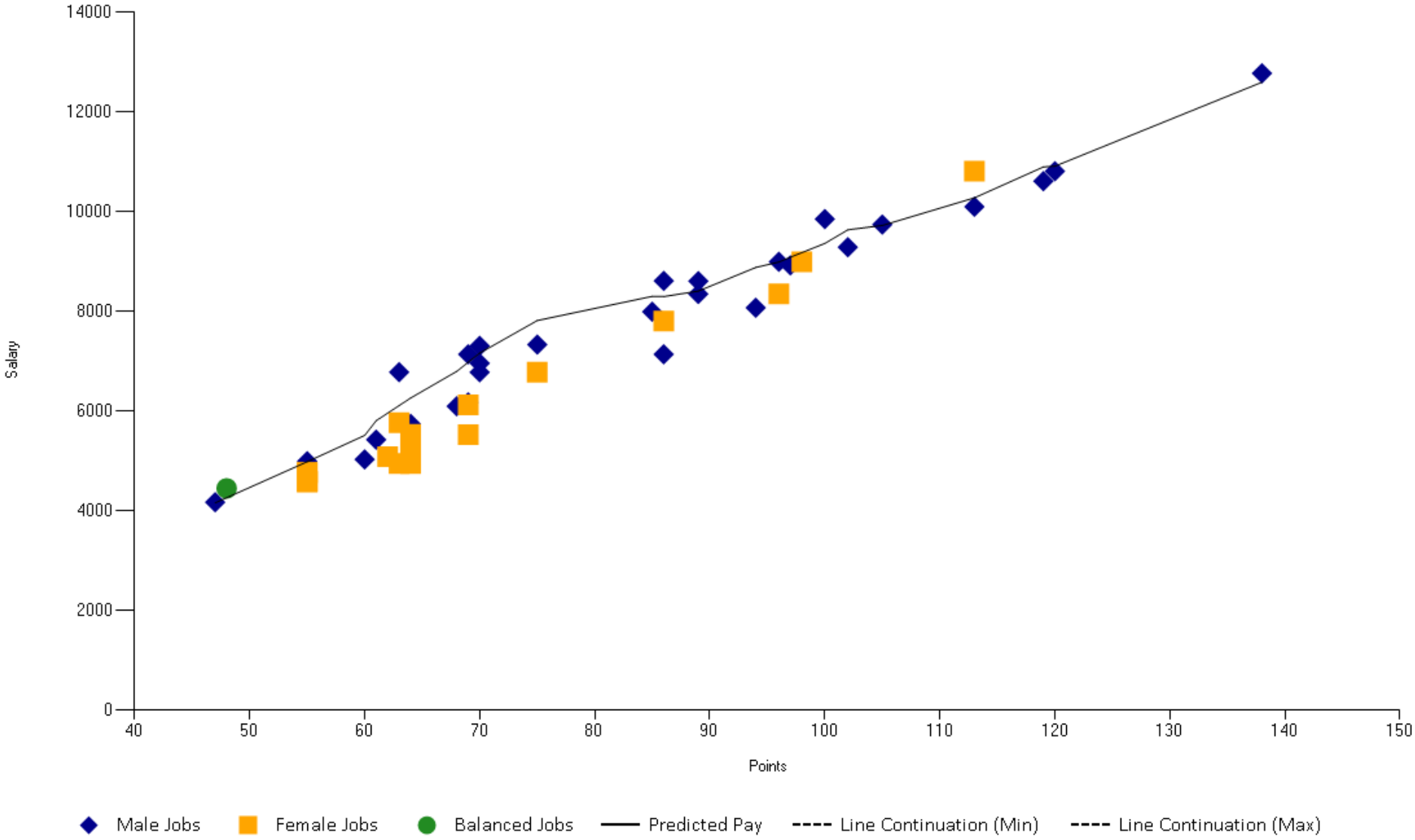
Job Nbr	Class Title	Nbr Males	Nbr Females	Non-Binary	Class Type	Jobs Points	Min Mo Salary	Max Mo Salary	Yrs to Max Salary	Yrs of Service	Exceptional Service Pay
33	Building Official	1	0	0	M	89	6677.05	8346.31	5.00	0.00	
34	Assistant Fire Chief/FireMarsh	1	0	0	M	89	6883.41	8604.27	5.00	0.00	
35	IT Manager	1	0	0	M	94	6455.52	8069.40	5.00	0.00	
36	Asst Finance Officer	0	1	0	F	96	6677.05	8346.31	5.00	0.00	
37	Econ Dev Manager	1	0	0	M	96	7193.01	8991.26	5.00	0.00	
38	Parks and Asst PW Superintende	1	0	0	M	97	7136.51	8920.64	5.00	0.00	
39	Adm Services Director	0	1	0	F	98	7193.01	8991.26	5.00	0.00	
40	Captains	2	0	0	M	100	7575.84	9848.60	16.00	0.00	
41	Public Works Superintendent	1	0	0	M	102	7427.02	9283.77	5.00	0.00	
42	City Engr	1	0	0	M	105	7790.42	9738.02	5.00	0.00	
43	Fire Chief / EMD	1	0	0	M	113	8077.01	10096.27	5.00	0.00	
44	Finance Director	0	1	0	F	113	8646.63	10808.28	5.00	0.00	
46	Police Chief	1	0	0	M	119	8486.92	10608.65	5.00	0.00	
45	Dep. City AdmCD Director	1	0	0	M	120	8646.63	10808.28	5.00	0.00	
47	City Administrator	1	0	0	M	138	10216.85	12771.06	5.00	0.00	

Job Number Count: 47

MANAGEMENT AND BUDGET

Predicted Pay Report for: Ramsey

Case: 2021 DATA



MANAGEMENT AND BUDGET

Predicted Pay Report for: Ramsey

Case: 2021 DATA

Job Nbr	Job Title	Nbr Males	Nbr Females	Non-Binary	Total Nbr	Job Type	Job Points	Max Mo Salary	Predicted Pay	Pay Difference
1	Building Maintenance	3	0	0	3	Male	47	4170.2100	4156.9283	13.2817
2	Community Service Officer	1	1	0	2	Balanced	48	4448.3100	4259.6279	188.6821
3	Fire Tech	0	1	0	1	Female	55	4581.4900	4981.3391	-399.8491
4	Police Tech	0	3	0	3	Female	55	4581.4900	4981.3391	-399.8491
5	Secretary/Receptionist	0	1	0	1	Female	55	4581.4900	4981.3391	-399.8491
6	Admin Assistant	0	6	0	6	Female	55	4762.3600	4981.3391	-218.9791
7	Recreation Specialist	0	1	0	1	Female	55	4762.3600	4981.3391	-218.9791
8	PW Maint Worker	12	0	0	12	Male	55	4993.1400	4981.3391	11.8009
9	IT Tech	1	0	0	1	Male	60	5028.4300	5511.6001	-483.1701
11	Auto Mechanic	2	0	0	2	Male	61	5424.2300	5806.5600	-382.3300
10	Permit Tech	0	2	0	2	Female	62	5082.2900	5958.0796	-875.7896
12	Senior Acct Clerk	0	1	0	1	Female	63	4943.6100	6109.5991	-1165.9891
13	Engr Tech II	0	1	0	1	Female	63	5765.6100	6109.5991	-343.9891
18	Engr Tech IV	1	0	0	1	Male	63	6778.0000	6109.5991	668.4009
14	Police Tech LEAD	0	1	0	1	Female	64	4943.6100	6261.1187	-1317.5087
15	Communications and Events Coor	0	1	0	1	Female	64	5293.9800	6261.1187	-967.1387
16	Comm Dev Assistant	0	1	0	1	Female	64	5527.8700	6261.1187	-733.2487
17	Public Works Lead Worker	2	0	0	2	Male	64	5741.3900	6261.1187	-519.7287
19	Building Maint Supervisor	1	0	0	1	Male	68	6094.3300	6794.0078	-699.6778
20	HR Generalist	0	1	0	1	Female	69	5527.4100	6978.7107	-1451.3007
21	Accountant II	0	1	0	1	Female	69	6122.8500	6978.7107	-855.8607
22	Planning Technician	1	0	0	1	Male	69	6173.6500	6978.7107	-805.0607
23	Parks Supervisor	1	0	0	1	Male	69	7136.9400	6978.7107	158.2293
24	City Planner	1	0	0	1	Male	70	6956.0800	7161.0012	-204.9212
25	Patrol	16	4	0	20	Male	70	7305.5800	7161.0012	144.5788
27	Fire Inspector/Firefighter	1	0	0	1	Male	70	6776.0300	7161.0012	-384.9712
26	Office Supervisor	0	1	0	1	Female	75	6776.0300	7814.3847	-1038.3547
28	Civil Engr II	1	0	0	1	Male	75	7332.3300	7814.3847	-482.0547
29	Civil Engr IV	1	0	0	1	Male	85	7991.3500	8299.6954	-308.3454
32	Senior Planner	0	1	0	1	Female	86	7799.9100	8294.6845	-494.7745
30	PW Utilities Supervisor	1	0	0	1	Male	86	7136.9400	8294.6845	-1157.7445
31	Sergeants	4	0	0	4	Male	86	8609.7100	8294.6845	315.0255

MANAGEMENT AND BUDGET

Predicted Pay Report for: Ramsey

Case: 2021 DATA

Job Nbr	Job Title	Nbr Males	Nbr Females	Non-Binary	Total Nbr	Job Type	Job Points	Max Mo Salary	Predicted Pay	Pay Difference
33	Building Official	1	0	0	1	Male	89	8346.3100	8404.5726	-58.2626
34	Assistant Fire Chief/FireMarsh	1	0	0	1	Male	89	8604.2700	8404.5726	199.6974
35	IT Manager	1	0	0	1	Male	94	8069.4000	8878.6139	-809.2139
36	Asst Finance Officer	0	1	0	1	Female	96	8346.3100	8986.4710	-640.1610
37	Econ Dev Manager	1	0	0	1	Male	96	8991.2600	8986.4710	4.7890
38	Parks and Asst PW Superintende	1	0	0	1	Male	97	8920.6400	9083.2699	-162.6299
39	Adm Services Director	0	1	0	1	Female	98	8991.2600	9179.6288	-188.3688
40	Captains	2	0	0	2	Male	100	9848.6000	9359.8305	488.7695
41	Public Works Superintendent	1	0	0	1	Male	102	9283.7700	9632.2580	-348.4880
42	City Engr	1	0	0	1	Male	105	9738.0200	9719.9494	18.0706
44	Finance Director	0	1	0	1	Female	113	10808.2800	10273.6003	534.6797
43	Fire Chief / EMD	1	0	0	1	Male	113	10096.2700	10273.6003	-177.3303
46	Police Chief	1	0	0	1	Male	119	10608.6500	10893.8448	-285.1948
45	Dep. City AdmCD Director	1	0	0	1	Male	120	10808.2800	10909.3516	-101.0716
47	City Administrator	1	0	0	1	Male	138	12771.0600	12593.3949	177.6651

Job Number Count: 47

LEAGUE of MINNESOTA CITIES

INFORMATION MEMO

Local Government Pay Equity Act: An Overview

Learn about Minnesota law requirements to analyze city employee pay structure for evidence of gender inequity. How to use a job evaluation system to determine the comparable work value of each employee class. State requirements for a pay equity implementation report. Maintaining equitable pay relationships; effects of noncompliance.

RELEVANT LINKS:

Minn. Stat. §§ 471.998 - .999.
Minn. Stat. § 471.992 subd. 1.
Minn. R. 3920.0200.

I. History

In 1984 the Minnesota Legislature passed a bill extending pay equity to all local governments in the State. The law requires each local government to analyze its pay structure for evidence of inequities, and to report this information to the Department of Management and Budget (the "Department") every three years. Most Minnesota cities are also subject to the Equal Pay for Equal Work Law, which is a different law from the Pay Equity Act but also prohibits discrimination in pay based on sex.

II. Concept of pay equity

Compensation programs generally have three parts:

- Pay level—the level an employer pays in comparison to other employers.
- Pay structure—the relationships among jobs in an organization.
- Pay method—the set of policies and procedures for paying individual employees.

Pay equity is designed to address the problem of a wage structure in which there is one pay pattern for jobs performed mostly by men and another pay pattern for jobs performed mostly by women. Pay equity primarily affects pay structure, not pay level or pay method. An employer can still have a pay level that is different than other employers. The city can still pay more to recognize individuals' seniority and performance. One way to do this is to establish salary ranges for each job class and reward employees for seniority, performance, or both by moving them through the salary range.

For information on types of pay systems see HR Reference Manual, Chapter 4.

III. Job evaluation system

Every city must use a job evaluation system to determine the comparable work value of the work performed by each class of its employees. System options are:

Minn. R. 3920.0100 subp. 8.
Minn. Stat. § 471.994.

This material is provided as general information and is not a substitute for legal advice. Consult your attorney for advice concerning specific situations.

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RELEVANT LINKS:

MN Mgmt. & Budget, State Job Match Job Evaluation System.

- Use the state job match.
- Use or modify systems developed by other public employers.
- Design your own system.
- Purchase a privately-owned (consultant's) system.

Regardless of what job evaluation system is used, a city should be prepared to explain to the state's Pay Equity Coordinator the criteria considered within their job evaluation system, how the points are awarded and the objective basis for the system, to ensure there is no inherent bias against female job classes.

Minn. Stat. § 471.994.

No matter what job evaluation system is used, it must be updated to account for:

- New employee classes.
- Any changes in factors affecting the comparable work value of existing classes.

Minn. Stat. § 471.994.

Minn. Stat. § 471.997.

In addition, when substantially modifying your job evaluation system or adopting a new system you must notify the Commissioner of the Department of Management and Budget (the "Commissioner"). Cities should note the results of any job evaluation system and subsequent reports may be used in any proceeding or action alleging discrimination.

IV. Pay equity and bargaining units

Pay equity laws directly address some issues where collective bargaining and pay equity laws intersect:

Minn. Stat. § 471.994.

Minn. Stat. § 471.995.

- Cities must meet and confer with the exclusive representatives of their employees on the development or selection of a job evaluation system.
- A report containing the results of the job evaluation system must be provided to the exclusive representatives of the employees to be used by both parties in contract negotiations.

Minn. Stat. § 471.992 subd. 2.

- In interest arbitration (for any class other than balanced) the arbitrator shall consider pay equity, including results of a job evaluation study and any employee objections to said study, together with other standards appropriate to interest arbitration.

Minn. Stat. § 471.9966.

- The provisions of the Pay Equity Act do not diminish a city's duty to bargain in good faith.

V. Pay equity implementation report

Cities with one or more employees must file a pay equity implementation report every three years as required by the Department.

RELEVANT LINKS:

Minn. R. 3920.0100 subp. 5.
Minn. Stat. § 179A.03 subd. 14.
MN Mgmt. & Budget, Local Government Pay Equity.

Minn. Stat. § 13.03.

Minn. R. 3920.0300 subp. 5.

Generally, an employee is one who works in a position a minimum of 67 days per year (100 days in the case of a student) and works an average of at least 14 hours per week during the weeks they are scheduled to work."

The information in the report is public. The form that cities must use is provided by the Department and requires that the following information be submitted:

- A list of all job classes in the political subdivision.
- The number of employees in each class.
- The number of female employees in each class.
- An identification of each class as male-dominated, female-dominated, or balanced.
- The comparable work value of each class as determined by the job evaluation system.
- The minimum and maximum monthly salary for each class and the amount of time in employment required to qualify for the maximum.
- Any additional cash compensation.
- Whether or not job classes are eligible for benefits, or if the jurisdiction's contribution limit for benefits is different for any male-dominated and female-dominated classes of comparable work value.
- Any other information requested by the commissioner.

Minn. R. 3920.0400.

Based on the pay equity implementation report and any other information requested by the Department, a number of tests are used to analyze the information submitted and determine compliance/noncompliance.

VI. Noncompliance

Minn. R. 3920.0800 subp.1, 3.

If a city is found not in compliance, a notice will be issued to that city. A city in disagreement with such a finding may notify the Commissioner and will be given a defined period of time during which additional information may be submitted for reconsideration of the finding.

Minn. R. 3920.0800 subp. 1. and
Minn. R. 3920.1000 subp. 3.

In the event compliance is not achieved within the defined time period set by the commissioner, the commissioner will notify the city and the commissioner of revenue the city is subject to a five percent reduction in the aid that would otherwise be payable to that city, or to a fine of $100 per day, whichever is greatest.

Minn. Stat. § 471.9981 subd. 7.
Minn. R. 3920.1200.

Cities may appeal the imposition of a penalty by filing a notice of appeal with the commissioner within 30 days of the commissioner's notification to the city of the penalty. No penalty may be imposed while an appeal is pending.

RELEVANT LINKS:

Minn. R. § 3920.1300.

VII. Maintaining pay equity

Cities must maintain equitable pay relationships and submit additional reports as required by the department, generally every third year. The Department monitors compliance on an ongoing basis and reports to the legislature annually. The procedures for imposing or appealing penalties still apply to those cities found in compliance at one time, but found not in compliance at a future date.

VIII.Further assistance

Cities may contact the Pay Equity Coordinator for specific assistance. The League's Human Resources and Benefits Department will also discuss with you any additional questions you may have.

Dominique Murray, State Program Administrator- Pay Equity
Email: Dominique.Murray@statemn.us
651-259-3805
800.627.3529

800.925.1122
651.281.1200
HRbenefits@lmc.org

Interpreting Results of Compliance Tests

Your jurisdiction is required to pass four tests to be in compliance.

1. Completeness and Accuracy Test

Report is submitted on time
Data is correct
Required information has been provided
For more information, refer to the Guide to Understanding Pay Equity Compliance

2. Statistical or Alternative Test

Compares salary data to determine if female classes are paid consistently below male classes of comparable work value (job points). The Minnesota Pay Equity Management System will generate results applying the Statistical Analysis Test. Underpayment ratio results of 80 and above are passing. In some cases, the Alternative Analysis is required and consists of a manual review of the data. Refer to the following page to determine which test applies to your report. For more information, refer to the Guide to Understanding Pay Equity Compliance.

3. Salary Range Test

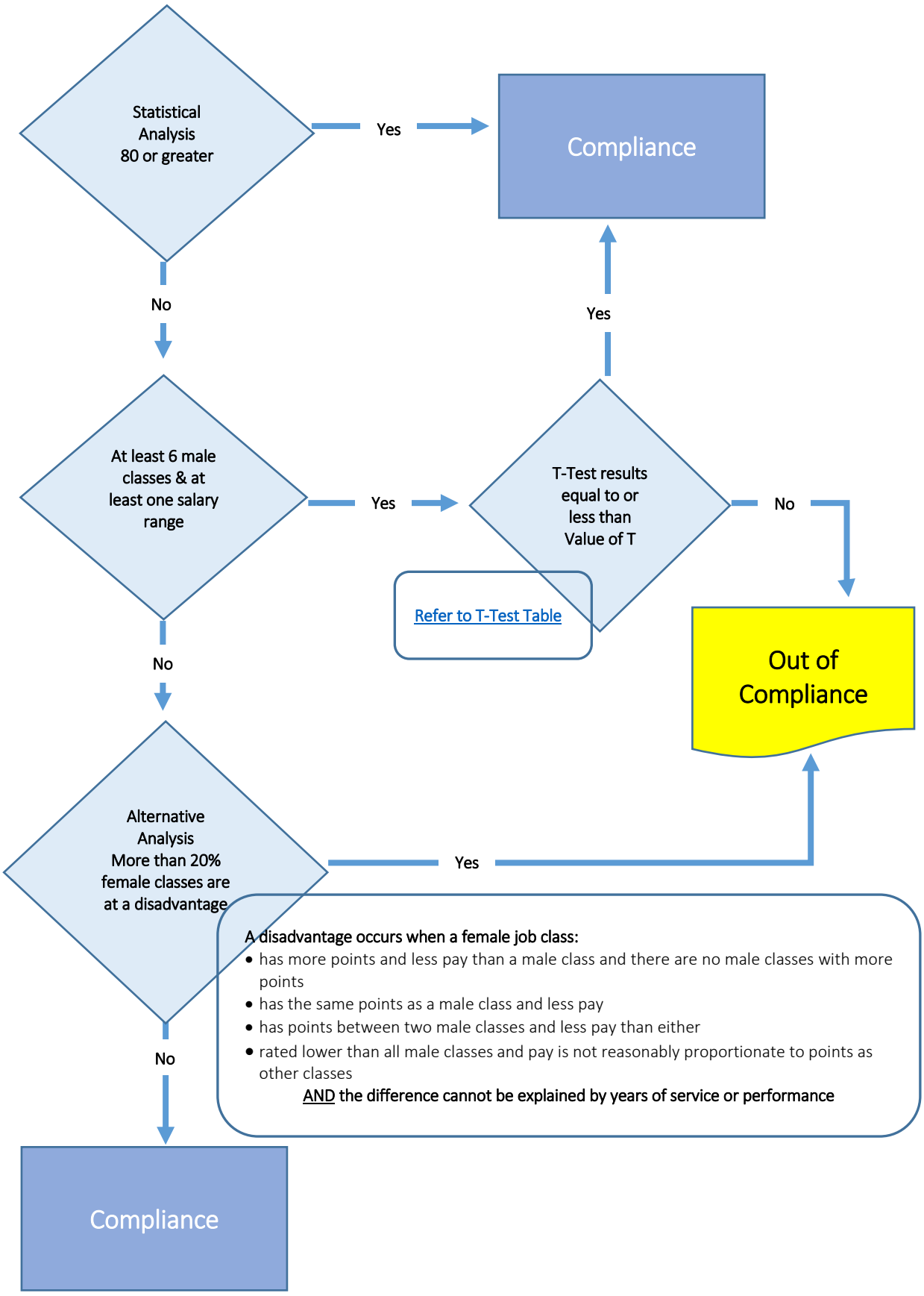
Compares the average number of years required for female classes to move through a salary range consisting of a time-phased step progression to the average number of years required for male classes. Results of 0 or 80 and above are passing scores. (Test does not apply if years to achieve maximum salary are not defined or if salary ranges are not defined). For more information, refer to the Guide to Understanding Pay Equity Compliance.

4. Exceptional Service Pay Test

Compares the percentage of female classes receiving longevity or performance pay to the percentage of male classes receiving longevity or performance pay. In noting exceptional service pay, recipients must exceed the maximum salary reported. Results of 0 or 80 and above are passing scores. (Test does not apply if exceptional service pay is not available in your jurisdiction). For more information, refer to the Guide to Understanding Pay Equity Compliance.

Interpreting Results of Compliance Tests

When to use Statistical and Alternative Analysis Tests



CC Regular Session **7. 1.**

Meeting Date: 01/26/2021

Submitted For: Sean Sullivan, Community Development

By: Sean Sullivan, Community Development

Information

Title:

Adopt Resolution #21-027 Approving Request for Interest (RFI) for a Dynamic Display Billboard for Retail Advertising on Highway 10 Near The COR

Purpose/Background:

The purpose of this case is to seek authorization at the recommendation of the EDA to publish a request for interest in developing a dynamic display billboard on Highway 10 in Ramsey. The City would not own the sign, but facilitate the location of a sign by a private billboard company. A request for interest is a shorter, more simplistic version of a request for proposals to gauge interest before investing significant staff time in the endeavor. A request for proposals is a more involved and detailed process. Either way, this process is to simply seek interested parties. It does not obligate the City to move forward with a project itself.

Staff has received input from developers and potential end-users indicating that it is difficult being seen from Highway 10 in the COR and surrounding areas. Due to this issue, the City Council and Planning Commission have recently granted approvals for 75-foot tall signage on the land under contract by RGH Ramsey and another parcel owned by PSD LLC to assist in increasing visibility to Highway 10 traffic.

The EDA met on September 10, 2020 and discussed the possibility of a Dynamic Display Billboard somewhere on Highway 10 to assist in marketing for the COR and other businesses in Ramsey. At the EDA meeting a presentation made by Blue Ox Media highlighted the Ramsey market, items to consider when locating a Billboard of this type and experience with a new Dynamic Display Billboard in Champlin. Blue Ox Media is a Dynamic Display Billboard owner and operator. Blue Ox Media erected the newer billboard on Highway 169 in Champlin, which provides additional advertising opportunities for local and national businesses. The cost of this Dynamic Display Signage was around $500,000.

Blue Ox Media did a great job answering questions and providing some feedback on the prospects of a Dynamic Display Billboard in Ramsey at the September EDA meeting. Generally speaking, they indicated that Ramsey was a market for consideration and that they would have interest in exploring it further. In addition, they indicated that often times there are local advertising opportunities for local businesses at reduced rates but that the majority of the revenue was for national advertisers for long term contracts. All of these items could be negotiated if the City was party to the sign agreement. Although the preference from Blue Ox Media was to enter into an Exclusivity Agreement, the subsequent discussion by the EDA led to a consensus that the City should let other interested parties pitch their proposals as well.

Within the last 1-2 years, the City renovated the Community Sign adjacent to the Northstar Commuter Rail Station. The intent of this sign was clearly defined as a community sign providing community messaging only, not advertising for local businesses. This current discussion is to consider ways to provide an additional signage that is focused on advertising for local businesses; not a community message sign.

The City Council met on November 10, 2020 and directed staff to draft a Request for Interest for a Dynamic Display Billboard on Highway 10 near the COR.

Notification:

N/A

Observations/Alternatives:

Staff has prepared a Request for Interest/Proposals for a Dynamic Display Billboard for Retail Advertising on Hwy 10 Near the COR.

Items further defined in the RFI include:

- Proposed Location of Dynamic Display Billboard
- Size of Dynamic Display Billboard
- Development Standard and Maintenance
- Duration of Agreement
- Ad Content
- Ordinance Changes
- Community Branding (similar to City Signs on Hwy 10?)
- Timing

Alternatives:

1. Adopt Resolution #21-027 Approving Request for Interest/Proposals for a Dynamic Display Billboard for Retail Advertising on Hwy 10 Near the COR as presented
2. Adopt Resolution #21-027 Approving Request for Interest/Proposals for a Dynamic Display Billboard for Retail Advertising on Hwy 10 Near the COR with changes
3. Something else

Funding Source:

This project would be handled under normal staff duties.

There would be no cost to the City at this time. If a parcel owned by the City were selected, the City would negotiate lease revenue for a ground lease. The City would not be handling the ad sales. The billboard company would own and operate the sign itself.

Recommendation:

The EDA recommends that the City Council begin a process seeking interest in construction a dynamic display billboard on Highway 10.

Action:

Motion to adopt adopt Resolution #21-027 approving Request for Interest for a Dynamic Display Billboard for Retail Advertising on Highway 10 near The COR.

Attachments

Resolution #21-027

DRAFT RFI

Champlin Sign Photo and Information

Form Review

Inbox	Reviewed By	Date
Sean Sullivan (Originator)	Sean Sullivan	01/19/2021 04:46 PM
Tim Gladhill	Tim Gladhill	01/21/2021 09:23 AM
Sean Sullivan (Originator)	Sean Sullivan	01/21/2021 09:34 AM
Tim Gladhill	Tim Gladhill	01/21/2021 11:50 AM
Kurt Ulrich	Kurt Ulrich	01/21/2021 02:54 PM
Form Started By: Sean Sullivan		Started On: 11/23/2020 01:04 PM

Final Approval Date: 01/21/2021

Councilmember _____ introduced the following resolution and moved for its adoption:

RESOLUTION #21-027

RESOLUTION APPROVING REQUEST FOR INTEREST FOR A DYNAMIC DISPLAY BILLBOARD FOR RETAIL ADVERTISING ALONG HIGHWAY 10 NEAR THE COR

WHEREAS, the Developers, potential developers and end-users in the COR and surrounding areas have indicated that it is challenging to advertise to travelers on Highway 10 due to the lack of visibility or proximity to this major highway; and

WHEREAS, the City has invested significantly into the COR to provide an opportunity for retail, commercial and housing investment in the heart of Ramsey and the lack of visibility from Hwy 10 is a barrier for retail development; and

WHEREAS, Dynamic Display Billboard has proven to be an effective way to market local and national businesses to high traffic roadways; and

WHEREAS, the private Dynamic Display Billboard market sector has expressed interest in the Ramsey market which presents an opportunity for the City to help our local businesses advertise to a larger audience; and

WHEREAS, the EDA supports soliciting proposals for Dynamic Display Billboard in Ramsey; and

WHEREAS, the On November 10, 2020 the City Council directed Staff to draft a RFI/RFP and to bring it back to the City Council for consideration; and

NOW THEREFORE, BE IT RESOLVED BY THE CITY OF RAMSEY, ANOKA COUNTY, STATE OF MINNESOTA, as follows:

1) That the City approve the attached Request for Interest (RFI) for the development of Dynamic Display Billboard on Highway 10 near the COR; subject to City Attorney review.

That the motion for the adoption of the forgoing resolution was duty seconded by Councilmember _____, and upon vote being taken thereon, the following voted in favor:

and the following voted against the same:

and the following abstained:

and the following were absent:

Existing Vacancy

Whereupon said resolution was declared duly passed and adopted by the Ramsey City Council this the 26th day of January, 2021.

_____
Mayor

ATTEST:

_____
City Clerk

City of Ramsey
Requests for Interest
Dynamic Display Billboard

Introduction

The City of Ramsey is requesting proposals from qualified businesses to construct and operate a Dynamic Display Billboard in the City of Ramsey. Please provide the business contact information below:

Company information

Business Name:

Street Address:

Website:

References:

Project Team (enter multiple members if applicable)

Name:

Role:

Email:

Phone:

Experience

Please provide example(s) of dynamic display billboard projects completed by your business. For each example, please describe how the project was funded for construction and how billboard was operated.

Project Specifications/Required Submittals

Please include specifications/narrative to demonstrate how you will comply with the following.

Location: Adjacent to US Highway 10/169 in the City of Ramsey city limits (proximity to COR preferred). Please provide Site Location Map (including legal description and PID) and Site Ownership of proposed site(s).

Size: Dynamic display sign must not exceed 40 X 40 feet. (excluding the base).

Sign Base: Sign base must be consistent/complimentary with City sign plan and branding. (please consult with Ramsey Zoning Staff at 763-433-9821).

Sign Graphics: Virtual renderings of dynamic display sign for east bound and west bound traffic are required for location(s)

Construction, operation and maintenance: Company must construct, operate and maintain sign

DRAFT

Ramsey Business Advertising and Community Messaging: Ad space must be reserved for both City and local business advertising. Please describe how much space will be reserved for each entity type and if there will be reduced cost to advertise

Duration: Commitment to a minimum of a 10-year agreement

Ordinance Compliance/Changes: Construction and operation of the proposed dynamic display billboard will likely result in the need for City Ordinance amendments. Please include experience in working with Ordinance amendments.

City Owned Parcels: The City is open to a location currently owned (or planned to be owned after pending Highway 10 Improvements) to locate a billboard. In that case, please provide detail on the financial structure of lease rates and/or revenue cost-share.

DRAFT

CHAMPLIN – Blue Ox Media

West Side of Highway 169, 500 feet south of 120th Ave.

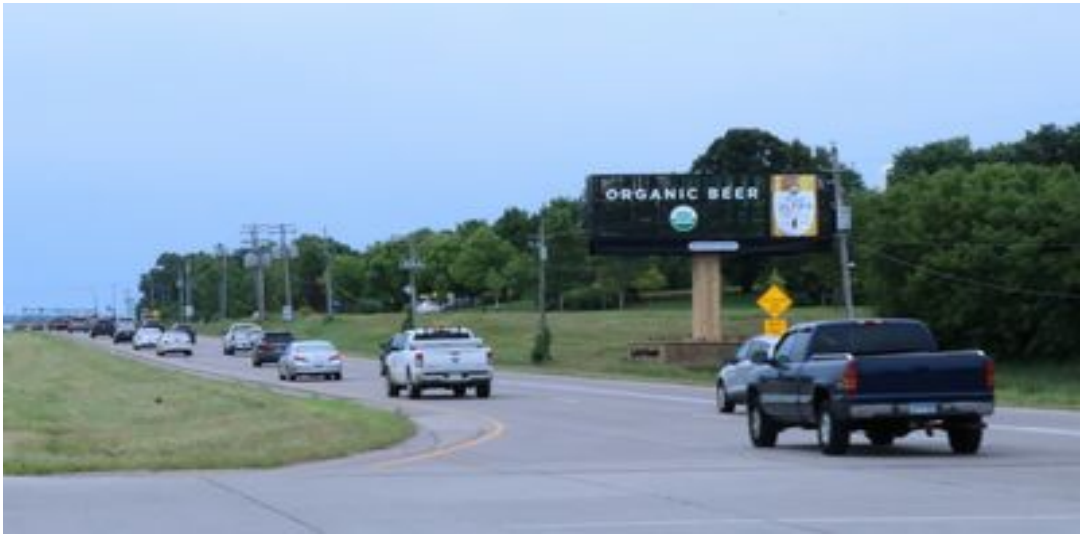
Blue Ox Media's EXCLUSIVE Highway 169 advertising coverage provides brands with the only digital Out of home billboard coverage within a 5+ mile radius! No other OOH coverage exists along Highway 169 from I-694 through the entire area.

Reaching consumers in the heart of the northwest metro, this location is ideal marketing coverage for healthcare, higher education, technology and auto brands. Additionally, the sign is a short drive from several colleges, some of the metros top retailers and the affluent communities of Anoka, Coon Rapids, Osseo & Maple Grove!

Size: 14' X 48'

Facing: North & South

Type: Digital



CC Regular Session **7. 2.**

Meeting Date: 01/26/2021

By: Bruce Westby, Engineering/Public Works

Information

Title:

Adopt Resolution #21-022 Approving Plans and Specifications and Authorizing Advertisements for Bids for Riverdale Drive Reconstruction, Improvement Project #21-00

Purpose/Background:

Purpose:

The purpose of this case is to consider adopting Resolution #21-022 approving plans and specifications and authorizing advertisements for bids for the reconstruction of Riverdale Drive NW between Feldspar Street NW and Sunfish Lake Boulevard, Improvement Project #21-00.

Background:

City Improvement Project #21-00 proposes to reconstruct Riverdale Drive NW between Feldspar Street NW and Sunfish Lake Boulevard in 2021 per the 2021 - 2030 Capital Improvement Plan (CIP).

The segment of Riverdale Drive that is proposed to be reconstructed totals approximately 2,925 lineal feet (0.55 miles). A figure showing the location and scope of the proposed improvements is included on the attached cover sheet of the plans. The pavement on this segment of Riverdale Drive is in very poor condition and Public Works Staff spend an excessive amount of time each year patching the pavement. In addition, Staff has received numerous complaints from the public in recent years regarding the poor condition of this pavement.

On November 24, 2020, City Council accepted a proposal from Bolton & Menk, Inc. to provide design services for this project including collecting topographic survey data, completing geotechnical evaluations, preparing plans and specifications complying with Minnesota Department of Transportation (MnDOT) State Aid standards, providing required submittals to State Aid, and bidding services. Riverdale Drive is part of the City's Municipal State Aid (MSA) system and is therefore required to meet 10-ton pavement design strength standards, as well as other applicable MnDOT State Aid standards.

Municipal utilities (water supply and sanitary sewer) exist in the project area. Sanitary sewer improvements are not proposed with this project as the sanitary sewer lines were cleaned and televised and the results verified that repairs are not immediately needed or anticipated to be needed during the 60-year design life of the improvements. Water supply improvements are also not proposed. However, water service lines extending from the trunk line to individual properties are proposed to be inspected at the right of way to confirm that each service line is properly tied back to the trunk line. This work will help ensure that service line repairs will not be needed during the design life of the proposed improvements, and is being proposed as repairs to several water service lines were made recently along this segment of Riverdale Drive. The water supply system was recently tested for leaks and the results indicate that repairs are not immediately needed or anticipated to be needed during the design life of the improvements.

Storm sewer improvements are proposed with this project. This includes adding trunk storm sewer under Riverdale Drive to better convey stormwater runoff from the Dolomite Street intersection area to the Mississippi River, as well as adding a pollution control structure to remove pollutants from stormwater runoff before it is discharged to the river.

Riverdale Drive is currently 44-feet wide from face-of-curb to face-of-curb, but is proposed to be reduced by

10-feet throughout the corridor to a width of 34-feet from face-of-curb to face-of-curb. To accomplish this, two existing 6-foot wide on-street bike lanes on the west end of Riverdale Drive are proposed to be removed, along with the on-street parking lane along the north side. An 8-foot wide on-street parking lane is proposed along the south side of Riverdale Drive to accommodate over-flow parking for adjacent properties, and could accommodate parking for trail users and the proposed Mississippi River overlook, east of Dolomite Street. Drive lanes are proposed to be 12-feet wide, with an additional 2-feet provided along the curb on the north side to better accommodate truck traffic and to mitigate loss of useable pavement in the winter due to snow and ice accumulations.

A 10-foot wide off-street bituminous trail exists north of Riverdale Drive and west of Sunfish Lake Boulevard. This trail terminates approximately 300 feet east of Dolomite Street, where it connects to Riverdale Drive. This trail is proposed to be extended to Feldspar Street to allow pedestrians and bicyclists to use the off-street trail, which will be separated from Riverdale Drive by a boulevard between 6 and 8-feet wide that will better accommodate snow storage and reduce drifting of snow along the corridor, compared to the existing 0 to 2-foot wide boulevard.

Attached is sheet 7 from the 90-percent plans that show the proposed typical section in more detail.

Removing the segment of Dolomite Street between Riverdale Drive and Highway 10 was considered with this project as identified in the Highway 10 Access Planning Study and as carried forward in the Ramsey Gateway Plan. However, removing this segment of Dolomite Street would cause significant delays in delivering this project. Though this work is not eligible for State Aid funding, alternate funding sources have been identified for completing this work when the need or benefit warrants it.

A 6-foot wide concrete sidewalk was contemplated along the south side of Riverdale Drive between Dolomite Street and Feldspar Street to enhance pedestrian access to Riverdale Park for pedestrians with origins or destinations south of Riverdale Drive. However, these improvements are estimated to cost $110,000, which far outweigh the benefits so the sidewalk is not proposed to be constructed as part of this project.

Also contemplated was construction of a Mississippi River observation deck and trail connection included in the 2021 - 2030 CIP. However, since constructing the overlook with this project would not reduce construction costs the observation deck and connecting trail should instead be considered at the time the private property is developed.

Access to abutting properties will be maintained throughout construction as best as practical. Staff will work with property owners as needed to ensure they are informed in advance of access interruptions, if needed. Access for emergency services will be maintained throughout construction.

Project schedule
January 26 – Approve Plans and Specifications / Authorize Ads for Bids
January 29, February 5 – Publish Ads for Bids
March 2 – Bid opening
March 9 – Accept Bids / Award Contract
Late May / early June – Begin construction
Early September – Substantial completion (open to traffic)
2022 – Final completion

Notification:

Public notifications were not required in advance of this case.

Upon Council authorization, advertisements will be published in the Anoka Union Herald and in Finance & Commerce on January 29 and February 5, 2021, as required per State Statute. Bids will also be advertised electronically on QuestCDN.

Observations/Alternatives:

Observations:
The only public comment received to date has been that the pavement is in dire need of repair/replacement. It should be noted that a public information meeting was not conducted for this project because plans were developed quickly and the current COVID-19 pandemic does not allow for large in-person gatherings. Instead, the project web page is being populated with lots of information and links to allow the public to learn as much about the project as they want, including reviewing construction plans and watching a presentation that was prepared and narrated by City Staff. Contact information is also provided in case anyone has questions or wants to discuss anything in detail with City Staff. Letters were recently mailed to abutting property owners informing them of the project and the web page. Staff will update the Council on any public comments received when bids are presented in March for award of a construction contract.

The proposed improvements should have a serviceable life of 60 years, assuming that proactive maintenance operations are performed on a regular basis during the life of the improvements.

This project will be bid electronically through QuestCDN. The Engineering Department moved to full electronic bids using QuestCDN in 2019 to help streamline the bidding process for both the City and the bidders. However, this also allows bids to be opened "publicly" on-line, which is critical at this time considering that in-person bid openings are not a viable option during the current COVID-19 pandemic.

Alternatives:
Alternative #1 – Motion to adopt Resolution #21-022 approving plans and specifications and authorizing advertisements for bids for Riverdale Drive Reconstruction, Improvement Project #21-00.

Alternative #2 – Motion to deny adoption of Resolution #21-022 at this time.

Funding Source:
The Engineer's opinion of probable construction costs for the proposed improvements based on 90-percent plans is $900,000. Estimated project costs include an additional 23-percent for indirect costs (administrative, engineering, finance and legal), which totals $1,107,000.

Municipal State Aid (MSA) Funds are proposed to pay for street and trail improvements, and Stormwater Funds are proposed to pay for stormwater improvements. Any costs related to sanitary sewer and/or watermain will be paid through the respective enterprise fund.

Recommendation:
Staff recommends alternative #1 in accordance with the approved 2021 – 2030 CIP.

On January 19, 2021, the Public Works Committee unanimously recommended approval of alternative 1.

Action:
Motion to adopt Resolution #21-022 approving plans and specifications and authorizing advertisements for bids for Riverdale Drive Reconstruction, Improvement Project #21-00.

Attachments

Resolution 21-022
IP2100 Plans Title Sheet
IP2100 Plans Typicals

Form Review

Inbox	Reviewed By	Date
Kurt Ulrich	Kurt Ulrich	01/21/2021 03:31 PM

Form Started By: Bruce Westby Started On: 01/19/2021 12:02 PM
Final Approval Date: 01/21/2021

Councilmember _____ introduced the following resolution and moved for its adoption:

RESOLUTION #21-022

RESOLUTION APPROVING PLANS AND SPECIFICATIONS AND AUTHORIZING ADVERTISEMENTS FOR BIDS FOR RIVERDALE DRIVE RECONSTRUCTION, IMPROVEMENT PROJECT #21-00

WHEREAS, the City proposes to reconstruct Riverdale Drive NW between Feldspar Street NW and Sunfish Lake Boulevard in 2021 under City Improvement Project #21-00; and

WHEREAS, pursuant to Ramsey City Council Resolution #20-248 adopted November 24, 2020, the City Council accepted the design services proposal of Bolton & Menk, Inc. for providing engineering services required to develop final plans and specifications for the purpose of soliciting bids for the construction of Improvement Project #21-00; and

WHEREAS, Bolton & Menk, Inc. has completed plans and specifications for the purpose of advertising for bids for the same improvements.

NOW THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF RAMSEY, ANOKA COUNTY, STATE OF MINNESOTA, as follows:

1) The Ramsey City Council hereby approves the plans and specifications prepared by Bolton & Menk, Inc. for the making of such improvements, and authorizes the advertisement of bids for the same improvements as City Improvement Project #21-00.

The motion for the adoption of the foregoing resolution was duly seconded by Councilmember _____, and upon vote being taken thereon, the following voted in favor thereof:

and the following voted against the same:

and the following abstained:

and the following were absent:

Existing Vacancy

Whereupon said resolution was declared duly passed and adopted by the Ramsey City Council this the 26th day of January, 2021.

_____
Mayor

ATTEST:

_____
City Clerk

MINNESOTA DEPARTMENT OF TRANSPORTATION
CITY OF RAMSEY
ANOKA COUNTY, MINNESOTA
RIVERDALE DRIVE IMPROVEMENTS
CITY IMPROVEMENT PROJECT #21-00

CONSTRUCTION PLAN FOR: GRADING, BITUMINOUS RECLAMATION, AGGREGATE BASE, PLANT MIXED BITUMINOUS PAVEMENT, CONCRETE CURB AND GUTTER, ADA IMPROVEMENTS, STORM SEWER, LANDSCAPING AND RELATED APPURTENANCES

S.A.P. 199-108-004 LOCATED ON RIVERDALE DR NW FROM FELDSPAR ST NW TO 750' WEST OF SUNFISH LAKE BLVD

RIVERDALE DR (S.A.P. 199-108-004)

GROSS LENGTH	2351.0	FEET	0.445	MILES
BRIDGE LENGTH	NA	FEET	NA	MILES
EXCEPTION LENGTH	NA	FEET	NA	MILES
NET LENGTH	2351.0	FEET	0.445	MILES

LENGTH AND DESCRIPTION BASED UPON PROPOSED RIVERDALE DR NW CENTERLINE

DESIGN DESIGNATION RIVERDALE DR NW
STA. STA 0+19TO STA. STA 23+70

FUNTIONAL CLASSIFICATION	URBAN COLLECTOR
R-VALUE	60
ΣN-18	180,000
NO. & WIDTH OF TRAFFIC LANES	2 & 12 ft
NO. & WIDTH OF PARKING LANES	1 & 8 ft
ADT (PRESENT YEAR) 2021	1,000
ADT (PROJECTED YEAR) 2041	2,120
HCADT (PROJECTED YEAR) 2041	3.87%
DESIGN SPEED	35 mph
DESIGN LOAD	10 ton

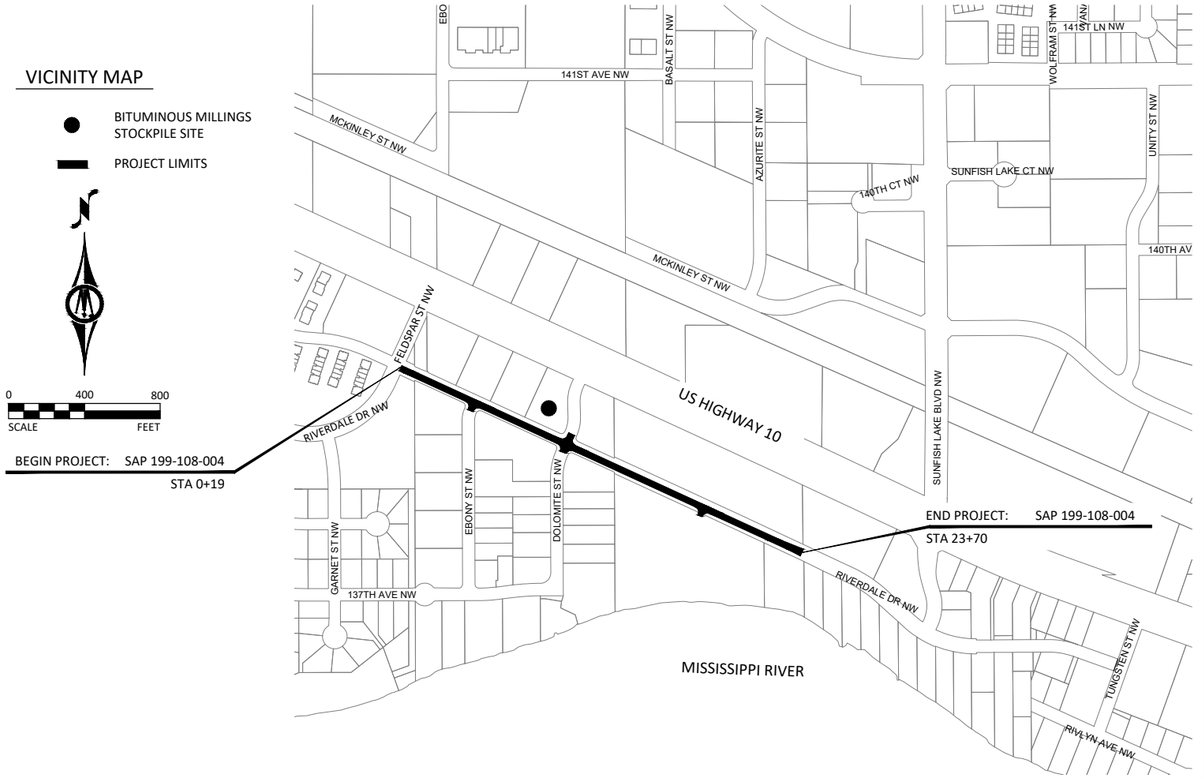
DESIGN SPEED FOR ROADWAY BASED ON
ON STOPPING SIGHT DISTANCE:
HEIGHT OF EYE = 3.5 FT
HEIGHT OF OBJECT = 2.0 FT

DESIGN DESIGNATION OFF-ROAD TRAIL
STA 0+19 TO 13+45

FUNTIONAL CLASSIFICATION	BIKE TRAIL
DESIGN SPEED	2O MPH

STOPPING SIGHT DISTANCE
HEIGHT OF EYE = 4.5 FT
HEIGHT OF OBJECT = 0 FT

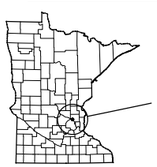
VICINITY MAP



TYPICAL PLAN SCALE
UNLESS OTHERWISE NOTED:

HORIZONTAL SCALE 0 25 50 — SCALE FEET
VERTICAL SCALE 0 5 10 — SCALE FEET

PROJECT LOCATION



CITY: RAMSEY
COUNTY: ANOKA
DISTRICT: METRO

THE SUBSURFACE UTILITY INFORMATION IN THIS PLAN IS UTILITY QUALITY LEVEL D UNLESS OTHERWISE NOTED. THIS UTILITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF CI/ASCE 38-02, ENTITLED "STANDARD GUIDELINES FOR THE COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA."

BM=859.76
TOP NUT OF HYDRANT
STA 1+24.40
SOUTH SIDE OF STREET

PROJECT DATUM:
HORIZONTAL: ANOKA COUNTY COORDINATES (1996 ADJUSTMENT)
VERTICAL: NGVD 29

RECORD DRAWING INFORMATION
OBSERVER:
CONTRACTOR:
DATE:

MINN. PROJ. NO. STATE FUNDS

--- GOVERNING SPECIFICATIONS ---
THE 2018 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATION FOR CONSTRUCTION" SHALL GOVERN.

ALL TRAFFIC CONTROL DEVICES AND SIGNING SHALL CONFORM AND BE INSTALLED IN ACCORDANCE WITH THE "MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MN MUTCD) AND PART VI, "FIELD MANUAL" FOR TEMPORARY TRAFFIC CONTROL DEVICES.

SHEET NUMBER	SHEET TITLE
GENERAL	
1	TITLE SHEET
2	LEGEND
3	STATEMENT OF ESTIMATED QUANTITIES
4	ALIGNMENT TABULATION
CIVIL	
5-6	EXISTING CONDITIONS AND REMOVALS
7-17	TYPICAL SECTIONS & DETAILS
18-20	STORMWATER POLLUTION PREVENTION PLAN
21-22	EROSION COTROL
23-27	STREET PLAN AND PROFILE
28-29	INTERSECTION DETAILS
30-31	SIGNAGE & STRIPING PLAN
32-37	CROSS SECTIONS

THIS PLAN SET CONTAINS 37 SHEETS.

90% PLANS

Kevin P. Kielb, P.E.
Design Engineer: I hereby certify that this plan was prepared by me or under my direct supervision, and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

Date 1/12/2021 License Number 23211

Date
Approved: City of RAMSEY Engineer

Date
District State Aid Engineer:
Review for compliance with State Aid Rules/Policy

Date
Approved for State Aid Funding: State Aid Engineer

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H:\RAMS\08112320\4\CAD\C3D\123204d001.dwg 1/12/2021 2:25:01 PM

BOLTON & MENK
7533 SUNWOOD DR NW, SUITE 206
RAMSEY, MINNESOTA 55303
Phone: (763) 433-2851
Email: Ramsey@bolton-menk.com
www.bolton-menk.com

City of RAMSEY

DESIGNED	ZFL
DRAWN	ZFL
CHECKED	KPK
CLIENT PROJ. NO.	21-00

NO.	ISSUED FOR	DATE

CITY OF RAMSEY, MINNESOTA
RIVERDALE DRIVE IMPROVEMENTS, S.A.P. 199-108-004
STATE AID PROJECT NO. S.A.P. 199-108-004

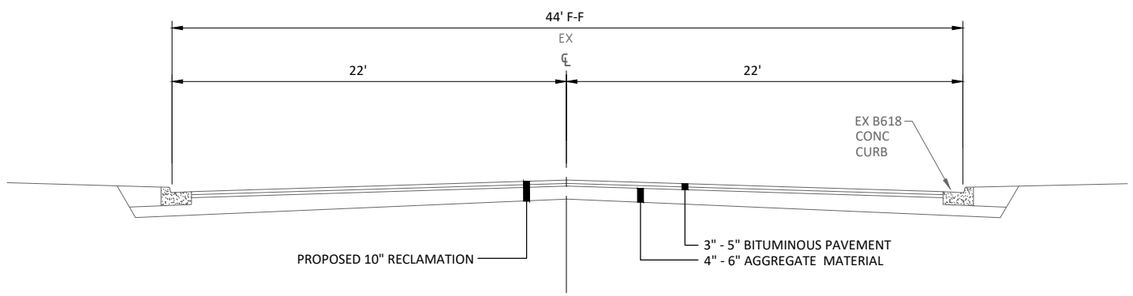
SHEET 1 OF 37

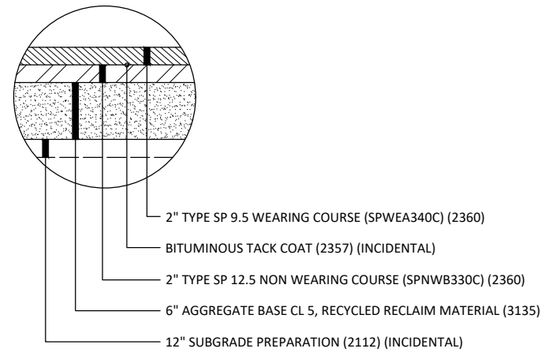
EXISTING TYPICAL SECTION

RIVERDALE DRIVE NW

NOT TO SCALE

STA 0+19 TO STA 23+70





INSET A - BITUMINOUS ROADWAY

NOT TO SCALE

NOTES:

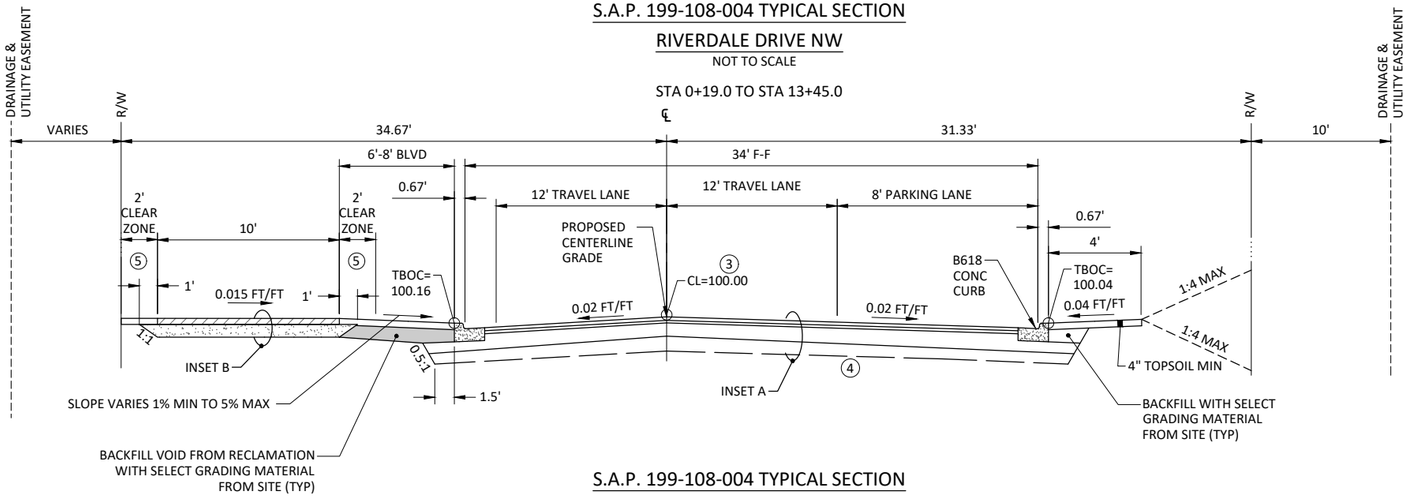
1. ANY VARIATIONS FROM THE TYPICAL SECTION DIMENSIONS ARE SHOWN ON THE PLAN DRAWINGS
2. PAVEMENT SLOPES AT INTERSECTION LOCATIONS MAY VARY FROM THOSE SHOWN ON THE TYPICAL SECTION
3. ELEVATIONS SHOWN ARE RELATIVE TO C/L AND DO NOT RELATE TO ACTUAL CONSTRUCTION GRADES
4. SUBGRADE SHALL BE TEST ROLLED PRIOR TO AGGREGATE BASE INSTALLATION AND CONFORM TO MnDOT SPEC 2111
5. TRAIL CLEAR ZONE 1:6 MAX, NO TRAFFIC SIGNS SHALL BE INSTALLED WITHIN TRAIL CLEAR ZONE

S.A.P. 199-108-004 TYPICAL SECTION

RIVERDALE DRIVE NW

NOT TO SCALE

STA 0+19.0 TO STA 13+45.0

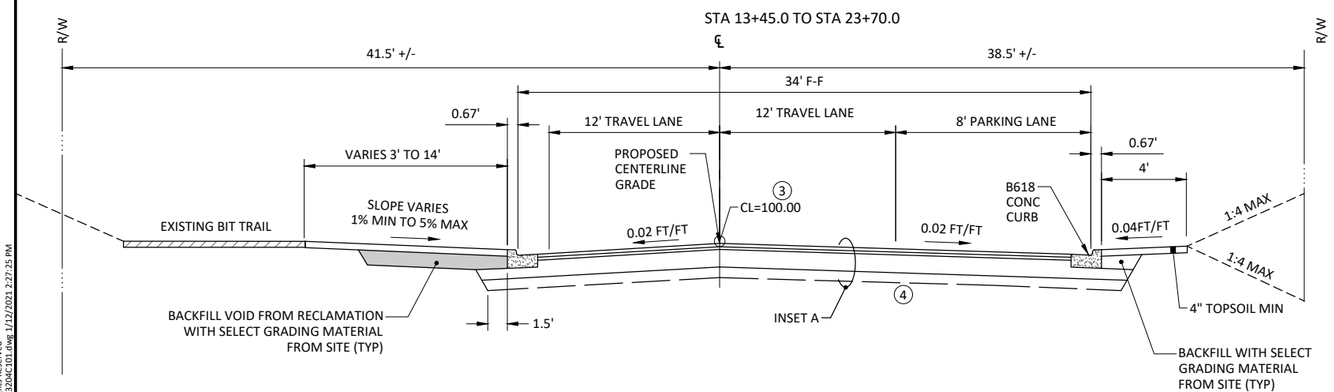


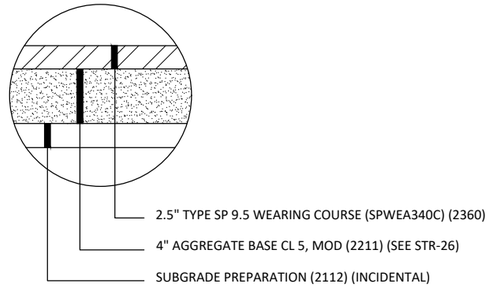
S.A.P. 199-108-004 TYPICAL SECTION

RIVERDALE DRIVE NW

NOT TO SCALE

STA 13+45.0 TO STA 23+70.0





INSET B - BITUMINOUS TRAIL

NOT TO SCALE

TABLE A
MODIFIED CLASS 5 SPECIFICATIONS

% PASSING	
1"	100
3/4"	90 – 100
3/8"	50 – 80
No.4	35 – 70
No.10	20 – 60
No.40	10 – 35
No.200	5 – 10

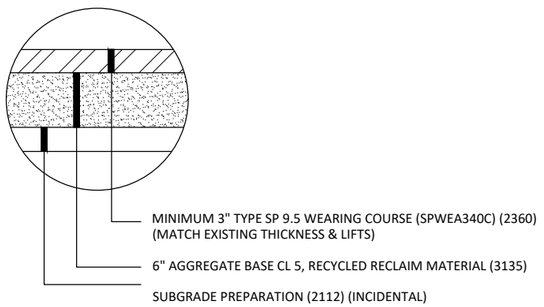
NOTES:
1. THE AGGREGATE BASE CONSTRUCTION WILL BE ACCEPTED FOR PAYMENT IN ACCORDANCE WITH THE PROVISIONS IN TABLE A.
2. IF THE AGGREGATE BASE FAILS TO MEET THE REQUIREMENTS OF TABLE A THE MATERIAL CAN BE CORRECTED IN PLACE OR REMOVED AND REPLACED WITH MATERIAL THAT MEET THE REQUIREMENTS OF TABLE A.
3. IN THE EVENT THAT RECYCLED MATERIAL IS USE IT MUST MEET MNDOT REQUIREMENTS FOR RECYCLED BASE.

APPROVED: 2 – 2003

City of RAMSEY

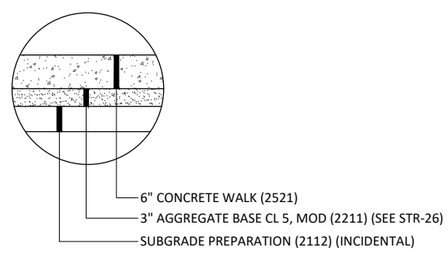
STANDARD DETAILS: MODIFIED CLASS 5 SPECIFICATIONS

CITY PLATE No. STR-26



BITUMINOUS DRIVEWAY (COMMERCIAL)

NOT TO SCALE



CONCRETE WALK / PEDESTRIAN RAMP

NOT TO SCALE

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H:\RAMS\08\123204\CAD\C3D\123204C101.dwg 1/12/2021 2:27:25 PM

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

90% PLANS

KEVIN P. KIELB

LIC. NO. 23211 DATE 1/12/2021

BOLTON & MENK

7533 SUNWOOD DR NW, SUITE 206
RAMSEY, MINNESOTA 55303
Phone: (763) 433-2851
Email: Ramsey@bolton-menk.com
www.bolton-menk.com

City of RAMSEY

DESIGNED	ZFL
DRAWN	ZFL
CHECKED	KPK
CLIENT PROJ. NO.	21-00

NO.	ISSUED FOR	DATE

CITY OF RAMSEY, MINNESOTA

RIVERDALE DRIVE IMPROVEMENTS, S.A.P. 199-108-004

TYPICAL SECTIONS

SHEET 7 OF 37

CC Regular Session **7. 3.**

Meeting Date: 01/26/2021

By: Bruce Westby, Engineering/Public Works

Information

Title:

Adopt Resolution #21-023 Approving Plans and Specifications and Authorizing Advertisements for Bids for 2021 Crack Seal Improvements, Improvement Project #21-06

Purpose/Background:

Purpose:

The purpose of this case is to adopt Resolution #21-023 approving plans and specifications and authorizing advertisements for bids for 2021 Crack Seal Improvements, Improvement Project #21-06.

Background:

Crack seal improvements are completed annually on between 13 and 23 miles of public street segments to cost-effectively maximize the life of the bituminous pavement.

Crack sealing protects pavement by preventing stormwater runoff from seeping through cracks in the pavement and joints between the pavement and concrete curb and gutter and utility castings, reducing future pavement damage due to wet subgrade soils, especially during freeze-thaw cycles.

The City's current pavement maintenance schedule calls for public streets to be crack sealed the third, seventh, and fourteenth year following construction, reconstruction, and overlay improvements. However, while this is the typical maintenance schedule it is important to note that Staff reviews the condition of all streets annually and adjusts the schedule of maintenance operations based on actual pavement conditions.

A total of 21.05 miles of public street segments are proposed to receive crack seal improvements in 2021. These street segments were selected based on age, pavement maintenance history, and Pavement and Surface Evaluation Rating (PASER) values. Crack seal improvements are typically performed on pavement sections with PASER ratings of 7 or higher. Staff also attempts to select street segments that are in relatively close proximity to each other in an attempt to receive lower bid prices for mobilization and traffic control bid items.

Plans and specifications for the 2021 Crack Sealing Improvements were prepared in-house as part of Staff's normal duties, and are attached to this case. Also attached is a street segment pavement condition summary sheet.

Notification:

No notifications were required for this case. However, upon adopting Resolution #21-023, advertisements for bids will be published in the Anoka Union Herald and in Finance and Commerce on January 29th and February 5th.

Observations/Alternatives:

Observations:

Similar to all improvement projects over the past couple of years, bids will be accepted and managed on-line through QuestCDN. This will prove especially useful during the current pandemic since it will not limit the ability for contractors to submit bids, for the City to receive and accept bids, or for attendance during the public bid opening.

Upon Council approval of this case, bids will be publicly opened on-line on March 2nd. The City Council will be asked to accept bids and award a contract for construction on March 9th.

The 2021 crack seal improvements are anticipated to occur between mid-June and mid-August. The work itself generally takes two to three weeks to complete once the Contractor commits their crews to the project. Staff will maintain a project webpage, and will update it as new information is made available. Letters will not be mailed to notify the public of the 2021 crack seal improvements since the work occurs quickly and has little to no impact on the traveling public or abutting properties.

Alternatives:
Alternative #1 - Motion to adopt Resolution #21-023 approving plans and specifications and authorizing advertisements for bids for 2021 Crack Seal Improvements, Improvement Project #21-06.

Alternative #2 - Motion to deny adoption of Resolution #21-023 at this time.

Funding Source:
Estimated project costs for the proposed 2021 crack seal improvements total $190,500. This includes 14% indirect costs for administrative, engineering, legal and financing. Based on available information, Staff anticipates that the bid prices for the 2021 crack seal improvements should be similar to the 2020 crack seal bid prices.

If bids come in lower than $200,000, Staff will recommend completing a pavement rejuvenation project, similar to the project completed in Stanhope Terrace in 2020, in an attempt to spend all of the $200,000 budgeted for crack seal improvements on pavement maintenance improvements. If bids come in higher than $200,000, Staff will recommend removing various street segments from the project to limit project costs to no more than $200,000. Either way, Staff will discuss their recommendations with Council on March 9th when bids are presented for consideration of awarding a contract.

The 2021 Crack Seal Improvements will be funded from the $200,000 that is budgeted annually for crack seal improvements.

Recommendation:
Staff recommends Alternative #1.

Action:
Adopt Resolution #21-023 approving plans and specifications and authorizing advertisements for bids for 2021 Crack Seal Improvements, Improvement Project #21-06.

Attachments

Resolution 21-023
Plan Sheet 1 - Overall Map
Plan Sheet 2 - Map A
Plan Sheet 3 - Map B
Plan Sheet 4 - Map C
Plan Sheet 5 - Map D
Plan Sheet 6 - Map E
Street Summary Sheet

Form Review

Inbox	Reviewed By	Date
Kurt Ulrich	Kurt Ulrich	01/21/2021 03:34 PM
Form Started By: Bruce Westby		Started On: 01/19/2021 12:05 PM
Final Approval Date: 01/21/2021		

Councilmember _____ introduced the following resolution and moved for its adoption:

RESOLUTION #21-023

RESOLUTION APPROVING PLANS AND SPECIFICATIONS AND AUTHORIZING ADVERTISEMENTS FOR BIDS FOR 2021 CRACK SEAL IMPROVEMENTS, IMPROVEMENT PROJECT #21-06

WHEREAS, the City of Ramsey can most cost-effectively maximize the life of the bituminous pavement on public streets by sealing cracks on an annual basis; and

WHEREAS, the City of Ramsey adopted a budget for 2021 including $200,000 to crack seal the bituminous pavement on numerous public street segments in support of the City's Pavement Management Program; and

WHEREAS, the City Engineer has prepared plans and specifications for the purpose of advertising bids for a 2021 Crack Seal Improvements project.

NOW THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF RAMSEY, ANOKA COUNTY, STATE OF MINNESOTA, as follows:

1) The City Council hereby approves final plans and specifications as prepared by the City Engineer with reference to the 2021 Crack Seal Improvements, Improvement Project #21-06, and authorizes the advertisement of bids for the same improvements.

The motion for the adoption of the foregoing resolution was duly seconded by Councilmember _____, and upon vote being taken thereon, the following voted in favor thereof:

and the following voted against the same:

and the following abstained:

and the following were absent:

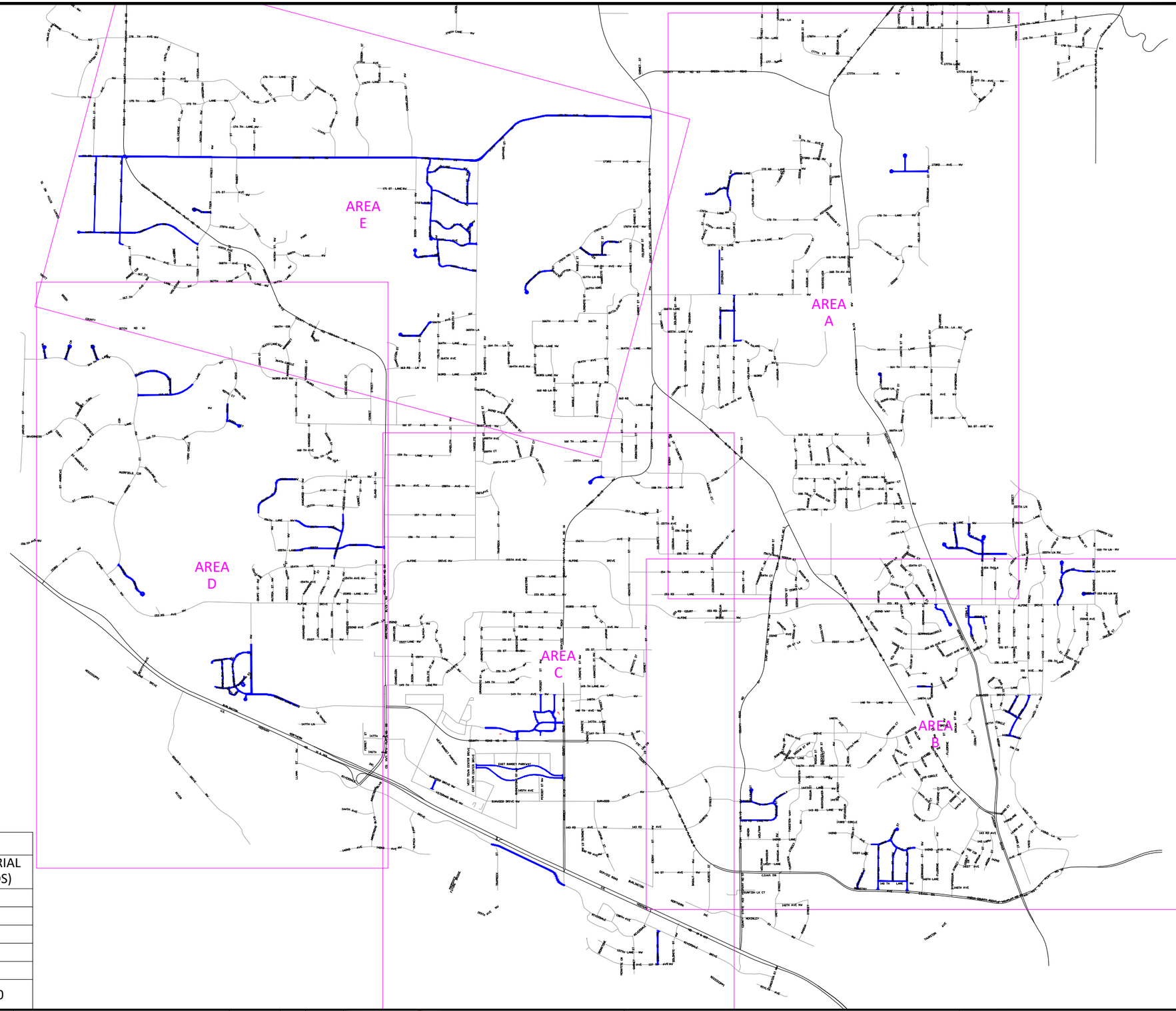
Existing Vacancy

Whereupon said resolution was declared duly passed and adopted by the Ramsey City Council this the 26th day of January, 2021.

_____
Mayor

ATTEST:

_____
City Clerk



2021 CRACK SEAL SUMMARY

PROJECT AREA	LENGTH (MILES)	CS MATERIAL (POUNDS)
A	2.29	14381
B	3.45	18921
C	2.93	21794
D	4.23	17353
E	8.15	35421
PROJECT TOTAL	21.05	107870

DATE	REVISION

Dec 22, 2020 - 2:02pm
O:\Engineering\Acad\Cad Dwgs\Projects N-Z\SealCoat Areas\2021 Seal Coat Areas\2021 Crack Seal Base Map.dwg

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota

Joe Feriancek
Date --- Lic. No. ---

DESIGNED BY:	---	
DRAWN BY:	---	DATE: 12/22/20
CHECKED BY:	---	FILE: (21-06)

CITY OF RAMSEY
7550 SUNWOOD DRIVE
RAMSEY, MN 55303
(763) 427-1410 FAX (763) 433-9898

OVERALL MAP

2021 CRACK SEAL IMPROVEMENTS
CITY PROJECT NO. 21-06
CITY OF RAMSEY, MINNESOTA

SHEET 1 OF 6 SHEETS

AREA A

SUBDIVISION	LENGTH (MILES)	CS MATERIAL (POUNDS)
COVENANT MEADOWS	0.31	933
ESTATES OF SILVER OAKS 2ND	0.06	366
SECTION 10 UNPLATTED	0.72	3005
SECTION 15 UNPLATTED	0.04	263
TROTT BROOK ESATES	0.38	1755
WOODLAND GREEN	0.78	8059
MAP AREA A TOTAL	2.18	14381

0 1/10 2/10 3/10
SCALE (MILE)

N

DATE	REVISION

Dec 22, 2020 - 1:32pm
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Joe Feriancek
Date --- Lic. No. ---

DESIGNED BY:	---	
DRAWN BY:	---	DATE: 12/22/20
CHECKED BY:	---	FILE: (21-06)

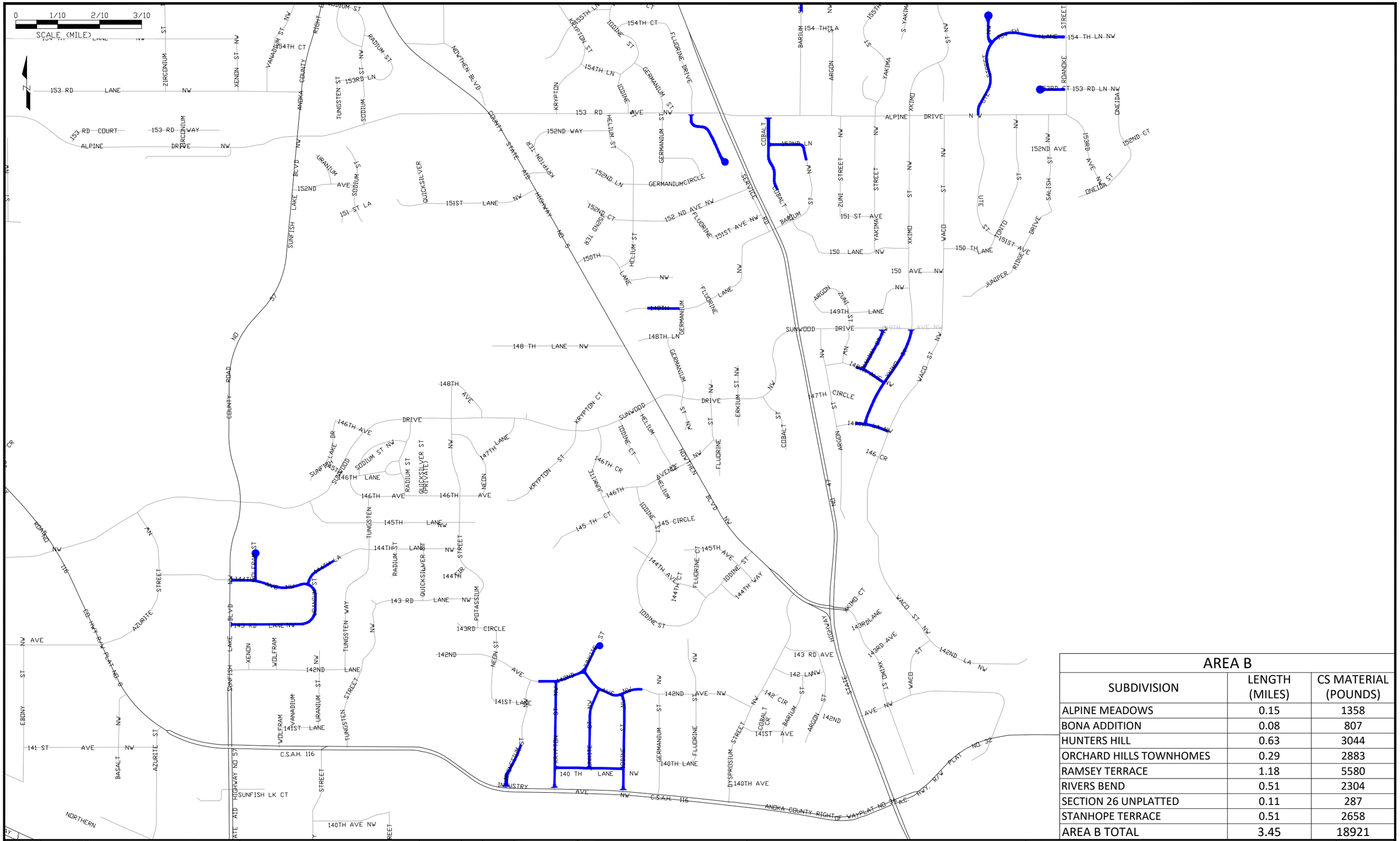
City of RAMSEY

CITY OF RAMSEY
7550 SUNWOOD DRIVE
RAMSEY, MN 55303
(763) 427-1410 FAX (763) 433-9898

AREA A

2021 CRACK SEAL IMPROVEMENTS
CITY PROJECT NO. 21-06
CITY OF RAMSEY, MINNESOTA

SHEET 2 OF 6 SHEETS



AREA B		
SUBDIVISION	LENGTH (MILES)	CS MATERIAL (POUNDS)
ALPINE MEADOWS	0.15	1358
BONA ADDITION	0.08	807
HUNTERS HILL	0.63	3044
ORCHARD HILLS TOWNHOMES	0.29	2883
RAMSEY TERRACE	1.18	5580
RIVERS BEND	0.51	2304
SECTION 26 UNPLATTED	0.11	287
STANHOPE TERRACE	0.51	2658
AREA B TOTAL	3.45	18921

DATE	REVISION

Dec 22, 2020 - 1:59pm
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Joe Feriancek
Date --- Lic. No. ---

DESIGNED BY:	---	
DRAWN BY:	---	DATE: 12/22/20
CHECKED BY:	---	FILE: (21-06)

City of RAMSEY
CITY OF RAMSEY
7550 SUNWOOD DRIVE
RAMSEY, MN 55303
(763) 427-1410 FAX (763) 433-9898

AREA B

2021 CRACK SEAL IMPROVEMENTS
CITY PROJECT NO. 21-06
CITY OF RAMSEY, MINNESOTA

SHEET 3 OF 6 SHEETS

0 1/10 2/10 3/10

SCALE (MILE)

N

AREA C		
SUBDIVISION	LENGTH (MILES)	CS MATERIAL (POUNDS)
COR ONE	0.05	301
MSA - RIVERDALE DRIVE	0.48	2859
RAMSEY TOWN CENTER	1.00	5140
RIVERSIDE WEST	0.19	1619
TOWN CENTER GARDENS	0.51	5490
TOWN CENTER GARDENS 2ND	0.12	1304
TOWN CENTER GARDENS 3RD	0.49	4239
WHITE OAK ADDITION	0.09	841
AREA C TOTAL	2.93	21794

CO. HWY. R/W PLAT NO. 33
ARMSTRONG BLVD NW
AID HIGHWAY
CHAMELEON
152ND LANE NW
151ST LANE NW
149 TH LANE NW
BISON ST NW
150TH AVE NW
ALPACA ST NW
ZEOLITE ST NW
YOLITE ST NW
WILLEMITE ST NW
PROPOSED FUTURE BRIDGE
WEST TOWN CENTER DRIVE
EAST TOWN CENTER DRIVE
SUNWOOD DRIVE NW
VETERANS DRIVE NW
WEST RAMSEY PARKWAY
EAST RAMSEY PARKWAY
COUNTY ROAD NO. 116
TRAPROCK ST NW
RHINESTONE ST NW
145TH AVE NW
PERIDOT ST NW
URANIMITE ST NW
149 TH LANE NW
150 TH LANE NW
151 ST LANE NW
152 ND LANE NW
153 RD LANE NW
154TH LANE NW
155TH AVE NW
158TH AVE NW
159TH CT NW
160TH AVE NW
159TH AVE NW
SAPPHIRE ST NW
PERIDOT CT NW
PERIDOT ST NW
VARIOLITE ST NW
RAMSEY BLVD NW
COUNTY ROAD NO. 58
SERVICE ROAD
COUNTY HWY R/W PLAT NO. 16
ALPINE DRIVE
156TH AVE NW
157 TH LANE NW
JASPAR ST NW
HEMATITE ST NW
GARNET ST NW
DOLOMITE ST NW
COQUINA ST NW
BASALT ST NW
EBONY ST NW
IRONSTONE ST NW
COUNTY
ZIRCONIUM ST NW
AZURITE CT NW
XENON ST NW
LIMONITE ST NW
KAMACITE ST NW
143 RD AVE NW
148 TH AVE NW
147 TH LANE NW
146 CR ST NW
141 ST AVE NW
137 TH AVE NW
138TH AVE NW
137TH LANE NW
IRONSTONE
HEMATITE CR
GARNET ST NW
RIVERDALE DRIVE
HIGHWAY 10 & 169
SERVICE ROAD
BURLINGTON DRIVE NW
CO HWY R/W PLAT NO. 8
HENNEPIN
MISSISSIPPI
NORTHERN INC

DATE	REVISION

Dec 22, 2020 - 12:44pm
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I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota

Joe Feriancek
Date --- Lic. No. ---

DESIGNED BY:	---	
DRAWN BY:	---	DATE: 12/22/20
CHECKED BY:	---	FILE: (21-06)

City of RAMSEY

CITY OF RAMSEY
7550 SUNWOOD DRIVE
RAMSEY, MN 55303
(763) 427-1410 FAX (763) 433-9898

AREA C

2021 CRACK SEAL IMPROVEMENTS
CITY PROJECT NO. 21-06
CITY OF RAMSEY, MINNESOTA

SHEET 4 OF 6 SHEETS

AREA D

SUBDIVISIONS	LENGTH (MILES)	CS MATERIAL (POUNDS)
MSA - BUNKER & PUMA	0.56	3800
NORTHFORK	0.35	1823
NORTHFORK ITASCA SHORES	0.23	667
NORTHFORK OAKS	0.18	540
NORTHFORK THIRD	0.52	1398
RIVERSTONE	0.69	3469
RIVERSTONE 2ND	0.33	1580
THE NORTH FORTY 2ND	0.33	883
THE NORTH FORTY 3RD	1.03	3191
AREA D TOTAL	4.23	17353

0 1/10 2/10 3/10
SCALE (MILE)

N

DATE	REVISION

Dec 22, 2020 - 12:48pm
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Joe Feriancek
Date --- Lic. No. ---

DESIGNED BY:	---	
DRAWN BY:	---	DATE: 12/22/20
CHECKED BY:	---	FILE: (21-06)

City of RAMSEY

CITY OF RAMSEY
7550 SUNWOOD DRIVE
RAMSEY, MN 55303
(763) 427-1410 FAX (763) 433-9898

AREA D

2021 CRACK SEAL IMPROVEMENTS
CITY PROJECT NO. 21-06
CITY OF RAMSEY, MINNESOTA

SHEET 5 OF 6 SHEETS

AREA E		
SUBDIVISIONS	LENGTH (MILES)	CS MATERIAL (POUNDS)
BROOKFIELD 4TH	0.30	1509
BROOKFIELD 8TH	0.23	1452
GOLDEN EAGLE ESTATES	2.18	7674
MSA - 173RD AVENUE	3.04	14468
RUM RIVER PRAIRIE	0.58	1533
SECTION 06 UNPLATTED	0.26	1197
SECTION 07 UNPLATTED	1.17	5394
TROTT BROOK RIDGE	0.39	2194
AREA E TOTAL	8.15	35421

0 1/10 2/10 3/10
SCALE (MILE)

N

COUNTY HIGHWAY RIGHT OF WAY PLAT NO 33

COUNTY STATE AID HIGHWAY NO 83

COUNTY DITCH NO 61

DATE	REVISION

Dec 22, 2020 - 1:44pm
C:\Engineering\AutoCad Dwgs\Projects N-Z\SealCoat Areas\2021 Seal Coat Areas\2021 Crack Seal Base Map.dwg

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Joe Feriancek
Date ---- Lic. No. ----

DESIGNED BY:	---	
DRAWN BY:	---	DATE: 12/22/20
CHECKED BY:	---	FILE: 21-06

City of RAMSEY

CITY OF RAMSEY
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AREA E

2021 CRACK SEAL IMPROVEMENTS
CITY PROJECT NO. 21-06
CITY OF RAMSEY, MINNESOTA

SHEET 6 OF 6 SHEETS

2021 Crack Seal

Plat	Name	DESCRIPT	RTG_2020	SQ_FT	CDS_SF	Miles_2
Alpine Meadows						
	Fluorine St	Alpine Dr / S EOP	8	25455.3	0	0.16
Sum Miles_2 0.16						
Bona Add.						
	149th Lane	Germanium St / WEOP	7	13470.74	0	0.08
Sum Miles_2 0.08						
Brookfield 4th						
	168th Lane	Limonite Ter/ E EOP	10	16509.524342	0	0.1
	169th Lane	Kamacite/ E Eop	10	10592	0	0.06
	Kamacite St	168th Ln/ 169th Ln	10	14464	0	0.09
	Limonite Ter	170th Trl/ 168th Ln	10	12032	0	0.07
Sum Miles_2 0.32						
Brookfield 8th						
	168th Cir	E EOP/ CDS	9	33920	7854	0.2
Sum Miles_2 0.2						
COR ONE						
	Yolite St	Sunwood Dr / Veterans Dr	10	10859.561659	0	0.07
Sum Miles_2 0.07						
Covenant Meadows						
	Iodine St	172nd Ln - CDS	10	14140	7854	0.1
Sum Miles_2 0.1						
Covenant Meadows`						
	172nd Lane	Germanium St/ W EOP	10	36096	7854	0.21
Sum Miles_2 0.21						
Estates of Silver Oaks 2nd						
	Lithium St	S EOP / CDS	10	4649.316384	6361	0.03
Sum Miles_2 0.03						
Golden Eagle Estates						
	168th Ave	NW PC Yolite St / Variolite St	8	25895.52	0	0.2
	169th Lane	NW PC Zeolite St /	8	34753.44	5189	0.27

Plat		Name	DESCRIPT	RTG_2020	SQ_FT	CDS_SF	Miles_2
			Variolite St				
		170th Ave	Zeolite St / CDS	8	29593.92	0	0.23
		171st Ave	W EOP / Zeolite St	8	7354.32	0	0.06
		171st Ave	Zeolite St / Variolite St	8	34903.2	0	0.28
		172nd Lane	Zeolite St / NW PC Willemite & 172nd Lane	8	30804	0	0.24
		Willemite St	170th Ave / CDS	8	6631.2	6297	0.05
		Willemite St	CDS / 169th Lane	8	10379.28	0	0.08
		Willemite St	PC of 172nd / 171st Ave	8	23359.44	0	0.18
		Yolite St	169th / PC 168th & Yolite St	8	19670.64	0	0.16
		Zeolite St	173rd / PC of 169th & Zeolite St	8	57540	0	0.45
Sum Miles_2	2.2						
Hunters Hill							
		143rd Lane	W EOP / N PC Uranium St & 143rd	7	25045.44	0	0.2
		144th Ave	W EOP / S PC Uranium St & 144th Ave	7	26065.2	0	0.21
		144th Lane	144th Ave / E EOP	7	10747.2	0	0.08
		Uranium St	N PC 143rd Lane & Uranium St / S PC 144th Ave & Uranium St	7	10003.92	0	0.08
		Wolfram St	144th Ave / CDS	7	9843.12	6690	0.08
Sum Miles_2	0.65						
MSA							
		173rd Ave	CSAH 83 / Variolite St	8	335456	0	1.99
		175th Ave	Variolite St / CSAH 5	8	180331.52	0	1.07
		Bunker Lake Blvd	Puma / Jackal	9	56017.238196	0	0.29
		Puma St	Bunker Lake Blvd / Rabbit St	9	49319.174669	0	0.23
		Puma St	Rabbit St / Lift Station 8	9	17736.540676	0	0.08
		Riverdale Drive	Traprock St / Ramsey Blvd	10	98873.207025	0	0.47
Sum Miles_2	4.13						
Northfork							
		164th Lane	E EOP / Andrie Street	5	14344.94	0	0.09

Plat	Name	DESCRIPT	RTG_2020	SQ_FT	CDS_SF	Miles_2
	Driscoll Cir	164th Lane / CDS	10	14808.08	7758	0.09
	Fortmann Cir	164th Lane / CDS	10	14643.78	7725	0.09
	Halas Cir	164th Lane / CDS	10	12534.23	7980	0.08
Sum Miles_2 0.35						
Northfork Itasca Shores						
	Andrie Court	Andrie St / CDS	10	37700.4	9017	0.24
Sum Miles_2 0.24						
Northfork Oaks						
	160th Court	Royal Road / CDS	10	14604.1	6582	0.08
	Royal Road	160th Court / E EOP	10	13165.39	0	0.08
Sum Miles_2 0.16						
Northfork Third						
	162nd Lane	Andrie Rd / Wolverine St	10	29193.94	0	0.18
	162nd Lane	Wolverine St / E EOP	10	24883.7	0	0.15
	164th Lane	Wolverine St / W EOP	9	15027.25	0	0.09
	Wolverine St	162nd Lane / 164th Lane	10	19844.34	0	0.12
Sum Miles_2 0.54						
Orchard Hills Townhomes						
	152nd Lane	Cobalt St / Barium St	8	13883.2	0	0.08
	Barium St	152nd Lane / S EOP	8	6365.76	0	0.04
	Cobalt St	152nd Lane / S EOP	7	18611.2	0	0.11
	Cobalt St	153rd Lane / Alpine Dr	7	11758.4	0	0.07
Sum Miles_2 0.3						
Ramsey Terrace						
	140th Lane	Krypton St / Iodine St	7	20902.8	0	0.16
	142nd Ave	W EOP / E EOP	7	46309.44	0	0.27
	Iodine St	142nd Ave / CR 116	7	29956.8	0	0.24
	Junkite St	142nd Ave / 140th Ave	7	24381.36	0	0.19
	Junkite St	N EOP / 142nd Ave	7	11621.04	5968	0.09
	Krypton St	142nd Ave / CR 116	7	32585.52	0	0.26
Sum Miles_2 1.21						
Ramsey Town Center						

Plat		Name	DESCRIPT	RTG_2020	SQ_FT	CDS_SF	Miles_2
		East Ramsey Parkway EB	East Town Center Dr / Rhinestone St	9	31517.644272	0	0.25
		East Ramsey Parkway EB	Olivine St / CR 56	9	10164	0	0.08
		East Ramsey Parkway EB	Peridot St / Olivine St	9	7817.04	0	0.06
		East Ramsey Parkway EB	Rhinestone St / Peridot St	9	16888.56	0	0.13
		East Ramsey Parkway WB	East Town Center Dr / Rhinestone St	9	28988.4	0	0.23
		East Ramsey Parkway WB	Olivine St / CR 56	9	10232.16	0	0.08
		East Ramsey Parkway WB	Peridot St / Olivine St	9	16270.8	0	0.13
		East Ramsey Parkway WB	Rhinestone St / Peridot St	9	9851.52	0	0.08
Sum Miles_2	1.04						
Rivers Bend							
		147th Lane	W EOP / Waco St	10	29088.8	0	0.02
		147th Lane	Xkimo St / Waco St	10	8255	0	0.06
		148th Ave	W EOP / Xkimo St	10	10753.34	0	0.08
		Xkimo St	149th Ave / 147th Lane	10	36383.58	0	0.26
		Yakima St	149th Ave / 148th Ave	10	15127.32	0	0.11
Sum Miles_2	0.53						
Riverside West							
		Ebony St	Riverdale Dr / 137th Ave	8	30978.9	0	0.2
Sum Miles_2	0.2						
Riverstone							
		149th Ave	Rabbit St/ 150th Ave	10	14036	0	0.09
		150th Ave	Rabbit St/ E EOP	10	12209	0	0.08
		150th Ave	Rabbit St/ W EOP	10	10324	0	0.07
		150th Ln	Rabbit St / W EOP	10	6902	0	0.05
		Quagga Cir	150th Ave / 150th Ave	10	9367	0	0.06
		Quagga Ct	Rabbit St/ CDS	10	5365	7854	0.04
		Rabbit St	150th Ave/ N EOP	10	26448	0	0.17

Plat	Name	DESCRIPT	RTG_2020	SQ_FT	CDS_SF	Miles_2
	Rabbit St	Puma / 150th Ave	10	16588	0	0.11
	Rabbit St	S EOP / Puma St	10	14254.938383	0	0.09
Sum Miles_2 0.76						
Riverstone 2nd						
	149th Ave	E EOP/ W EOP	10	8476.505679	0	0.06
	150th Ln	E EOP/ W EOP	10	13655.372036	0	0.09
	Snowy Owl St	149th Ave - 150th Ln	10	24762.421978	0	0.16
Sum Miles_2 0.31						
Rum River Prairie						
	169th Lane	Baugh St / Tiger St	10	71538.481005	0	0.48
	170th Court	Tiger St / CDS	10	14984.078545	7850	0.1
Sum Miles_2 0.58						
Section 06 Unplatted						
	173rd Ave	Baugh St / Driscoll St	7	22752	0	0.18
	173rd Ave	Driscoll St / Termini	7	24224.16	0	0.08
Sum Miles_2 0.26						
Section 07 Unplatted						
	169th Lane	Baugh St / CDS	7	28811.04	4333	0.24
	Baugh St	169th Lane / S Section Line	7	7747.68	0	0.06
	Baugh St	173rd Ave / 169th Lane	7	54502.32	0	0.43
	Driscoll St	173rd Ave / 169th Lane	7	54150.72	0	0.43
Sum Miles_2 1.16						
Section 10 Unplatted						
	166th Lane	Yttrium St/ Zirconium St	7	9418.141478	0	0.07
	Yttrium St	N Line Sect 15/ 167th Ave	7	31350.928255	0	0.25
	Zirconium St	N Line Sect 15 / 166th Lane	7	20104.776207	0	0.16
	Zirconium St	S EOP/ 167th Ave	8	31560	0	0.25
Sum Miles_2 0.73						
Section 15 Unplatted						
	164th Lane	E Line Sect 15 / Yttrium St	7	5372.88	0	0.04
Sum Miles_2 0.04						

Plat	Name	DESCRIPT	RTG_2020	SQ_FT	CDS_SF	Miles_2
Section 26 Unplatted						
	Magnesium St	CR 116 / SEOP Windemere Woods	10	19865.28	0	0.16
Sum Miles_2 0.16						
Stanhope Terrace						
	153rd Court	Roanoke St / CDS	10	11804.4	8365	0.07
	154th Ave	Ute St / Roanoke St	10	29556.3	0	0.19
	Ute St	153rd Ave / N EOP	10	41556	8018	0.26
Sum Miles_2 0.52						
The North Forty 2nd						
	158th Lane	NE PC Okapi St & 158th / E EOP	10	16016.77	0	0.1
	Okapi St	S EOP / NE PC 158th Lane & Okapi St	10	39093.17	0	0.24
Sum Miles_2 0.34						
The North Forty 3rd						
	155th Lane	W EOP / Armstrong Blvd	10	82983.59	0	0.51
	156th Lane	W EOP / Hedgehog St	10	45220.01	0	0.28
	Hedgehog St	S EOP / N EOP	10	40751.05	0	0.25
	Iguana St	S EOP / N EOP	10	42334.22	0	0.26
Sum Miles_2 1.3						
Town Center Gardens						
	147th Lane	Rhinestone St / Ramsey Blvd	7	48288.96	0	0.29
	147th Terrace	147th Lane / Olivine St	7	19011.84	0	0.11
	Olivine St	147th Terrace / 147th Lane	7	7696.96	0	0.05
	Peridot St	147th Terrace / Well House	8	2486.66	0	0.02
	Rhinestone St	CR 116 / 147th Lane	7	8786.88	0	0.05
Sum Miles_2 0.52						
Town Center Gardens 2nd Add						
	Olivine St	147th Lane / N EOP	7	10555.52	0	0.06
	Peridot St	147th Lane / 148th	7	11610.56	0	0.07

Plat	Name	DESCRIPT	RTG_2020	SQ_FT	CDS_SF	Miles_2
		Lane				
Sum Miles_2 0.13						
Town Center Gardens 3rd						
	147th Lane	147th Cir / 147th Cir		8	19626	0	0.12
	147th Lane	147th Cir / Rhinestone St		8	7891.8	0	0.05
	148th Lane	Peridot St / Olivine St		7	16246.8	0	0.1
	Olivine St	148th Lane / 149th Ave		8	17455.5	0	0.11
	Peridot St	148th Lane / 149th Ave		8	16534.8	0	0.1
Sum Miles_2 0.48						
Trott Brook Estates						
	171st Lane	W EOP / Yttrium St		7	17544.24	2735	0.14
	172nd Lane	SW PC Yttrium & 172nd Lane / E EOP		7	7196.4	0	0.06
	Yttrium St	S EOP / SW PC 172nd Lane and Yttrium St		7	23537.52	0	0.19
Sum Miles_2 0.39						
Trott Brook Ridge						
	165th Ave	Alpaca St / CDS		7	19956.87	7725	0.12
	168th Lane	SE PC Bison & 168th Lane / W EOP		8	21082.48	0	0.13
	Alpaca St	165th Ave / E EOP		7	16810.99	0	0.1
	Bison St	SE PC 168th / Bison St		8	7665.37	7121	0.05
Sum Miles_2 0.4						
White Oak Addition						
	158th Lane	Kamacite / CDS		8	13466.56	7618	0.08
Sum Miles_2 0.08						
Woodland Green						
	155th Lane	CDS / E EOP		9	62830.8	9046	0.38
	Barium St	S EOP / CDS		9	23992.76	8088	0.15
	Cobalt St	Barium St/ 156th Ln		9	24335	0	0.15
	Erkium St	155th Lane / 156th Lane		9	22728.27	0	0.14
Sum Miles_2 0.82						
Sum SQ_FT 3337380.	Sum CDS_SF 171882	Sum Miles_2 21.7				

Plat	Name	DESCRIPT	RTG_2020	SQ_FT	CDS_SF	Miles_2
	470789					

CC Regular Session **7. 4.**

Meeting Date: 01/26/2021

By: Tim Gladhill, Community Development

Information

Title:

Introduce Ordinance ~~#20-01~~ **#21-01** Amending City Code Sections 117-111 (R-1 Residential District) and 117-112 (R-2 Residential District) Clarifying Sub-districts based on Lot Size

Purpose/Background:

The purpose of this case is administrative/housekeeping in nature. Based on recent applications of the newly created sub-districts allowing 65 foot wide lots and 50 foot wide lots 'by right', Staff is proposing a restructuring of City Code as it pertains to detached single-family lots.

- Standards for 80 foot wide lot and 65 foot wide lots remain unchanged
- Moves 50 foot wide lots from R-2 Residential District to R-1 Residential District
    - Consistent with actual net density
    - Standards remain unchanged
    - Clarifies that accessory structures are allowed
- Moves 40 foot wide lots from R-3 Residential District to R-2 Residential District
    - Consistent with actual net density
    - Standards remain unchanged
    - Clarifies that R-3 Residential District is reserved for higher-density developments

Notification:

The Planning Commission held a Public Hearing on January 7, 2021. The Public Hearing Notice was properly advertised in the Anoka County Union-Herald, the City's Official Newsletter. A notice is not required for this step.

Observations/Alternatives:

As noted above, there are no policy implications in this ordinance. This is a housekeeping amendment to establish a more logical structure and naming scheme for detached single-family districts. These recommended amendments are based on actual experience applying recent code changes.

Funding Source:

This case is being handled as part of normal Staff duties.

Recommendation:

The Planning Commission recommends that the City Council adopt Ordinance ~~#20-01~~ **#21-01**.

Action:

Motion to introduce Ordinance ~~#20-01~~ **#21-01**.

Attachments

Ordinance #20-01

DRAFT Planning Commission Minutes dated January 7, 2021

Form Review

Inbox	Reviewed By	Date
Tim Gladhill (Originator)	Tim Gladhill	01/21/2021 11:50 AM
Kurt Ulrich	Kurt Ulrich	01/21/2021 03:13 PM
Form Started By: Tim Gladhill		Started On: 01/08/2021 09:14 AM
Final Approval Date: 01/21/2021		

ORDINANCE #21-01

CITY OF RAMSEY
ANOKA COUNTY
STATE OF MINNESOTA

AN AMENDMENT TO CHAPTER 117 OF THE CITY CODE, WHICH CHAPTER IS KNOWN AS ZONING AND SUBDIVISIONS OF THE CITY CODE OF RAMSEY, MINNESOTA

AN ORDINANCE AMENDING ARTICLE II DIVISION 4 SECTION 117-89 (DISTRICTS), 117-111 (R-1 RESIDENTIAL DISTRICT), AND 117-112 (R-2 RESIDENTIAL DISTRICT)

The City of Ramsey Ordains:

SECTION 1 AUTHORITY

This ordinance is adopted pursuant to and under the authority of the City Charter of the City of Ramsey.

SECTION 2 AMENDMENTS

Section 117-89. – Districts is amended to read as follows:

Sec. 117-89. - Districts.

For the purpose of this chapter, the city is divided in the following zoning districts:

(1) R-1 Residential (MUSA – 50). The intent of this district is to accommodate 50 foot wide detached single-family dwellings on suitable land within the Metropolitan Urban Service Area at a maximum net density of four units per acre.

~~(1)~~ (2) R-1 Residential (MUSA – 65). The intent of this district is to accommodate 65 foot wide detached single-family dwelling units on suitable land within the Metropolitan Urban Service Area at a maximum net density of four units per acre.

~~(2)~~ (3) R-1 Residential (MUSA – 50). The intent of this district is to accommodate 50 foot wide single-family dwelling units on suitable land within the Metropolitan Urban Service Area at a maximum net density of three units per acre or four units per acre through the use of a Planned Unit Development (PUD).

~~(3)~~ (4) R-1 Residential (Rural Developing). The intent of this district is to accommodate single-family dwelling units outside of the Metropolitan Urban Service Area at a maximum gross density of one unit per 2.5 acres.

~~(4)~~ (5) R-2 Residential (Detached Townhome). The intent of this district is to accommodate detached townhomes on lots a minimum of 40 feet wide at a density of four to seven units per acre.

~~(5)~~ (6) R-2 Residential (Multifamily or Attached Townhome). The intent of this district is to accommodate multifamily units, duplexes, twinhomes, and attached townhomes at a density of four to seven units per acre.

And all existing numbers (5) through (17) renumbered accordingly.

Sec. 117-111. - R-1 Residential District shall be amended to read as follows:

Sections (a) through (c) unchanged.

(d) R-1 bulk standards.

	MUSA			Rural Developing (Large Single Family Lots)
	50	65	80	
Minimum lot size	.15 acres	.15 acres	.25 acres	2.5 acres
Minimum density	2.5 units per acre	2.5 units per acre	2.5 units per acre	1 unit per 2.5 acres (gross) (minimum)
Maximum density	4 units per acre (maximum)	4 units per acre (maximum)	3 units per acre/4 units per acre with PUD (net) (maximum)	N/A
Minimum lot width	50 feet	65 feet	80 feet/ 90 feet - corner lot	200 feet/100 feet on cul-de-sac
Front yard setback	25 feet	25 feet	30 feet	40 feet
Side yard setback	5 feet	5 feet	5 feet	10 feet
Side yard setback for corner lots	25 feet	25 feet	30 feet	40 feet
Rear yard setback	20 feet	20 feet	30 feet	40 feet
Rear yard setback when adjoining a parcel zoned Park [3]	20 feet	20 feet		N/A
Major/minor arterial setback measured from the centerline of the road right-of-way	60 feet from right-of-way centerline plus the local applicable setback			
Service road setback	35 feet			

Maximum building height (measured from lowest adjacent grade to average height between eaves and highest ridge)	35 feet		
	Minimum floor areas: (main floor)		
Rambler with garage	912 square feet		
Split level or two story with garage	720 square feet (total of main living areas)		
Townhouse with garage		PUD Required	N/A
	1 bedroom—700 square feet	1 bedroom—700 square feet	
	2 bedrooms—800 square feet	2 bedrooms—800 square feet	
	3 bedrooms—960 square feet	3 bedrooms—960 square feet	
	Each additional bedroom 125 square feet	Each additional bedroom 125 square feet	
Maximum lot coverage for all principal and accessory buildings (excludes impervious or prepared surface)	50%	35%	
Maximum driveway width at street [2]	30 feet; 24 feet on culs-de sac		
Maximum number of driveways [2]	1 per street frontage		2
Side yard setback for driveways [2]	5 feet		
Required driveway surface [2]	Bituminous or Concrete		Bituminous, Concrete, or Class V
	Accessory structure setbacks:		

Front [1]	25 feet or same as principal structure, whichever is greater	30 feet or same as principal structure, whichever is greater	40 feet or same as principal structure, whichever is greater
Rear	5 feet		
Side	5 feet	6 feet	10 feet
Side Corner	25 feet	30 feet	40 feet

Sec. 117-112. - R-2 Residential District intent, permitted uses, and bulk standards shall be amended to read as follows:

(a) Intent. The intent of the R-2 Residential District is to accommodate ~~multiple~~ dwellings at a density of four to seven dwelling units per acre and multiple-dwelling complexes within the 2040 MUSA. All lots created by subdivision located within the 2040 MUSA shall be serviced by sanitary sewer and municipal water.

(d) R-2 bulk standards.

	Detached ~~Villa~~Townhome	Multifamily or Attached Townhome ~~(Attached)~~
Minimum Lot Size	~~.15~~ .10 Acres	None
Minimum density (net)	4.0	
Maximum density (net)	7.0	
Lot width	40 ~~50~~ feet	N/A
Building setback from private street measured from back of curb or public street right of way	25 feet	
Building setback from exterior development boundary line	25 feet	30 feet
Front yard setback	25 feet	30 feet
Side yard setback	5 feet	30 feet
Side yard setback corner lot	25 feet	30 feet
Rear yard setback	20 feet	30 feet
Maximum lot coverage for all principal and accessory buildings (excludes	50%	35%

impervious or prepared surface)		
Maximum building height (measured from lowest adjacent grade to average height between eaves and highest ridge)	35 feet	
Open space required	N/A	40% general open space 10% of which must be identifiable community space
Minimum separation between multifamily buildings, appurtenances thereto (i.e., patios, decks)	N/A	20 feet
Parking node setback from exterior development boundary line	30 feet	30 feet
Parking node setback from structure	15 feet	15 feet
Accessory Structures	Not Allowed	Not Allowed
~~Accessory structure setbacks:~~		
~~- Front~~	~~30 feet or same as principal structure, whichever is greater~~	~~N/A~~
~~- Rear~~	~~5 feet~~	~~N/A~~
~~- Side~~	~~6 feet~~	~~N/A~~
~~- Side corner~~	~~30 feet~~	~~N/A~~

The Detached Villa column in City Code Section 117-113 (R-3 Residential) is confirmed to be deleted from that section and added to City Code Section 117-112 (R-2 Residential).

SECTION 3. SUMMARY

The following official summary of Ordinance #21-01 has been approved by the City Council of the City of Ramsey as clearly informing the public of the intent and effect of the Ordinance.

Ordinance #21-01 amends Section 117-111 of the City Code to move 50-foot wide lots to the R-1 District from the R-2 District, renamed as R-1 (MUSA – Detached Townhome). It amends Section 117-112 to rename the district Detached Villa to Detached Townhome and lower the minimum lot width from 50 feet to 40 feet. Ordinance 20-01 also updates Section 117-89 to update definitions.

SECTION 4. EFFECTIVE DATE

This ordinance becomes effective 30 days after its passage and publication, subject to City Charter Section 5.04.

PASSED by the City Council of the City of Ramsey, Minnesota the _____ day of _____, 2021.

_____

Mayor

ATTEST:

_____

City Clerk

Introduction date:

Posting dates:

Adoption date:

Publication date:

Effective date:

Commissioner VanScoy commented that the City has done a lot of work to ensure that the transitioning will be adequate and believed that the Commission should follow the requirements and recommendations of staff.

Motion by Commissioner VanScoy, seconded by Commissioner Gengler, to recommend that City Council adopt Resolution #21-007 with the recommended number of trees.

A roll call vote was performed:

Commissioner Gengler	aye
Commissioner Peters	aye
Commissioner Anderson	aye
Commissioner VanScoy	aye
Chairperson Bauer	aye

Motion carried.

6.02: Public Hearing: Consider Ordinance #20-01 Amending City Code Sections 117-111 (R-1 Residential District) and 117-112 (R-2 Residential District) Clarifying Subdistricts based on Lot Size

Public Hearing

Chairperson Bauer called the public hearing to order at 7:51 p.m.

Presentation

Deputy City Administrator Gladhill presented the staff report stating that staff recommends adoption of Ordinance #20-01.

Citizen Input

No comments.

Motion by Commissioner Peters, seconded by Commissioner Anderson, to close the public hearing.

A roll call vote was performed:

Commissioner Peters	aye
Commissioner Anderson	aye
Commissioner Gengler	aye
Commissioner VanScoy	aye
Chairperson Bauer	aye

DRAFT

Motion carried.

Chairperson Bauer closed the public hearing closed at 7:56 p.m.

Commission Business

Commissioner Anderson asked how these changes would affect projects like Trott Brook.

Deputy City Administrator Gladhill commented that this would not change the outcome. He stated that this is a tool that would allow for smaller lots sizes. He confirmed that a zoning change would still be necessary to achieve this zoning and therefore the Council would have final control over any requests.

Commissioner VanScoy asked if in the past the smaller lots have been allowed that has been done through PUD. He asked if there would be an issue in terms of negotiations.

Deputy City Administrator Gladhill confirmed that has been the process, which has been challenging in order to equate the tradeoff benefits. He commented that the zoning amendment, and often times Comprehensive Plan amendment, would be needed therefore the ability to negotiate would be available. He commented that this would be a better tool to use rather than attempting to go through a PUD process, which would also be less burdensome on applicants.

Commissioner VanScoy commented that he believes that this would be a helpful tool as the Commission has recommended approvals in the past that have in turn been denied by the Council because it did not believe that a PUD was achieved. He commented that he does see the benefit of having this tool available.

Commissioner Anderson stated that this would then open up R-1 to 55 foot wide lots, which he could see becoming an advantage for a developer. He stated that it is important to control where 55 foot wide lots are placed, especially in the northern part of Ramsey.

Chairperson Bauer commented that the City would still have control as this would be a subzone, therefore R-1 would still require 80 foot lots and smaller lots could only be achieved with a zoning change.

Deputy City Administrator Gladhill confirmed that this would be a separate zoning district and would require a zoning amendment. He stated that this would only apply where the City allows and does not provide rights to a developer. He commented that nothing would actively be zoned for 55 foot lots, this would simply be a tool that could be used.

Motion by Commissioner Peters, seconded by Commissioner Gengler, to recommend that City Council adopt Ordinance #20-01.

A roll call vote was performed:

Commissioner Anderson	nay
Commissioner Peters	aye
Commissioner Gengler	aye
Commissioner VanScoy	aye
Chairperson Bauer	aye

Motion carried.

6.03: Public Hearing: Consider Ordinance #21-02 Amending City Code Section 117-148 Entitled Mississippi River Corridor Critical Area

Public Hearing

Chairperson Bauer called the public hearing to order at 8:06 p.m.

Presentation

Deputy City Administrator Gladhill presented the staff report stating that staff recommends adoption of the ordinance.

Councilmember Musgrove asked if staff has worked with other cities in this area and how those cities are adjusting to the changes.

Deputy City Administrator Gladhill noted that there were two attempts at rule making, noting that the first did not go well and the DNR took a step back and reevaluated. He stated that the second attempt was much more successful with community input. He stated that staff worked extensively with communities on the upper pool of the Coon Rapids Dam (Anoka, Dayton, Brooklyn Park and Coon Rapids). He stated that while there was frustration in the beginning, throughout the process there was improvement. He commented that Ramsey may be one of the first to bring forward the ordinance amendment, but all cities should have submitted their Comprehensive Plan and will be updating their ordinance as well.

Citizen Input

No comments.

Motion by Commissioner VanScoy, seconded by Commissioner Peters, to close the public hearing.

A roll call vote was performed:

Commissioner Peters	aye
Commissioner Gengler	aye
Commissioner Anderson	aye
Commissioner VanScoy	aye
Chairperson Bauer	aye

CC Regular Session **7. 5.**

Meeting Date: 01/26/2021

By: Tim Gladhill, Community Development

Information

Title:

Introduce Ordinance ~~#20-02~~ **#21-02** Amending City Code Section 117-148 Entitled Mississippi River Corridor Critical Area

Purpose/Background:

The purpose of this case is to consider amending the City's regulations within the Mississippi River Corridor Critical Area (MRCCA) Overlay District.

This overlay district is required by the State of Minnesota and establishes minimum land use standards within the District. The Overlay District was originally created in the late 1970s and recently updated in 2017. The District requires a general land use plan be included in the City's Comprehensive Plan, which is now complete and in effect. The next step is to amend our official controls (Zoning Code).

Staff is advancing the amendment now ahead of the anticipated schedule due to the proposed Riverstone South proposal. The updated rules are more reflective of the proposed Riverstone South subdivision.

While the City was very active during the State of Minnesota Rulemaking Process and subsequent update to the City's Comprehensive Plan, including this area, this is the first read of the actual official controls/zoning code update. The City Council should feel comfortable tabling action if additional time and information is necessary. However, it should be noted that a delay in this ordinance update will delay the Riverstone South proposed subdivision.

Alternatives

1. Adopt the Ordinance as presented (meets minimum requirements)
2. Adopt the Ordinance as modified
3. Postpone action to further refine draft ordinance
4. Do not adopt the ordinance (would not be in compliance with State Statute/Minnesota Rules)

Notification:

The Planning Commission held a Public Hearing on January 7, 2021. The Public Hearing Notice was advertised in the Anoka County Union-Herald, the City Official Newsletter. Since the district/impacted area is more than 40 acres in size, direct mailings are not required. Notification is not required for this step.

During the State of Minnesota Rulemaking process (2015-2017) significant public outreach and notification was provided.

Observations/Alternatives:

The updated plans and rules represent a significant benefit to the City of Ramsey. Under the previous plan, a majority of the district was in a rural open space designation, significantly restricting future development potential and conflicted with the City's Comprehensive Plan. The updated rules better reflect the City's vision for future land use. The most relevant example is the current Riverstone South proposal. Under the previous plan, this current proposal would have needed to be processed as a Planned Unit Development with significantly more open space protection (50% of the site).

Additionally, the updated rules remove a number of lawful, non-conforming uses for neighborhoods that were created prior to establishment of the Overlay District by the State of Minnesota. The Bowers Drive neighborhood is an example of the updated districts better reflecting actual built-environment, thereby removing non-conformities.

Many of the rules that were recently added already existed in Ramsey's ordinance. The updated rules have minimal impact to Ramsey, where other communities were more significantly impacted. There are some updated vegetation management requirements and permitting requirements, but nothing significantly different than Ramsey's existing ordinance.

Attached to this case is a copy of the proposed ordinance following Ramsey City Code outline and structure. The DNR has provided a model ordinance with additional commentary to help explain requirements. To help bridge the gap between the two documents with a different numbering sequence, Staff has created a 'crosswalk' to help cross-reference the two document to better access the commentary from the DNR.

Funding Source:

This case is being handled as part of normal Staff duties.

Recommendation:

The Planning Commission recommends that the City Council adopt the ordinance.

Action:

Motion to introduce Ordinance ~~#20-02~~ **#21-02** amending City Code Section 117-148 (Mississippi River Corridor Critical Area).

Attachments

Overview
MRCCA District Map
Ordinance #21-02
Ordinance #21-02 Cover
Crosswalk Comparison to DNR Model Ordinance
DNR Model Ordinance with Commentary
PREVIOIUSLY APPROVED: MRCCA Plan
Comparison to Existing Ramsey Ordinance
DRAFT Planning Commission Minutes dated January 7, 2021

Form Review

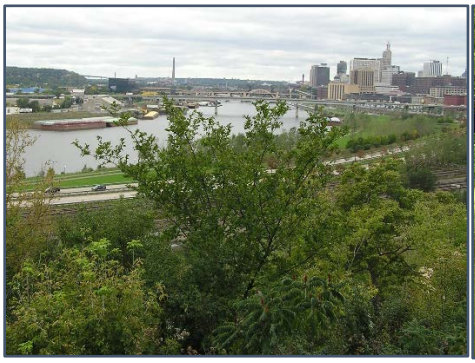
Inbox	Reviewed By	Date
Tim Gladhill (Originator)	Tim Gladhill	01/21/2021 11:50 AM
Kurt Ulrich	Kurt Ulrich	01/21/2021 03:20 PM
Form Started By: Tim Gladhill		Started On: 01/08/2021 09:59 AM
Final Approval Date: 01/21/2021		

DEPARTMENT OF NATURAL RESOURCES

Guide to City and Township MRCCA Zoning Updates

What is the Mississippi River Corridor Critical Area MRCCA?

The Mississippi River Corridor Critical Area (MRCCA) is a corridor of land along each side the Mississippi River in the Twin Cities Metropolitan Area with coordinated state, regional and local land use planning and zoning. It includes 54,000 acres in 30 local governments along a 72-mile stretch of the river. Land development in the MRCCA has been regulated by city and township-adopted MRCCA plans and zoning regulations since 1976 in compliance with state provisions. These local zoning standards have regulated structure height and setbacks from the river and bluffs as well as vegetation management and removal, land alteration, and subdivision of land to preserve the corridor's unique natural, recreational, and cultural features.



The MRCCA was designated a critical area in 1976 by Executive Order following passage of the Minnesota Critical Areas Act of 1973. The Executive Order was the governing regulation until it was superseded by MRCCA rules in 2017 (Minnesota Rules Chapter 6106). The rules more consistently protect habitat, scenic views and water quality, and allow redevelopment to address contemporary needs such as higher density and mixed uses. In 1988, the National Park Service designated the Mississippi National River & Recreation Area (MNRRA), which shares the same border as the MRCCA. There are no federal land planning or zoning regulations associated with the MNRRA.

Why is the MRCCA important?

The Mississippi River is one of the most famous rivers in the world. It is the defining feature for the many communities along its banks. Through the Twin Cities metro area, the MRCCA supports a diverse mix of residential, commercial, industrial and recreational uses, as well as river-related industry and transportation. Though the river corridor has been extensively developed, many intact and remnant cultural, natural and scenic areas remain, including bluffs, islands, floodplains, wetlands, historic resources, and native plants and animals. The state rules and local MRCCA plans and zoning regulations are designed to protect these resources while accommodating continued growth and redevelopment.

Why is my community updating its MRCCA zoning regulations?

Starting in January 2020 and going through approximately December 2022, all communities in the MRCCA will be adopting new MRCCA zoning standards consistent with 2017 MRCCA rules and local MRCCA plans that were recently updated as part of the comprehensive plan 10-year updates. **Until a community adopts the new standards, its existing MRCCA zoning standards apply.**

Contact your local city or township zoning staff with questions about relevant standards and permit requirements that apply to your property. The DNR's role is to ensure that local government MRCCA zoning regulations comply with the state rules and to provide technical assistance and oversight to local zoning staff.

Overview of New Local Government MRCCA Zoning Regulations

Local MRCCA zoning regulations are administered as an overlay district. Within this overlay district, MRCCA zoning regulations guide building and construction, vegetation management and removal, and land alteration. These regulations also affect local decisions on variances and conditional use permits. Following is an explanation of how the new zoning regulations in the 2017 MRCCA rules will affect some of the most common development activities.

New Terms

Familiarity with the following terms are helpful for understanding MRCCA zoning regulations. These terms are described and mapped in city and township MRCCA plans (a chapter of the comprehensive plan) and summarized below:

Bluff. A natural feature with an average slope exceeding 18%.

Bluff impact zone. The bluff and land within 20 feet of the bluff.

Native plant communities. Plant communities of five acres or greater that meet the quality criteria established by the Minnesota Biological Survey to qualify as a native plant community - identified in local government MRCCA plans.

Natural drainage way. Rivers and streams and any other drainage ways identified by local governments.

Shore impact zone. 50% of the required structure setback from the river.

Significant existing vegetation stands. Largely intact and connected plant communities that contain a sufficient representation of the original native plant community - identified in local government MRCCA plans.

Wetland. Transitional lands between terrestrial and aquatic systems where the water table is usually at or near the surface or land covered by shallow water.

Building and Construction

Structure height and structure setbacks from the river and top of bluffs (the top of an 18% slope) vary for each of the six MRCCA districts (See Table 1). These provisions protect scenic views and keep buildings and other development activity away from sensitive shorelines and slopes that provide habitat and are prone to soil erosion and slope failure. Structure height and setback standards will not change for most property owners. See the MRCCA Boundary and Districts web page to find the district in which your parcel is located.

Table 1. Building and constructions standards for each of the six MRCCA districts.

Build & Construction Standards	Rural Open Space (CA-ROS)	River Neighborhood (CA-RN)	River Towns and Crossings (CA-RTC)	Separated from River (CA-SR)	Urban Mixed (CA-UM)	Urban Core (CA-UM)
Maximum Structure Height	35’	35’	48’*	Underlying Zoning	65’*	Underlying Zoning
Mississippi River Structure Setback	200’	100’	75’	n/a	50’	Underlying Zoning
Bluff Structure Setback	100’	40’	40’	40’	40’	40’

*Greater height may be allowed with a Conditional Use Permit.

Expansion of Nonconforming Structures

Legal nonconforming structures were lawfully permitted when they were built. However, when zoning standards change and these structures no longer conform to the new standards, they become legally nonconforming or “grandfathered.” Nonconforming structures are common in the MRCCA. Minnesota Statute (MS §462.357, Subd. 1e) protects the rights of

the owners of nonconforming structures, and allows for their continued use, including repair, replacement, restoration, maintenance, or improvement. Under the MRCCA rules, local governments may allow the lateral expansion of legally nonconforming principal structures such as homes, as long as they do not expand further into required setbacks from the river and bluff.

Land Alteration Standards (Grading & Filling)

Land alteration in areas near water and on steep slopes increases the risk of soil erosion and the movement of sediment into water. A new local government permit is required for the following land alteration activities:

- Any activity that disturbs more than 10 cubic yards or 1,000 square feet of soil within the shore impact zone or within 50 feet of a public water, wetland, or natural drainage way, whichever is greater.
- Erosion control projects and repair & maintenance of existing structures in the bluff impact zone. All other activities are prohibited in the bluff impact zone.
- Riprap, retaining walls or other erosion control structures to correct an established erosion problem as determined by the local government. There are specific design standards and conditions for constructing these structures. The construction of structures below the ordinary high water level would continue to require a DNR permit or approval.

Vegetation Removal & Management Standards

Retaining vegetation along the river and on slopes is important to stabilize soil and to slow, absorb, and filter stormwater before it runs into the river. Vegetation is also important for retaining the scenic qualities of the river. Local MRCCA regulations include a new vegetation permit and standards for protecting and managing vegetation.

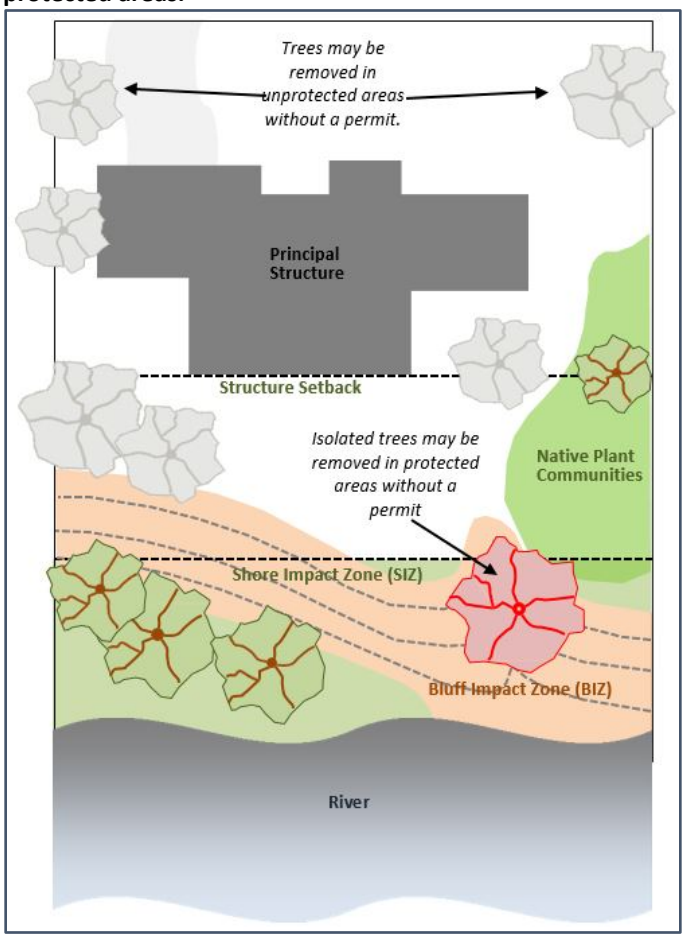
Landscaping & Maintenance Activities that DO NOT Require a Permit:

- Maintenance of existing lawns, landscaping and gardens;
- Removal of vegetation in emergency situations as determined by the local government;
- The removal of isolated individual trees or shrubs that are not in a contiguous patch, strip, row, or block and that does not substantially reduce the tree canopy or understory cover.

Prohibited Vegetation Removal Activities

The intensive removal of all or a majority of the trees or shrubs in a contiguous patch, strip, row, or block in protected areas - the shore impact zone, bluff impact zone, within 50 feet of a wetland or natural drainage way or of native plant communities and significant existing vegetative stands - is prohibited. Figure 1 shows some of these protected areas – protected areas are shown in color. Note that isolated trees and shrubs may be removed in protected areas without a permit.

Figure 1. Intensive removal of vegetation in prohibited in protected areas.



Allowed Vegetation Removal Activities with a Permit:

Some vegetation removal activities in protected areas are allowed with a **vegetation permit**, including removal:

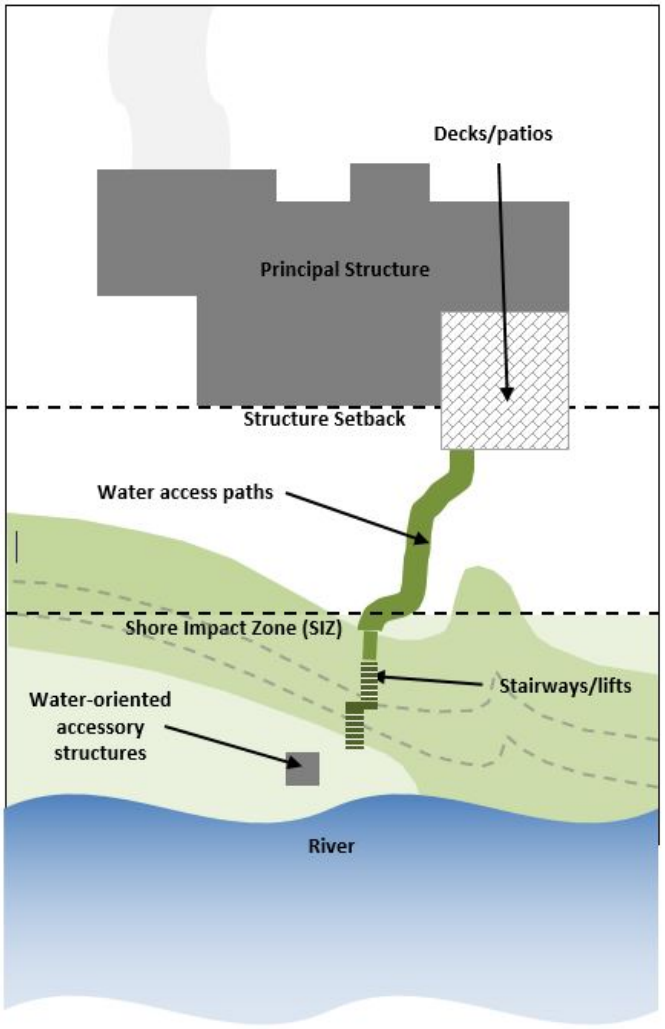
- of vegetation that is dead, diseased, dying, or hazardous;
- to prevent the spread of diseases or insect pests;
- of invasive non-native species;
- to prepare for restoration and erosion control management activities consistent with a plan approved by the local government;
- of the minimum necessary for construction allowed with a building permit.

River Access on Riparian Lots

Local MRCCA regulations include new design standards for river access including access paths and stairways, water-oriented structures and patios and decks (see Figure 2):

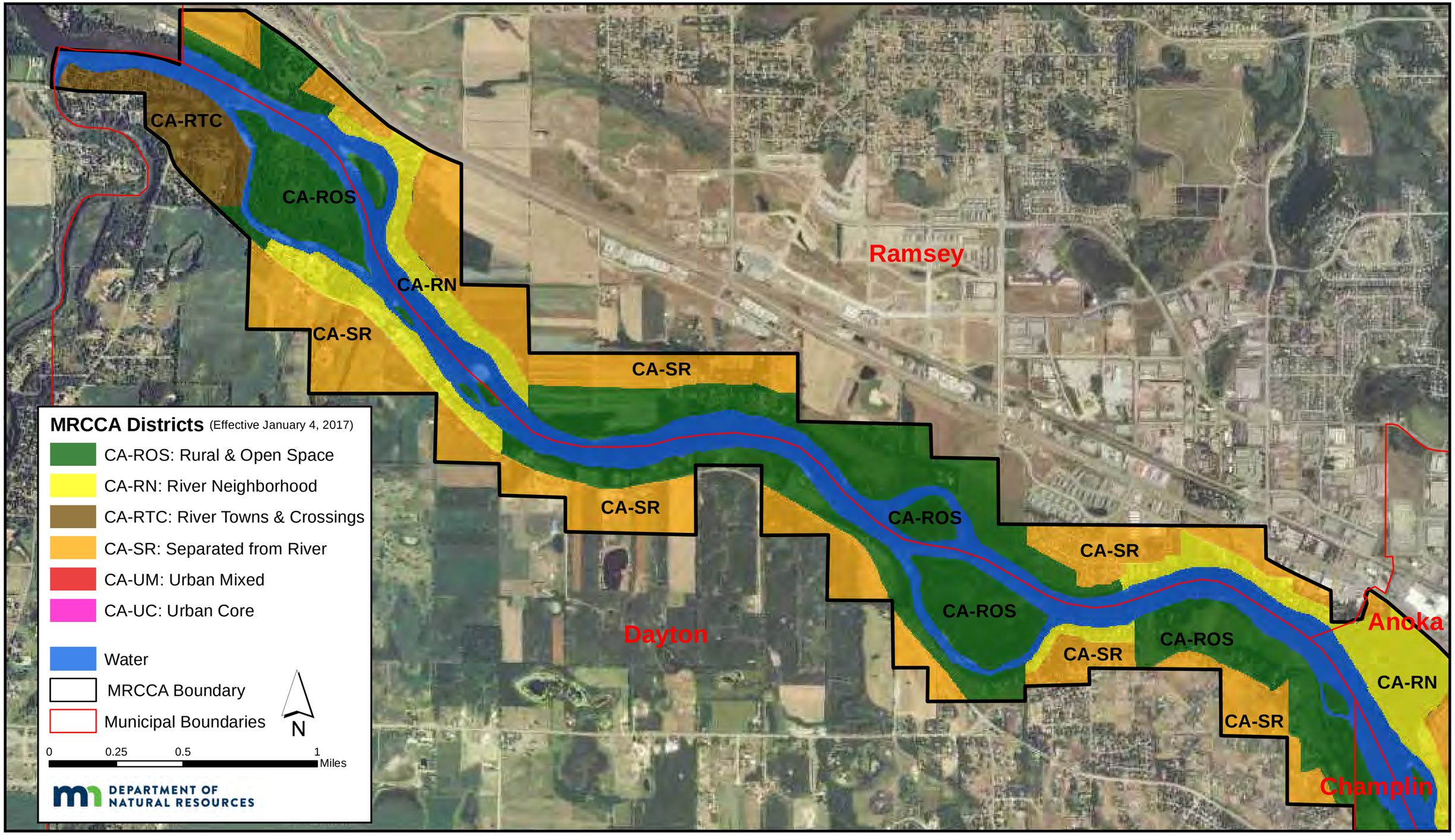
- Private driveways, parking areas and other impervious surfaces must not be placed in the shore impact zone or the bluff impact zone, except for:
    - **Access Paths:** Access paths can be no wider than 8 feet wide in the shore impact zone or 4 feet wide in a bluff impact zone.
    - **Stairways, lifts, and landings:** Stairways, lifts, and landings are allowed in the shore impact zone and the bluff impact zone as long as stairways and lifts are no wider than 4 feet and landings no more than 32 square feet.
- Decks and patios may encroach into bluff and river setbacks up to 15% of the required structure setback, provided they don't extend into the bluff impact zone.
- One water-oriented accessory structure is allowed for every 300 feet of river frontage. Lots less than 300 feet may have one structure. The water-oriented accessory structure is limited to a 12-foot height, 120 square foot area, and must be at least 10 feet from the water's edge. These structures are not allowed in the bluff impact zone.
- Temporary storage of docks, boats, and other equipment during the winter months are prohibited in the bluff impact zone but allowed in the shore impact zone.

Figure 2. River Access Design Standards.



MRCCA web address: https://www.dnr.state.mn.us/waters/watermgmt_section/critical_area/index.html

Mississippi River Corridor Critical Area (MRCCA) District Map - Dayton to Anoka
Minnesota Rules, part 6106.0100



117-148 – Mississippi River Corridor Critical Area Overlay District development standards

(a) AUTHORITY, INTENT AND PURPOSE

(1) **Statutory Authorization.** This Mississippi River Corridor Critical Area (MRCCA) Section is adopted pursuant to the authorization and policies contained in Minnesota Statutes, Chapter 116G, Minnesota Rules, Parts 6106.0010 - 6106.0180, and the planning and zoning enabling legislation in Minnesota Statutes, Chapter 462 and 473.

(2) **Policy**. The Legislature of Minnesota has delegated responsibility to local governments of the state to regulate the subdivision, use and development of designated critical areas and thus preserve and enhance the quality of important historic, cultural, aesthetic values, and natural systems and provide for the wise use of these areas.

(b) GENERAL PROVISIONS AND DEFINITIONS

(1) **Jurisdiction.** The provisions of this Section apply to land within the river corridor boundary as described in the State Register, volume 43, pages 508 to 519 and shown on the zoning map.

(2) **Enforcement.** The City of Ramsey is responsible for the administration and enforcement of this Section. Any violation of its provisions or failure to comply with any of its requirements including violations of conditions and safeguards established in connection with grants of variances or conditional uses constitutes a misdemeanor and is punishable as defined by law. Violations of this Section can occur regardless of whether or not a permit is required for a regulated activity listed in Section 117-148(c)2 (Permits).

(3) **Severability.** If any section, clause, provision, or portion of this Section is adjudged unconstitutional or invalid by a court of competent jurisdiction, the remainder of this Section shall not be affected thereby.

(4) **Abrogation and Greater Restrictions.** It is not intended by this Section to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where this Section imposes greater restrictions, the provisions of this Section shall prevail. All other Sections inconsistent with this Section are hereby repealed to the extent of the inconsistency only.

(5) **Underlying Zoning.** Uses and standards of underlying zoning districts apply except where standards of this overlay district are more restrictive.

(6) **Definitions.** Unless specifically defined below, words or phrases used in this Section shall be interpreted to give them the same meaning they have in common usage and to give this Section its most reasonable application. For the purpose of this Section, the words “must” and “shall” are mandatory and not permissive. All distances, unless otherwise specified, are measured horizontally.

a. **Access path**. An area designated to provide ingress and egress to public waters.

b. **Adjacent.** Having a boundary that physically touches or adjoins.

c. **Agricultural use.** A use having the meaning given under Minnesota Statutes, section 40A.02.

d. **Alternative design.** Subdivision design methods such as conservation design, transfer of development density, or similar zoning and site design techniques that protect open space and natural areas.

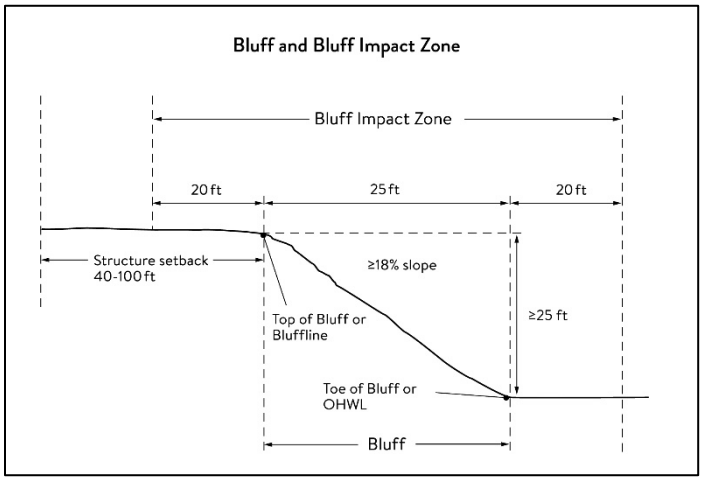
e. **Barge fleeting.** Temporarily parking and securing barges on the river, on or off channel, while tows are assembled or broken up.

f. **Biological and ecological functions.** The functions of vegetation in stabilizing soils and slopes, retaining and filtering runoff, providing habitat, and recharging groundwater.

g. **Bluff**. A natural topographic feature having:

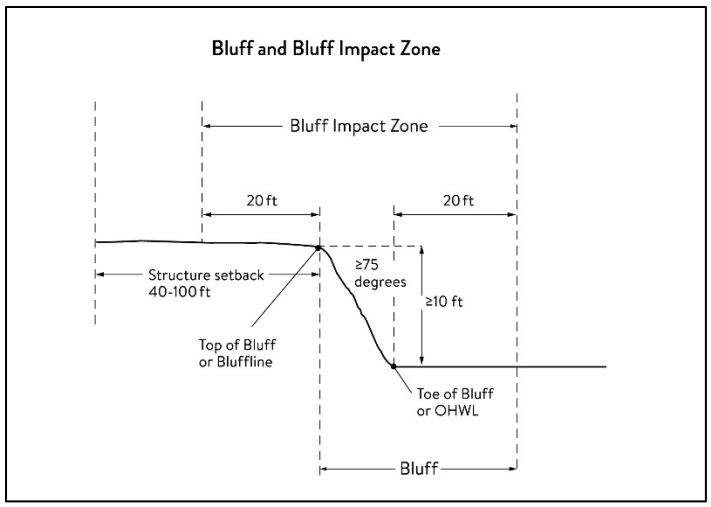
(1) A slope that rises at least 25 feet and the grade of the slope averages 18 percent or greater, measured over a horizontal distance of 25 feet, from the toe of the slope to the top of the slope. Where the slope begins below the ordinary high water level, the ordinary high water level is the toe of the slope. See Figure 1; or

Figure 1. Bluff and Bluff Impact Zone



(2) A natural escarpment or cliff with a slope that rises at least ten feet above the ordinary high water level or toe of the slope, whichever is applicable, to the top of the slope, with a slope of 75 degrees or greater. See Figure 2.

Figure 2. Natural Escarpment Bluff and Bluff Impact Zone



h. **Bluff impact zone.** A bluff and land located within 20 feet of the bluff. See Figures 1 and 2.

i. **Bluffline.** A line delineating the top of the bluff. More than one bluffline may be encountered proceeding landward from the river. See Figures 1 and 2.

j. **Bluff, Toe of.** A line along the bottom of a bluff, requiring field verification, such that the slope above the line exceeds 18 percent and the slope below the line is 18 percent or less, measured over a horizontal distance of 25 feet. See Figures 1 and 2.

k. **Bluff, Top of.** A line along the top of a bluff, requiring field verification, such that the slope below the line exceeds 18 percent and the slope above the line is 18 percent or less, measured over a horizontal distance of 25 feet. See Figures 1 and 2.

l. **Buildable area.** The area upon which structures may be placed on a lot or parcel of land and excludes areas needed to meet requirements for setback, rights-of-way, bluff impact zones, historic properties, wetlands, designated floodways, land below the ordinary high water level of public waters, and other unbuildable areas.

m. **Building.** A structure with two or more outside rigid walls and a fully secured roof and affixed to a permanent site.

n. **Certificate of compliance.** A document written after a compliance inspection, certifying that the development is in compliance with applicable requirements at the time of the inspection.

o. **Commissioner.** The commissioner of the Minnesota Department of Natural Resources.

p. **Conditional use.** A use having the meaning given under Minnesota Statutes, chapters 394 and 462.

q. **Conservation design.** A pattern of subdivision that is characterized by grouping lots within a portion of a parcel, where the remaining portion of the parcel is permanently protected as open space.

r. **Conventional subdivision.** A pattern of subdivision that is characterized by lots that are spread regularly throughout a parcel in a lot and block design.

s. **Deck.** A horizontal, unenclosed, aboveground level structure open to the sky, with or without attached railings, seats, trellises, or other features, attached or functionally related to a principal use or site.

t. **Developer.** Having the meaning given under Minnesota Statutes, section 116G.03.

u. **Development.** Having the meaning given under Minnesota Statutes, section 116G.03.

v. **Discretionary action.** An action under this chapter related to land use that requires a public hearing by local ordinance or statute, such as preliminary plats, final subdivision plats, planned unit developments, conditional use permits, interim use permits, variances, appeals, and rezonings.

w. **Dock.** Having the meaning given under Minnesota Rules, chapter 6115.

x. **Electric power facilities.** Equipment and associated facilities for generating electric power or devices for converting wind energy to electrical energy as identified and defined under Minnesota Statutes, section 216E.

y. **Essential services.** Underground or overhead gas, electrical, communications, steam, or water distribution, collection, supply, or disposal systems, including storm water. Essential services include poles, wires, mains, drains, pipes, conduits, cables, fire alarm boxes, traffic signals, hydrants, navigational structures, aviation safety facilities or other similar equipment and accessories in conjunction with the systems. Essential services does not include buildings, treatment works as defined in Minnesota Statutes, chapter 115.01, electric power facilities or transmission services.

z. **Feedlot.** Having the meaning given for animal feedlots under Minnesota Rules chapter 7020.

aa. **Floodplain.** Having the meaning given the meaning given under Minnesota Rules chapter 6120.

ab. **Fully reconstructs.** The reconstruction of an existing impervious surface that involves site grading and subsurface excavation so that soil is exposed. Mill and overlay and other resurfacing activities are not considered fully reconstructed.

ac. **Hard-surface trail.** A trail surfaced in asphalt, crushed aggregate, or other hard surface, for multi-purpose use, as determined by local, regional, or state agency plans.

ad. **Historic property.** An archaeological site, standing structure, site, district, or other property that is:

1. Listed in the National Register of Historic Places or the State Register of Historic Places or locally designated as a historic site under Minnesota Statutes, section 471;
2. determined to meet the criteria for eligibility to the National Register of Historic Places or the State Register of Historic Places as determined by the director of the Minnesota Historical Society; or
3. An unplatted cemetery that falls under the provisions of Minnesota Statutes, section 307, in consultation with the Office of the State Archaeologist.

ae. **Impervious surface.** A constructed hard surface that either prevents or retards the entry of water into the soil and causes water to run off the surface in greater quantities and at an increased rate of flow than prior to development. Examples include rooftops, decks, sidewalks, patios, parking lots, storage areas, and driveways, including those with concrete, asphalt, or gravel surfaces.

af. **Intensive vegetation clearing.** The removal of all or a majority of the trees or shrubs in a contiguous patch, strip, row, or block.

ag. **Interim use.** A use having the meaning given under Minnesota Statutes, section 394 and 462.

ah. **Land alteration.** An activity that exposes the soil or changes the topography, drainage, or cross section of the land, excluding gardening or similar minor soil disturbances.

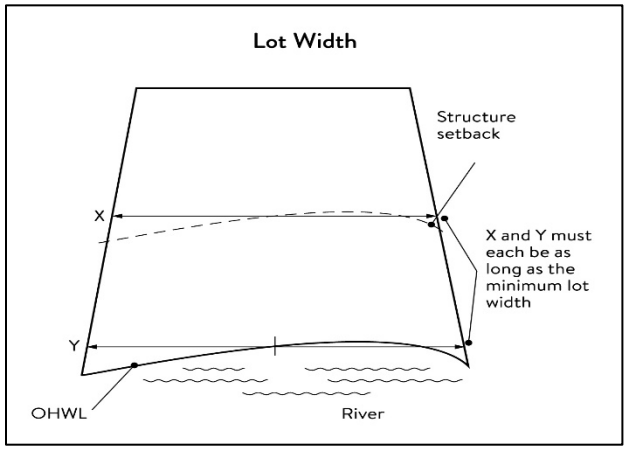
ai. **Local government.** Counties, cities, and townships.

aj. **Local park agencies.** The Minneapolis Park and Recreation Board and the Three Rivers Park District.

ak. **Lot.** Having the meaning given under Minnesota Rules chapter 6120.

al. **Lot width.** The shortest distance between lot lines measured at both the ordinary high water level and at the required structure setback from the ordinary high water level. See Figure 3.

Figure 3. Lot Width



am. **Marina.** Having the meaning given under Minnesota Rules chapter 6115.

an. **Mississippi River Corridor Critical Area (MRCCA).** The area within the River Corridor Boundary (See Section 117-148(b)6bs) (*Definitions* - River Corridor Boundary).

ao. **Mississippi River Corridor Critical Area (MRCCA) Plan.** A chapter or other element in the City of Ramsey comprehensive plan.

ap. **Mooring facility.** Having the meaning given under Minnesota Rules chapter 6115.0170.

aq. **Native plant community.** A plant community that has been identified as part of the Minnesota Biological Survey or biological survey issued or adopted by a local, state, or federal agency.

ar. **Natural-surface trail.** A trail composed of native soil and rock or compacted granular stone, primarily intended for hiking, equestrian, or mountain bike use, as determined by local, regional, or state agency plans.

as. **Natural vegetation.** Any combination of ground cover, understory, and tree canopy that, while it may have been altered by human activity, continues to stabilize soils, retain and filter runoff, provide habitat, and recharge groundwater.

at. **Nonconformity.** Having the meaning given under Minnesota Statutes, section 394.22.

au. **Nonmetallic mining.** Construction, reconstruction, repair, relocation, expansion, or removal of any facility for the extraction, stockpiling, storage, disposal, or reclamation of nonmetallic minerals such a stone, sand, and gravel. Nonmetallic mining does not include ancillary facilities such as access roads, bridges, culverts, and water level control structures. For purposes of this subpart, "facility" includes all mine pits, quarries, stockpiles, basins, processing structures and equipment, and any structures that drain or divert public waters to allow mining.

av. **Off-premise advertising signs.** Those signs that direct attention to a product, service, business, or entertainment venue that is not exclusively related to the premises where the sign is located.

aw. **Ordinary high water level (OHWL).** Having the meaning given under Minnesota Statutes, section 103G.005.

ax. **Overlay district.** A zoning district that is applied over one or more previously established zoning districts, establishing additional or stricter standards and criteria for covered properties in addition to those of the underlying zoning district. Overlay districts are often used to protect historic features and natural resources such as shoreland or floodplain.

ay. **Parcel.** Having the meaning given under Minnesota Statutes, section 116G.03.

az. **Patio.** A constructed hard surface located at ground level with no railings and open to the sky.

ba. **Picnic shelter.** A roofed structure open on all sides, accessory to a recreational use.

bb. **Planned unit development.** A method of land development that merges zoning and subdivision controls, allowing developers to plan and develop a large area as a single entity, characterized by a unified site design, a mix of structure types and land uses, and phasing of development over a number of years. Planned unit development includes any conversion of existing structures and land uses that utilize this method of development.

bc. **Plat.** Having the meaning given under Minnesota Statutes, sections 505 and 515B.

bd. **Port.** A water transportation complex established and operated under the jurisdiction of a port authority according to Minnesota Statutes, section 458.

be. **Primary conservation areas.** Key resources and features, including shore impact zones, bluff impact zones, floodplains, wetlands, gorges, areas of confluence with tributaries, natural drainage routes, unstable soils and bedrock, native plant communities, cultural and historic properties,

and significant existing vegetative stands, tree canopies, and other resources identified in local government plans.

bf. **Private facilities.** Private roads, driveways, and parking areas, private water access and viewing facilities, decks and patios in setback areas, and private signs.

bg. **Professional engineer.** An engineer licensed to practice in Minnesota.

bh. **Public facilities.** Public utilities, public transportation facilities, and public recreational facilities.

bi. **Public recreation facilities.** Recreational facilities provided by the state or a local government and dedicated to public use, including parks, scenic overlooks, observation platforms, trails, docks, fishing piers, picnic shelters, water access ramps, and other similar water-oriented public facilities used for recreation.

bj. **Public river corridor views.** Views toward the river from public parkland, historic properties, and public overlooks, as well as views toward bluffs from the ordinary high water level of the opposite shore, as seen during the summer months and documented in the MRCCA plan/chapter of the comprehensive plan.

bk. **Public transportation facilities.** All transportation facilities provided by federal, state, or local government and dedicated to public use, such as roadways, transit facilities, railroads, and bikeways.

bl. **Public utilities.** Electric power facilities, essential services, and transmission services.

bm. **Public waters.** Having the meaning given under Minnesota Statutes, section 103G.005.

bn. **Readily visible.** Land and development that are easily seen from the ordinary high water level of the opposite shore during summer months.

bo. **Resource agency.** A federal, state, regional, or local agency that engages in environmental, natural, or cultural resource protection or restoration activities, including planning, implementation, and monitoring.

bp. **Retaining wall.** A vertical or nearly vertical structures constructed of mortar and rubble masonry, rock, or stone regardless of size, vertical timber pilings, horizontal timber planks with piling supports, sheet pilings, poured concrete, concrete blocks, or other durable materials.

bq. **Rock Riprap.** Natural coarse rock placed or constructed to armor shorelines, streambeds, bridge abutments, pilings and other shoreline structures against scour, or water or ice erosion.

br. **River corridor boundary.** The boundary approved and adopted by the Metropolitan Council under Minnesota Statutes, section 116G.06, as approved and adopted by the legislature in Minnesota Statutes, section 116G.15, and as legally described in the Sate Register, volume 43, pages 508 to 518.

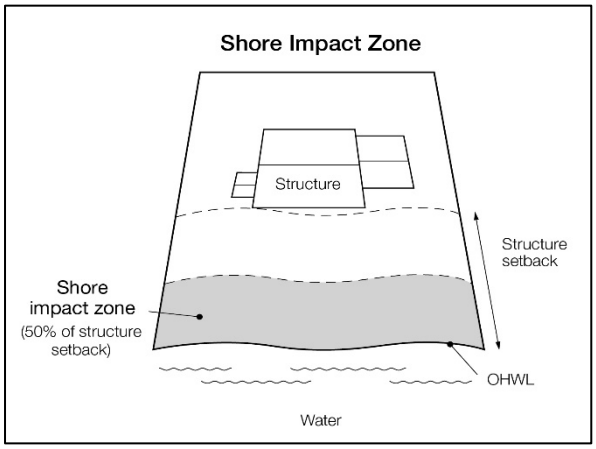
bs. **River-dependent use.** The use of land for commercial, industrial, or utility purposes, where access to and use of a public water feature is an integral part of the normal conduct of business and where the use is dependent on shoreline facilities.

bt. **Selective vegetation removal.** The removal of isolated individual trees or shrubs that are not in a contiguous patch, strip, row, or block and that does not substantially reduce the tree canopy or understory cover.

bu. **Setback.** A separation distance measured horizontally.

bv. **Shore impact zone.** Land located between the ordinary high water level of public waters and a line parallel to it at a setback of 50 percent of the required structure setback or, for agricultural use, 50 feet landward of the ordinary high water level. See Figure 4.

Figure 4. Shore Impact Zone



bw. **Shoreline facilities.** Facilities that require a location adjoining public waters for ingress and egress, loading and unloading, and public water intake and outflow, such as barge facilities, port facilities, commodity loading and unloading equipment, watercraft lifts, marinas, short-term watercraft mooring facilities for patrons, and water access ramps. Structures that would be enhanced by a shoreline location, but do not require a location adjoining public waters as part of their function, are not shoreline facilities, such as restaurants, bait shops, and boat dealerships.

bx. **Special purpose units of government.** The University of Minnesota, the St. Paul Port Authority, watershed management organizations established under Minnesota Statutes, chapter 103B, watershed districts established under Minnesota Statutes, chapter 103D, and any other unit of government other than local government or a state or regional agency.

by. **State or regional agency.** The Metropolitan Airports Commission, Minnesota Historical Society, University of Minnesota, Department of Natural Resources, Department of Transportation, Metropolitan Council and other state agencies.

bz. **Steep slope.** A natural topographic feature with an average slope of 12 to 18 percent, measured over a horizontal distance equal to or greater than 50 feet, and any slopes greater than 18 percent that are not bluffs.

ca. **Storm water management facilities.** Facilities for the collection, conveyance, treatment, or disposal of storm water.

cb. **Structure.** A building, sign, or appurtenance thereto, except for aerial or underground utility lines, such as sewer, electric, telephone, or gas lines, and utility line towers, poles, and other supporting appurtenances.

cc. **Subdivision**. Having the meaning given under Minnesota Statutes, section 462.352.

cd. **Subsurface sewage treatment system**. Having the meaning given under Minnesota Rules, part 7080.1100.

ce. **Transmission services.**

1. Electric power lines, cables, pipelines, or conduits that are:

(i) used to transport power between two points, as identified and defined under Minnesota Statutes, section 216E.01, subdivision 4; or

(ii) For mains or pipelines for gas, liquids, or solids in suspension, used to transport gas, liquids, or solids in suspension between two points; and

2. Telecommunication lines, cables, pipelines, or conduits.

cf. **Treeline.** The more or less continuous line formed by the tops of trees in a wooded area when viewed from a particular point. The treeline is determined during all seasons as if under full foliage.

cg. **Twin Cities Metropolitan area.** The area over which the Metropolitan Council has jurisdiction according to Minnesota Statutes, section 473.121 subdivision 2.

ch. **Variance.** Having the meaning given under Minnesota Statutes, section 394.22.

ci. **Water access ramp.** A boat ramp, carry-down site, boarding dock, and approach road, or other access that allows launching and removal of a boat, canoe, or other watercraft with or without a vehicle and trailer.

cj. **Water-oriented accessory structure.** A small building or other improvement, except stairways, fences, docks, and retaining walls, that, because of the relationship of its use to public waters, needs to be located closer to public waters than the normal structure setback. Examples include gazebos, screen houses, fish houses, pump houses, and detached decks and patios.

ck. **Water quality impact zone.** Land within the shore impact zone or within 50 feet of the boundary of a public water, wetland, or natural drainage way, whichever is greater.

cl. **Wetland.** Having the meaning given under Minnesota Statutes, section 103G.005.

cm. **Wharf.** Having the meaning given under Minnesota Rules, part 6115.0170.

(c) ADMINISTRATION

1. **Purpose.** The purpose of this Section is to identify administrative provisions to ensure this Section is administered consistent with its purpose.

2. **Permits.** A permit is required for the construction of buildings or building additions (including construction of decks and signs), the installation and/or alteration of sewage treatment systems, vegetation removal consistent with Section 117-148(i) (Vegetation Management) and land alterations consistent with Section 117-148(j) (Land alteration standards and stormwater management).

3. **Variances.** Variances to the requirements under this Section may only be granted in accordance with Minnesota Statutes, Section 462.357 and must consider the potential impacts of variances on primary conservation areas, public river corridor views, and other resources identified in the MRCCA plan. In reviewing the variance application, the City of Ramsey shall:

a. Evaluate the impacts to these resources. and if negative impacts are found, require conditions to mitigate the impacts that are related to and proportional to the impacts, consistent with Section 117-148(c)5 (Conditions of Approval) and

b. Make written findings that the variance is consistent with the purpose of this Section, as follows.

(1) The extent, location and intensity of the variance will be in substantial compliance with the MRCCA Plan;

(2) The variance is consistent with the character and management purpose of the MRCCA district in which it is located;

(3) The variance will not be detrimental to PCAs and PRCVs nor will it contribute to negative incremental impacts to PCAs and PRCVs when considered in the context of past, present and reasonable future actions; and

(4) The variance will not negatively impact (other MRCCA plan-identified resources).

4. **Conditional and interim use permits.** All conditional and interim uses, required under this Section, must comply with Minnesota Statutes, section 462.3595 and must consider the potential impacts on primary conservation areas, public river corridor views, and other resources identified in the MRCCA plan. In reviewing the application, the City of Ramsey shall:

a. Evaluate the impacts to these resources and if negative impacts are found, require conditions to mitigate the impacts that are related to and proportional to the impacts, consistent with Section 117-148(c)5 (Conditions of approval); and

b. Make written findings that the conditional use is consistent with the purpose of this Section, as follows.

(1) The extent, location and intensity of the conditional use will be in substantial compliance with the MRCCA Plan;

(2) The conditional use is consistent with the character and management purpose of the MRCCA district in which it is located;

(3) The conditional use will not be detrimental to PCAs and PRCVs nor will it contribute to negative incremental impacts to PCAs and PRCVs when considered in the context of past, present and reasonable future actions; and

(4) The conditional use will not negatively impact (other MRCCA plan-identified resources).

5. Conditions of Approval. The City of Ramsey shall evaluate the impacts to PCAs, PRCVs, and other resources identified in the MRCCA Plan, and if negative impacts are found, require conditions to mitigate the impacts that are related to and proportional to the impacts. Mitigation may include:

(1) Restoration of vegetation identified as “vegetation restoration priorities” identified in the MRCCA plan.

(2) Preservation of existing vegetation;

(3) Stormwater runoff management;

(4) Reducing impervious surface;

(5) Increasing structure setbacks;

(6) Wetland and drainageway restoration and/or preservation; and

(7) And other conservation measures.

6. **Application materials.** Applications for permits and discretionary actions required under this Section must submit the following information unless the Zoning Administrator determines that the information is not needed.

a. A detailed project description; and

b. Scaled maps and plans, dimensional renderings, maintenance agreements, and other materials that identify and describe:

(1) Primary conservation areas;

(2) Public river corridor views;

(3) Buildable area;

(4) Existing and proposed topography and drainage patterns;

(5) Proposed storm water and erosion and sediment control practices;

(6) Existing and proposed vegetation to be removed and established;

(7) Ordinary high water level, blufflines, and all required setbacks;

(8) Existing and proposed structures;

(9) Existing and proposed impervious surfaces; and

(10) Existing and proposed subsurface sewage treatment systems.

7. **Nonconformities**.

a. All legally established nonconformities as of the date of this ordinance may continue consistent with 462.357 Subd. 1e .

b. New structures erected in conformance with the setback averaging provisions of Section 117-148(f)3d (Structure and impervious surface placement) are conforming structures.

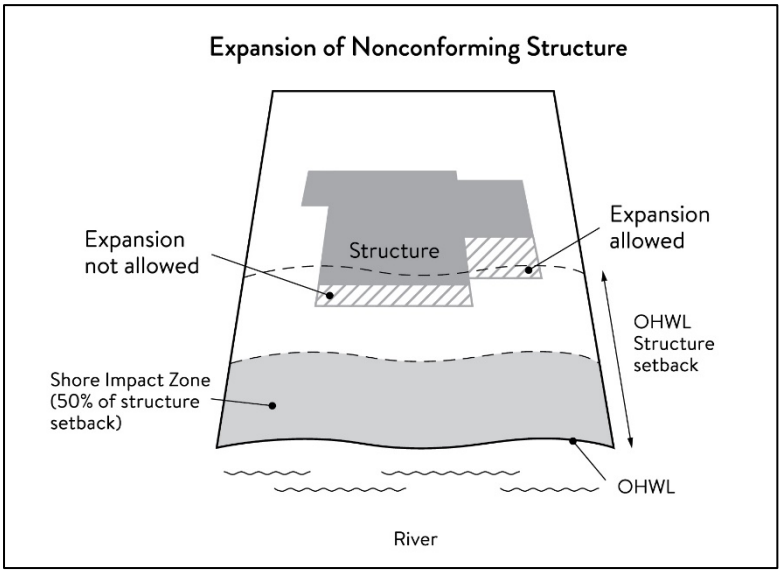
c. Site alterations and expansion of site alterations that were legally made prior to the effective date of this ordinance are conforming. Site alterations include vegetation, erosion control, storm water control measures, and other nonstructural site improvements.

d. Legally nonconforming principal structures that do not meet the setback requirements of Section 117-148(f)3 (Structure and impervious surface placement) may be expanded laterally provided that:

(1) The expansion does not extend into the shore or bluff impact zone or further into the required setback than the building line of the existing principal structure (See Figure 5); and

(2) The expanded structure's scale and bulk is consistent with that of the original structure and existing surrounding development.

Figure 5. Expansion of Nonconforming Structure



8. **Notifications.**

a. Amendments to this Section and to the MRCCA plan must be submitted to the Commissioner as provided in Minnesota Rules, part 6106.0070, Subp. 3, Items B – I.

b. Notice of public hearings for discretionary actions, including conditional and interim use permits, variances, appeals, rezonings, preliminary plats, final subdivision plats, master plans, and PUDs, must be sent to the following entities at least thirty (30) days prior to the hearing:

(1) The Commissioner in a format prescribed by the DNR;

(2) National Park Service; and

(3) where building heights exceed the height limits specified in Section 117-148(f)2 (Structure height) as part of the conditional use or variance process, adjoining local governments within the MRCCA, including those with overlapping jurisdiction and those across the river.

c. Notice of final decisions for actions in Section 117-148(c)7 (Nonconformities), including findings of fact, must be sent to the Commissioner, the National Park Service, and adjoining local governments within the MRCCA within ten (10) days of the final decision.

d. Requests to amend district boundaries must follow the provisions in Minnesota Rules, part 6106.0100, Subp. 9, Item C.

e. The DNR will be notified at time of application submittal of master plans, PUDs, preliminary, and final plats

9. **Accommodating disabilities.** Reasonable accommodations for ramps or other facilities to provide persons with disabilities access to the persons' property, as required by the federal Americans with Disabilities Act and the federal Fair Housing Act and as provided by Minnesota Rules, chapter 1341, must:

a. Comply with Sections 117-148(f) to (l); or

b. If Sections 117-148(f) to (l) cannot be complied with, ramps or other facilities are allowed with an administrative permit provided:

(1) The permit terminates on either a specific date or upon occurrence of a particular event related to the person requiring accommodation; and

(2) Upon expiration of the permit, the ramp or other facilities must be removed.

(d) MRCCA DISTRICTS

1. **Purpose**. The purpose of this Section is to establish districts under which building height and structure placement are regulated to protect and enhance the Mississippi River's resources and features consistent with the natural and built character of each district.

2. **District description and management purpose**. The MRCCA within the City of Ramsey is divided into the following MRCCA Districts:

a. Rural and Open Space (ROS).

(1) Description. The ROS District is characterized by rural and low-density development patterns and land uses, and includes land that is riparian or visible from the river, as well as large, undeveloped tracts of high ecological and scenic value, floodplain, and undeveloped islands. Many primary conservation areas exist in the district.

(2) Management purpose. The ROS District must be managed to sustain and restore the rural and natural character of the corridor and to protect and enhance habitat, parks and open space, public river corridor views, and scenic, natural, and historic areas.

b. River Neighborhood (RN).

(1) Description. The RN District is characterized by primarily residential neighborhoods that are riparian or readily visible from the river or that abut riparian parkland. The district includes parks and open space, limited commercial development, marinas, and related land uses.

(2) Management purpose. The RN District must be managed to maintain the character of the river corridor within the context of existing residential and related neighborhood development, and to protect and enhance habitat, parks and open space, public river corridor views, and scenic, natural, and historic areas. Minimizing erosion and the flow of untreated storm water into the river and enhancing habitat and shoreline vegetation are priorities in the district.

~~c. River Towns and Crossings (RTC).~~

~~(1) Description. The RTC District is characterized by historic downtown areas and limited nodes of intense development at specific river crossings, as well as institutional campuses that predate designation of the MRCCA, and that include taller buildings.~~

~~(2) Management purpose. The RTC district must be managed in a manner that allows continued growth and redevelopment in historic downtowns and more intensive redevelopment in limited areas at river crossings to accommodate compact walkable development patterns and connections to the river. Minimizing erosion and the flow of untreated storm water into the river, providing public access to and public views of the river, and restoring natural vegetation in riparian areas and tree canopy are priorities in the district.~~

d. Separated from River (SR).

(1) Description. The SR District is characterized by its physical and visual distance from the Mississippi River. The district includes land separated from the river by distance, topography, development, or a transportation corridor. The land in this district is not readily visible from the Mississippi River.

(2) Management purpose. The SR district provides flexibility in managing development without negatively affecting the key resources and features of the river corridor. Minimizing negative impacts to primary conservation areas and minimizing erosion and flow of untreated storm water into the Mississippi River are priorities in the district. The RTC district must be managed in a manner that allows continued growth and redevelopment in historic downtowns and more intensive redevelopment in limited areas at river crossings to accommodate compact walkable development patterns and connections to the river. Minimizing erosion and the flow of untreated storm water into the river, providing public access to and public views of the river, and restoring natural vegetation in riparian areas and tree canopy are priorities in the district.

~~e. Urban Mixed (UM).~~

~~(1) Description. The UM District includes large areas of highly urbanized mixed use that are a part of the urban fabric of the river corridor, including institutional, commercial, industrial, and residential areas and parks and open space.~~

~~(2) Management purpose. The UM District must be managed in a manner that allows for future growth and potential transition of intensely developed areas that does not negatively affect public river corridor views and that protects bluffs and floodplains. Restoring and enhancing bluff and shoreline habitat, minimizing erosion and flow of untreated storm water into the river, and providing public access to and public views of the river are priorities in the district.~~

~~f. Urban Core (UC).~~

~~(1) Description. The UC District includes downtown.~~

~~(2) Management purpose. The UC District must be managed with the greatest flexibility to protect commercial, industrial, and other high-intensity urban uses, while minimizing negative impacts to primary conservation areas and minimizing erosion and flow of untreated storm water into the river. Providing public access to and public views of the river are priorities in the district.~~

3. **MRCCA district map**. The locations and boundaries of the MRCCA districts established by this Section are shown on MRCCA Overlay District map which is incorporated herein by reference. The district boundary lines are intended to follow the center lines of rivers and streams, highways, streets, lot lines, and municipal boundaries, unless a boundary line is otherwise indicated on the map. Where district boundaries cross unsubdivided property, the district boundary line is determined by use of dimensions or the scale appearing on the map.

(e) SPECIAL LAND USE PROVISIONS

1. **Purpose.** To identify development standards and considerations for land uses that have potential to negatively impact primary conservation areas and public river corridor views.

2. **Underlying zoning.** Uses within the MRCCA are generally determined by underlying zoning, with additional provisions for the following land uses:

   a. **Agricultural use.** Perennial ground cover is required within 50 feet of the ordinary high water level and within the bluff impact zone.

   b. **Feedlots.** New animal feedlots and manure storage areas are prohibited. Existing animal feedlots and manure storage areas must conform with Minnesota Rules, chapter 7020.

c. **Forestry.** Tree harvesting and biomass harvesting within woodlands, and associated reforestation, must be consistent with recommended practices in Conserving Wooded Areas in Developing Communities: Best Management Practices in Minnesota.

d. **Nonmetallic mining.** Nonmetallic mining requires a conditional use permit or interim use permit issued by the local government, subject to the following:

(1) New nonmetallic mining is prohibited within the shore impact zone and bluff impact zone and within the required structure setback from the bluffline and OHWL;

(2) Processing machinery must be located consistent with setback standards for structures as provided in Section 117-148(f)3 (Structure and impervious surface placement);

(3) Only one barge loading area, which must be limited to the minimum size practicable, is permitted for each mining operation;

(4) New and, where practicable, existing nonmetallic mining operations must not be readily visible and must be screened by establishing and maintaining natural vegetation. The unscreened boundaries of nonmetallic mining areas are limited to only the barge loading area;

(5) A site management plan must be developed by the operator and approved by the local government before new nonmetallic mining commences. Operations must be consistent with the site plan throughout the duration of operations at the site. The site management plan must:

(i) Describe how the site will be developed over time with an emphasis on minimizing environmental risk to public waters;

(6) Explain where staged reclamation may occur at certain points during the life of the site;

(7) Address dust, noise, storm water management, possible pollutant discharges, days and hours of operation, and duration of operations; and

(8) Describe any anticipated vegetation and topographic alterations outside the pit, and reclamation plans consistent with the stated end use for the land; and;

(9) Existing and new nonmetallic mining operations must submit land reclamation plans to the local government compatible with the purposes of this ordinance.

f. **River-dependent uses.** River-dependent uses must comply with the following design standards:

(1) Structures and parking areas, except shoreline facilities and private roads and conveyances serving river-dependent uses as provided in Section 117-148(l) (Exemptions), must meet the dimensional and performance standards in this Section must be designed so that they are not readily visible, and must be screened by establishing and maintaining natural vegetation;

(2) Shoreline facilities must comply with Minnesota Rules, chapter 6115 and must:

(i) be designed in a compact fashion so as to minimize the shoreline area affected; and

(ii) minimize the surface area of land occupied in relation to the number of watercraft or barges to be served; and

(3) Dredging and placement of dredged material are subject to existing federal and state permit requirements and agreements.

g. **Wireless communication towers.** Wireless communication towers require a conditional or interim use permit and are subject to the following design standards:

(1) The applicant must demonstrate that functional coverage cannot be provided through co-location, a tower at a lower height, or a tower at a location outside of the MRCCA;

(2) The tower must not be located in a bluff or shore impact zone; and

(3) Placement of the tower must minimize impacts on public river corridor views.

(4) Comply with the general design standards in Section 117-148(h)2 (General design standards).

(f) STRUCTURE HEIGHT AND PLACEMENT AND LOT SIZE

1. **Purpose.** To establish standards that protect primary conservation areas and public river corridor views from development impacts and ensure that new development is sited consistent with the purpose of the MRCCA.

2. **Structure height.** Structures and facilities must comply with the following standards unless identified as exempt in Section 117-148(l) (Exemptions).

a. Structures and facilities must comply with the following standards unless identified as exempt in Section 117-148(l) (Exemptions).

(1) ROS District: 35 feet.

(2) RN District: 35 feet.

~~(3) RTC District: 48 feet **(or lower)**, provided tiering of structures away from the Mississippi River and from blufflines is given priority, with lower structure heights closer to the river and blufflines, and that structure design and placement minimizes interference with public river corridor views. Structures over 48 feet **(or lower) and up to (fill in a max. height)** are allowed as a conditional use according to Section 6.23.~~

(4) SR District: Height is determined by underlying zoning, provided the allowed height is consistent with that of the mature treeline, where present, and existing surrounding development, as viewed from the OWHL of the opposite shore.

~~(5) UM District: 65 feet, provided tiering of structures away from the Mississippi River and from blufflines is given priority, with lower structure heights closer to the river and blufflines, and that structure design and placement minimize interference with public river corridor views. Structures over 65 feet **(or lower) and up to (fill in a max. height)** are allowed as a conditional use according to Section 6.23.~~

~~(6) UC District: Height is determined by underlying zoning, provided tiering of structures away from the Mississippi River and blufflines is given priority, with lower structure heights closer to the river and blufflines, and structure design and placement minimize interference with public river corridor views.~~

b. Height is measured on the side of the structure facing the Mississippi River.

c. In addition to the conditional use permit requirements of Section 117-148(c)4, (Conditional and interim use permits) criteria for considering whether to grant a conditional use permit for structures exceeding the height limits must include:

(1) Assessment of the visual impact of the proposed structure on public river corridor views, including views from other communities;

(2) Determination that the proposed structure meets the required bluff and OHWL setbacks;

(3) Identification and application of techniques to minimize the perceived bulk of the proposed structure, such as:

(i) Placing the long axis of the building perpendicular to the river;

(ii) Stepping back of portions of the facade;

(iii) Lowering the roof pitch or use of a flat roof;

(iv) Using building materials or mitigation techniques that will blend in with the natural surroundings such as green roofs, green walls, or other green and brown building materials;

(v) Narrowing the profile of upper floors of the building; or

(vi) Increasing the setbacks of the building from the Mississippi River or blufflines;

(vii) Identification of techniques for preservation of those view corridors identified in the MRCCA Plan; and

(viii) Opportunities for creation or enhancement of public river corridor views.

3. **Structure and impervious surface placement.**

a. Structures and impervious surface must not be placed in the shore or bluff impact zones unless identified as an exemption in Section 117-148(l) (Exemptions).

b. Structures and facilities must comply with the following OHWL setback provisions unless identified as exempt in Section 117-148(l) (Exemptions).

(1) ROS District: 200 feet from the Mississippi River and 150 feet from the Minnesota and Vermillion Rivers.

(2) RN District: 100 feet from the Mississippi River and 75 feet from the Rum and Vermillion Rivers.

~~(3) RTC District: 75 feet from the Mississippi, Crow, and Rum Rivers.~~

(4) SR District: 75 feet from the Vermillion River.

~~(5) UM District: 50 feet from the Mississippi River.~~

~~(6) UC District: Setbacks are determined by underlying zoning.~~

c. Structures and facilities must comply with the following bluffline setback provisions unless identified as exempt in Section 117-148(l) (Exemptions):

(1) ROS District: 100 feet.

(2) RN District: 40 feet.

~~(3) RTC District: 40 feet.~~

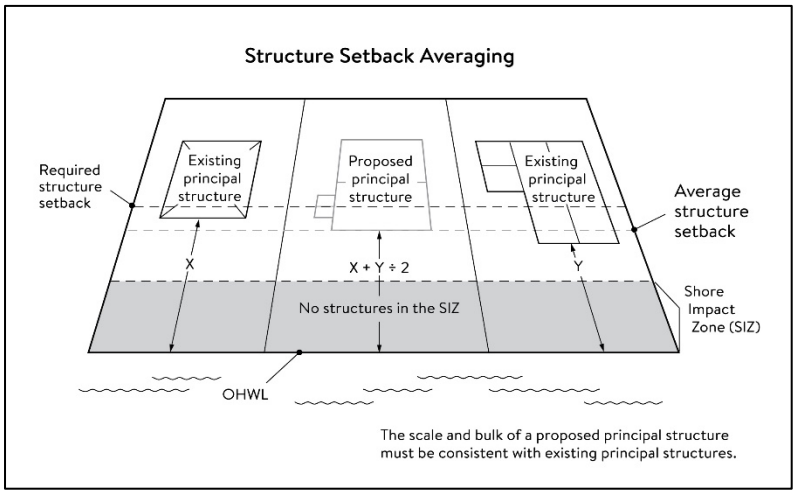
(4) SR District: 40 feet.

~~(5) UM District: 40 feet.~~

~~(6) UC District: 40 feet.~~

d. Where principal structures exist on the adjoining lots on both sides of a proposed building site, the minimum setback may be altered to conform to the average of the adjoining setbacks, provided that the new structure's scale and bulk riverward or bluffward of the setbacks required under Section 117-148(f)3 (Structure and impervious surface placement) consistent with adjoining development. See Figure 6.

Figure 6. Structure Setback Averaging



e. Subsurface sewage treatment systems, including the septic tank and absorption area, must be located at least 75 feet from the ordinary high water level of the Mississippi River and all other public waters.

4. **Lot size and buildable area.**

a. The width of lots abutting the Mississippi River in the ROS District must be at least 200 feet, unless alternative design methods are used that provide greater protection of the riparian area.

b. All new lots must have adequate buildable area to comply with the setback requirements of Section 117-148(f)3 (Structure and impervious surface placement) so as to not require variances to use the lots for their intended purpose.

g. PERFORMANCE STANDARDS FOR PRIVATE FACILITIES

1. **Purpose.** To establish design standards for private facilities that are consistent with best management practices and that minimize impacts to primary conservation areas, public river corridor views and other resources identified in the MRCCA plan.

2. **General design standards**. All private facilities must be developed in accordance with the vegetation management and land alteration requirements in Sections 117-148(i) (Vegetation management) and 117-148(j) (Land alteration standards and stormwater management).

3. **Private roads, driveways, and parking areas**. Except as provided in Section 117-148(l) (Exemptions), private roads, driveways and parking areas must:

a. Be designed to take advantage of natural vegetation and topography so that they are not readily visible;

b. Comply with structure setback requirements according to Section 117-148(f)3 (Structure and impervious surface placement); and

c. Not be placed within the bluff impact zone or shore impact zone, unless exempt under Section 117-148(l) (Exemptions) and designed consistent with Section 117-148(f)2 (General design standards).

4. **Private water access and viewing facilities**.

a. Private access paths must be no more than:

(1) Eight feet wide, if placed within the shore impact zone; and

(2) Four feet wide, if placed within the bluff impact zone.

c. Private water access ramps must:

(1) Comply with Minnesota Rules, chapters 6115.0210 and 6280.0250; and

(2) Be designed and constructed consistent with the applicable standards in Design Handbook for Recreational Boating and Fishing Facilities.

c. Design and construction of private stairways, lifts, and landings are subject to the following standards:

(1) Stairways and lifts must not exceed four feet in width on residential lots. Wider stairways may be used for commercial properties and residential facilities held in common, if approved by Conditional Use Permit;

(2) Landings for stairways and lifts on residential lots must not exceed 32 square feet in area. Landings larger than 32 square feet area allowed for commercial properties and residential facilities held in common, if approved by Conditional Use Permit*;*

(3) Canopies or roofs are prohibited on stairways, lifts, or landings;

(4) Stairways, lifts, and landings must be located in the least visible portion of the lot whenever practical; and

E. Ramps, lifts, mobility paths, or other facilities for persons with physical disabilities are allowed for achieving access to shore areas according to Section 7.43 A. – D, and as provided under Section 117-148(c)9 (Accommodating disabilities).

d. One water-oriented accessory structure is allowed for each riparian lot or parcel less than 300 feet in width at the ordinary high water level, with one additional water-oriented accessory structure allowed for each additional 300 feet of shoreline on the same lot or parcel. Water-oriented accessory structures are prohibited in the bluff impact zone and must:

(1) not exceed 12 feet in height;

(2) not exceed 120 square feet in area; and

(3) be placed a minimum of 10 feet from the ordinary high water level.

5. **Decks and patios in setback areas.** Decks and at-grade patios may encroach into the required setbacks from the ordinary high water level and blufflines without a variance, when consistent with Sections 117-

148(i) (Vegetation management) and 117-148(j) (Land alteration standards and stormwater management), provided that:

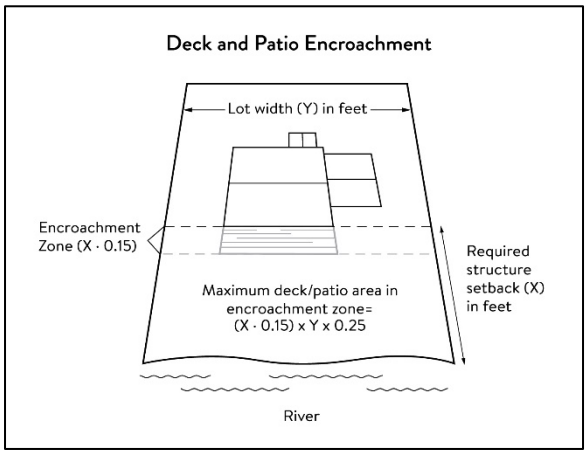
a. The encroachment of the deck or patio into the required setback area does not exceed 15 percent of the required structure setback;

b. the area of the deck or patio that extends into the required setback area occupies no more than 25 percent of the total area between the required setback and the 15 percent using the formula:

[required setback depth (feet) x 0.15 x lot width (feet) = maximum total area]

c. The deck or patio does not extend into the bluff impact zone. See Figure 7.

Figure 7. Deck and Patio Encroachment



6. **Off-premise and directional signs.**

a. Off-premise advertising signs must:

(1) Meet required structure placement and height standards in Section 117-148(f) (Structure height and placement and lot size).

(2) Not be readily visible

b. Directional signs for patrons arriving at a business by watercraft must comply with the following standards:

(1) They must be consistent with Minnesota Statutes, section 86B.115.

(2) Only convey the location and name of the establishment and the general types of goods and services available, if located in a shore impact zone.

(3) Be no greater than ten feet in height and 32 square feet in surface area; and

(4) If illuminated, the lighting must be shielded to prevent illumination out across the river or to the sky.

7. Fences. Fences between principal structures and the river are allowed provided that fences are:

a. Not higher than six feet.

b. Not located within 40 feet of slopes greater than 12%.

c. Not located in the regulatory floodplain.

(h) PERFORMANCE STANDARDS FOR PUBLIC FACILITIES

1. **Purpose.** To establish design standards for public facilities that are consistent with best management practices and that minimize impacts to primary conservation areas, public river corridor views and other resources identified in the MRCCA plan. Public facilities serve the public interest by providing public access to the Mississippi River corridor or require locations in or adjacent to the river corridor and therefore require some degree of flexibility.

2. **General design standards**. All public facilities must be designed and constructed to:

   a. Minimize visibility of the facility from the river to the extent consistent with the purpose of the facility;

   b. Comply with the structure placement and height standards in Section 117-148(f) (Structure height and placement and lot size), except as provided in Section 117-148(l) (Exemptions);

   c. Be consistent with the vegetation management standards in Section 117-148(i) (Vegetation Management) and the land alteration and storm water management standards in Section 117-148(j) (Land alteration standards and stormwater management), including use of practices identified in Best Practices for Meeting DNR General Public Waters Work Permit GP 2004-0001, where applicable;

   d. Avoid primary conservation areas, unless no alternative exists. If no alternative exists, then disturbance to primary conservation areas must be avoided to the greatest extent practicable, and design and construction must minimize impacts; and

   e. Minimize disturbance of spawning and nesting times by scheduling construction at times when local fish and wildlife are not spawning or nesting.

3. **Right-of-way maintenance standards**. Right-of-way maintenance must comply with the following standards:

   a. Vegetation currently in a natural state must be maintained to the extent feasible;

   b. Where vegetation in a natural state has been removed, native plants must be planted and maintained on the right-of-way; and

   c. Chemical control of vegetation must be avoided when practicable, but when chemical control is necessary, chemicals used must be in accordance with the regulations and other requirements of all state and federal agencies with authority over the chemical's use.

4. **Crossings of public water or public land.** Crossings of public waters or land controlled by the commissioner are subject to approval by the commissioner according to Minnesota Statutes, sections 84.415 and 103G.245.

5. **Public utilities**. Public utilities must comply with the following standards:

   a. High-voltage transmission lines, wind energy conversion systems greater than five megawatts, and pipelines are regulated according to Minnesota Statutes, chapter 216E, 216F, and 216G respectively; and

   b. If overhead placement is necessary, utility facility crossings must minimize visibility of the facility from the river and follow other existing right of ways as much as practicable.

   c. The appearance of structures must be as compatible as practicable with the surrounding area in a natural state with regard to height and width, materials used, and color.

d. Wireless communication facilities, according to Section 117-148(e)2g (Wireless communication towers).

6. **Public transportation facilities**. Public transportation facilities shall comply with structure placement and height standards in Section 117-148(f) (Structure height and placement and lot size). Where such facilities intersect or about two or more MRCCA districts, the least restrictive standards apply. Public transportation facilities must be designed and constructed to give priority to:

   a. Providing scenic overlooks for motorists, bicyclists, and pedestrians;

   b. Providing safe pedestrian crossings and facilities along the river corridor;

   c. Providing access to the riverfront in public ownership; and

   d. Allowing for use of the land between the river and the transportation facility.

7. **Public recreational facilities**. Where such facilities intersect or abut two or more MRCCA districts, the least restrictive dimensional standards apply. Public transportation facilities must be designed and constructed to give priority to:

   a. Buildings and parking associated with pubic recreational facilities must comply with the structure placement and height standards in Section 117-148(f) (Structure height and placement and lot size), except as provided in Section 117-148(l) (Exemptions);

   b. Roads and driveways associated with public recreational facilities must not be placed in the bluff or shore impact zones unless no other placement alternative exists. If no alternative exists, then design and construction must minimize impacts to shoreline vegetation, erodible soils and slopes, and other sensitive resources.

   c. Trails, access paths, and viewing areas associated with public recreational facilities and providing access to or views of the Mississippi River are allowed within the bluff and shore impact zones if design, construction, and maintenance methods are consistent with the best management practice guidelines in Trail Planning, Design, and Development Guidelines.

      (1) Hard-surface trails are not allowed on the face of bluffs with a slope exceeding 30 percent. Natural surface trails are allowed, provided they do not exceed eight feet in width.

      (2) Trails, paths, and viewing areas must be designed and constructed to minimize:

         (i) Visibility from the river;

         (ii) Visual impacts on public river corridor views; and

         (iii) Disturbance to and fragmentation of primary conservation areas.

   d. Public water access facilities must comply with the following requirements:

      (1) Watercraft access ramps must comply with Minnesota Rules chapters 6115.0210 and 6280.0250; and

      (2) Facilities must be designed and constructed consistent with the standards in Design Handbook for Recreational Boating and Fishing Facilities.

   e. Public signs and kiosks for interpretive or directional purposes are allowed in the bluff or shore impact zones, provided they are placed and constructed to minimize disturbance to these areas and avoid visual impacts on public river corridor views.

   f. Public stairways, lifts, and landings must be designed as provided in Section 117-148(g)4c (Stairways, lifts and landings).

(i) VEGETATION MANAGEMENT

1. **Purpose.** To establish standards that sustain and enhance the biological and ecological functions of vegetation; preserve the natural character and topography of the MRCCA; and maintain stability of bluffs and steep slopes and ensure stability of other erosion-prone areas.

2. **Applicability.** This section applies to:

   a. Shore impact zones;

   b. Areas within 50 feet of a wetland or natural drainage way;

   c. Bluff impact zones;

   d. Areas of native plant communities; and

   e. Significant existing vegetative stands identified in the MRCCA plan.

3. **Activities allowed without a vegetation permit.**

   a. Maintenance of existing lawns, landscaping and gardens;

   b. Removal of vegetation in emergency situations as determined by the City of Ramsey*;*

   c. Right-of-way maintenance for public facilities meeting the standards Section 117-148(h)3 (Right of way maintenance standards);

   d. Agricultural and forestry activities meeting the standards of Sections 117-148(e)2 (Underlying zoning);

   e. Selective vegetation removal, provided that vegetative cover remains consistent with the management purpose of the MRCCA District, including:

      (1) Vegetation that is dead, diseased, dying, or hazardous;

      (2) To prevent the spread of diseases or insect pests;

      (3) Individual trees and shrubs; and

      (4) Removal of invasive non-native species.

4. **Activities allowed with a vegetation permit.**

   a. The following intensive vegetation clearing activities are allowed with a vegetation permit:

      (1) Clearing of vegetation that is dead, diseased, dying, or hazardous;

      (2) Clearing to prevent the spread of diseases or insect pests;

      (3) Clearing to remove invasive non-native species.

      (4) Clearing to prepare for restoration and erosion control management activities consistent with a plan approved by City of Ramsey.

      (5) The minimum necessary for development that is allowed with a building permit or as an exemption under Section 117-148(l) (Exemptions).

   b. Conditions of vegetation permit approval:

      (1) Development is sited to minimize removal of or disturbance to natural vegetation;

      (2) Soil, slope stability, and hydrologic conditions are suitable for the proposed work as determined by a professional engineer or City of Ramsey;

(3) Clearing is the minimum necessary and designed to blend with the natural terrain and minimize visual impacts to public river corridor views;

(4) Any native plant communities removed are replaced with vegetation that provides equivalent biological and ecological functions consistent with an approved vegetation restoration plan as provided in Section 117-148(i)6 (Vegetation restoration plan). If replaced, priorities for restoration are stabilization of erodible soils, restoration or enhancement of shoreline vegetation, and revegetation of bluffs or steep slopes visible from the river;

(5) All other vegetation removed is restored with natural vegetation to the greatest extent practicable consistent with an approved vegetation restoration plan as provided in Section 117-148(i)6 (Vegetation restoration plan). Priorities for replacement are the same as under Section 117-148(i)4 (Activities allowed with a vegetation permit);

(6) Any disturbance of highly erodible soils is replanted with deep-rooted vegetation with a high stem density;

(7) Vegetation removal activities are conducted so as to expose the smallest practical area of soil to erosion for the least possible time;

(8) Areas of vegetation restoration priorities identified in the MRCCA plan are restored, if applicable; and

(9) Any other condition determined necessary to achieve the purpose of this section.

5. **Prohibited activities.** All other intensive vegetation clearing is prohibited.

6. **Vegetation restoration plan.**

a. Development of a vegetation restoration plan and reestablishment of natural vegetation is required:

(1) As a condition of a vegetation permit issued under Section 117-148(i)4b (conditions of vegetation permit), items (4) and (5);

(2) Upon failure to comply with any provisions in this section; or

(3) As part of the planning process for subdivisions as provided in Section 117-148(k) (Subdivision and land development standards).

b. The vegetation restoration plan must satisfy the application submittal requirements in 117-148(c)6 (Application Materials), and:

(1) Include vegetation that provides suitable habitat and effective soil stability, runoff retention, and infiltration capability. Vegetation species, composition, density, and diversity must be guided by nearby patches of native plant communities and by Native Vegetation Establishment and Enhancement Guidelines;

(2) Be prepared by a qualified individual; and

(3) Include a maintenance plan that includes management provisions for controlling invasive species and replacement of plant loss for three years.

c. A certificate of compliance will be issued after the vegetation restoration plan requirements have been satisfied.

(j) LAND ALTERATION STANDARDS AND STORMWATER MANAGEMENT

1. **Purpose.** To establish standards that protect water quality from pollutant loadings of sediment, nutrients, bacteria, and other contaminants; and maintain stability of bluffs, shorelines, and other areas prone to erosion.

2. **Land alteration permit**.

   a. Within the bluff impact zone, land alteration is prohibited, except for the following which are allowed by permit.

      (1) Erosion control consistent with Section 117-148(j)6 (Conditions of land alteration permit approval);

      (2) The minimum necessary for development that is allowed as an exception under Section 117-148(l) (Exemptions); and

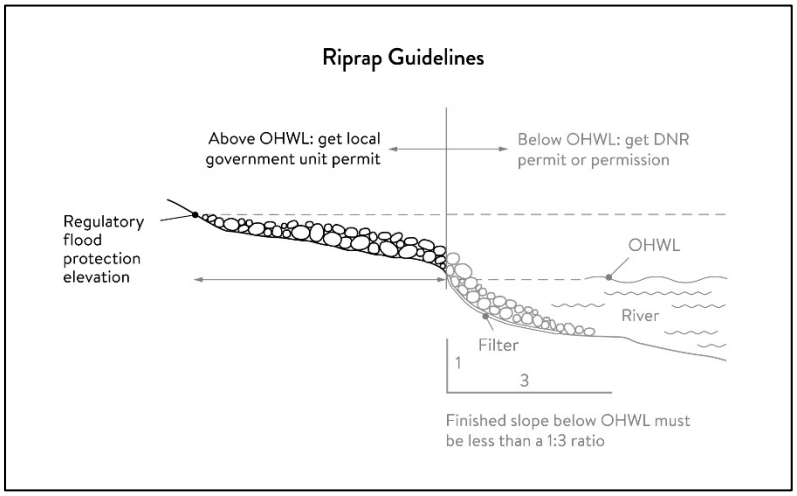
      (3) Repair and maintenance of existing buildings and facilities.

   b. Within the water quality impact zone, land alteration that involves more than ten cubic yards of material or affects an area greater than 1,000 square feet requires a permit.

3. **Rock riprap, retaining walls, and other erosion control structures**.

   a. Construction, repair, or replacement of rock riprap, retaining walls, and other erosion control structures located at or below the OHWL must comply with Minnesota Rules, chapters 6115.0215, subpart 4, item E, and 6115.0216, subpart 2. Work must not proceed until approved by the commissioner. See Figure 8.

Figure 8. Riprap Guidelines



   b. Construction or replacement of rock riprap, retaining walls, and other erosion control structures within the bluff impact zone and the water quality impact zone are allowed with a permit consistent with provisions of Section 117-148(j)6 (Conditions of land alteration permit approval) provided that:

      (1) If the project includes work at or below the OHWL, the commissioner has already approved or permitted the project.

      (2) The structures are used only to correct an established erosion problem as determined by the City of Ramsey.

(3) The size and extent of the structures are the minimum necessary to correct the erosion problem and are not larger than the following, unless a professional engineer determines that a larger structure is needed to correct the erosion problem:

(i) Retaining walls must not exceed five feet in height and must be placed a minimum horizontal distance of ten feet apart; and

(ii) Riprap must not exceed the height of the regulatory flood protection elevation.

c. Repair of existing rock riprap, retaining walls, and other erosion control structures above the OHWL does not require a permit provided it does not involve any land alteration under Section 117-148(j)2 (Land alteration permit).

4. **Stormwater management.**

a. In the bluff impact zone, storm water management facilities are prohibited~~,~~ except by permit if:

(1) There are no alternatives for storm water treatment outside the bluff impact zone on the subject site;

(2) The site generating runoff is designed so that the amount of runoff reaching the bluff impact zone is reduced to the greatest extent practicable;

(3) The construction and operation of the facility does not affect slope stability on the subject property or adjacent properties; and

(4) Mitigation based on the best available engineering and geological practices is required and applied to eliminate or minimize the risk of slope failure.

b. In the water quality impact zone, development that creates new impervious surface, as allowed by exemption in Section 117-148(l) (Exemptions), or fully reconstructs existing impervious surface of more than 10,000 square feet requires a storm water permit or approved storm water plan. Multipurpose trails and sidewalks are exempt if there is down gradient vegetation or a filter strip that is at least five feet wide.

c. In all other areas, storm water runoff must be directed away from the bluff impact zones or unstable areas.

5. **Development on steep slopes**. Construction of structures, impervious surfaces, land alteration, vegetation removal, or other construction activities are allowed on steep slopes if:

a. The development can be accomplished without increasing erosion or storm water runoff;

b. The soil types and geology are suitable for the proposed development; and

c. Vegetation is managed according to the requirements of Section 117-148(i) (Vegetation management).

6. **Conditions of land alteration permit approval.**

a. Temporary and permanent erosion and sediment control measures retain sediment onsite consistent with best management practices in the Minnesota Stormwater Manual;

b. Natural site topography, soil, and vegetation conditions are used to control runoff and reduce erosion and sedimentation;

c. Construction activity is phased when possible;

d. All erosion and sediment controls are installed before starting any land disturbance activity;

e. Erosion and sediment controls are maintained to ensure effective operation;

f. The proposed work is consistent with the vegetation standards in Section 117-148(i) (Vegetation Management); and

g. Best management practices for protecting and enhancing ecological and water resources identified in Best Practices for Meeting DNR General Public Waters Work Permit GP 2004-0001.

7. **Compliance with other plans and programs.** All development must:

a. Be consistent with Minnesota Statutes, chapter 103B, and local water management plans completed under chapter 8410;

b. Meet or exceed the wetland protection standards under Minnesota Rules, chapter 8420; and

c. Meet or exceed the floodplain management standards under Minnesota Rules, chapter 6120. 5000 – 6120.6200

(k) SUBDIVISION AND LAND DEVELOPMENT STANDARDS

1. **Purpose.**

a. To protect and enhance the natural and scenic values of the MRCCA during development or redevelopment of the remaining large sites

b. To establish standards for protecting and restoring biological and ecological functions of primary conservation areas on large sites; and

c. To encourage restoration of natural vegetation during development or redevelopment of large sites where restoration opportunities have been identified in MRCCA Plans.

2. **Applicability.**

a. The design standards in this section apply to subdivisions, planned unit developments and master-planned development and redevelopment of land involving ten or more acres for contiguous parcels that abut the Mississippi River and 20 or more acres for all other parcels, including smaller individual sites within the following developments that are part of a common plan of development that may be constructed at different times:

(1) Subdivisions;

(2) Planned unit developments; and

(3) Master-planned development and redevelopment of land.

b. The following activities are exempt from the requirements of this section:

(1) Minor subdivisions consisting of three or fewer lots;

(2) Minor boundary line corrections;

(3) Resolutions of encroachments;

(4) Additions to existing lots of record;

(5) Placement of essential services; and

(6) Activities involving river-dependent commercial and industrial uses.

3. **Application materials.** Project information listed in Section 117-148(c)6 (Application Materials) must be submitted for all proposed developments.

4. **Design standards.**

a. Primary conservation areas, where they exist, must be set aside and designated as protected open space in quantities meeting the following as a percentage of total parcel area:

(1) CA-ROS District: 50%;

(2) CA-RN District: 20%;

~~(3) CA-RTC, CA-UM, and CA-UC Districts: 10%; and~~

(4) CA-SR District: 10% if the parcel includes native plant communities or provides feasible connections to a regional park or trail system, otherwise no requirement.

b. If the primary conservation areas exceed the amounts specified in Section 117-148(k)4a above, then protection of native plant communities and natural vegetation in riparian areas shall be prioritized.

c. If primary conservation areas exist but do not have natural vegetation (identified as restoration priorities in the MRCCA Plan), then a vegetation assessment must be completed to evaluate the unvegetated primary conservation areas and determine whether vegetation restoration is needed. If restoration is needed, vegetation must be restored according to Section 117-148(i)6b (under Vegetation restoration plan).

d. If primary conservation areas do not exist on the parcel and portions of the parcel have been identified in the MRCCA plan as a restoration area, vegetation must be restored in the identified areas according to Section 117-148(i)6b (under Vegetation restoration plan) and the area must be set aside and designated as protected open space.

e. Storm water treatment areas or other green infrastructure may be used to meet the protected open space requirements if the vegetation provides biological and ecological functions.

f. Land dedicated under (insert LGU ordinance citation) for public river access, parks, or other open space or public facilities may be counted toward the protected open space requirement.

g. Protected open space areas must connect open space, natural areas, and recreational areas, where present on adjacent parcels, as much as possible to form an interconnected network.

5. **Permanent protection of designated open space**.

a. Designated open space areas must be protected through one or more of the following methods:

(1) Public acquisition by a government entity for conservation purposes;

(2) A permanent conservation easement, as provided in Minnesota Statutes, chapter 84C;

(3) A deed restriction; and

(4) Other arrangements that achieve an equivalent degree of protection.

b. Permanent protection methods must ensure the long-term management of vegetation to meet its biological and ecological functions, prohibit structures, and prohibit land alteration, except as needed to provide public recreational facilities and access to the river.

(l) EXEMPTIONS

1. **Purpose.** To provide exemptions to structure placement, height and other standards for specific river or water access dependent facilities as provided in Minnesota Statutes 116G.15 Subd. 4.

2. **Applicability.**

a. Uses and activities not specifically exempted must comply with this Section. Uses and activities exempted under shore impact zone and bluff impact zone must comply with the vegetation management and land alteration standards in Sections 117-148(i) (Vegetation management) and 117-148(j) (Land alterations standards and stormwater management).

b. Uses and activities in Section 117-148(l)3 below are categorized as:

A. **Exempt – E.** This means that the use or activity is allowed;

B. **Exempt if no alternative - (E).** This means that the use or activity is allowed only if no alternatives exist; and

C. **Not exempt - N.** This means that a use or activity is not exempt and must meet the standards of this ordinance.

3. **Use and activity exemptions classification.**

a. General uses and activities.

Use or Activity	Set backs	Height Limits	SIZ	BIZ	Applicable standards with which the use or activity must comply
Industrial and utility structures requiring greater height for operational reasons (such as elevators, refineries and railroad signaling towers)	N	E	N	N	Structure design and placement must minimize interference with public river corridor views.
Barns, silos, and farm structures	N	E	N	N	
Bridges and bridge approach roadways	E	E	E	(E)	Section 117-148(h) (Performance standards for public facilities)
Wireless communication towers	E	E	N	N	Section 117-148(e)2f (River-dependent uses)
Chimneys, church spires, flag poles, public monuments, and mechanical stacks and equipment	N	E	N	N	
Historic properties and contributing properties in historic districts	E	E	E	E	Exemptions do not apply to additions or site alterations
~~Buildings and structures on the face of or abutting the bluff in the CA-UC district of St. Paul, between Chestnut Street and Highway 52.~~	~~E~~	~~n/a~~	~~n/a~~	~~E~~	~~Height in CA-UC district is governed by underlying zoning~~

b. Public utilities.

Use or Activity	Set backs	Height Limits	SIZ	BIZ	Applicable standards with which the use or activity must comply
Electrical power facilities	E	E	E	(E)	Section 117-148(h) (Performance standards for public facilities)
Essential services (other than storm water facilities)	E	E	E	(E)	Section 117-148(h) (Performance standards for public facilities)
Storm water facilities	E	N	E	(E)	Section 117-148(j) (Land alteration standards and stormwater management)
Wastewater treatment	E	N	E	N	Section 117-148(h) (Performance standards for public facilities)
Public transportation facilities	E	N	(E)	(E)	Section 117-148(h) (Performance standards for public facilities)

c. Public recreational facilities.

Use or Activity	Set backs	Height Limits	SIZ	BIZ	Applicable standards with which the use or activity must comply
Accessory structures, such as monuments, flagpoles, light standards, and similar park features	E	E	(E)	(E)	Section 117-148(h) (Performance standards for public facilities); within BIZ, only on slopes averaging less than 30%. Exemptions do not apply to principal structures.
Picnic shelters and other open-sided structures	E	N	(E)	N	Section 117-148(h) (Performance standards for public facilities)
Parking lots	(E)	N	(E)	(E)	Section 117-148(h) (Performance standards for public facilities); within BIZ, only within 20 feet of toe of bluff; not on face of bluff; and must not affect stability of bluff
Roads and driveways	(E)	N	(E)	(E)	Section 117-148(h) (Performance standards for public facilities)
Natural-surfaced trails, access paths, and viewing areas	E	N	E	E	Section 117-148(h) (Performance standards for public facilities)
Hard-surfaced trails and viewing platforms	E	N	E	(E)	Section 117-148(h) (Performance standards for public facilities); within BIZ, only on slopes averaging less than 30%
Water access ramps	E	N	E	(E)	Section 117-148(h) (Performance standards for public facilities)
Public signs and kiosks for interpretive or directional purposes	E	N	E	(E)	Section 117-148(h) (Performance standards for public facilities)

d. River-dependent uses.

Use or Activity	Set backs	Height Limits	SIZ	BIZ	Applicable standards with which the use or activity must comply
Shoreline facilities	E	N[1]	E	(E)	Section 117-148(e)2f (River dependent uses). Exemptions do not apply to buildings, structures, and parking areas that are not part of a shoreline facility

[1] River-dependent commercial, industrial, and utility structures are exempt from height limits only if greater height is required for operational reasons.

Use or Activity	Set backs	Height Limits	SIZ	BIZ	Applicable standards with which the use or activity must comply
Private roads and conveyance structures serving river-dependent uses	E	N[1]	E	(E)	Section 117-148(e)2f (River dependent uses)

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992 e. Private residential and commercial water access and use facilities.

Use or Activity	Set backs	Height Limits	SIZ	BIZ	Applicable standards with which the use or activity must comply
Private roads serving 3 or more lots	(E)	N	N	(E)	Section 117-148(g) (Performance standards for private facilities); in BIZ, only on slopes averaging less than 30%. Exemption does not apply to private roads serving fewer 3 lots or to private driveways and parking areas
Access paths	E	N	E	E	Section 117-148(g) (Performance standards for private facilities)
Water access ramps	E	N	E	N	Section 117-148(g) (Performance standards for private facilities)
Stairways, lifts, and landings	E	N	E	E	Section 117-148(g) (Performance standards for private facilities)
Water-oriented accessory structures	E	N	E	N	Section 117-148(g) (Performance standards for private facilities)
Patios and decks	E	N	N	N	Section 117-148(g)5 (Decks and patios in setback area)
Directional signs for watercraft (private)	E	N	E	N	Section 117-148(g)6 (Off premise and directional signage); exemption does not apply to off-premise advertising signs
Temporary storage of docks, boats, and other equipment during the winter months	E	N	E	N	
Erosion control structures, such as rock riprap and retaining walls	E	N	E	(E)	Sections 117-148(j)3 (Rock riprap, retaining walls, and other erosion control measures), 117-148(j)5 (Development on steep slopes) and 117-148(j)6 (Conditions of land alteration permit approval)
Flood control structures	E	N	E	(E)	Section 117-148(j) (Land alteration standards and stormwater management)

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ORDINANCE #21-02
CITY OF RAMSEY
ANOKA COUNTY
STATE OF MINNESOTA

AN ORDINANCE AMENDING CITY CODE SECTION 117-148 ENTITLED MISSISSIPPI RIVER CORRIDOR CRITICAL AREA.

The City of Ramsey ordains:

SECTION 1. AUTHORITY

This ordinance is adopted pursuant to and under the authority of the Charter of the City of Ramsey.

SECTION 2. PURPOSE

Per S701.10 (Fees) the purpose of this Ordinance is to establish the Permit Fees, service Charges, and Other Fees that will be collected by the City in year 2021. This is known as the Schedule of Rates, Fees and Charges.

SECTION 3. AMENDMENT TO CITY CODE SECTION 117-348

The current City Code Section 117-148 is repealed in its entirety and replaced with the attached text.

SECTION 4. EFFECTIVE DATE

This Ordinance becomes effective 30 days after its passage and publication, subject to City Charter Section 5.04.

SECTION 5. **SUMMARY**

The following is the official summary of Ordinance #21-02, as clearly informing the public of the intent and effect of the Ordinance.

Ordinance #21-02 updates the City's Mississippi River Corridor Critical Area (MRCCA) Overlay District to comply with minimum requirements established by the State of Minnesota. Critical Area Overlay Standards include, but are not limited lot size, building size, building height, vegetation management, bluff/slope protection, open space preservation and stormwater management.

PASSED by the City Council of the City of Ramsey, Minnesota the ____ day of _____, 2021.

_____
Mayor

ATTEST:

_____

City Clerk

Introduction date:
Posting dates:
Adoption date:
Publication date:
Effective date:

Mississippi River Corridor Critical Area (MRCCA) Overlay District Update

DNR Model Ordinance Comparison/Crosswalk to City of Ramsey Draft Ordinance

This ordinance comparison is provided to compare to the DNR Model Ordinance. This document will help in the DNR approval process as well as assist the City of Ramsey access the commentary provided on the DNR Model Ordinance.

Summary Level – Section Header Crosswalk

NOTE: Any time the City of Ramsey DRAFT Ordinance mentions 'This Section', it is referring to City Code Section 117-148 (being amended with this ordinance).

Section Header	DNR Model Ordinance	City of Ramsey Ordinance
Authority, Intent and Purpose	1.0	(a)
General Provisions and Definitions	2.0	(b)
Administration	3.0	(c)
MRCCA Districts	4.0	(d)
Special Land Use Provisions	5.0	(e)
Structure Height and Placement and Lot Size	6.0	(f)
Performance Standards for Private Facilities	7.0	(g)
Performance Standards for Public Facilities	8.0	(h)
Vegetation Management	9.0	(i)
Land Alteration Standards and Stormwater Management	10.0	(j)
Subdivision and Land Development Standards	11.0	(k)
Exemptions	12.0	(l)

Detailed Cross Reference Crosswalk

The model ordinance includes a number of specific cross references to internal sections of this section of City Code. This crosswalk does not include citations to outside sources such as State Statute and State Rules.

Line Number	Citation/Topic	DNR Model Ordinance Section	City of Ramsey Ordinance Section
18	Permits	3.2	117-148(c)2
132	River Corridor Boundary	2.680	117-148(b)6bs
272	Vegetation Management	9.0	117-148(i)
273	Land alteration standards and stormwater management	10.0	117-148(j)
279	Conditions of Approval	3.5	117-148(c)5
295	Conditions of Approval	3.5	117-148(c)5
337	Structure and impervious surface placement	6.34	117-148(f)3d
342	Structure and impervious surface placement	6.3	117-148(f)3
360	Structure height	6.2	117-148(f)2
363	Nonconformities	3.71	117-148(c)7
374	Broad reference		
375	Broad reference		
468	Structure and impervious surface placement	6.3	117-148(f)3
490	Exemptions	12.0	117-148(l)
505	General design standards	8.2	117-148(h)2
511	Exemptions	12.0	117-148(l)
513	Exemptions	12.0	117-148(l)
534	Conditional and interim use permits		117-148(c)4
555	Exemptions	12.0	117-148(l)
557	Exemptions	12.0	117-148(l)
567	Exemptions	12.0	117-148(l)
577	Structure and impervious surface placement	3.4	117-148(f)3

590	Structure and impervious surface placement	6.3 (6.32 & 6.33)	117-148(f)3
599	Vegetation management	9.0	117-148(i)
600	Land alteration standards and stormwater management	10.0	117-148(j)
601	Exemptions	12.0	117-148(l)
605	Structure and impervious surface placement	6.3	117-148(f)3
607	Exemptions	12.0	117-148(l)
608	General design standards	8.2	117-148(f)2
631	Accommodating disabilities	3.9	117-148(c)9
640	Vegetation management	9.0	117-148(i)
641	Land alteration standards and stormwater management	10.0	117-148(j)
654	Structure height and placement and lot size	6.0	117-148(f)
679	Structure height and placement and lot size	6.0	117-148(f)
680	Exemptions	12.0	117-148(l)
681	Vegetation management	9.0	117-148(i)
682	Land alteration standards and stormwater management	10.0	117-148(j)
710	Wireless communication towers	5.26	117-148(e)2g
713	Structure height and placement and lot size	6.0	117-148(f)
724	Structure height and placement and lot size	6.0	117-148(f)
725	Exemptions	12.0	117-148(l)
748	Stairways, lifts and landings	7.43	117-148(g)4c
763	Right of way maintenance standards	8.3	117-148(h)3
765	Underlying zoning	5.2 (5.21 & 5.23)	117-148(e)2

780	Exemptions	12.0	117-148(l)
790	Vegetation restoration plan	9.62	117-148(i)6
795	Vegetation restoration plan	9.62	117-148(i)6
796	Activities allowed with a vegetation permit	9.42.D	117-148(i)4
807	Conditions of vegetation permit	9.42	117-148(i)4b
810	Subdivision and land development standards	11.0	117-148(k)
831	Conditions of land alteration permit approval	10.6	117-148(j)6
833	Exemptions	12.0	117-148(l)
848	Conditions of land alteration permit approval	10.6	117-148(j)6
861	Land alteration permit	10.2	117-148(j)2
874	Exemptions	12.0	117-148(l)
884	Vegetation management	9.0	117-148(i)
894	Vegetation management	9.0	117-148(i)
928	Application Materials	3.6	117-148(c)6
938	Primary Conservation Areas	11.41	117-148(k)4a
944	Vegetation restoration plan	9.62	117-148(i)6b
948	Vegetation restoration plan	9.62	117-148(i)6b
971	Vegetation management	19.0	117-148(i)
973	Use and activity exemptions classification	12.3	117-148(l)3
980 (table)	Performance standards for public facilities	8.0	117-148(h)
980 (table)	River-dependent uses (referring to wireless communications towers)	5.26	117-148(e)2f
983 (table)	Performance standards for public facilities	8.0	117-148(h)

983 (table)	Land alteration standards and stormwater management	10.0	117-148(j)
985 (table)	Performance standards for public facilities	8.0	117-148(h)
990 (table)	River-dependent uses	5.25	117-148(e)2f
992 (table)	Performance standards for private facilities	7.0	117-148(g)
992 (table)	Off premise and directional signage	7.6	117-148(g)6
992 (table)	Rock riprap, retaining walls, and other erosion control measures	10.3	117-148(j)3
992 (table)	Development on steep slopes	10.5	117-148(j)5
992 (table)	Conditions of land alteration permit approval	10.6	117-148(j)6
992 (table)	Land alteration standards and stormwater management	10.0	117-148(j)

DEPARTMENT OF NATURAL RESOURCES

Mississippi River Corridor Critical Area (MRCCA) Model Ordinance

Introduction

This model is intended to help local governments develop a new MRCCA section, chapter or article within their zoning code. This model ordinance is consistent with Minnesota's MRCCA rules (6106.0010 – 6106.0180). In some areas, the ordinance provisions are different from rules to be consistent with state statutes and other agency rules. In these cases, the commentary explains why the changes have been made. In all other areas the standards in the model are consistent with the rules, although some sections - most notably the vegetation and subdivision sections - have been slightly restructured for ease of administration. The model also contains administrative language not in rule to help clarify and administer the provisions for local government zoning purposes.

The MRCCA provisions must be structured as an **overlay district.** If a conflict exists with underlying zoning, the provisions of the overlay district govern. Where specific numeric thresholds or standards are listed in this model, those numeric thresholds or standards must be included in the overlay district.

Blue bold text in the "Ordinance Language" column indicates **optional** language that provides clarity on topics not sufficiently addressed in rule, or is a suggested higher standard than the minimum in rule. This text is clearly identified as optional and explained in the "Commentary" column. Higher standards may be additions to or deletions from the rules.

This model is periodically updated to improve clarity based on feedback from local governments. Please check for the latest version on the DNR's MRCCA webpages.

Please contact your Area Hydrologist with any questions on this model ordinance.

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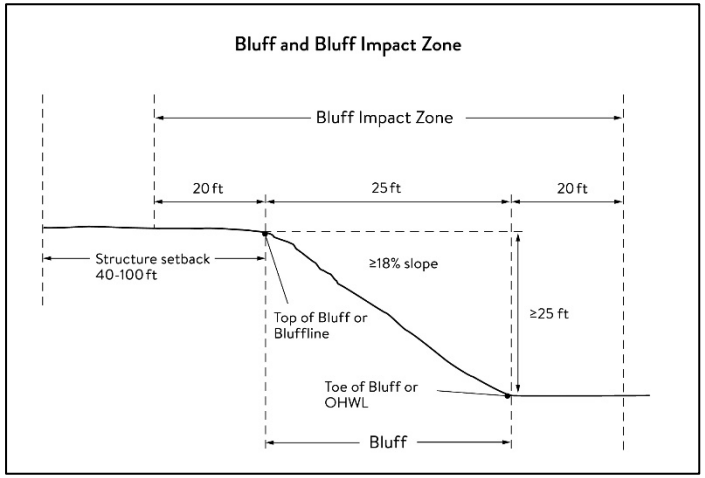
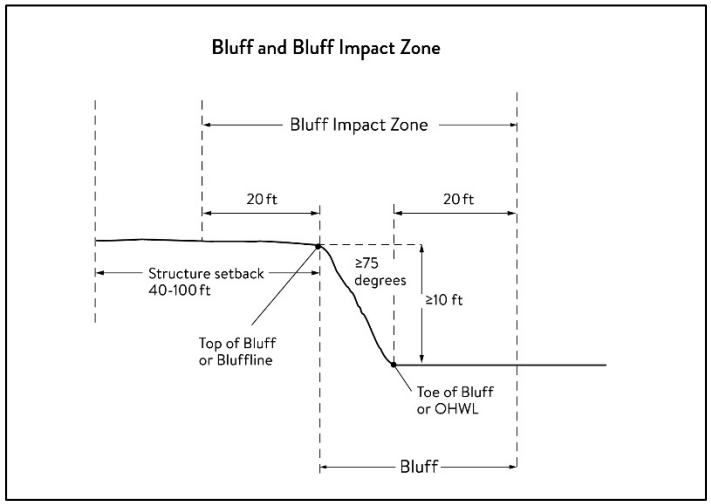
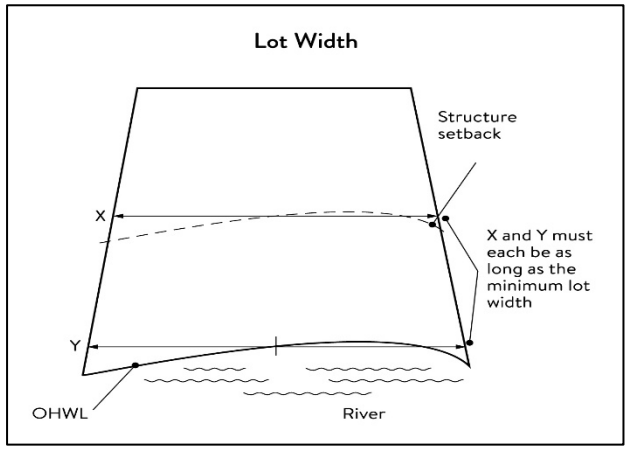
Ordinance Language	*Commentary*
1.0 AUTHORITY, INTENT AND PURPOSE	
1.1 **Statutory Authorization.** This Mississippi River Corridor Critical Area (MRCCA) *(section, chapter or article)* is adopted pursuant to the authorization and policies contained in Minnesota Statutes, Chapter 116G, Minnesota Rules, Parts 6106.0010 - 6106.0180, and the planning and zoning enabling legislation in Minnesota Statutes, Chapter 462 and 473.	*1.1. Ensures that LGU authority to administer and enforce the ordinance is connected to state regulatory policy.*
1.2 **Policy**. The Legislature of Minnesota has delegated responsibility to local governments of the state to regulate the subdivision, use and development of designated critical areas and thus preserve and enhance the quality of important historic, cultural, aesthetic values, and natural systems and provide for the wise use of these areas.	*1.2. Reinforces the responsibility of local governments to regulate the MRCCA in their jurisdiction.*
2.0 GENERAL PROVISIONS AND DEFINITIONS	
2.1 **Jurisdiction.** The provisions of this *(section, chapter or article)* apply to land within the river corridor boundary as described in the State Register, volume 43, pages 508 to 519 and shown on the zoning map *(insert reference citation)*.	
2.2 **Enforcement.** The (*insert name of local government or designated official*) is responsible for the administration and enforcement of this *(section, chapter or article)*. Any violation of its provisions or failure to comply with any of its requirements including violations of conditions and safeguards established in connection with grants of variances or conditional uses constitutes a misdemeanor and is punishable as defined by law. Violations of this *(section, chapter or article)* can occur regardless of whether or not a permit is required for a regulated activity listed in Section 3.2.	*2.2 – 2.4. If these provisions are already included in the zoning ordinance, they are not needed.*
2.3 **Severability.** If any section, clause, provision, or portion of this *(section, chapter or article)* is adjudged unconstitutional or invalid by a court of competent jurisdiction, the remainder of this *(section, chapter or article)* shall not be affected thereby.	
2.4 **Abrogation and Greater Restrictions.** It is not intended by this *(section, chapter or article)* to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where this *(section, chapter or article)* imposes greater restrictions, the provisions of this *(section, chapter or article)* shall prevail. All other *(sections, chapters or articles)* inconsistent with this *(section, chapter or article)* are hereby repealed to the extent of the inconsistency only.	
2.5 **Underlying Zoning.** Uses and standards of underlying zoning districts apply except where standards of this overlay district are more restrictive.	
2.6 **Definitions.** Unless specifically defined below, words or phrases used in this *(section, chapter or article)* shall be interpreted to give them the same meaning they have in common usage and to give this *(section, chapter or*	*2.6. These definitions are the minimum necessary for a compliant ordinance. Some definitions may not be*

Ordinance Language	*Commentary*
article) its most reasonable application. For the purpose of this *(section, chapter or article)*, the words "must" and "shall" are mandatory and not permissive. All distances, unless otherwise specified, are measured horizontally.	*needed if a given feature or land use is not present or not allowed in the community.*
2.611 **Access path**. An area designated to provide ingress and egress to public waters.	
2.612 **Adjacent.** Having a boundary that physically touches or adjoins.	
2.613 **Agricultural use.** A use having the meaning given under Minnesota Statutes, section 40A.02.	
2.614 **Alternative design.** Subdivision design methods such as conservation design, transfer of development density, or similar zoning and site design techniques that protect open space and natural areas.	
2.615 **Barge fleeting.** Temporarily parking and securing barges on the river, on or off channel, while tows are assembled or broken up.	
2.616 **Biological and ecological functions.** The functions of vegetation in stabilizing soils and slopes, retaining and filtering runoff, providing habitat, and recharging groundwater.	
2.617 **Bluff.** A natural topographic feature having: A. A slope that rises at least 25 feet and the grade of the slope averages 18 percent or greater, measured over a horizontal distance of 25 feet, as follows: a. Where the slope begins above the ordinary high water level, from the toe of the slope to the top of the slope; or b. Where the slope begins below the ordinary high water level, from the ordinary high water level to the top of the slope. See Figure 1; or B. A natural escarpment or cliff with a slope that rises at least ten feet above the ordinary high water level or toe of the slope, whichever is applicable, to the top of the slope, with a slope of 75 degrees or greater. See Figure 2.	*2.617. Bluffs are anywhere in the MRCCA, not just abutting the water. The DNR's bluff mapping tool, a GIS extension, is available for download from the Minnesota Geospatial Commons. This tool helps to identify bluffs for general mapping and planning purposes.*
OR	
2.617 Bluff. A natural topographic feature having: A. **A slope that rises at least 25 feet and the grade of the slope averages 18 percent or greater, measured over a horizontal distance of 25 feet, from the toe of the slope to the top of the slope. Where the slope begins below the ordinary high water level, the ordinary high water level is the toe of the slope. See Figure 1; or**	*2.617. Optional. This alternative "part A" bluff definition is more concise, direct and may be more clear than the definition as worded in rules. The alternative definition does not change the specification of what a bluff is, only how it is worded. The wording of "part B" is unchanged.*

Ordinance Language	*Commentary*
Figure 1. Bluff and Bluff Impact Zone  **B. A natural escarpment or cliff with a slope that rises at least ten feet above the ordinary high water level or toe of the slope, whichever is applicable, to the top of the slope, with a slope of 75 degrees or greater. See Figure 2.** Figure 2. Natural Escarpment Bluff and Bluff Impact Zone  	

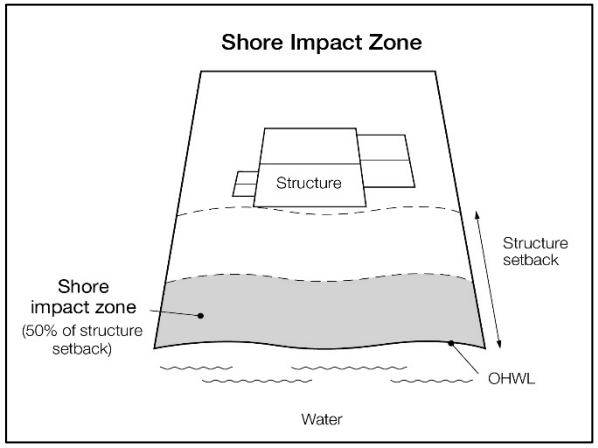
Ordinance Language	*Commentary*
2.618 **Bluff impact zone.** A bluff and land located within 20 feet of the bluff. See Figures 1 and 2. 2.619 **Bluffline.** A line delineating the top of the bluff. More than one bluffline may be encountered proceeding landward from the river. See Figures 1 and 2. 2.620 **Bluff, Toe of.** A line along the bottom of a bluff, requiring field verification, such that the slope above the line exceeds 18 percent and the slope below the line is 18 percent or less, measured over a horizontal distance of 25 feet. See Figures 1 and 2. 2.621 **Bluff, Top of.** A line along the top of a bluff, requiring field verification, such that the slope below the line exceeds 18 percent and the slope above the line is 18 percent or less, measured over a horizontal distance of 25 feet. See Figures 1 and 2. 2.622 **Buildable area.** The area upon which structures may be placed on a lot or parcel of land and excludes areas needed to meet requirements for setback, rights-of-way, bluff impact zones, historic properties, wetlands, designated floodways, land below the ordinary high water level of public waters, and other unbuildable areas. 2.623 **Building.** A structure with two or more outside rigid walls and a fully secured roof and affixed to a permanent site. 2.624 **Certificate of compliance.** A document written after a compliance inspection, certifying that the development is in compliance with applicable requirements at the time of the inspection. 2.625 **Commissioner.** The commissioner of the Minnesota Department of Natural Resources. 2.626 **Conditional use.** A use having the meaning given under Minnesota Statutes, chapters 394 and 462. 2.627 **Conservation design.** A pattern of subdivision that is characterized by grouping lots within a portion of a parcel, where the remaining portion of the parcel is permanently protected as open space. 2.628 **Conventional subdivision.** A pattern of subdivision that is characterized by lots that are spread regularly throughout a parcel in a lot and block design. 2.629 **Deck.** A horizontal, unenclosed, aboveground level structure open to the sky, with or without attached railings, seats, trellises, or other features, attached or functionally related to a principal use or site. 2.630 **Developer.** Having the meaning given under Minnesota Statutes, section 116G.03. 2.631 **Development.** Having the meaning given under Minnesota Statutes, section 116G.03. 2.632 **Discretionary action.** An action under this chapter related to land use that requires a public hearing by local ordinance or statute, such as preliminary plats, final subdivision plats, planned unit developments, conditional use permits, interim use permits, variances, appeals, and rezonings.	

Ordinance Language	*Commentary*
2.633 **Dock.** Having the meaning given under Minnesota Rules, chapter 6115. 2.634 **Electric power facilities.** Equipment and associated facilities for generating electric power or devices for converting wind energy to electrical energy as identified and defined under Minnesota Statutes, section 216E. 2.635 **Essential services.** Underground or overhead gas, electrical, communications, steam, or water distribution, collection, supply, or disposal systems, including storm water. Essential services include poles, wires, mains, drains, pipes, conduits, cables, fire alarm boxes, traffic signals, hydrants, navigational structures, aviation safety facilities or other similar equipment and accessories in conjunction with the systems. Essential services does not include buildings, treatment works as defined in Minnesota Statutes, chapter 115.01, electric power facilities or transmission services. 2.636 **Feedlot.** Having the meaning given for animal feedlots under Minnesota Rules chapter 7020. 2.637 **Floodplain.** Having the meaning given the meaning given under Minnesota Rules chapter 6120. 2.638 **Fully reconstructs.** The reconstruction of an existing impervious surface that involves site grading and subsurface excavation so that soil is exposed. Mill and overlay and other resurfacing activities are not considered fully reconstructed. 2.639 **Hard-surface trail.** A trail surfaced in asphalt, crushed aggregate, or other hard surface, for multi-purpose use, as determined by local, regional, or state agency plans. 2.640 **Historic property.** An archaeological site, standing structure, site, district, or other property that is: A. Listed in the National Register of Historic Places or the State Register of Historic Places or locally designated as a historic site under Minnesota Statutes, section 471; B. determined to meet the criteria for eligibility to the National Register of Historic Places or the State Register of Historic Places as determined by the director of the Minnesota Historical Society; or C. An unplatted cemetery that falls under the provisions of Minnesota Statutes, section 307, in consultation with the Office of the State Archaeologist. 2.641 **Impervious surface.** A constructed hard surface that either prevents or retards the entry of water into the soil and causes water to run off the surface in greater quantities and at an increased rate of flow than prior to development. Examples include rooftops, decks, sidewalks, patios, parking lots, storage areas, and driveways, including those with concrete, asphalt, or gravel surfaces. 2.642 **Intensive vegetation clearing.** The removal of all or a majority of the trees or shrubs in a contiguous patch, strip, row, or block. 2.643 **Interim use.** A use having the meaning given under Minnesota Statutes, section 394 and 462.	

Ordinance Language	*Commentary*
2.644 **Land alteration.** An activity that exposes the soil or changes the topography, drainage, or cross section of the land, excluding gardening or similar minor soil disturbances. 2.645 **Local government.** Counties, cities, and townships. 2.646 **Local park agencies.** The Minneapolis Park and Recreation Board and the Three Rivers Park District. 2.647 **Lot.** Having the meaning given under Minnesota Rules chapter 6120. 2.648 **Lot width.** The shortest distance between lot lines measured at both the ordinary high water level and at the required structure setback from the ordinary high water level. See Figure 3. Figure 3. Lot Width  2.649 **Marina.** Having the meaning given under Minnesota Rules chapter 6115.	
2.650 **Mississippi River Corridor Critical Area (MRCCA).** The area within the River Corridor Boundary (See Section 2.680).	*2.650. Optional definition to clarify the "MRCCA" term used throughout document.*
2.651 **Mississippi River Corridor Critical Area (MRCCA) Plan.** A chapter or other element in the *(insert name of jurisdiction)* comprehensive plan.	*2.651. Optional definition to clarify the "MRCCA Plan" term used throughout document.*
2.652 **Mooring facility.** Having the meaning given under Minnesota Rules chapter 6115.0170. 2.653 **Native plant community.** A plant community that has been identified as part of the Minnesota Biological Survey or biological survey issued or adopted by a local, state, or federal agency.	

Ordinance Language	*Commentary*
2.654 **Natural-surface trail.** A trail composed of native soil and rock or compacted granular stone, primarily intended for hiking, equestrian, or mountain bike use, as determined by local, regional, or state agency plans. 2.655 **Natural vegetation.** Any combination of ground cover, understory, and tree canopy that, while it may have been altered by human activity, continues to stabilize soils, retain and filter runoff, provide habitat, and recharge groundwater. 2.656 **Nonconformity.** Having the meaning given under Minnesota Statutes, section 394.22. 2.657 **Nonmetallic mining.** Construction, reconstruction, repair, relocation, expansion, or removal of any facility for the extraction, stockpiling, storage, disposal, or reclamation of nonmetallic minerals such a stone, sand, and gravel. Nonmetallic mining does not include ancillary facilities such as access roads, bridges, culverts, and water level control structures. For purposes of this subpart, "facility" includes all mine pits, quarries, stockpiles, basins, processing structures and equipment, and any structures that drain or divert public waters to allow mining. 2.658 **Off-premise advertising signs.** Those signs that direct attention to a product, service, business, or entertainment venue that is not exclusively related to the premises where the sign is located. 2.659 **Ordinary high water level (OHWL).** Having the meaning given under Minnesota Statutes, section 103G.005. 2.660 **Overlay district.** A zoning district that is applied over one or more previously established zoning districts, establishing additional or stricter standards and criteria for covered properties in addition to those of the underlying zoning district. Overlay districts are often used to protect historic features and natural resources such as shoreland or floodplain. 2.661 **Parcel.** Having the meaning given under Minnesota Statutes, section 116G.03. 2.662 **Patio.** A constructed hard surface located at ground level with no railings and open to the sky. 2.663 **Picnic shelter.** A roofed structure open on all sides, accessory to a recreational use. 2.664 **Planned unit development.** A method of land development that merges zoning and subdivision controls, allowing developers to plan and develop a large area as a single entity, characterized by a unified site design, a mix of structure types and land uses, and phasing of development over a number of years. Planned unit development includes any conversion of existing structures and land uses that utilize this method of development. 2.665 **Plat.** Having the meaning given under Minnesota Statutes, sections 505 and 515B. 2.666 **Port.** A water transportation complex established and operated under the jurisdiction of a port authority according to Minnesota Statutes, section 458.	

Ordinance Language	*Commentary*
2.667 **Primary conservation areas.** Key resources and features, including shore impact zones, bluff impact zones, floodplains, wetlands, gorges, areas of confluence with tributaries, natural drainage routes, unstable soils and bedrock, native plant communities, cultural and historic properties, and significant existing vegetative stands, tree canopies, and other resources identified in local government plans. 2.668 **Private facilities.** Private roads, driveways, and parking areas, private water access and viewing facilities, decks and patios in setback areas, and private signs. 2.669 **Professional engineer.** An engineer licensed to practice in Minnesota. 2.670 **Public facilities.** Public utilities, public transportation facilities, and public recreational facilities. 2.671 **Public recreation facilities.** Recreational facilities provided by the state or a local government and dedicated to public use, including parks, scenic overlooks, observation platforms, trails, docks, fishing piers, picnic shelters, water access ramps, and other similar water-oriented public facilities used for recreation. 2.672 Public river corridor views. Views toward the river from public parkland, historic properties, and public overlooks, as well as views toward bluffs from the ordinary high water level of the opposite shore, as seen during the summer months and documented in the MRCCA plan/chapter of the comprehensive plan. 2.673 Public transportation facilities. All transportation facilities provided by federal, state, or local government and dedicated to public use, such as roadways, transit facilities, railroads, and bikeways. 2.674 **Public utilities.** Electric power facilities, essential services, and transmission services. 2.675 **Public waters.** Having the meaning given under Minnesota Statutes, section 103G.005. 2.676 **Readily visible.** Land and development that are easily seen from the ordinary high water level of the opposite shore during summer months. 2.677 **Resource agency.** A federal, state, regional, or local agency that engages in environmental, natural, or cultural resource protection or restoration activities, including planning, implementation, and monitoring. 2.678 **Retaining wall.** A vertical or nearly vertical structures constructed of mortar and rubble masonry, rock, or stone regardless of size, vertical timber pilings, horizontal timber planks with piling supports, sheet pilings, poured concrete, concrete blocks, or other durable materials. 2.679 **Rock Riprap.** Natural coarse rock placed or constructed to armor shorelines, streambeds, bridge abutments, pilings and other shoreline structures against scour, or water or ice erosion. 2.680 **River corridor boundary.** The boundary approved and adopted by the Metropolitan Council under Minnesota Statutes, section 116G.06, as approved and adopted by the legislature in Minnesota Statutes, section 116G.15, and as legally described in the Sate Register, volume 43, pages 508 to 518.	*2.679. This definition has been modified to be consistent with public waters rules. The MRCCA rule definition for riprap defines riprap as "coarse stones, boulders, cobbles, and broken rock, concrete, and bricks..." This material is not consistent with Minnesota Rules, 6115.0215 Subp. 4E and 6115.0216 Subp. 2 and has been replaced with "natural coarse*

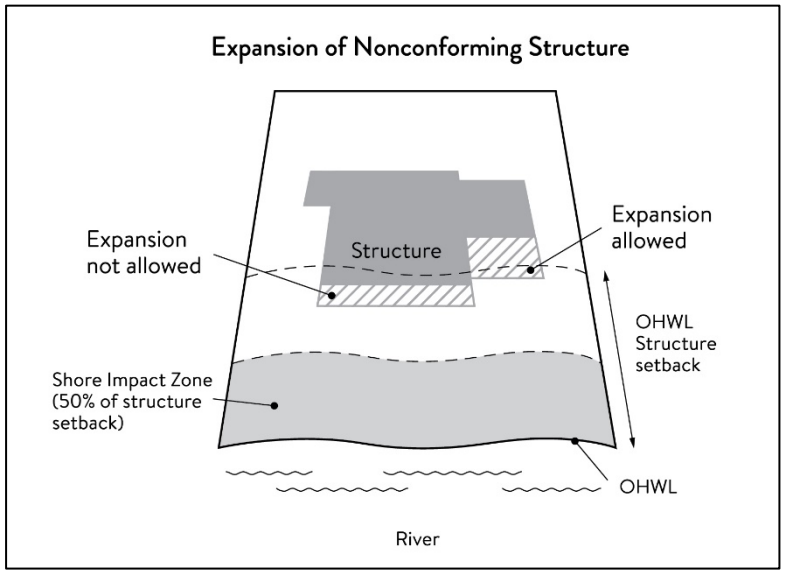
Ordinance Language	*Commentary*
2.681 **River-dependent use.** The use of land for commercial, industrial, or utility purposes, where access to and use of a public water feature is an integral part of the normal conduct of business and where the use is dependent on shoreline facilities. 2.682 **Selective vegetation removal.** The removal of isolated individual trees or shrubs that are not in a contiguous patch, strip, row, or block and that does not substantially reduce the tree canopy or understory cover. 2.683 **Setback.** A separation distance measured horizontally. 2.684 **Shore impact zone.** Land located between the ordinary high water level of public waters and a line parallel to it at a setback of 50 percent of the required structure setback or, for agricultural use, 50 feet landward of the ordinary high water level. See Figure 4. Figure 4. Shore Impact Zone  2.685 **Shoreline facilities.** Facilities that require a location adjoining public waters for ingress and egress, loading and unloading, and public water intake and outflow, such as barge facilities, port facilities, commodity loading and unloading equipment, watercraft lifts, marinas, short-term watercraft mooring facilities for patrons, and water access ramps. Structures that would be enhanced by a shoreline location, but do not require a location adjoining public waters as part of their function, are not shoreline facilities, such as restaurants, bait shops, and boat dealerships. 2.686 **Special purpose units of government.** The University of Minnesota, the St. Paul Port Authority, watershed management organizations established under Minnesota Statutes, chapter 103B, watershed districts	*rock" in order to be consistent with the pre-existing public waters rules.*

Ordinance Language	*Commentary*
established under Minnesota Statutes, chapter 103D, and any other unit of government other than local government or a state or regional agency. 2.687 **State or regional agency.** The Metropolitan Airports Commission, Minnesota Historical Society, University of Minnesota, Department of Natural Resources, Department of Transportation, Metropolitan Council and other state agencies. 2.688 **Steep slope.** A natural topographic feature with an average slope of 12 to 18 percent, measured over a horizontal distance equal to or greater than 50 feet, and any slopes greater than 18 percent that are not bluffs. 2.689 **Storm water management facilities.** Facilities for the collection, conveyance, treatment, or disposal of storm water. 2.690 **Structure.** A building, sign, or appurtenance thereto, except for aerial or underground utility lines, such as sewer, electric, telephone, or gas lines, and utility line towers, poles, and other supporting appurtenances. 2.691 **Subdivision**. Having the meaning given under Minnesota Statutes, section 462.352. 2.692 **Subsurface sewage treatment system**. Having the meaning given under Minnesota Rules, part 7080.1100. 2.693 **Transmission services.** A. Electric power lines, cables, pipelines, or conduits that are: (1) used to transport power between two points, as identified and defined under Minnesota Statutes, section 216E.01, subdivision 4; or (2) For mains or pipelines for gas, liquids, or solids in suspension, used to transport gas, liquids, or solids in suspension between two points; and B. Telecommunication lines, cables, pipelines, or conduits. 2.694 **Treeline.** The more or less continuous line formed by the tops of trees in a wooded area when viewed from a particular point. The treeline is determined during all seasons as if under full foliage. 2.695 **Twin Cities Metropolitan area.** The area over which the Metropolitan Council has jurisdiction according to Minnesota Statutes, section 473.121 subdivision 2. 2.696 **Variance.** Having the meaning given under Minnesota Statutes, section 394.22. 2.697 **Water access ramp.** A boat ramp, carry-down site, boarding dock, and approach road, or other access that allows launching and removal of a boat, canoe, or other watercraft with or without a vehicle and trailer.	

Ordinance Language	*Commentary*
2.698 **Water-oriented accessory structure.** A small building or other improvement, except stairways, fences, docks, and retaining walls, that, because of the relationship of its use to public waters, needs to be located closer to public waters than the normal structure setback. Examples include gazebos, screen houses, fish houses, pump houses, and detached decks and patios. 2.699 **Water quality impact zone.** Land within the shore impact zone or within 50 feet of the boundary of a public water, wetland, or natural drainage way, whichever is greater. 2.670 **Wetland.** Having the meaning given under Minnesota Statutes, section 103G.005. 2.671 **Wharf.** Having the meaning given under Minnesota Rules, part 6115.0170.	
3.0 ADMINISTRATION 3.1 **Purpose.** The purpose of this Section is to identify administrative provisions to ensure this *(section, chapter, or article)* is administered consistent with its purpose. 3.2 **Permits.** A permit is required for the construction of buildings or building additions (including construction of decks and signs), the installation and/or alteration of sewage treatment systems, vegetation removal consistent with Section 9.0 and land alterations consistent with Section 10.0. 3.3 **Variances.** Variances to the requirements under this *(section, chapter, or article)* may only be granted in accordance with Minnesota Statutes, Section 462.357 and must consider the potential impacts of variances on primary conservation areas, public river corridor views, and other resources identified in the MRCCA plan. In reviewing the variance application, the *(zoning authority, governing body, or other appropriate term)* shall: 3.31 Evaluate the impacts to these resources. and if negative impacts are found, require conditions to mitigate the impacts that are related to and proportional to the impacts, **consistent with Section 3.5** and 3.32 Make written findings that the variance is consistent with the purpose of this (*section, chapter, or article*)***, as follows***. **A. The extent, location and intensity of the variance will be in substantial compliance with the MRCCA Plan;** **B. The variance is consistent with the character and management purpose of the MRCCA district in which it is located;** **C. The variance will not be detrimental to PCAs and PRCVs nor will it contribute to negative incremental impacts to PCAs and PRCVs when considered in the context of past, present and reasonable future actions; and** **D. The variance will not negatively impact (other MRCCA plan-identified resources).**	*3.2. Cities and Townships delegating vegetation and land alteration permitting to another entity may wish to make that arrangement clear here or elsewhere in this administrative section.* *3.3. PRCV impact assessments* for variances and conditional uses should review the MRCCA Plan for how PRCVs are visually shown or identified, why they are important and what changes would enhance or degrade them. Impacts will vary depending on the Plan's description of them and the project's size, height, & location. Public hearing comments will be an important source of information in determining impacts and mitigation. *3.31. Optional. Including a reference to optional Section 3.5 provides the zoning authority with a list of mitigation ideas to consider for specific applications.* *3.32. Determining consistency with the purpose of this MRCCA section, chapter, or article, is variance criteria that must be evaluated in addition to the practical difficulties criteria in MS 462.357 Subd 6.* *3.32.A-D. Optional. These findings provide clarity on what it means to find that a variance is consistent with the purpose of this section, chapter, or article (as required by rule) and help strengthen protections for PCAs and PRCVs in variance reviews.* *3.4. The* conditional uses required under this section include: allowing heights to exceed those specified in the UM and RTC districts, wireless communication towers, and nonmetallic mining.

Ordinance Language	*Commentary*
3.4 **Conditional and interim use permits.** All conditional and interim uses, required under this *(section, chapter or article),* must comply with Minnesota Statutes, section 462.3595 and must consider the potential impacts on primary conservation areas, public river corridor views, and other resources identified in the MRCCA plan. In reviewing the application, the *(zoning authority, governing body, or other appropriate term)* shall: 3.41 Evaluate the impacts to these resources and if negative impacts are found, require conditions to mitigate the impacts that are related to and proportional to the impacts, **consistent with Section 3.5; and** **3.42 Make written findings that the conditional use is consistent with the purpose of this *(section, chapter, or article*), as follows.** **A. The extent, location and intensity of the conditional use will be in substantial compliance with the MRCCA Plan;** **B. The conditional use is consistent with the character and management purpose of the MRCCA district in which it is located;** **C. The conditional use will not be detrimental to PCAs and PRCVs nor will it contribute to negative incremental impacts to PCAs and PRCVs when considered in the context of past, present and reasonable future actions; and** **D. The conditional use will not negatively impact (other MRCCA plan-identified resources).** **3.5 Conditions of Approval. The *(zoning authority, governing body, or other appropriate term)* shall evaluate the impacts to PCAs, PRCVs, and other resources identified in the MRCCA Plan, and if negative impacts are found, require conditions to mitigate the impacts that are related to and proportional to the impacts. Mitigation may include:** **A. Restoration of vegetation identified as "vegetation restoration priorities" identified in the MRCCA plan.** **B. Preservation of existing vegetation;** **C. Stormwater runoff management;** **D. Reducing impervious surface;** **E. Increasing structure setbacks;** **F. Wetland and drainageway restoration and/or preservation; and** **G. And other conservation measures.**	*3.41. Optional. Including a reference to optional Section 3.5 provides the zoning authority with a list of mitigation ideas to consider for specific applications.* *3.42.A-D. Optional. Rules do not require findings for conditional uses. These findings help strengthen protection for PCAs and PRCVs in reviewing conditional use applications by providing clarity on what it means to find that the conditional use is consistent with the purpose of this section, chapter, or article.* *3.5. Optional. This list of mitigation ideas can help the zoning authority make decisions on appropriate mitigation that will reduce impacts from approved variances and conditional uses.*

Ordinance Language	*Commentary*
3.6 **Application materials.** Applications for permits and discretionary actions required under this *(section, chapter or article)* must submit the following information unless the (*insert designated official*) determines that the information is not needed.	*3.62.A. Please see the DNR-developed online mapper for locating PCAs by parcel.*
3.61 A detailed project description; and	
3.62 Scaled maps and plans, dimensional renderings, maintenance agreements, and other materials that identify and describe:	
A. Primary conservation areas;	
B. Public river corridor views;	
C. Buildable area;	
D. Existing and proposed topography and drainage patterns;	
E. Proposed storm water and erosion and sediment control practices;	
F. Existing and proposed vegetation to be removed and established;	
G. Ordinary high water level, blufflines, and all required setbacks;	
H. Existing and proposed structures;	
I. Existing and proposed impervious surfaces; and	
J. Existing and proposed subsurface sewage treatment systems.	
3.7 **Nonconformities**.	
3.71 All legally established nonconformities as of the date of this ordinance may continue consistent with 462.357 Subd. 1e .	
3.72 New structures erected in conformance with the setback averaging provisions of Section 6.34 are conforming structures.	*3.74 Optional. LGUs may choose to not include this provision as a higher standard.*
3.73 Site alterations and expansion of site alterations that were legally made prior to the effective date of this ordinance are conforming. Site alterations include vegetation, erosion control, storm water control measures, and other nonstructural site improvements.	
3.74 Legally nonconforming principal structures that do not meet the setback requirements of Section 6.3 may be expanded laterally provided that:	
A. The expansion does not extend into the shore or bluff impact zone or further into the required setback than the building line of the existing principal structure (See Figure 5); and	

Ordinance Language	*Commentary*
B. The expanded structure's scale and bulk is consistent with that of the original structure and existing surrounding development. Figure 5. Expansion of Nonconforming Structure  	
3.8 **Notifications.** 3.81 Amendments to this *(section, chapter, or article)* and to the MRCCA plan must be submitted to the Commissioner as provided in Minnesota Rules, part 6106.0070, Subp. 3, Items B – I.	*3.81 DNR's preferred notification method is via email to the appropriate DNR Area Hydrologist.*
3.82 Notice of public hearings for discretionary actions, including conditional and interim use permits, variances, appeals, rezonings, preliminary plats, final subdivision plats, **master plans,** and PUDs, must be sent to the following entities at least **thirty (30)** ~~**ten (10)**~~ days prior to the hearing: A. The Commissioner in a format prescribed by the DNR; B. National Park Service; and C. where building heights exceed the height limits specified in Section 6.2 as part of the conditional use or variance process, adjoining local governments within the MRCCA, including those with overlapping jurisdiction and those across the river.	*3.82. Optional. Increasing the lead time for the DNR, NPS and adjoining local governments will increase the chance of getting substantive feedback available for consideration at the public hearing.* *3.84 Changes to district boundaries must be supported by approved changes in the MRCCA Plan.* *3.85. Optional. Local governments will get better feedback and fewer surprises by engaging the DNR*

Ordinance Language	*Commentary*
3.83 Notice of final decisions for actions in Section 3.71, including findings of fact, must be sent to the Commissioner, the National Park Service, and adjoining local governments within the MRCCA within ten (10) days of the final decision. 3.84 Requests to amend district boundaries must follow the provisions in Minnesota Rules, part 6106.0100, Subp. 9, Item C. **3.85 The DNR will be notified at time of application submittal of master plans, PUDs, preliminary, and final plats** 3.9 **Accommodating disabilities.** Reasonable accommodations for ramps or other facilities to provide persons with disabilities access to the persons' property, as required by the federal Americans with Disabilities Act and the federal Fair Housing Act and as provided by Minnesota Rules, chapter 1341, must: 3.91 Comply with Sections 6.0 to 12.0; or 3.92 If Sections 6.0 to 12.0 cannot be complied with, ramps or other facilities are allowed with an administrative permit provided: A. The permit terminates on either a specific date or upon occurrence of a particular event related to the person requiring accommodation; and B. Upon expiration of the permit, the ramp or other facilities must be removed. **4.0 MRCCA DISTRICTS** 4.1 **Purpose**. The purpose of this Section is to establish districts under which building height and structure placement are regulated to protect and enhance the Mississippi River's resources and features consistent with the natural and built character of each district. 4.2 **District description and management purpose**. The MRCCA within the *(City or Town)* is divided into the following MRCCA Districts: 4.21 Rural and Open Space (ROS). A. Description. The ROS District is characterized by rural and low-density development patterns and land uses, and includes land that is riparian or visible from the river, as well as large, undeveloped tracts of high ecological and scenic value, floodplain, and undeveloped islands. Many primary conservation areas exist in the district. B. Management purpose. The ROS District must be managed to sustain and restore the rural and natural character of the corridor and to protect and enhance habitat, parks and open space, public river corridor views, and scenic, natural, and historic areas.	*earlier in the review process for large projects with potential impacts to PCAs and PRCVs* *3.9. This provision has been revised from rules to allow use of an administrative permit instead of an IUP for accommodating disabilities to ensure that "reasonable accommodations" consistent with the federal ADA and Fair Housing Act can be made.* *4.2 Include only those districts in the city or town.*

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4.22 River Neighborhood (RN). A. Description. The RN District is characterized by primarily residential neighborhoods that are riparian or readily visible from the river or that abut riparian parkland. The district includes parks and open space, limited commercial development, marinas, and related land uses. B. Management purpose. The RN District must be managed to maintain the character of the river corridor within the context of existing residential and related neighborhood development, and to protect and enhance habitat, parks and open space, public river corridor views, and scenic, natural, and historic areas. Minimizing erosion and the flow of untreated storm water into the river and enhancing habitat and shoreline vegetation are priorities in the district. 4.23 River Towns and Crossings (RTC). A. Description. The RTC District is characterized by historic downtown areas and limited nodes of intense development at specific river crossings, as well as institutional campuses that predate designation of the MRCCA, and that include taller buildings. B. Management purpose. The RTC district must be managed in a manner that allows continued growth and redevelopment in historic downtowns and more intensive redevelopment in limited areas at river crossings to accommodate compact walkable development patterns and connections to the river. Minimizing erosion and the flow of untreated storm water into the river, providing public access to and public views of the river, and restoring natural vegetation in riparian areas and tree canopy are priorities in the district. 4.24 Separated from River (SR). A. Description. The SR District is characterized by its physical and visual distance from the Mississippi River. The district includes land separated from the river by distance, topography, development, or a transportation corridor. The land in this district is not readily visible from the Mississippi River. B. Management purpose. The SR district provides flexibility in managing development without negatively affecting the key resources and features of the river corridor. Minimizing negative impacts to primary conservation areas and minimizing erosion and flow of untreated storm water into the Mississippi River are priorities in the district. The RTC district must be managed in a manner that allows continued growth and redevelopment in historic downtowns and more intensive redevelopment in limited areas at river crossings to accommodate compact walkable development patterns and connections to the river. Minimizing erosion and the flow of untreated storm water into the river, providing public access to and public views of the river, and restoring natural vegetation in riparian areas and tree canopy are priorities in the district.	

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4.25 Urban Mixed (UM). A. Description. The UM District includes large areas of highly urbanized mixed use that are a part of the urban fabric of the river corridor, including institutional, commercial, industrial, and residential areas and parks and open space. B. Management purpose. The UM District must be managed in a manner that allows for future growth and potential transition of intensely developed areas that does not negatively affect public river corridor views and that protects bluffs and floodplains. Restoring and enhancing bluff and shoreline habitat, minimizing erosion and flow of untreated storm water into the river, and providing public access to and public views of the river are priorities in the district. 4.26 Urban Core (UC). A. Description. The UC District includes downtown. B. Management purpose. The UC District must be managed with the greatest flexibility to protect commercial, industrial, and other high-intensity urban uses, while minimizing negative impacts to primary conservation areas and minimizing erosion and flow of untreated storm water into the river. Providing public access to and public views of the river are priorities in the district.	*4.3 Include a link to the city/town website or DNR website containing the map to make it easier for property owners to find the district for their property.*
4.3 **MRCCA district map**. The locations and boundaries of the MRCCA districts established by this *(section, chapter, or article)* are shown on *(insert name of MRCCA Overlay District map)* which is incorporated herein by reference. The district boundary lines are intended to follow the center lines of rivers and streams, highways, streets, lot lines, and municipal boundaries, unless a boundary line is otherwise indicated on the map. Where district boundaries cross unsubdivided property, the district boundary line is determined by use of dimensions or the scale appearing on the map.	*5.0. The uses and their special conditions in this section must be in the ordinance if the use is allowed. If not, the provision may be excluded from this section, but it should be clear in the ordinance that such uses are prohibited.*
5.0 SPECIAL LAND USE PROVISIONS	
5.1 **Purpose.** To identify development standards and considerations for land uses that have potential to negatively impact primary conservation areas and public river corridor views.	
5.2 **Underlying zoning.** Uses within the MRCCA are generally determined by underlying zoning, with additional provisions for the following land uses:	
5.21 **Agricultural use.** Perennial ground cover is required within 50 feet of the ordinary high water level and within the bluff impact zone.	
5.22 **Feedlots.** New animal feedlots and manure storage areas are prohibited. Existing animal feedlots and manure storage areas must conform with Minnesota Rules, chapter 7020.	*5.24. Optional. Consider prohibiting mining within the OHWL structure setback. Screening of mining operation is possible if the operation is setback from*

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5.23 **Forestry.** Tree harvesting and biomass harvesting within woodlands, and associated reforestation, must be consistent with recommended practices in Conserving Wooded Areas in Developing Communities: Best Management Practices in Minnesota.	*the water. This will enhance recreational use of the River.*
5.24 **Nonmetallic mining.** Nonmetallic mining requires a conditional use permit or interim use permit issued by the local government, subject to the following: A. New nonmetallic mining is prohibited within the shore impact zone and bluff impact zone and within the required structure setback from the bluffline and OHWL; B. Processing machinery must be located consistent with setback standards for structures as provided in Section 6.3; C. Only one barge loading area, which must be limited to the minimum size practicable, is permitted for each mining operation; D. New and, where practicable, existing nonmetallic mining operations must not be readily visible and must be screened by establishing and maintaining natural vegetation. The unscreened boundaries of nonmetallic mining areas are limited to only the barge loading area; E. A site management plan must be developed by the operator and approved by the local government before new nonmetallic mining commences. Operations must be consistent with the site plan throughout the duration of operations at the site. The site management plan must: (1) Describe how the site will be developed over time with an emphasis on minimizing environmental risk to public waters; F. Explain where staged reclamation may occur at certain points during the life of the site; G. Address dust, noise, storm water management, possible pollutant discharges, days and hours of operation, and duration of operations; and H. Describe any anticipated vegetation and topographic alterations outside the pit, and reclamation plans consistent with the stated end use for the land; and; I. Existing and new nonmetallic mining operations must submit land reclamation plans to the local government compatible with the purposes of this ordinance.	
5.25 **River-dependent uses.** River-dependent uses must comply with the following design standards: A. Structures and parking areas, except shoreline facilities and private roads and conveyances serving river-dependent uses as provided in Section 12.0, must meet the dimensional and performance standards in	

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this *(section, chapter, or article),* must be designed so that they are not readily visible, and must be screened by establishing and maintaining natural vegetation; B. Shoreline facilities must comply with Minnesota Rules, chapter 6115 and must: (1) be designed in a compact fashion so as to minimize the shoreline area affected; and (2) minimize the surface area of land occupied in relation to the number of watercraft or barges to be served; and C. Dredging and placement of dredged material are subject to existing federal and state permit requirements and agreements. 5.26 **Wireless communication towers.** Wireless communication towers require a conditional or interim use permit and are subject to the following design standards: A. The applicant must demonstrate that functional coverage cannot be provided through co-location, a tower at a lower height, or a tower at a location outside of the MRCCA; B. The tower must not be located in a bluff or shore impact zone; and C. Placement of the tower must minimize impacts on public river corridor views. D. Comply with the general design standards in Section 8.2.	*5.26. The word "facilities" is replaced with "towers" to improve consistency throughout this provision.*
6.0 STRUCTURE HEIGHT AND PLACEMENT AND LOT SIZE 6.1 **Purpose.** To establish standards that protect primary conservation areas and public river corridor views from development impacts and ensure that new development is sited consistent with the purpose of the MRCCA. 6.2 **Structure height.** Structures and facilities must comply with the following standards unless identified as exempt in Section 12.0. 6.21 Structures and facilities must comply with the following standards unless identified as exempt in Section 12.0. A. ROS District: 35 feet **(or lower).** B. RN District: 35 feet. C. RTC District: 48 feet **(or lower)**, provided tiering of structures away from the Mississippi River and from blufflines is given priority, with lower structure heights closer to the river and blufflines, and that structure design and placement minimizes interference with public river corridor views. Structures over 48 feet **(or lower) and up to (fill in a max. height)** are allowed as a conditional use according to Section 6.23.	*6.21. Optional. Reduce the maximum heights allowed by right in any district and implement a maximum height allowed through a CUP in the RTC and UM District. This will reduce the heights requested by developers and provide better protection of scenic resources. These changes will also provide more opportunities to add conditions or require mitigation, especially in redevelopment areas.* *6.21 Optional. Replace the vague tiering and priority language in the RTC, UM, and UC Districts with specific height standards based on distance from the river that would be zoned/mapped through additional zoning districts (e.g. RTC-1, RTC-2, etc.). For each district further from the river, a maximum height allowed by CUP would be increased.*

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D. SR District: Height is determined by underlying zoning, provided the allowed height is consistent with that of the mature treeline, where present, and existing surrounding development, as viewed from the OWHL of the opposite shore. E. UM District: 65 feet, provided tiering of structures away from the Mississippi River and from blufflines is given priority, with lower structure heights closer to the river and blufflines, and that structure design and placement minimize interference with public river corridor views. Structures over 65 feet **(or lower) and up to (fill in a max. height)** are allowed as a conditional use according to Section 6.23. F. UC District: Height is determined by underlying zoning, provided tiering of structures away from the Mississippi River and blufflines is given priority, with lower structure heights closer to the river and blufflines, and structure design and placement minimize interference with public river corridor views. 6.22 Height is measured on the side of the structure facing the Mississippi River. 6.23 In addition to the conditional use permit requirements of Section 3.4, criteria for considering whether to grant a conditional use permit for structures exceeding the height limits must include: A. Assessment of the visual impact of the proposed structure on public river corridor views, including views from other communities; **B. Determination that the proposed structure meets the required bluff and OHWL setbacks;** C. Identification and application of techniques to minimize the perceived bulk of the proposed structure, such as: (1) Placing the long axis of the building perpendicular to the river; (2) Stepping back of portions of the facade; **(3) Lowering the roof pitch or use of a flat roof;** **(4) Using building materials or mitigation techniques that will blend in with the natural surroundings such as green roofs, green walls, or other green and brown building materials;** (5) Narrowing the profile of upper floors of the building; or (6) Increasing the setbacks of the building from the Mississippi River or blufflines; (7) Identification of techniques for preservation of those view corridors identified in the MRCCA Plan; and (8) Opportunities for creation or enhancement of public river corridor views.	*6.22 Communities may wish to cross reference their building height definition in their ordinance for compatibility with this provision.* *6.23 LGUs may want to use visual analysis tools to help understand and communicate visual impacts during project review and approval. See DNR guidance for PRCV Viewshed Analysis, using Google Earth and Sketch up, which are freely available visual assessment tools.* *6.23.B. Optional. This standard would link CUP approval with conformance to bluff setback standards.* *6.23.C. 3&4. Optional. These additional techniques can help reduce visual impacts in certain situations.* *6.3. Local governments may apply stricter standards than those listed here. Increasing structure setbacks can help reduce the risk of erosion in near shore and bluff areas and enhance the aesthetic character of*

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6.3 **Structure and impervious surface placement.** 6.31 Structures and impervious surface must not be placed in the shore or bluff impact zones unless identified as an exemption in Section 12.0. 6.32 Structures and facilities must comply with the following OHWL setback provisions unless identified as exempt in Section 12.0. A. ROS District: 200 feet from the Mississippi River and 150 feet from the Minnesota and Vermillion Rivers. B. RN District: 100 feet from the Mississippi River and 75 feet from the Rum and Vermillion Rivers. C. RTC District: 75 feet from the Mississippi, Crow, and Rum Rivers. D. SR District: 75 feet from the Vermillion River. E. UM District: 50 feet from the Mississippi River. F. UC District: Setbacks are determined by underlying zoning. 6.33 Structures and facilities must comply with the following bluffline setback provisions unless identified as exempt in Section 12.0: A. ROS District: 100 feet. B. RN District: 40 feet. C. RTC District: 40 feet. D. SR District: 40 feet. E. UM District: 40 feet. F. UC District: 40 feet. 6.34 Where principal structures exist on the adjoining lots on both sides of a proposed building site, the minimum setback may be altered to conform to the average of the adjoining setbacks, provided that the new structure's scale and bulk riverward or bluffward of the setbacks required under Sections 6.32 and 6.33 are consistent with adjoining development. See Figure 6.	*the river. Larger setbacks also allow room for larger riparian buffers.*

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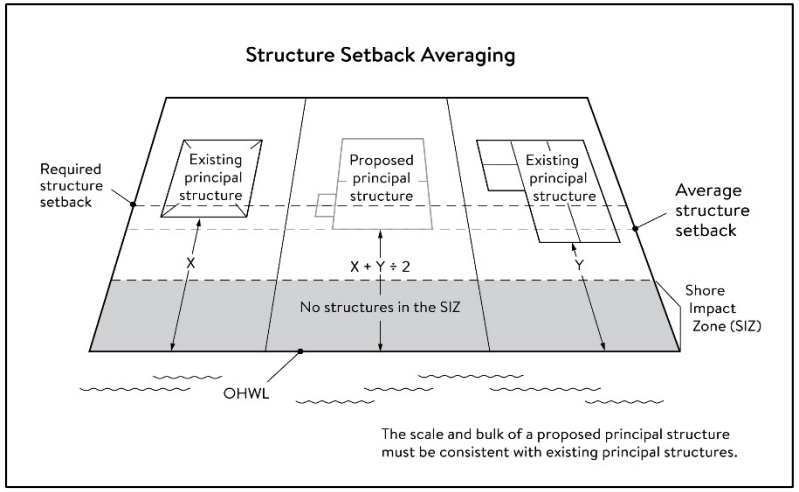
Figure 6. Structure Setback Averaging  6.35 Subsurface sewage treatment systems, including the septic tank and absorption area, must be located at least 75 feet from the ordinary high water level of the Mississippi River and all other public waters. 6.4 **Lot size and buildable area.** 6.41 The width of lots abutting the Mississippi River in the ROS District must be at least 200 feet, unless alternative design methods are used that provide greater protection of the riparian area. 6.42 All new lots must have adequate buildable area to comply with the setback requirements of Sections 6.32 and 6.33 so as to not require variances to use the lots for their intended purpose. **7.0 PERFORMANCE STANDARDS FOR PRIVATE FACILITIES** 7.1 **Purpose.** To establish design standards for private facilities that are consistent with best management practices and that minimize impacts to primary conservation areas, public river corridor views and other resources identified in the MRCCA plan. 7.2 **General design standards**. All private facilities must be developed in accordance with the vegetation management and land alteration requirements in Sections 9.0 and 10.0. 7.3 **Private roads, driveways, and parking areas**. Except as provided in Section 12.0, private roads, driveways and parking areas must:	*6.41. This provision only applies in the ROS district.*

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7.31 Be designed to take advantage of natural vegetation and topography so that they are not readily visible; 7.32 Comply with structure setback requirements according to Section 6.3; and 7.33 Not be placed within the bluff impact zone or shore impact zone, unless exempt under Section 12.0 and designed consistent with Section 8.2. 7.4 **Private water access and viewing facilities**. 7.41 Private access paths must be no more than: A. Eight feet wide, if placed within the shore impact zone; and B. Four feet wide, if placed within the bluff impact zone. 7.42 Private water access ramps must: A. Comply with Minnesota Rules, chapters 6115.0210 and 6280.0250; and B. Be designed and constructed consistent with the applicable standards in Design Handbook for Recreational Boating and Fishing Facilities. 7.43 Design and construction of private stairways, lifts, and landings are subject to the following standards: A. Stairways and lifts must not exceed four feet in width on residential lots. Wider stairways may be used for commercial properties and residential facilities held in common, if approved by (insert name of LGU permit or approval type); B. Landings for stairways and lifts on residential lots must not exceed 32 square feet in area. Landings larger than 32 square feet area allowed for commercial properties and residential facilities held in common, if approved by *(insert name of LGU permit or approval type);* C. Canopies or roofs are prohibited on stairways, lifts, or landings; D. Stairways, lifts, and landings must be located in the least visible portion of the lot whenever practical; and E. Ramps, lifts, mobility paths, or other facilities for persons with physical disabilities are allowed for achieving access to shore areas according to Section 7.43 A. – D, and as provided under Section 3.9. 7.45 One water-oriented accessory structure is allowed for each riparian lot or parcel less than 300 feet in width at the ordinary high water level, with one additional water-oriented accessory structure allowed for each additional 300 feet of shoreline on the same lot or parcel. Water-oriented accessory structures are prohibited in the bluff impact zone and must: A. not exceed 12 feet in height;	*7.42.B.* This publication is available as a hard copy from the US Fish & Wildlife Services Conservation Library or by purchase from States Organization for Boating Access (SOBA) for $55. *7.5. Optional. Eliminate this provisions and prohibit decks and patios within the structure setback.*

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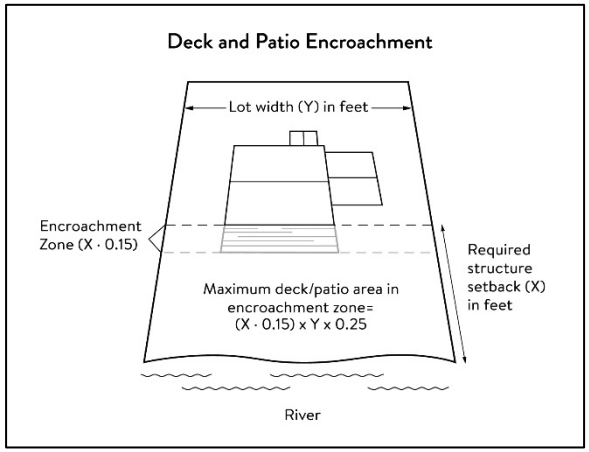
B. not exceed 120 square feet in area; and C. be placed a minimum of 10 feet from the ordinary high water level. 7.5 **Decks and patios in setback areas.** Decks and at-grade patios may encroach into the required setbacks from the ordinary high water level and blufflines without a variance, when consistent with Sections 9.0 and 10.0, provided that: 7.51 The encroachment of the deck or patio into the required setback area does not exceed 15 percent of the required structure setback; 7.52 the area of the deck or patio that extends into the required setback area occupies no more than 25 percent of the total area between the required setback and the 15 percent using the formula: [required setback depth (feet) x 0.15 x lot width (feet) = maximum total area] 7.53 The deck or patio does not extend into the bluff impact zone. See Figure 7. Figure 7. Deck and Patio Encroachment  7.6 **Off-premise and directional signs.** 7.61 Off-premise advertising signs must: A. Meet required structure placement and height standards in Sections 6.2 and 6.3. B. Not be readily visible 7.62 Directional signs for patrons arriving at a business by watercraft must comply with the following standards:	*7.6. If local governments choose to allow off-premise signs and signs in the shore impact zone, these provision must be included. If not, LGUs must exclude them.*

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A. They must be consistent with Minnesota Statutes, section 86B.115. B. Only convey the location and name of the establishment and the general types of goods and services available, if located in a shore impact zone. C. Be no greater than ten feet in height and 32 square feet in surface area; and D. If illuminated, the lighting must be shielded to prevent illumination out across the river or to the sky. **7.7 Fences. Fences between principal structures and the river are allowed provided that fences are:** **7.71 Not higher than six feet.** **7.72 Not located within 40 feet of slopes greater than 12%.** **7.73 Not located in the regulatory floodplain.** **8.0 PERFORMANCE STANDARDS FOR PUBLIC FACILITIES** 8.1 **Purpose.** To establish design standards for public facilities that are consistent with best management practices and that minimize impacts to primary conservation areas, public river corridor views and other resources identified in the MRCCA plan. Public facilities serve the public interest by providing public access to the Mississippi River corridor or require locations in or adjacent to the river corridor and therefore require some degree of flexibility. 8.2 **General design standards**. All public facilities must be designed and constructed to: 8.21 Minimize visibility of the facility **from the river** to the extent consistent with the purpose of the facility; 8.22 Comply with the structure placement and height standards in Section 6.0, except as provided in Section 12.0; 8.23 Be consistent with the vegetation management standards in Section 9.0 and the land alteration and storm water management standards in Section 10.0, including use of practices identified in Best Practices for Meeting DNR General Public Waters Work Permit GP 2004-0001, where applicable; 8.24 Avoid primary conservation areas, unless no alternative exists. If no alternative exists, then disturbance to primary conservation areas must be avoided to the greatest extent practicable, and design and construction must minimize impacts; and 8.25 Minimize disturbance of spawning and nesting times by scheduling construction at times when local fish and wildlife are not spawning or nesting. 8.3 **Right-of-way maintenance standards**. Right-of-way maintenance must comply with the following standards:	*7.61.B. Note that the term "readily visible" is defined in the definitions section.* *7.62. This language may conflict with supreme court decisions regarding free speech and the first amendment. The provision is intended to prohibit nonessential signs in the shore impact zone to limit the impact on scenic views while allowing directional signage. If LGUs want to allow such signs and are uncomfortable with this language, they should propose alternative language. If LGUs do not want signs in the SIZ, then this language should be eliminated and replaced with language prohibiting nonessential signs in the SIZ.* *7.7. Optional. Language regulating fences in the SIZ will protect river views and may minimize neighbor conflicts over fences and views to the river.* *8.21. Optional. Added text provides administrative clarity that views from the river are important to protect.*

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8.31 Vegetation currently in a natural state must be maintained to the extent feasible; 8.32 Where vegetation in a natural state has been removed, native plants must be planted and maintained on the right-of-way; and 8.33 Chemical control of vegetation must be avoided when practicable, but when chemical control is necessary, chemicals used must be in accordance with the regulations and other requirements of all state and federal agencies with authority over the chemical's use. 8.4 **Crossings of public water or public land.** Crossings of public waters or land controlled by the commissioner are subject to approval by the commissioner according to Minnesota Statutes, sections 84.415 and 103G.245. 8.5 **Public utilities**. Public utilities must comply with the following standards: 8.51 High-voltage transmission lines, wind energy conversion systems greater than five megawatts, and pipelines are regulated according to Minnesota Statutes, chapter 216E, 216F, and 216G respectively; and 8.52 If overhead placement is necessary, utility **facility** crossings must **minimize visibility of the facility from the river ~~be hidden from view~~ and follow other existing right of ways** as much as practicable. 8.53 The appearance of structures must be as compatible as practicable with the surrounding area in a natural state with regard to height and width, materials used, and color. 8.54 Wireless communication facilities, according to Section 5.26. 8.6 **Public transportation facilities**. Public transportation facilities shall comply with structure placement and height standards in Section 6.0. Where such facilities intersect or about two or more MRCCA districts, the least restrictive standards apply. Public transportation facilities must be designed and constructed to give priority to: 8.61 Providing scenic overlooks for motorists, bicyclists, and pedestrians; 8.62 Providing safe pedestrian crossings and facilities along the river corridor; 8.63 Providing access to the riverfront in public ownership; and 8.64 Allowing for use of the land between the river and the transportation facility. 8.7 **Public recreational facilities**. Where such facilities intersect or abut two or more MRCCA districts, the least restrictive dimensional standards apply. Public transportation facilities must be designed and constructed to give priority to: 8.71 Buildings and parking associated with pubic recreational facilities must comply with the structure placement and height standards in Section 6.0, except as provided in Section 12.0; 8.72 Roads and driveways associated with public recreational facilities must not be placed in the bluff or shore impact zones unless no other placement alternative exists. If no alternative exists, then design and	*8.5. There are situations where local governments have jurisdiction for approving transmission projects. See 216E.05 Subd. 1. In those cases, the local government would apply these standards in reviewing and approving the transmission application 8.52. Optional. Added text provides administrative clarity that views from the river are important to protect when local governments have approval authority.*

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construction must minimize impacts to shoreline vegetation, erodible soils and slopes, and other sensitive resources.	
8.73 Trails, access paths, and viewing areas associated with public recreational facilities and providing access to or views of the Mississippi River are allowed within the bluff and shore impact zones if design, construction, and maintenance methods are consistent with the best management practice guidelines in Trail Planning, Design, and Development Guidelines.	*8.73. Contact the DNR Parks and Trails Division at 651-259-5600 to get the password to download a free copy.*
A. Hard-surface trails are not allowed on the face of bluffs with a slope exceeding 30 percent. Natural surface trails are allowed, provided they do not exceed eight feet in width.	
B. Trails, paths, and viewing areas must be designed and constructed to minimize:	*8.73.A. While this is an accessibility concern, there is no requirement to make all places accessible. Most hiking trails are not accessible. The impacts to bluffs with slopes over 30% to build accessible trails would result in enormous grading changes and vegetation removal.*
(1) Visibility from the river;	
(2) Visual impacts on public river corridor views; and	
(3) Disturbance to and fragmentation of primary conservation areas.	
8.74 Public water access facilities must comply with the following requirements:	
A. Watercraft access ramps must comply with Minnesota Rules chapters 6115.0210 and 6280.0250; and	
B. Facilities must be designed and constructed consistent with the standards in Design Handbook for Recreational Boating and Fishing Facilities.	
8.75 Public signs and kiosks for interpretive or directional purposes are allowed in the bluff or shore impact zones, provided they are placed and constructed to minimize disturbance to these areas and avoid visual impacts on public river corridor views.	*8.74.B.* This publication is available as a hard copy from the US Fish & Wildlife Services Conservation Library or by purchase from States Organization for Boating Access (SOBA) for $55.
8.76 Public stairways, lifts, and landings must be designed as provided in Section 7.43.	
9.0 VEGETATION MANAGEMENT	
9.1 **Purpose.** To establish standards that sustain and enhance the biological and ecological functions of vegetation; preserve the natural character and topography of the MRCCA; and maintain stability of bluffs and steep slopes and ensure stability of other erosion-prone areas.	
9.2 **Applicability.** This section applies to:	
9.21 Shore impact zones;	
9.22 Areas within 50 feet of a wetland or natural drainage way;	*9.2 LGUs are not allowed to restrict the height of ground cover vegetation in these "designated" areas such as through nuisance weed control ordinances. If*
9.23 Bluff impact zones;	

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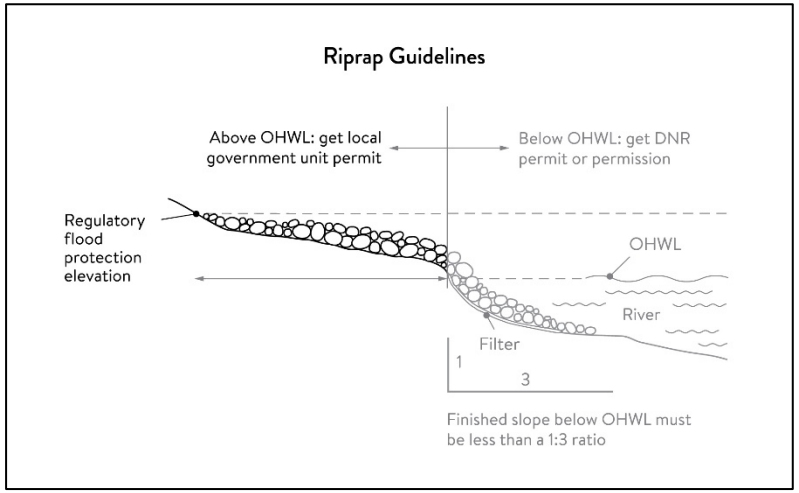
9.24 Areas of native plant communities; and 9.25 Significant existing vegetative stands identified in the MRCCA plan. 9.3 **Activities allowed without a vegetation permit.** 9.31 Maintenance of existing lawns, landscaping and gardens; 9.32 Removal of vegetation in emergency situations as determined by *(insert name of LGU);* 9.33 Right-of-way maintenance for public facilities meeting the standards Section 8.3; 9.34 Agricultural and forestry activities meeting the standards of Sections 5.21 and 5.23; 9.35 Selective vegetation removal, provided that vegetative cover remains consistent with the management purpose of the MRCCA District, including: A. Vegetation that is dead, diseased, dying, or hazardous; B. To prevent the spread of diseases or insect pests; **C. Individual trees and shrubs; and** D. Removal of invasive non-native species. 9.4 **Activities allowed with a vegetation permit.** 9.41 The following intensive vegetation clearing activities are allowed with a vegetation permit: A. Clearing of vegetation that is dead, diseased, dying, or hazardous; B. Clearing to prevent the spread of diseases or insect pests; C. Clearing to remove invasive non-native species. D. Clearing to prepare for restoration and erosion control management activities consistent with a plan approved by (*insert name of LGU or name of resource agency*). E. The minimum necessary for development that is allowed with a building permit or as an exemption under Section 12.0. 9.42 Conditions of vegetation permit approval: A. Development is sited to minimize removal of or disturbance to natural vegetation; B. Soil, slope stability, and hydrologic conditions are suitable for the proposed work as determined by a professional engineer or (insert name of resource agency, if someone other than professional engineer is desired);	*such ordinance provisions exist, LGUs must amend them so they do not apply to these designated areas.* *9.35.C. This provides clarity that removing individual trees and shrubs is allowed under the rules.* *9.4 LGUs must develop a new or use an existing permit process consistent with 6106.0150 Subp. 4. LGUs must submit documentation to the DNR verifying a process and administrative forms and procedures as part of ordinance review and approval process. LGUs have the authority to approve, approve with conditions or deny a vegetation permit application.*

Ordinance Language	*Commentary*
C. Clearing is the minimum necessary and designed to blend with the natural terrain and minimize visual impacts to public river corridor views; D. Any native plant communities removed are replaced with vegetation that provides equivalent biological and ecological functions consistent with an approved vegetation restoration plan as provided in Section 9.62. If replaced, priorities for restoration are stabilization of erodible soils, restoration or enhancement of shoreline vegetation, and revegetation of bluffs or steep slopes visible from the river; E. All other vegetation removed is restored with natural vegetation to the greatest extent practicable consistent with an approved vegetation restoration plan as provided in Section 9.62. Priorities for replacement are the same as under Section 9.42.D; F. Any disturbance of highly erodible soils is replanted with deep-rooted vegetation with a high stem density; G. Vegetation removal activities are conducted so as to expose the smallest practical area of soil to erosion for the least possible time; H. **Areas of vegetation restoration priorities identified in the MRCCA plan are restored, if applicable;** and I. Any other condition determined necessary to achieve the purpose of this section. 9.5 **Prohibited activities.** All other intensive vegetation clearing is prohibited. 9.6 **Vegetation restoration plan.** 9.61 Development of a vegetation restoration plan and reestablishment of natural vegetation is required: A. As a condition of a vegetation permit issued under Section 9.42, items D and E; B. Upon failure to comply with any provisions in this section; or C. As part of the planning process for subdivisions as provided in Section 11.0. 9.62 The vegetation restoration plan must satisfy the application submittal requirements in 3.6, and: A. Include vegetation that provides suitable habitat and effective soil stability, runoff retention, and infiltration capability. Vegetation species, composition, density, and diversity must be guided by nearby patches of native plant communities and by Native Vegetation Establishment and Enhancement Guidelines; B. Be prepared by a qualified individual; and	*9.42. H. Optional. This condition implements a required implementation action in the approved MRCCA plan. The action calls for establishing a vegetation permitting process that includes permit review procedures to ensure consideration of restoration priorities identified in the plan in permit issuance and conditions requiring vegetation restoration for those priority areas.*

Ordinance Language	*Commentary*
C. Include a maintenance plan that includes management provisions for controlling invasive species and replacement of plant loss for three years. 9. 63 A certificate of compliance will be issued after the vegetation restoration plan requirements have been satisfied. **10.0 LAND ALTERATION STANDARDS AND STORMWATER MANAGEMENT** 10.1 **Purpose.** To establish standards that protect water quality from pollutant loadings of sediment, nutrients, bacteria, and other contaminants; and maintain stability of bluffs, shorelines, and other areas prone to erosion. 10.2 **Land alteration permit**. 10.21 Within the bluff impact zone, land alteration is prohibited, except for the following which are allowed by permit. A. Erosion control consistent with Section 10.6; B. The minimum necessary for development that is allowed as an exception under Section 12; and C. Repair and maintenance of existing buildings and facilities. 10.22 Within the water quality impact zone, land alteration that involves more than ten cubic yards of material or affects an area greater than 1,000 square feet requires a permit. 10.3 **Rock riprap, retaining walls, and other erosion control structures**. 10.31 Construction, repair, or replacement of rock riprap, retaining walls, and other erosion control structures located at or below the OHWL must comply with Minnesota Rules, chapters 6115.0215, subpart 4, item E, and 6115.0216, subpart 2. Work must not proceed until approved by the commissioner. See Figure 8.	*9.62. LGUs could consider identifying what a qualified professional means in different situations.* *10.22. Optional. LGUs may increase the distance or area where a land alteration permit is required.*

Ordinance Language	*Commentary*
Figure 8. Riprap Guidelines  10.32 Construction or replacement of rock riprap, retaining walls, and other erosion control structures within the bluff impact zone and the water quality impact zone are allowed with a permit consistent with provisions of Section 10.6 provided that: A. If the project includes work at or below the OHWL, the commissioner has already approved or permitted the project. B. The structures are used only to correct an established erosion problem as determined by the (insert name of LGU and/or resource agency). C. The size and extent of the structures are the minimum necessary to correct the erosion problem and are not larger than the following, unless a professional engineer determines that a larger structure is needed to correct the erosion problem: (1) Retaining walls must not exceed five feet in height and must be placed a minimum horizontal distance of ten feet apart; and (2) Riprap must not exceed the height of the regulatory flood protection elevation. 10.33 Repair of existing rock riprap, retaining walls, and other erosion control structures above the OHWL does not require a permit provided it does not involve any land alteration under Section 10.2. 10.4 **Stormwater management.** 10.41 In the bluff impact zone, storm water management facilities are prohibited**,** except by permit if:	*10.41. Optional. Could add the bluff setback to this standard to increase the area in which stormwater treatment facilities would not be allowed.*

Ordinance Language	*Commentary*
A. There are no alternatives for storm water treatment outside the bluff impact zone on the subject site; B. The site generating runoff is designed so that the amount of runoff reaching the bluff impact zone is reduced to the greatest extent practicable; C. The construction and operation of the facility does not affect slope stability on the subject property or adjacent properties; and D. Mitigation based on the best available engineering and geological practices is required and applied to eliminate or minimize the risk of slope failure. 10.42 In the water quality impact zone, development that creates new impervious surface, as allowed by exemption in Section 12.0, or fully reconstructs existing impervious surface of more than 10,000 square feet requires a storm water permit or approved storm water plan. Multipurpose trails and sidewalks are exempt if there is down gradient vegetation or a filter strip that is at least five feet wide. 10.43 In all other areas, storm water runoff must be directed away from the bluff impact zones or unstable areas. 10.5 **Development on steep slopes**. Construction of structures, impervious surfaces, land alteration, vegetation removal, or other construction activities are allowed on steep slopes if: 10.21 The development can be accomplished without increasing erosion or storm water runoff; 10.22 The soil types and geology are suitable for the proposed development; and 10.23 Vegetation is managed according to the requirements of Section 9.0. 10.6 **Conditions of land alteration permit approval.** 10.61 Temporary and permanent erosion and sediment control measures retain sediment onsite consistent with best management practices in the Minnesota Stormwater Manual; 10.62 Natural site topography, soil, and vegetation conditions are used to control runoff and reduce erosion and sedimentation; 10.63 Construction activity is phased when possible; 10.64 All erosion and sediment controls are installed before starting any land disturbance activity; 10.65 Erosion and sediment controls are maintained to ensure effective operation; 10.66 The proposed work is consistent with the vegetation standards in Section 9.0; and 10.67 Best management practices for protecting and enhancing ecological and water resources identified in Best Practices for Meeting DNR General Public Waters Work Permit GP 2004-0001.	*10.42 Local governments must review and approve storm water permits/plans using the same standard used in their MS4 permit for post construction storm water management, or if no MS4 permit, then compliance with the current NPDES program permit for construction storm water.*

Ordinance Language	*Commentary*
10.7 **Compliance with other plans and programs.** All development must: 10.71 Be consistent with Minnesota Statutes, chapter 103B, and local water management plans completed under chapter 8410; 10.72 Meet or exceed the wetland protection standards under Minnesota Rules, chapter 8420; and 10.73 Meet or exceed the floodplain management standards under Minnesota Rules, chapter 6120. 5000 – 6120.6200	*10.7 Local governments may eliminate these provisions if similar language is included elsewhere in the ordinance.*
11.0 SUBDIVISION AND LAND DEVELOPMENT STANDARDS 11.1 **Purpose.** 11.11 To protect and enhance the natural and scenic values of the MRCCA during development or redevelopment of the remaining large sites 11.12 To establish standards for protecting and restoring biological and ecological functions of primary conservation areas on large sites; and 11.13 To encourage restoration of natural vegetation during development or redevelopment of large sites where restoration opportunities have been identified in MRCCA Plans.	
11.2 **Applicability.** 11.21 The design standards in this section apply to subdivisions, planned unit developments and master- planned development and redevelopment of land involving ten or more acres for **contiguous** parcels that abut the Mississippi River and 20 or more acres for all other parcels, including smaller individual sites within the following developments that are part of a common plan of development that may be constructed at different times: A. Subdivisions; B. Planned unit developments; and C. Master-planned development and redevelopment of land. 11.22 The following activities are exempt from the requirements of this section: A. Minor subdivisions consisting of three or fewer lots; B. Minor boundary line corrections; C. Resolutions of encroachments; D. Additions to existing lots of record;	*11.21. Optional. The 10-acre threshold is high considering redevelopment in urban areas of the corridor. Consider reducing to a lower threshold such as five-acres. This way communities can ensure more public access to the river and better protection or restoration of PCAs and PRCVs.* *Additionally, this provision is intended to ensure that all land adjacent to the River be protected. The optional word "contiguous" helps to communicate this and to reduce the potential for using existing parcel sizes to weaken protections for land adjacent to the river.*

Ordinance Language	*Commentary*
E. Placement of essential services; and F. Activities involving river-dependent commercial and industrial uses. 11.3 **Application materials.** Project information listed in Section 3.6 must be submitted for all proposed developments. 11.4 **Design standards.** 11.41 Primary conservation areas, where they exist, must be set aside and designated as protected open space in quantities meeting the following as a percentage of total parcel area: A. CA-ROS District: 50%; B. CA-RN District: 20%; C. CA-RTC, CA-UM, and CA-UC Districts: 10%; and D. CA-SR District: 10% if the parcel includes native plant communities or provides feasible connections to a regional park or trail system, otherwise no requirement. 11.42 If the primary conservation areas exceed the amounts specified in Section 11.41, then protection of native plant communities and natural vegetation in riparian areas shall be prioritized. 11.43 If primary conservation areas exist but do not have natural vegetation (identified as restoration priorities in the MRCCA Plan), then a vegetation assessment must be completed to evaluate the unvegetated primary conservation areas and determine whether vegetation restoration is needed. If restoration is needed, vegetation must be restored according to Section 9.62. 11.44 If primary conservation areas do not exist on the parcel and portions of the parcel have been identified in the MRCCA plan as a restoration area, vegetation must be restored in the identified areas according to Section 9.62 and the area must be set aside and designated as protected open space. 11.45 Storm water treatment areas or other green infrastructure may be used to meet the protected open space requirements if the vegetation provides biological and ecological functions. 11.46 Land dedicated under (insert LGU ordinance citation) for public river access, parks, or other open space or public facilities may be counted toward the protected open space requirement. 11.47 Protected open space areas must connect open space, natural areas, and recreational areas, where present on adjacent parcels, as much as possible to form an interconnected network. 11.5 **Permanent protection of designated open space**. 11.51 Designated open space areas must be protected through one or more of the following methods: A. Public acquisition by a government entity for conservation purposes;	*11.3. Local governments must provide for pre-project review of all proposed subdivisions, redevelopments, and planned unit developments.* *11.41.C. Optional. Increase set aside percentage in all district. As land in these districts gets redeveloped, it will be important to ensure PCAs and land is set aside for future parks and open space, especially for urban areas where there is greater density and opportunities to work and play along the river.* *11.46 This ordinance citation refers to LGU "park" dedication or in-lieu fee provisions adopted under Minnesota Statutes, section 462.358, subdivision 2b. If LGU has not adopted such provisions this section may be omitted.*

Ordinance Language	Commentary
B. A permanent conservation easement, as provided in Minnesota Statutes, chapter 84C; C. A deed restriction; and D. Other arrangements that achieve an equivalent degree of protection. 11.52 Permanent protection methods must ensure the long-term management of vegetation to meet its biological and ecological functions, prohibit structures, and prohibit land alteration, except as needed to provide public recreational facilities and access to the river. 11.6 **Alternative design standards**. **12.0 EXEMPTIONS** 12.1 **Purpose.** To provide exemptions to structure placement, height and other standards for specific river or water access dependent facilities as provided in Minnesota Statutes 116G.15 Subd. 4. 12.2 **Applicability.** 12.21 Uses and activities not specifically exempted must comply with this *(section, chapter, or article)*. Uses and activities exempted under shore impact zone and bluff impact zone must comply with the vegetation management and land alteration standards in Sections 9 and 10. 12.22 Uses and activities in Section 12.3 are categorized as: A. **Exempt – E.** This means that the use or activity is allowed; B. **Exempt if no alternative - (E).** This means that the use or activity is allowed only if no alternatives exist; and C. **Not exempt - N.** This means that a use or activity is not exempt and must meet the standards of this ordinance. 12.3 **Use and activity exemptions classification.** 12.31 General uses and activities.	*11.6 The MRCCA rules state that local ordinances must contain provisions, including incentives, for alternative design methods that achieve better protection or restoration of PCAs. Local governments must develop provisions that achieve additional protections for or restoration of primary conservation areas. These should address PCA resources specific to the community and unique opportunities for their protection or restoration within the type of development or redevelopment that is likely to happen in the community. The DNR will consider a wide variety of provisions to meet this requirement. Some ideas include:* • *Protection and restoration of continuous vegetation – preventing the fragmentation of vegetation and habitat by individual lots, especially along the river and natural drainage areas and protecting it as common open space.* • *Density bonus and smaller lots in return for protection of open space beyond the minimum identified in 11.41.* • *Use of conservation design or transfer of development rights in return for protection of open space beyond the minimum identified in 11.41.* • *Other zoning and site design techniques.*

Use or Activity	Set backs	Height Limits	SIZ	BIZ	Applicable standards with which the use or activity must comply
Industrial and utility structures requiring greater height for operational reasons (such as elevators, refineries and railroad signaling towers)	N	E	N	N	Structure design and placement must minimize interference with public river corridor views.
Barns, silos, and farm structures	N	E	N	N	
Bridges and bridge approach roadways	E	E	E	(E)	Section 8
Wireless communication towers	E	E	N	N	Section 5.26

Ordinance Language						Commentary
Chimneys, church spires, flag poles, public monuments, and mechanical stacks and equipment	N	E	N	N		
Historic properties and contributing properties in historic districts	E	E	E	E	Exemptions do not apply to additions or site alterations	
Buildings and structures on the face of or abutting the bluff in the CA-UC district of St. Paul, between Chestnut Street and Highway 52.	E	n/a	n/a	E	Height in CA-UC district is governed by underlying zoning	

12.32 Public utilities.

Use or Activity	Set backs	Height Limits	SIZ	BIZ	Applicable standards with which the use or activity must comply
Electrical power facilities	E	E	E	(E)	Section 8
Essential services (other than storm water facilities)	E	E	E	(E)	Section 8
Storm water facilities	E	N	E	(E)	Section 10
Wastewater treatment	E	N	E	N	Section 8
Public transportation facilities	E	N	(E)	(E)	Section 8

12.33 Public recreational facilities.

Use or Activity	Set backs	Height Limits	SIZ	BIZ	Applicable standards with which the use or activity must comply
Accessory structures, such as monuments, flagpoles, light standards, and similar park features	E	E	(E)	(E)	Section 8; within BIZ, only on slopes averaging less than 30%. Exemptions do not apply to principal structures.
Picnic shelters and other open-sided structures	E	N	(E)	N	Section 8
Parking lots	(E)	N	(E)	(E)	Section 8; within BIZ, only within 20 feet of toe of bluff; not on face of bluff; and must not affect stability of bluff
Roads and driveways	(E)	N	(E)	(E)	Section 8
Natural-surfaced trails, access paths, and viewing areas	E	N	E	E	Section 8
Hard-surfaced trails and viewing platforms	E	N	E	(E)	Section 8; within BIZ, only on slopes averaging less than 30%

Ordinance Language						*Commentary*
Water access ramps	E	N	E	(E)	Section 8	
Public signs and kiosks for interpretive or directional purposes	E	N	E	(E)	Section 8	

12.34 River-dependent uses.

Use or Activity	Set backs	Height Limits	SIZ	BIZ	Applicable standards with which the use or activity must comply
Shoreline facilities	E	N[1]	E	(E)	Section 5.25. Exemptions do not apply to buildings, structures, and parking areas that are not part of a shoreline facility
Private roads and conveyance structures serving river-dependent uses	E	N[1]	E	(E)	Section 5.25

12.35 Private residential and commercial water access and use facilities.

Use or Activity	Set backs	Height Limits	SIZ	BIZ	Applicable standards with which the use or activity must comply
Private roads serving 3 or more lots	(E)	N	N	(E)	Section 7; in BIZ, only on slopes averaging less than 30%. Exemption does not apply to private roads serving fewer 3 lots or to private driveways and parking areas
Access paths	E	N	E	E	Section 7
Water access ramps	E	N	E	N	Section 7
Stairways, lifts, and landings	E	N	E	E	Section 7
Water-oriented accessory structures	E	N	E	N	Section 7
Patios and decks	E	N	N	N	Section 7.5

[1] River-dependent commercial, industrial, and utility structures are exempt from height limits only if greater height is required for operational reasons.

Ordinance Language						*Commentary*
Directional signs for watercraft (private)	E	N	E	N	Section 7.6; exemption does not apply to off-premise advertising signs	
Temporary storage of docks, boats, and other equipment during the winter months	E	N	E	N		
Erosion control structures, such as rock riprap and retaining walls	E	N	E	(E)	Sections 10.3, 10.5 and 10.6	
Flood control structures	E	N	E	(E)	Section 10	

Chapter 06: Mississippi River Corridor Critical Area Plan (MRCCA)

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Introduction

Designated by Governor's Executive Order in the 1970s, the Mississippi River Corridor Critical Area (MRCCA) is a land corridor along the Mississippi River in the Twin Cities Metropolitan Area governed by special land planning requirements and land development regulations. These regulations, which are implemented through local MRCCA plans and ordinances, protect and preserve the natural, scenic, recreational, and transportation resources of this section of the Mississippi River. The MRCCA comprises 72 miles of river and 54,000 acres of surrounding land in 30 local jurisdictions.

Ramsey adopted its first Critical Area Plan in 1980. Ramsey adopted its first Critical Area Ordinance in 1985, and has processed several amendments since that date.

Ramsey has ensured that plan preparation has included extensive public engagement. In 2013, Ramsey hosted a series of public workshops on the topic, and maintains a contact database. With the 2040 Comprehensive Plan update that included the updating of the MRCCA plan, the City has conducted the most extensive public engagement process to date for any of its Comprehensive Plan updates. Community engagement included both online and in person activities resulting in feedback from a wide variety of stakeholders, many of which had likely not previously participated in community planning efforts.

In 1988, the U.S. Congress established the Mississippi River and Recreation Area (MNRRA), a unit of the National Park System. The MNRRA shares the same boundary as the MRCCA, and the park's Comprehensive Management Plan (CMP), signed by the Governor and Secretary of the Interior, incorporates by reference the MRCCA program for land use management. Rather than institute a separate layer of federal regulations, the MNRRA largely relies on the MRCCA to manage land use within the park. This reliance establishes a unique partnership and framework for land use management amongst the local, state, and federal governments to protect the intrinsic resources of the Mississippi River Corridor.

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Comprehensive Plan Strategic Imperatives

- A Balance of Rural Character and Urban Growth
- An Active Community (Parks, Recreation, and Open Space)
- A Connected Community (Transportation)
- A Positive Learning Environment

Initiatives for the Critical Area

- Protect and Restore Significant Ecological Resources
- Improve Water Quality
- Maintain and Improve Recreation Opportunities along and adjacent to the Mississippi River
- Improve Access to the Mississippi River
- Communicate the Benefits of Protection of Ecological Resources

Progress on MRCCA goals

The City of Ramsey has accomplished many goals described in previously approved plans including the Critical Area Plan.

1. Pearson Place Residential Development – a 12 unit large lot subdivision which is serviced by an extension of Bowers Drive was recently approved by the City. The City maintained large lot standards to improve pretreatment of runoff prior to flowing down to the Mississippi River.

2. Connexus Solar Garden – Connexus Energy recently developed a solar garden near the intersection of Riverdale Dr NW and Llama St NW. The solar garden had native pollinator plants established as ground cover providing additional water treatment benefits as well as increased habitat for area wildlife.

3. Riverwalk Village – a 14 unit single family residential development on the southeastern edge of the City will result in the removal of a former landfill and will have stormwater ponds constructed for additional pretreatment of runoff. The project received Tax Base Revitalization Account (TBRA) funds from the Metropolitan Council to assist with the clean up costs.

Mississippi River Corridor Critical Area Districts

The City is not currently aware of any conflicts with future land use designations and the established purpose of the MRCCA districts.

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River Neighborhood (CA-RN)

The river neighborhood district is characterized by primarily residential neighborhoods that are riparian or readily visible from the river or that abut riparian parkland. The district includes parks and open space, limited commercial development, marinas, and related land uses.

The river neighborhood district must be managed to maintain the character of the river corridor within the context of existing residential and related neighborhood development, and to protect and enhance habitat, parks and open space, public river corridor views, and scenic, natural, and historic areas. Minimizing erosion and the flow of untreated storm water into the river and enhancing habitat and shoreline habitat vegetation are priorities in the district.

Rural Open Space (CA-ROS)

The rural and open space district is characterized by rural and low-density development patterns and land uses, and includes land that is riparian or visible from the river, as well as large, undeveloped tracts of high ecological and scenic value, floodplain, and undeveloped islands. Many primary conservation areas exist in the district.

The rural open space district must be managed to sustain and restore the rural and natural character of the corridor and to protect and enhance habitat, parks and open space, public river corridor views, and scenic, natural, and historic areas.

Separated From River (CA-SR)

The separated from river district is characterized by its physical and visual distance from the Mississippi River. The district includes land separated from the river by distance, topography, development, or a transportation corridor. The land in this district is not readily visible from the Mississippi River.

The CA-SR district provides flexibility in managing development without negatively affecting the key resources and features of the river corridor. Minimizing negative impacts to primary conservation areas and minimizing erosion and flow of untreated storm water into the Mississippi River are priorities in the district.

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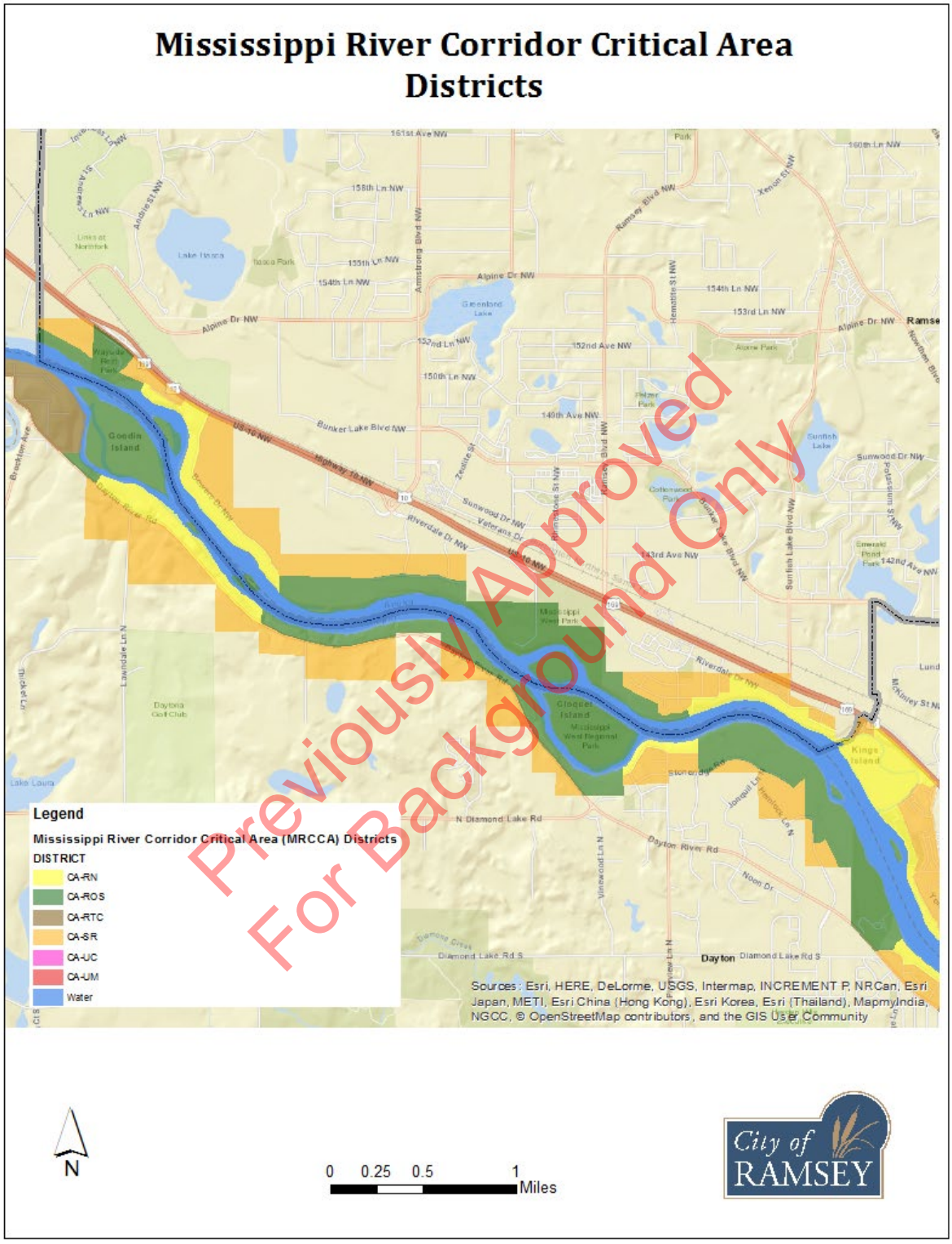
Figure 33: Mississippi River Corridor Critical Area Districts



Primary Conservation Areas

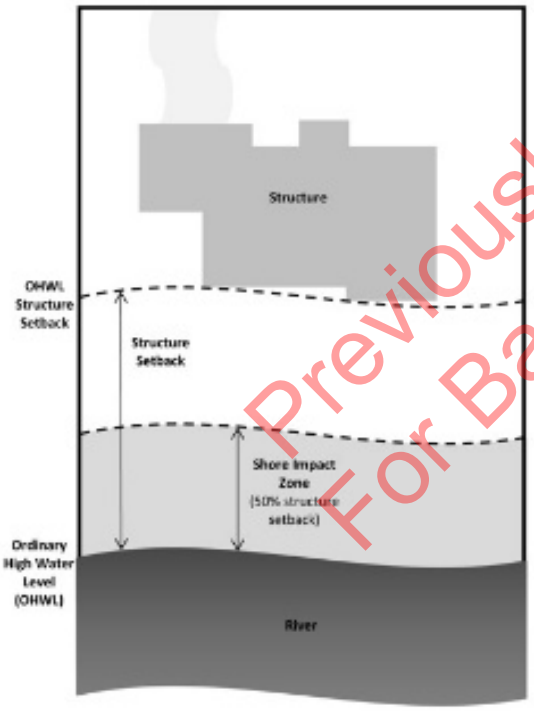
"Primary conservation areas" means key resources and features, including shore impact zones, bluff impact zones, floodplains, wetlands, gorges, areas of confluence with tributaries, natural drainage routes, unstable soils and bedrock, native plant communities, cultural and historic properties, significant existing vegetative stands, tree canopies, and other resources identified in local government plans.

General Overview and Description

The City recognizes bluffs, wetlands, floodplains, natural drainage routes, bluff impact zones, cultural and historic properties, unstable soils and bedrock, as well as shore impact zones and DNR identified native plant communities as primary conservation areas (PCAs) within the MRCCA boundary in the City. These areas are shown on Figures 34, 35, 36, 37, 38, and 39. The City will strive to protect these areas from public and private development and land use activities.

Shore Impact Zones

"Shore impact zone" means land located between the ordinary high water level of public waters and a line parallel to it at a setback of 50 percent of the required structure setback or, for areas in agricultural use, 50 feet landward of the ordinary high water level.



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Floodplains and Wetlands

"Floodplain" means the areas adjoining a watercourse which has been or hereafter may be covered by the regional flood.

Confluence with Key Tributaries

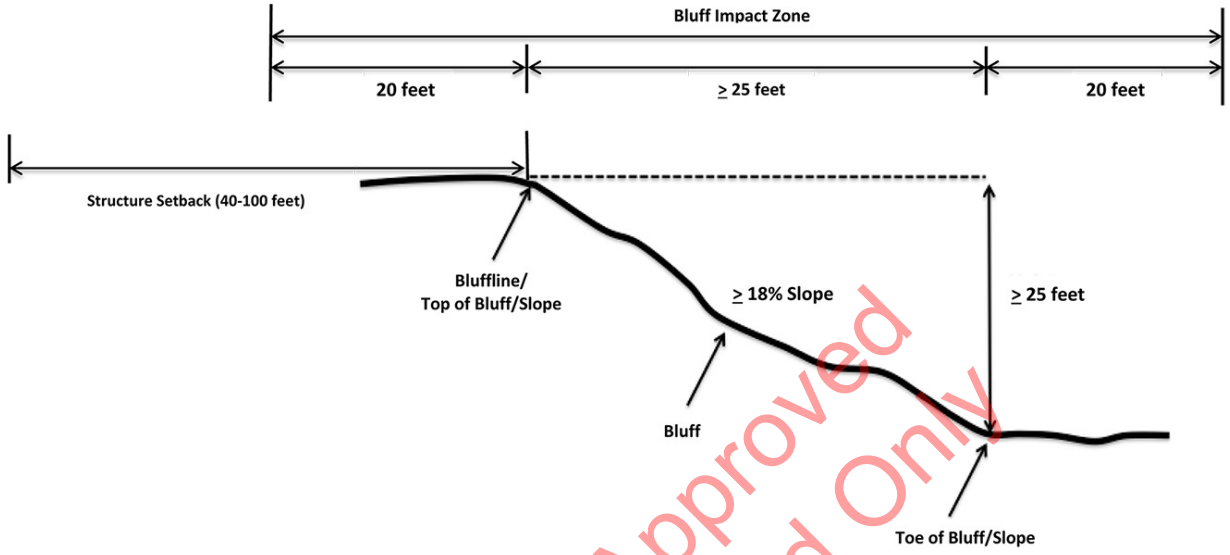
There are no confluences with key tributaries within Ramsey.

Natural Drainage Areas

The Critical Area Plan includes mapping of natural drainage areas that impact the Mississippi River.

Bluff Impact Zone

"Bluff impact zone" means the bluff and land within 20 feet of the bluff.



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Native Plant Communities and Significant Existing Vegetative Stands

"Native plant community" means a plant community that has been identified as part of the Minnesota biological survey or biological survey issued or adopted by a local, state, or federal agency. Significant existing vegetation stands refers to vegetation considered 'significant'. The plant communities are significant based on their state of being largely intact and connected and contain a sufficient representation of the original native plant community. This vegetation provides high ecological value in addition to the water quality and scenic values of "natural vegetation".

Cultural & Historic Properties

Historic property" means an archaeological site, standing structure, site, district, or other property that is:

- Listed in the National Register of Historic Places or the State Register of Historic Places or locally designated as a historic site under Minnesota Statutes, chapter 471;
- Determined to meet the criteria for eligibility to the National Register of Historic Places or the State Register of Historic Places; or
- An unplatted cemetery that falls under the provisions of Minnesota Statutes, chapter 307, in consultation with the Office of the State Archeologist.

One area of cultural and historic significance is located in the corridor. It does not meet the definition above. The location of the first settlement in Ramsey is located within the corridor, originally known as Itasca Village. There are no remaining structures or assets from this original settlement.

Gorges

There are no gorges located in Ramsey.

Unstable Soils and Bedrock

There are significant areas of shoreline erosion located along Ramsey's Mississippi River Shoreline. This erosion is documented through a 2016 Anoka Conservation District Survey. The results of said survey are incorporated into this document by reference. Ramsey will be utilizing this information for education, outreach, and funding purposes to restore priority areas from further erosion.

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Figure 34: Shore Impact Zone Map

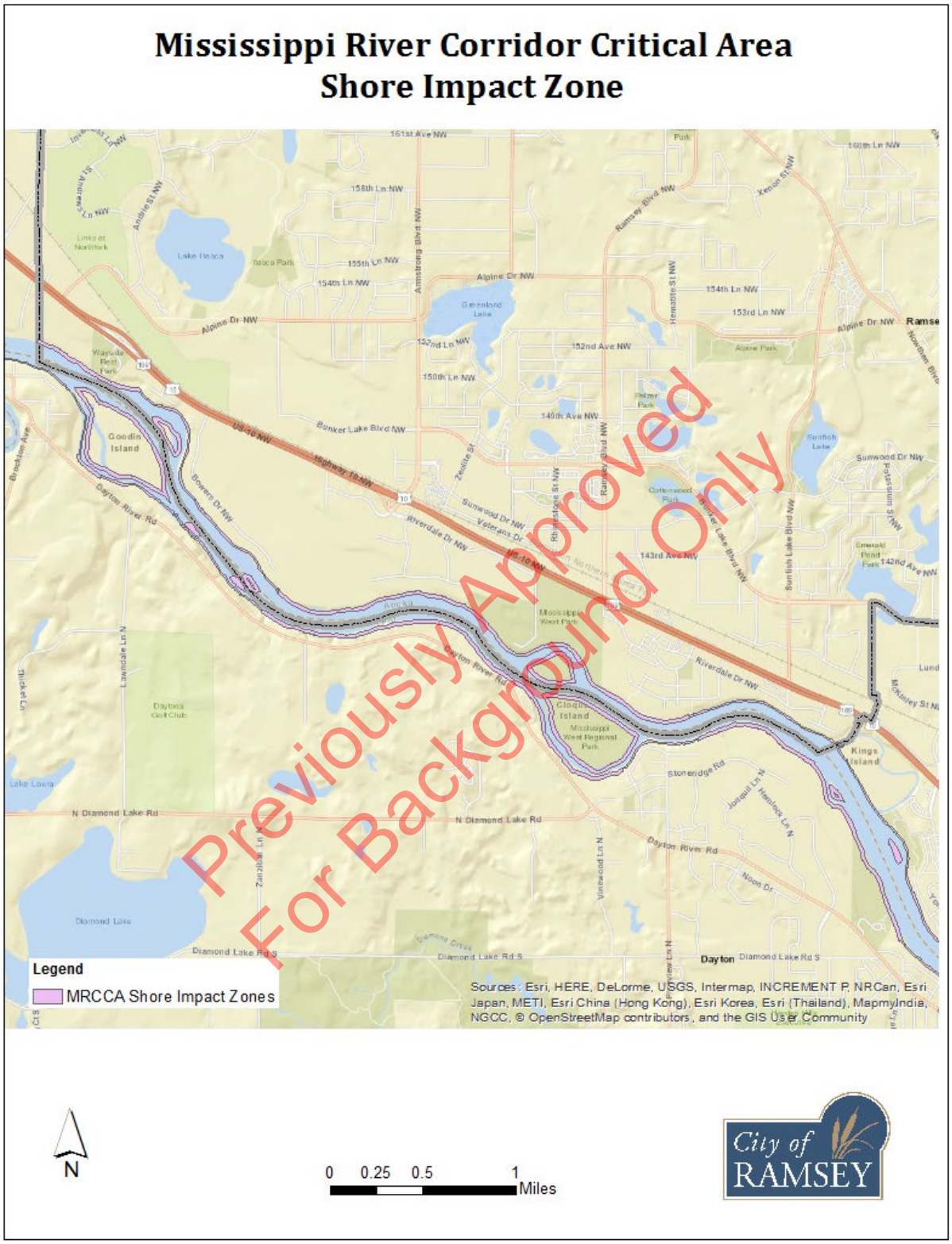

Figure 35: Floodplains and Wetland

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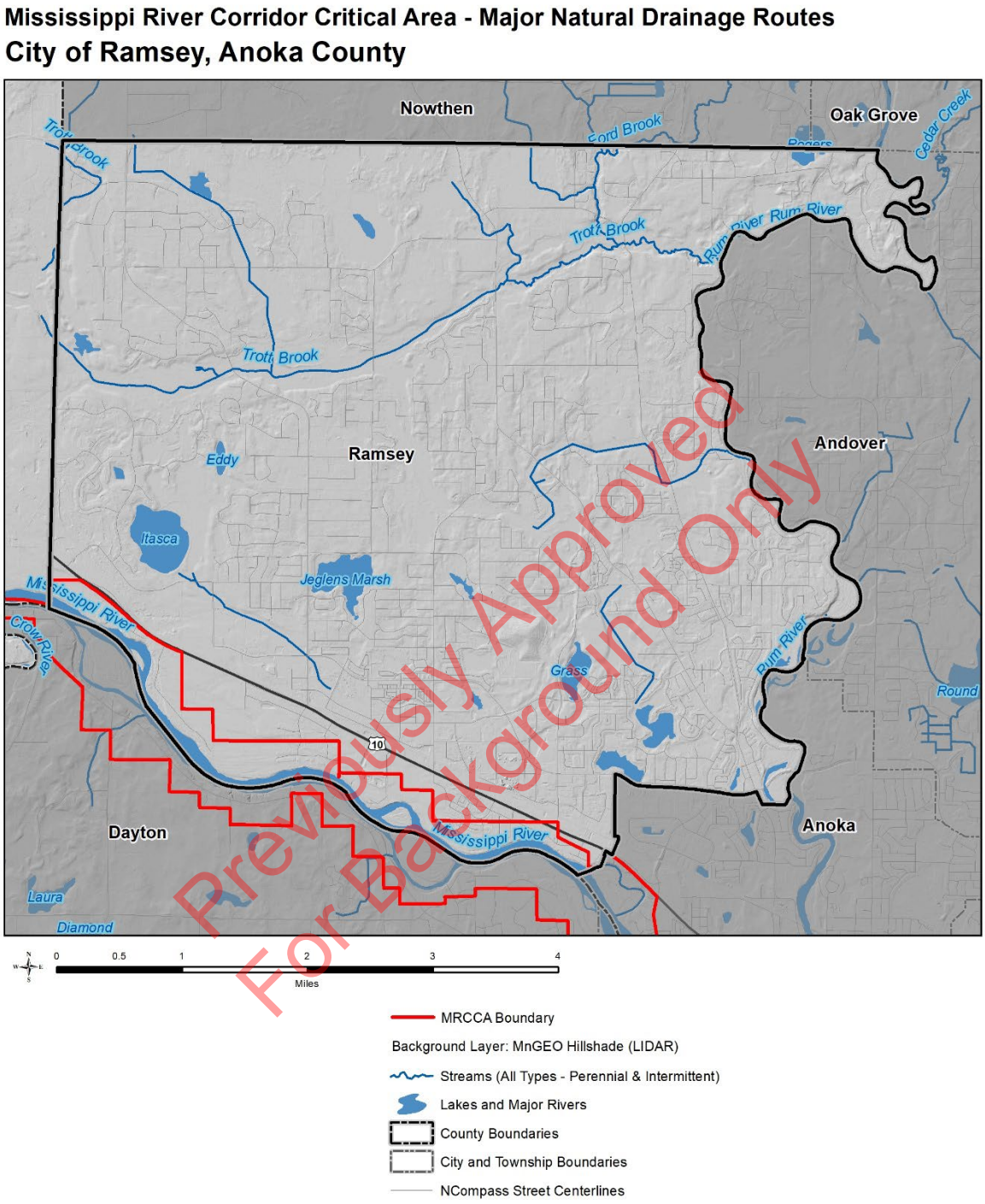
Figure 36: Natural Drainage Areas



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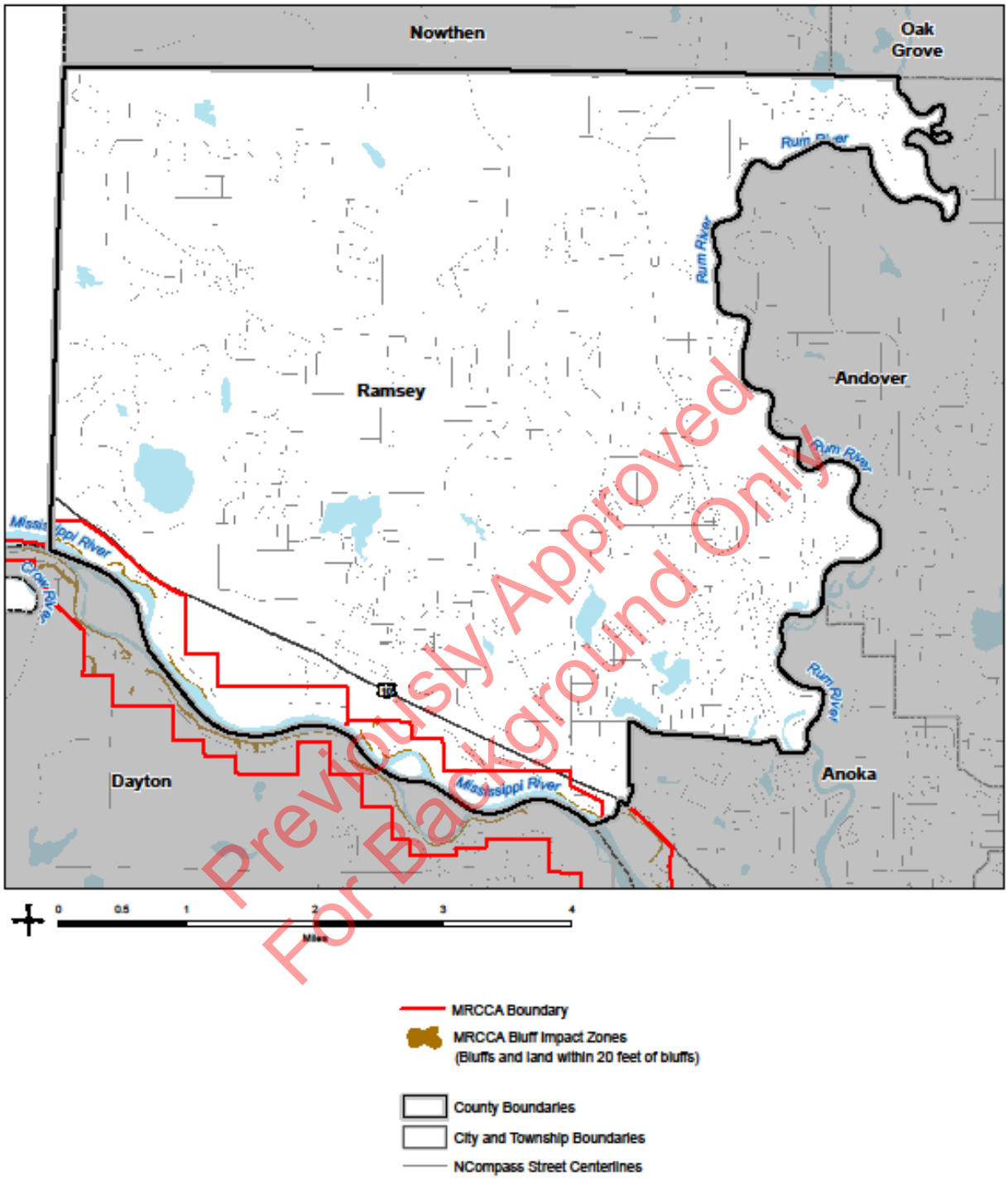
The Mississippi River serves as the only natural drainage route within the MRCCA within the City's municipal boundary.

Figure 37: Bluffs and Bluff Impact Zones



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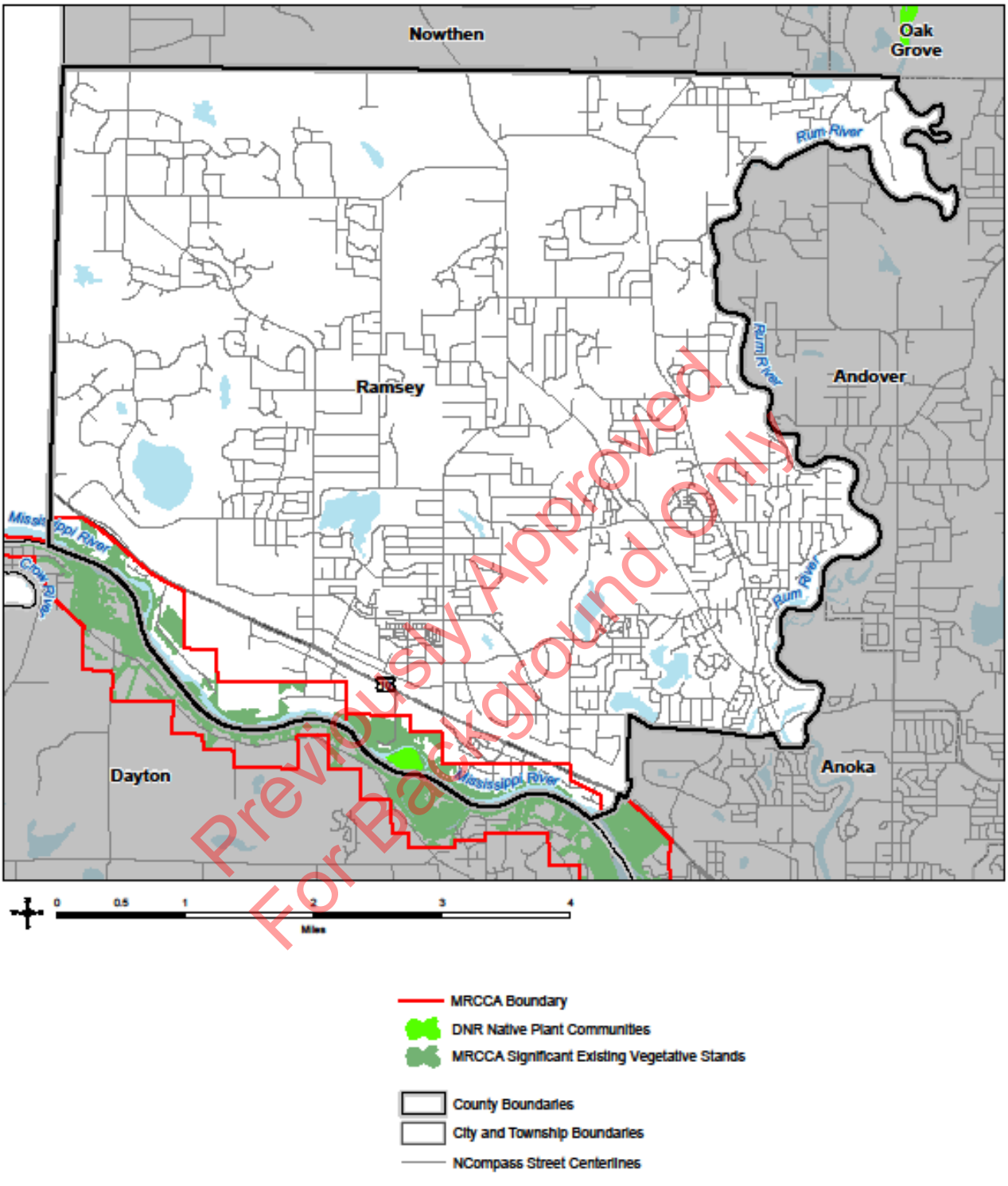
Bluffs are located on both the City of Ramsey as well as City of Dayton sides of the river. These bluffs are visible from the adjacent communities and provide valuable scenic views due to the bluffs themselves as well as the vegetation which exists along the bluffs. These views are of scenic value to those on land as well as river users.

Figure 38: Native Plant Communities & Significant Existing Vegetative Stands



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Public River Corridor Views

General Overview

The City of Ramsey is fortunate to have the Mississippi West Regional Park from which residents and visitors can view the Mississippi River. The location of this park is shown on Map 39. A key component of the Critical Area Plan is to when possible to improve access to public river corridor views and protect the views of bluffs from the river.

Views Toward River from Public Places (PRCV)

Two views were identified by Staff as being key public river corridor views (PRCVs) which are showing below as well as the location of the PRCV mapped with the direction of the view included.

PRCV View 1

PRCV View 2

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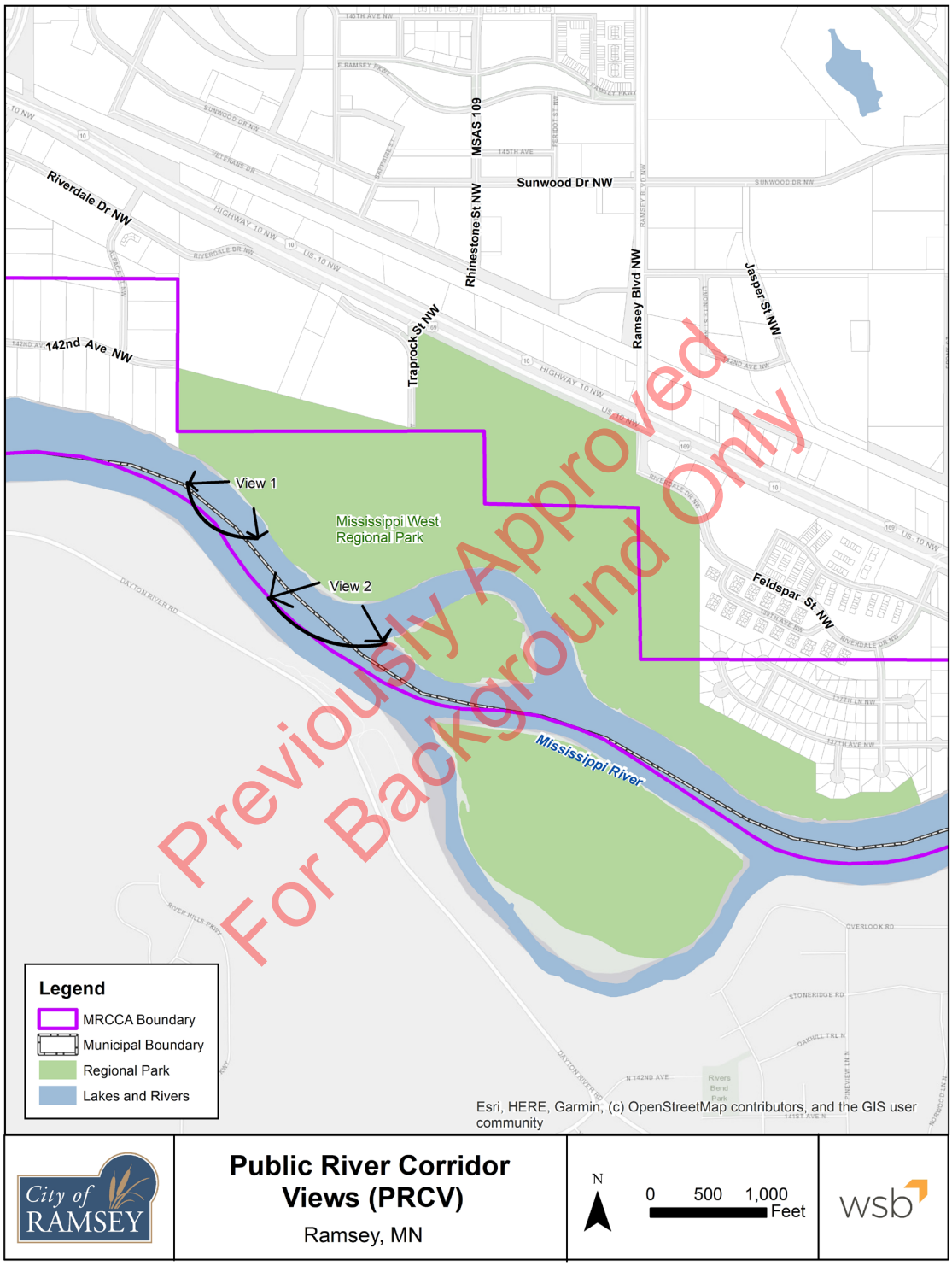
View 1 and 2 are deemed important PRCV's due to their direct pedestrian (view 1) and vehicular (view 2) access to the waterfront as well as existing dense vegetation at both sites. Loss of vegetation at either site may result in erosion that could reduce water quality in the area and thus degrade the overall aesthetic of the area.

Figure 39: Public River Corridor View Location



Priorities for Restoration

Ramsey's priority for restoration within the Corridor is protecting the Corridor from significant erosion as identified by the 2017 Anoka Conservation District Mississippi River Shoreline Inventory for Ramsey.

The City will work to make available the location of natural vegetation restoration priorities and the relevant ordinance requirements that apply to their property for project planning and permitting.

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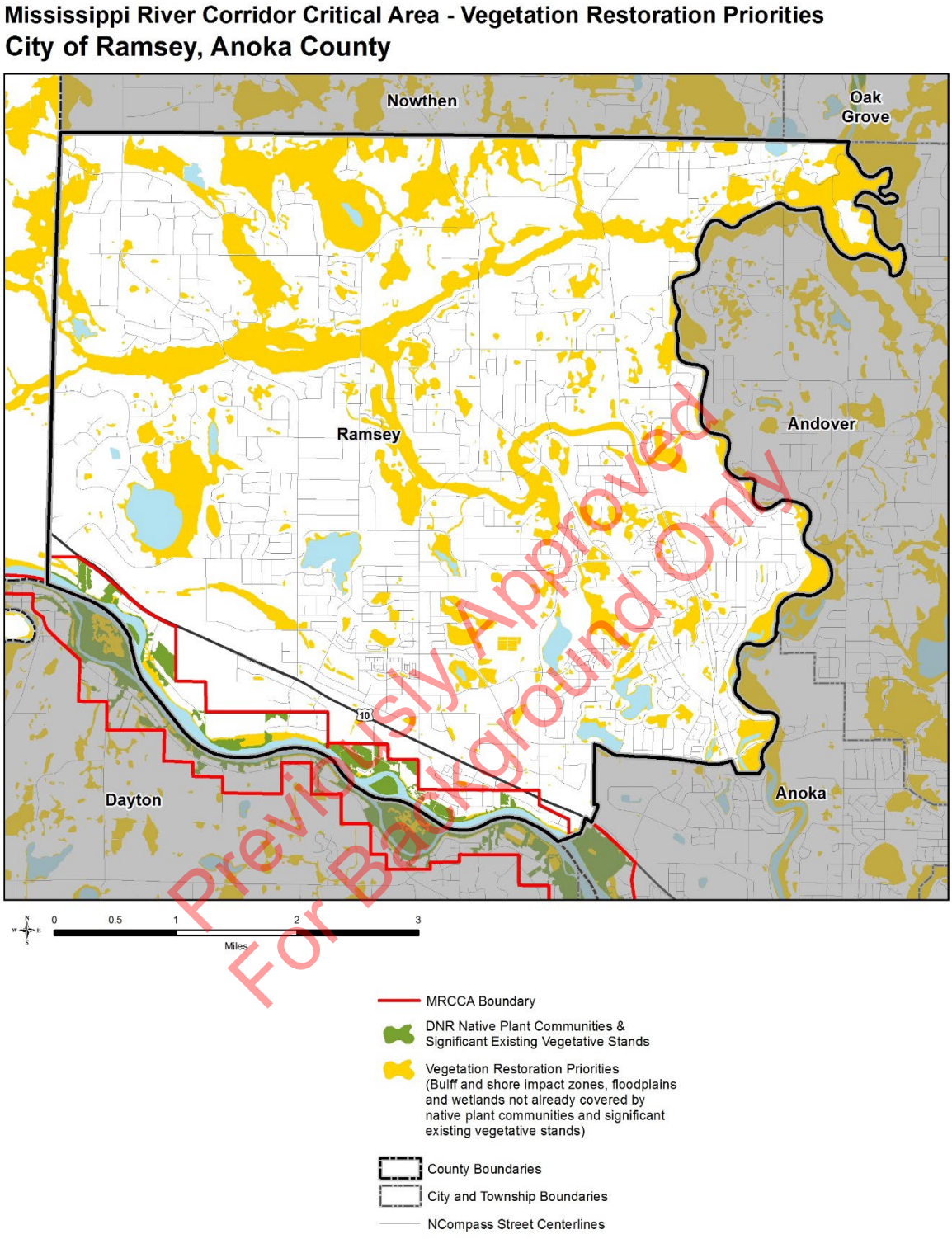
Figure 40: Vegetation Restoration Priorities



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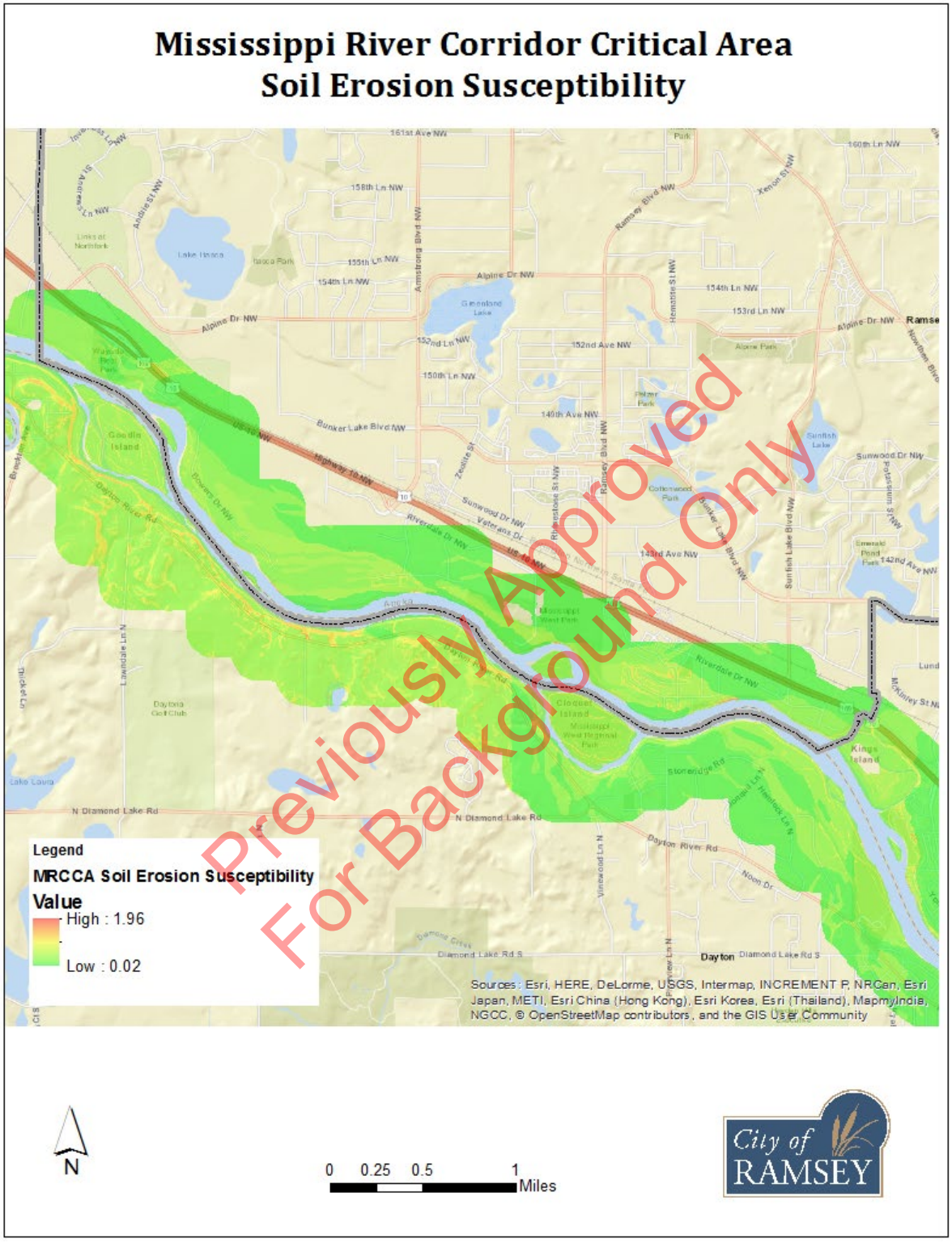
Vegetation restoration priorities are shore and bluff impact zones, floodplains and wetland that do not have native or natural vegetation cover and are susceptible to erosion or degradation because they are not stabilized with high quality vegetation. Restoration priorities are composed of both vegetation establishment as well as erosion and bank stabilization.

Figure 41: Soil Erosion Susceptibility



Those areas with higher erosion susceptibility are of increased importance for vegetation restoration and bank and slope stabilization as the likelihood of damage is higher due to the increase susceptibility of soil erosion in these areas.

Surface Water Uses

Surface water Uses can have negative impacts on riverbank erosion. The City is aware that recreational boat uses have known impacts on the Coon Rapids Dam Pool. The City does not currently regulate any surface water use under Chapter 86B (MR 6110.3000 – 6110.3800).

Open Space & Recreational Facilities

Existing Recreation Facilities

The Mississippi River Trail, Mississippi West Regional Park, and Riverdale Park are currently located within the Corridor.

Future Recreation Facilities

The future Mississippi West Regional Park is located within the Corridor. In addition, the future alignment of Central Anoka County Regional Trail connects to the Corridor. A future component of the Central Anoka County Regional Trail is a grade-separated pedestrian crossing over the BNSF/Northstar Commuter Rail Corridor and U.S. Highway 10, known as the Mississippi Skyway.

Water-Oriented Land Uses

Water oriented land uses are land uses on land riparian to the river that need to be there because they are water-oriented, such as a marina or restaurant with views of the river. As such, a boat launch classifies as a water-oriented land use.

Water-Oriented Use

Currently there is a boat launch at the site of the planned Mississippi River West Regional Park. This is an important community asset for the purposes of public river access. The Mississippi West Regional Park will be a primary access to encourage interaction with the Mississippi River. There is also a future local park planned west of Mississippi West Regional Park. The location of this water-oriented use is identified as "view 2" on the Public River Corridor View figure.

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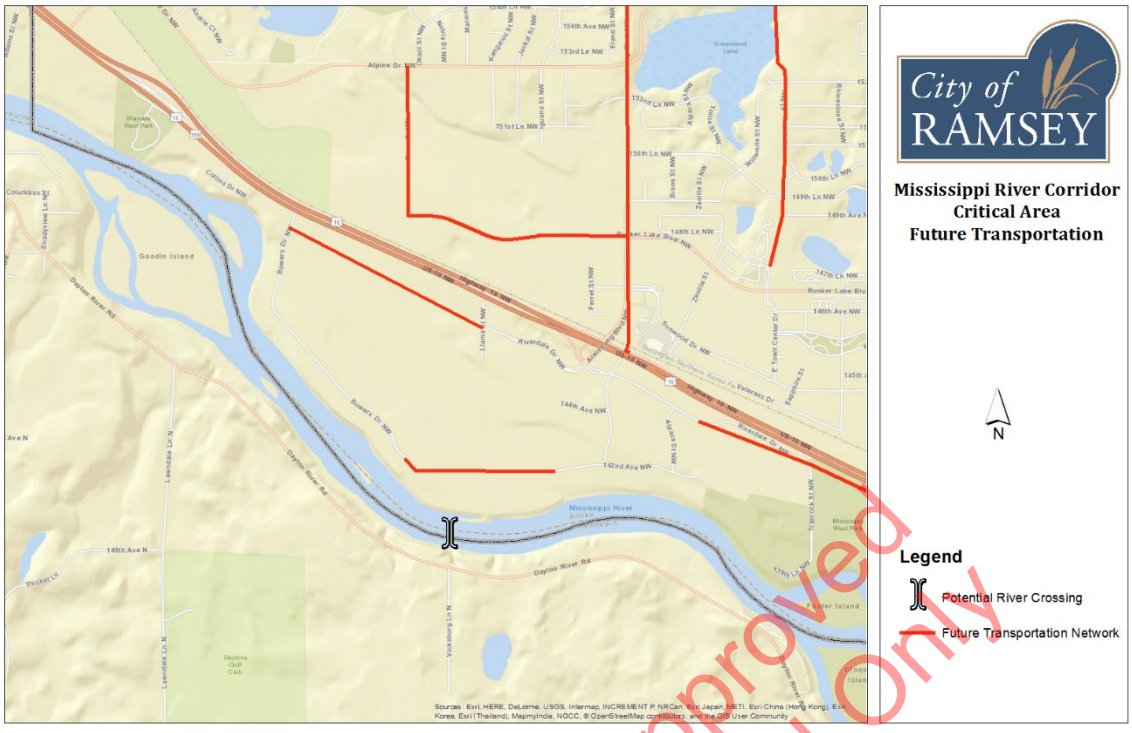
Transportation & Public Utilities

An existing Connexus Energy Electric Transmission Line current crosses the Mississippi River connecting Ramsey and Dayton. Ramsey continues to plan for a future River Crossing between Ramsey and Dayton which is shown in Figure 23 in the Transportation chapter.

Figure 42: Mississippi River Bridge/Crossing



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There are currently no electric power generating facilities installed within the MRCCA boundary. There is however a solar garden owned and operated by Connexus Energy just outside of the boundary. The City and will work with Connexus Energy to minimize the visual impact future transmission lines to the system would have on PCAs and PRCVs in the area. Solar power generating facilities are allowed as an accessory use is all city zoning districts. Ground mounted solar energy systems are required to comply with all building setbacks in the applicable zoning district. The height of ground mounted solar energy systems at maximum designed tilt shall not exceed the distance from the nearest property boundary or the maximum allowable building height for the applicable zoning district, whichever is more restrictive. Building mounted solar energy systems shall comply with the maximum allowable building height for the applicable zoning district. The limitations on height to be in conformance with height of other structures in the zoning district will limit the amount of impact a solar energy system could have on area PRCV's.

MRCCA Policies

Districts/Land Use

Policy 1: The City will implement the policies of the Critical Area by adopting the new MRCCA districts within our Zoning Code and amend the City's Zoning Map accordingly.

Policy 2: The City will protect native and existing vegetation during the development process and require restoration if any is removed by development. Priorities for restoration shall include stabilization of erodible soils, riparian buffers and bluffs or steep slopes visible from the river.

Policy 3: Identify and encourage connection of CA-SR district land to existing and planned parks and trails for Local Governing Units (LGUs) with developable land in CA-SR districts.

Policy 4: Encourage that land dedication requirements be used to acquire land suitable for public river access.

Policy 5: Guide land use and development consistent with management purpose of each district.

Policy 6: Amending existing or adopting new MRCCA ordinance overlay district compliant with the goals of the MRCCA Plan and Minnesota Rules, part 6106.0070, Subp. 5 – Content of Ordinances

Primary Conservation Areas

Policy 1: The City will encourage conservation subdivision design to protect Primary Conservation Areas.

Policy 2: Conservation Subdivision Design will be utilized to allow the clustering of lots in exchange for permanent protection of Primary Conservation Areas.

Policy 3: The City will continue its proactive approach to subdivision design by encouraging setbacks and adequate lot depth to preserve Primary Conservation Areas.

Policy 4: The City will support mitigation of impacts to PCAs through subdivisions/PUDs, variances, CUPs, and other permits.

Policy 5: The City will where possible and feasible restore previously removed native plant communities and natural vegetation in riparian areas a high priority during development.

Policy 6: The City will seek to establish permanent protection of PCAs through either public acquisition, conservation easement, or deed restrictions.

Policy 7: The City will seek to minimize impacts to PCAs from solar and wind generation facilities, public transportation facilities and public utilities.

Policy 8: The City will protect Primary Conservation Areas as shown and described within this MRCCA plan.

Public River Corridor Views

Policy 1: The City will strive to work with applicable partners, especially Anoka County Parks, to improve access to Public River Corridor Views.

Policy 2: When feasible, the City will protect and minimize impacts to PRCVs from public and private development activities.

Policy 3: The City will protect and minimize impacts to PRCVs from public and private vegetation management activities.

Policy 4: The City will protect PRCVs located within the community and identified by other communities adjacent or across the river.

Policy 5: The City will seek to minimize impacts on PRCVs from solar and wind generation facilities, public transportation facilities and public utilities.

Restoration Priorities

Policy 1: The City will continue to implement pilot demonstration projects and incentives to encourage restoration of priority areas.

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Policy 2: The City will seek opportunities to restore vegetation to protect and enhance PRCVs identified in this plan.

Policy 3: The City will seek opportunities to restore vegetation in restoration priority areas identified in this plan through the CUP, variance, vegetation permit and subdivision/PUD processes.

Policy 4: The City will work to sustain and enhance ecological functions (habitat value) during vegetation restorations.

Policy 5: The City will require that proposed development sites be evaluated for erosion prevention and bank and slope stabilization issues and require restoration as part of the development process.

Surface Water Uses

Policy 1: The City will continue to support Anoka County's operation of a Boat Launch along Traprock Street.

Policy 2: The City recognizes the Mississippi River as a "working river" that is important to the economy of the Twin Cities metropolitan area and the Midwest.

Policy 3: The City does not currently regulate surface water use under Minn. Statute, Chapter 86B and does not intend to assume that responsibility.

Policy 4: Where applicable, the City will seek to balance commercial and recreational surface water uses.

Water Oriented Uses

Policy 1: The City will work to minimize potential conflicts of water-oriented uses with other land uses.

Policy 2: The City acknowledges the existing water oriented uses described in this MRCCA plan and will protect those uses within the MRCCA boundary.

Open Space & Recreation Facilities

Ramsey will continue to support planning and implementation for Mississippi West. Ramsey will continue to own and maintain Riverdale Park. Ramsey will continue to plan for a new municipal park along the Mississippi River between the Alpaca Estates and Bowers neighborhoods.

Transportation & Public Utilities

Ramsey will continue to support future planning for the future Mississippi River Crossing to the City of Dayton in Hennepin County.

Ramsey will continue to support Connexus Energy's electric transmission line across the Mississippi River to the City of Dayton.

Natural Resources Planning

Ramsey undertook two (2) comprehensive inventories in the mid-2000s; a Natural Resources Inventory (NRI) and a Wetland Inventory. Both of these data sets are referenced any time a new development is proposed. These data sets help inform Ramsey if there are significant and/or high value natural resources within a development site that may warrant greater protections. While both provide valuable insight, Ramsey acknowledges that both require periodic updates to ensure that the data is accurate and relevant. There has been no specific timeframe identified for updates

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to either, but for this data to remain useful, they should be revisited no less than every ten (10) to fifteen (15) years. This may be useful as Ramsey continues to consider partnering with other agencies, especially as it relates to shoreline stabilization efforts.

City Code Amendments

In order to properly administer this amended plan, the City will need to make certain amendments to City Code. These amendments include but are not necessarily limited to the following.

- Establish General Land Use Review Procedures.
- Develop administrative procedures for shoreline stabilization.
- Establish a vegetation permitting process that includes permit review procedures to ensure consideration of restoration priorities identified in this plan in permit issuance, as well as standard conditions requiring vegetation restoration for those priority areas.
- Establish process for evaluating priorities for natural vegetation restoration, erosion prevention and bank and slope stabilization, or other restoration priorities identified in this plan in CUP, variances and subdivision/PUD processes.
- Develop visual analysis approach for CUPs for additional height in the RTC and UM districts (if applicable), as well as for proposed PUDs and variances.
- Develop a system for reviewing, tracking, and monitoring open space required as part of the subdivision process.

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Critical Area Implementation Plan

Strategy: Protect and Restore Significant Ecological Resources

- Update Zoning Code to reflect Amended Plan
- Establish a plan to reduce erosion, protect canopy coverage, protect significant vegetative areas, and encourage pollinator-friendly landscapes
- Ensure that information on the location of PRCVs is readily available to property owners to understand how PRCV-relevant ordinance requirements, such as vegetation management and land alteration permits, apply to their property for project planning and permitting.
- Actively communicate with other communities to protect views they have identified in your community that are valuable, and vice versa
- Establish procedures for processing applications with potential impacts to PRCVs including
    - Identifying the information that must be submitted and how it will be evaluated
    - Determining appropriate mitigation procedures/methods for variances and CUPs

Strategy: Improve Water Quality

- Establish a plan to reduce the amount of sediment and phosphorus entering the river.

Strategy: Maintain and Improve Recreation Opportunities along and adjacent to the Mississippi River

- Prioritize areas for acquisition to increase opportunities to access the river
- Coordinate jurisdictional planning efforts

Strategy: Improve Access to the Mississippi River

- Encourage creation, connection, and maintenance of open space, recreational facilities, including public access to the river
- Create and maintain access facilities for public access
- Complete the Central Anoka County Regional Trail Connection
- Update the Capital Improvement Program (CIP) to reflect the amended Plan
- Update Surface Water Use Regulations
- Provide Guidance to Private Property Owners for Private Accesses

Strategy: Communicate the Benefits of Protection of Ecological Resources

- Create Informational Packets that provide the location of PCAs and information for property owners to understand how PCA-relevant ordinance requirements, such as vegetation management and land alternation permits apply to their property for project planning and permitting
- Establish procedures and criteria for processing applications with potential impacts to PCA's including:
    - Identify what information must be submitted for projects within the MRCCA boundary and the way in which it will be evaluated
    - Determine appropriate mitigation procedures/methods for variances and CUPs
    - Establish evaluation criteria for protecting PCAs when a development site contains multiple types of PCAs and the total area of PCAs exceed the required set aside percentages

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    - Develop administrative procedures for integrating DNR and local permitting of riprap, walls and other hard armoring.
- Develop a Communications Plan
- Create a new Critical Area Webpage
- Create a Signage Package for Public Spaces
- Provide information on the location of natural vegetation restoration priorities to property owners to help them understand how relevant ordinance requirements apply to their property for project planning and permitting.

Strategy: Prioritize Areas of Preservation

- Focus efforts on stabilizing erosion at Mississippi West Regional Park
- Work collaboratively with owners of undeveloped land with shoreline to partner of preservation and flexibility in subdivision design

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MRCCA Standards Comparison

The following is a **sampling** of how key neighborhoods are impacted. This is not an exhaustive review.

Neighborhood General Comparison – Bulk Standards

- River Lots
    - Tungsten District (SE Ramsey)
        - No Change – designation remains the same (urban residential style)
    - Alpaca Estates (South Central Ramsey)
        - No Change – designation remains the same (rural residential style)
    - Bowers Drive
        - Changed to River Neighborhood – reflective of actual development pattern
        - Many lawful, nonconforming designations removed and are now simply conforming to code
- Non-River Lots
    - All lots without frontage on the shoreline now generally default to underlying zoning
    - Standards are generally reduced for non-riparian lots

Other Changes of Note

- Vegetative Management **standards** generally remain unchanged compared to Ramsey's current ordinance
- The Vegetation Management Permit is a new requirement
- The administrative provisions of the ordinance remain generally unchanged, but language updated to reflect current processes already used

General Note

Ramsey was fortunate to derive significant benefit from the revised rules as our ordinance already included most of the provisions. The benefit to Ramsey is in the change to the districts that better reflect existing development and future plans/vision. It is acknowledged that in other communities in the corridor, many of these standards are new and not included in existing regulations and can be seen as adding regulations. This is generally not the case for Ramsey.

Commissioner Anderson	nay
Commissioner Peters	aye
Commissioner Gengler	aye
Commissioner VanScoy	aye
Chairperson Bauer	aye

Motion carried.

6.03: Public Hearing: Consider Ordinance #21-02 Amending City Code Section 117-148 Entitled Mississippi River Corridor Critical Area

Public Hearing

Chairperson Bauer called the public hearing to order at 8:06 p.m.

Presentation

Deputy City Administrator Gladhill presented the staff report stating that staff recommends adoption of the ordinance.

Councilmember Musgrove asked if staff has worked with other cities in this area and how those cities are adjusting to the changes.

Deputy City Administrator Gladhill noted that there were two attempts at rule making, noting that the first did not go well and the DNR took a step back and reevaluated. He stated that the second attempt was much more successful with community input. He stated that staff worked extensively with communities on the upper pool of the Coon Rapids Dam (Anoka, Dayton, Brooklyn Park and Coon Rapids). He stated that while there was frustration in the beginning, throughout the process there was improvement. He commented that Ramsey may be one of the first to bring forward the ordinance amendment, but all cities should have submitted their Comprehensive Plan and will be updating their ordinance as well.

Citizen Input

No comments.

Motion by Commissioner VanScoy, seconded by Commissioner Peters, to close the public hearing.

A roll call vote was performed:

Commissioner Peters	aye
Commissioner Gengler	aye
Commissioner Anderson	aye
Commissioner VanScoy	aye
Chairperson Bauer	aye

Motion carried.

Chairperson Bauer closed the public hearing closed at 8:16 p.m.

Commission Business

Motion by Commissioner Gengler, seconded by Commissioner VanScoy, to recommend that City Council adopt Ordinance #21-02 amending City Code Section 117-148 (Mississippi River Corridor Critical Area).

Further discussion

Councilmember Musgrove asked if these changes could result in more project opportunities, such as riverbank stabilization and whether there would be additional funding opportunities for river property owners. Deputy City Administrator Gladhill stated that changing the zoning ordinance may not directly result in that action but having compliant regulations will assist. He advised of work that was done through the EPB that reviewed the condition of the shoreline and could result in additional funding opportunities for residents.

A roll call vote was performed:

Commissioner Gengler	aye
Commissioner Peters	aye
Commissioner Anderson	aye
Commissioner VanScoy	aye
Chairperson Bauer	aye

Motion carried.

6.04: Public Hearing: Consider Recommendations Related to Riverstone South; Case of Capstone Homes/Riverstone Development

1. **Adopt Resolution #21-015 Approving Comprehensive Plan Amendment from Low Density Residential to Medium Density Residential for Detached Townhome Section and Preliminary Plat for Riverstone South**
2. **Adopt Ordinance #21-03 Approving Zoning Amendment from R-1 Residential (MUSA – 80) District to R-1 Residential (MUSA – 65) District, R-1 Residential MUSA – 50) District and R-2 Residential (Detached Townhome) District**

Public Hearing

Chairperson Bauer called the public hearing to order at 8:20 p.m.

Presentation

CC Regular Session **7. 6.**

Meeting Date: 01/26/2021

By: Tim Gladhill, Community Development

Information

Title:

Receive Request from Planning Commission to Reconsider Bowers Drive Connection

Purpose/Background:

The purpose of this case is to receive a request from the Planning Commission to reconsider previous City Council direction to NOT include a second connection on the southern end of Bowers Drive as part of the Riverstone South Subdivision. The Planning Commission Chair will be in attendance to present the request.

As part of Sketch Plan Review (concept plan - precursor to Preliminary Plat), the City Council directed Staff and Developer to NOT include this second connection.

Observations/Alternatives:

Alternatives

1. Take no action - retain previous direction to not include connection
2. Motion to direct Staff and Developer to add connection to Preliminary Plat

Funding Source:

This case is being handled as part of normal Staff duties.

Recommendation:

The Planning Commission approved (on a 3-2 vote) a motion recommending that the City Council reconsider the connection to Bowers Drive, at (sic) some form, for public safety reasons.

Action:

Based on discussion.

Attachments

City Council Minutes dated September 8, 2020

DRAFT Planning Commission Minutes dated January 7, 2021

Site Location Map

Form Review

Inbox	Reviewed By	Date
Kurt Ulrich	Kurt Ulrich	01/21/2021 03:10 PM
Form Started By: Tim Gladhill		Started On: 01/08/2021 09:13 AM
Final Approval Date: 01/21/2021		

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CITY COUNCIL
CITY OF RAMSEY
ANOKA COUNTY
STATE OF MINNESOTA

The Ramsey City Council conducted a regular meeting on Tuesday, September 8, 2020, at the Ramsey Municipal Center, 7550 Sunwood Drive NW, Ramsey, Minnesota.

Members Present: Mayor John LeTourneau
Councilmember Mark Kuzma
Councilmember Jeff Menth
Councilmember Debra Musgrove
Councilmember Chris Riley
Councilmember Dan Specht

Members Absent: None

Also Present: City Administrator Kurtis Ulrich
Police Chief Jeff Katers
Parks and Assistant Public Works Superintendent Mark Riverblood – attended remotely
Public Works Superintendent Grant Riemer
Deputy City Administrator Timothy Gladhill
City Engineer Bruce Westby

1. CALL TO ORDER

Mayor LeTourneau called the regular meeting of the Ramsey City Council to order at 7:00 p.m., followed by the Pledge of Allegiance led by Mayor LeTourneau.

2. PRESENTATION

2.01: Presentation Proclaiming September 17-23, 2020 as Constitution Week

Mayor LeTourneau read the proclamation declaring September 17-23, 2020 as Constitution Week.

3. CITIZEN INPUT

None.

4. APPROVE AGENDA

Motion by Councilmember Menth, seconded by Councilmember Musgrove, to approve the agenda as presented.

Motion carried. Voting Yes: Mayor LeTourneau, Councilmembers Menth, Musgrove, Kuzma, Riley, and Specht. Voting No: None.

5. CONSENT AGENDA

Motion by Councilmember Riley, seconded by Councilmember Kuzma, to approve the following items on the Consent Agenda:

5.01: Approve the following Meeting Minutes:
1) City Council Work Session dated August 25, 2020
2) City Council Regular dated August 25, 2020

5.02: Approve Rental Licenses

5.03: Adopt Resolution #20-193 Approving Cash Disbursements Made and Authorizing Payment of Accounts Payable Invoicing Received During the Period of August 20, 2020 through September 3, 2020

5.04: Adopt Resolution #20-185 Proclaiming September 17-23, 2020 as Constitution Week

5.05: Adopt Resolution #20-191 Declaring Costs to be Assessed and Calling for Public Hearing on Proposed Assessment for Past-Due Charges on Municipal Utility Bills (which may include water, sewer, street lighting, recycling, stormwater charges, and penalties incurred) and Current Services Rendered

5.06: Adopt Resolution #20-192 Approving Snow Storage Agreement on City Owned Land

5.07: Adopt Resolution #20-194 Approving Underwriting Service Agreement for Small Business Relief Grant Program

5.08: Adopt Resolution #20-195 Ordering Assessment Roll and Calling Assessment Hearing for Improvement Project #20-04, Puma Street Improvements

5.09: Adopt Resolution #20-196 Approving Letter of Support for Metropolitan Council Clean Water Fund Request for State Fiscal Year 2022-2023

5.10: Adopt Resolution #20-197 Approving Amended Petition and Waiver Agreement for Municipal Water and Sanitary Sewer Connection to 7600 163rd Lane NW

Motion carried. Voting Yes: Mayor LeTourneau, Councilmembers Riley, Kuzma, Menth, Musgrove, and Specht. Voting No: None.

6. PUBLIC HEARING

None.

7. COUNCIL BUSINESS

7.01: Adopt Resolution #20-171 Accepting Bids and Awarding Contracts for Bid Package #1 and Alternate #1 for the New Public Works Facility

Public Works Superintendent Riemer reviewed the staff report and recommendation to adopt Resolution #20-171 accepting bids and awarding contracts for Bid Package #1 with a base bid amount of $6,138,361 and including Alternate Bid #1 in the amount of $441,938 for a total of $6,580,299.

Councilmember Musgrove asked if it is unusual to have this type of bidding competition and low bidders.

Public Works Superintendent Riemer replied that he believes that COVID has slowed down the commercial side of construction and therefore there is more interest from those contractors.

Motion by Councilmember Menth, seconded by Councilmember Riley, to Adopt Resolution #20-171 Accepting Bids and Awarding Contract for Bid Package #1 for the New Ramsey Public Works Facility, Improvement Project #20-07.

Further discussion: Councilmember Kuzma asked RJM to come forward and discuss why it is a good time to go forward with alternate bid #1. Curtis Sell, RJM, stated that there would be cost efficiencies in completing the alternate bid into the original build, as the cost to complete an expansion in the future adds additional costs. He noted that there would also be a schedule efficiency in completing both of those elements at once. Councilmember Musgrove asked when the Council will see updated sketches for the building. Mr. Sell stated that bid package #1 contains the larger denser portions of the project and the architect is working to complete bid package #2, which contains more of the design details.

Motion carried. Voting Yes: Mayor LeTourneau, Councilmembers Menth, Riley, Kuzma, Musgrove, and Specht. Voting No: None.

7.02: Review Sketch Plan for Riverstone South; Case of Capstone Homes

Assistant City Administrator Gladhill reviewed the staff report and asked the Council to provide feedback to the developer as part of the plan development for the next stage in the process known as Preliminary Plat. Preliminary Plat is the most crucial stage in the subdivision process. It was noted that the City has broad policy discretion as the request requires the approval of a Zoning Amendment and possibly a Comprehensive Plan Amendment due to lot sizes and densities.

Councilmember Specht asked if the Comprehensive Plan identifies a trail connection to the end of Bowers Drive.

Assistant City Administrator Gladhill stated that there has been some discussion on the MRT trail and where it will connect. He noted that the discussion is focused more on Riverdale Drive rather than running that trail through the Bowers Drive properties. He stated that staff will continue to work with new developments in order to secure segments near the river.

Mayor LeTourneau noted that the MRT extends past Bowers Drive to the west and is not proposed to go down Bowers Drive at this point. He noted that there is a full access onto the trail from Bowers Drive. He asked if the Council is required to make any decisions about the secondary road access tonight.

Assistant City Administrator Gladhill stated that tonight they are looking at whether there is general consensus to move forward with the plan development as proposed. He stated that they

would like direction on the Bowers Drive connection but noted that the decision could be changed prior to adoption of the Preliminary Plat.

Councilmember Riley asked if these would be the same lot sizes as Riverstone North.

Assistant City Administrator Gladhill confirmed that these would be the same lot sizes and would be very much a mirror image of the development, with the exception of the removal of one of the product types.

Councilmember Musgrove asked for details on Riverdale Drive and the history of the layout on the sketch.

Assistant City Administrator Gladhill provided background information on the access planning study that was completed in 2014 by the City and MnDOT, noting that study showed Riverdale Drive consuming some of the first few lots. He provided additional details on the proposed layout for Riverdale Drive which was developed by the developer working with the input of the Bowers Drive residents to find an alignment that worked well for everyone involved.

Mayor LeTourneau provided an opportunity for members of the public to provide input.

Jeff Johnson, 14540 Bowers Drive, referenced the Bowers Drive survey and asked at what point the Council would automatically move ahead. He asked if the decision has already been made on Bowers Drive. He stated that the residents have not been given any data from public safety on how much safer the neighborhood would be with the additional access. He stated that when you open up a cul-de-sac that increases opportunity for crime as that creates another way for people to access and exit the neighborhood. He stated that this road has been around for about 80 years and noted that there has not been one time since he has lived at his home where EMS has not been able to access the homes on Bowers Drive. He stated that there is a difference between a need and a desire. He stated that connecting Bowers Drive to Capstone would substantially increase the pedestrian traffic on Bowers Drive, which is a narrow road that is not lit by streetlights. He stated that providing this connection is attempting to solve a problem that does not exist and would instead create more problems that need to be solved, which would destroy the reason people purchased homes on that road. He stated that people that purchased property on Bowers Drive chose to live there and do not need the City to calculate their risk levels. He stated that if the residents on Bowers Drive felt threatened, they would not have purchased their properties. He commented that residents do not leave Bowers Drive, they seek property on Bowers Drive. He did not think it appropriate to include or make assumptions about the people that did not respond to the survey. He commented that the residents of Bowers Drive do not want the connection and did not believe there is anything wrong with keeping those neighborhoods isolated rather than connecting them. He did not think that putting a secondary access onto Bowers Drive would solve any problems and instead would create additional problems.

Mayor LeTourneau thanked Mr. Johnson for his input.

Mr. Johnson stated that at the last planning meeting he asked for information as to what would be required for the Bowers Drive residents to stop this process and he has not received that information.

Mayor LeTourneau stated that staff is still determining that but recognized that the voices of Bowers Drive have a high impact.

Councilmember Musgrove stated that it is clear that Mr. Johnson does not want a road and asked if he would support a narrow trail with breakaway barriers that could be used by emergency vehicles.

Mr. Johnson stated that once that is developed, people will use that as a trail and the pedestrian traffic will come from Capstone onto Bowers Drive. He confirmed that his concern is related to the increased pedestrian traffic and safety concerns with that activity.

Councilmember Musgrove asked what Mr. Johnson would believe to be a workable option.

Mr. Johnson stated that he would like to see the data that proves this would make that neighborhood safer as the data currently shows that the secondary access and increased pedestrian traffic would make the area more unsafe.

Councilmember Musgrove referenced the mention of 50 foot and 100-foot setbacks.

Mr. Johnson noted that the original planning meetings for Capstone referenced a 100-foot setback, but those original 12 homes were setback 50 feet instead.

Police Chief Katers appreciated Mr. Johnson's position. He stated that his comments related to public safety remain the same for any neighborhood noting that he prefers two points of access for all neighborhoods although he recognizes the uniqueness of Bowers Drive. He stated that he cannot provide statistical information of what may happen in the future and can only provide input on what could happen. He stated that there could be multiple situations that could cause the current access to be closed, therefore public safety prefers to have two points of access in order to get people in and out of a neighborhood.

Mr. Johnson stated that everyone that lives on Bowers Drive is aware of the risk they took in purchasing their property and they are not asking for that secondary access. He stated that cul-de-sacs are safer than any other road in terms of crime. He stated that he has not been provided with any information that has proven that two accesses would make the residents safer.

Police Chief Katers stated that his standard response for a development is to have two accesses. He stated that he is familiar with the cul-de-sac studies, noting that those were small areas in Minneapolis and therefore that is an urban area versus a rural environment and that study only took into account burglary and not the other crimes or situations that could exist.

Councilmember Specht thanked Mr. Johnson for his input and recognition of property rights. He stated that he has heard of informal surveys that have been completed with more response.

Josh Fuhreck, 14573 Bowers Drive, thanked Capstone for their efforts on this project. He stated that overall, this is a good project and the developer has given consideration to the unique forestry environment that exists on the property. He stated that overall, he supports the project, but he does not support the Bowers Drive connection. He stated that the public safety concerns mentioned have an extremely remote possibility of occurring. He noted that if the connection is provided to allow the additional pedestrian traffic on the narrow roadway of Bowers Drive, that would create a much more likely and real safety concern. He stated that it would be very unlikely that a tree would fall, and an emergency situation would occur at the same time, noting that has not happened once in 80 years. He stated that the City's survey was extremely slanted, mentioning only the City points and a statement that said if you do not respond we will assume you favor the connection. He presented a survey of 85 homes, noting that 60 residents responded in opposition of the connection to Bowers Drive. He asked the Council to consider the survey he presented rather than the survey completed by the City.

Councilmember Musgrove asked what the area between the homes is right now.

Mr. Fuhreck stated that currently it is a strip of land between two homes and one would assume that the land belongs to one of the two adjacent homes. He confirmed that the area is not mowed or maintained.

James Wadey, 14447 Bowers Drive, stated that he is one of the homes adjacent to the proposed access connection. He echoed the comments of the previous two speakers. He stated that when he purchased his home two years ago there was no indication that there would be a road and it was shown as an outlot. He stated that they asked Capstone the plans for the outlot and there was never a mention of a road connection. He stated that they signed the survey in opposition of the road. He agreed that the pedestrian traffic is already heavy with Bowers Drive residents and opening the secondary access would bring additional security concerns. He stated that there are a number of studies that show opening up a cul-de-sac has a detrimental impact on burglary. He commented that the City was never transparent through the channels he had available when he purchased his home about a potential road connection.

Carol Larson, 14480 Bowers Drive, stated that she has lived on Bowers Drive for 56 years and has seen a lot of changes. She stated that she appreciates that they have been isolated from a lot of the changes in Ramsey. She noted that she anticipated that there would be development on the Capstone property and Riverstone South and therefore does not object to that development. She stated that she does object to placing a roadway between two homes that were not alerted to that possibility. She stated that those homes would lose all privacy and they would have chosen other lots would they have known that. She stated that she has submitted several things to the Council in written form. She explained that if you go down Bowers Drive in the winter the driveways are plowed but the snow is yellow and brown because of the dogs in the area and did not want to see additional dogs being walked on the road. She commented that vehicles travel on Bowers Drive and adding additional pedestrian traffic would seem to be the opposite of increasing public safety. She believed that the one access should be provided from Highway 10.

Councilmember Specht asked if the City gets involved when there is sale of property next to a City owned property.

Assistant City Administrator Gladhill stated that the City cannot control the information shared by a realtor when selling a property. He explained that the City obtained that outlot in order to reserve that corridor for the future, therefore the area was not signed as a future road. He stated that perhaps the people that purchased those homes were not alerted to the possibility of a roadway connection in that location.

Mayor LeTourneau stated that he feels there are two separate issues in this case, the development plan, and the road connection to Bowers Drive.

Assistant City Administrator Gladhill stated that this is the opportunity for the Council to provide direction to the developer on the plan development for preliminary plat. He stated that perhaps the decision is not ready to be made on the road connection. He noted that this is the first time the petition has been presented to the City and the Council could direct staff to work towards a compromise or could take that option off the table all together. He confirmed that there is time to explore the Bowers Drive connection further at a future point.

Councilmember Kuzma stated that it sounds like the City owns the outlot currently and asked if there would be a possibility to provide the connection in the future.

Assistant City Administrator Gladhill confirmed that the decision could be made in the future if desired, noting that the intent has always been to reserve the corridor.

Councilmember Kuzma stated that he would recommend that the lot be reserved, and he would not support a road connection at this time because of the large opposition to the issue. He noted that the City would always have the ability to pursue that in the future.

Mayor LeTourneau confirmed the standpoint of Councilmember Kuzma to table the road connection at this time but still reserve the outlot and an outlot from Capstone in order to preserve that ability in the future.

Councilmember Specht stated that he likes the overall plan and additional tree preservation. He also agreed that the connection to Bowers Drive should be removed at this point.

Councilmember Musgrove asked if the cul-de-sacs proposed in the development would meet the standards of public safety.

Assistant City Administrator Gladhill stated that every development project goes through a development committee that includes representation from all City departments and noted that as designed staff is not concerned with the cul-de-sac sizes proposed.

Councilmember Musgrove asked if there has been discussion to having a third access to Riverdale near the 40-foot lots.

Assistant City Administrator Gladhill stated that there is an undetermined development area in the future that is identified with a stub road. He stated that staff feels that the two access points is sufficient and adding additional access points would cause conflicts on the access road.

Councilmember Musgrove asked if there would be any special easements on the property, such as a conservation easement.

Assistant City Administrator Gladhill stated that the protected area would be conveyed to the City and the City would own that property in fee title to prevent confusion and conflicts that have occurred in other neighborhoods that used conservation easements.

Councilmember Musgrove agreed that she would like to see the development move forward and would also support removing the road connection to Bowers Drive.

Councilmember Riley stated that right now they are focusing on the process of listening to residents. He stated that there is also a process of listening to the Planning Commission, public works and public safety who have all said that connection is necessary. He stated that one of the goals of the City is to have a connected community. He stated that he would support this development moving forward without the connection but would want to circle back to that potential connection in the future.

Councilmember Menth stated that if the Bowers Drive connection is eliminated that would leave two access points into the proposed development and asked if that would be considered sufficient.

Assistant City Administrator Gladhill confirmed that would be deemed sufficient for the new development.

Councilmember Menth commented that the statement is often made that a decision is made before they walk into the room and noted that tonight the residents that spoke changed his mind on this issue. He stated that he listened to the four residents tonight and they persuaded him. He stated that he would like to hold onto the right-of-way but keep Bowers Drive the way it is. He stated that the residents of Bowers Drive do not want that connection and the Council is supposed to represent the residents.

Councilmember Kuzma stated that perhaps when the curbs are installed there be a curb cut in that location, which would allow public safety to go through that area.

Assistant City Administrator Gladhill stated that even if there is not a road connection, staff would still like to use that corridor to place a hydrant in that location. He stated that the decision does not need to occur today, but staff will continue those discussions.

Councilmember Specht stated that he likes that a consensus was reached. He noted that if it were his decision completely, he would even favor selling that land to an adjacent landowner that may be interested.

Mayor LeTourneau stated that he was fond of hearing the statement from Councilmember Menth related to the fact that residents often believe that the Council has made up its mind before entering the room. He stated that many times in his years on the Council he has thought that the Council was in agreement on a topic because of the information from staff but that has changed on multiple occasions because of the input from the public. He stated that he also supports the consensus of the Council tonight to support this development moving forward as proposed without the connection to Bowers Drive at this time. He thanked Capstone for continuing to work with residents and listening to their input throughout this process. He commended Capstone for preserving additional trees and bringing forward a solid project to the community.

Mr. Johnson thanked Capstone and the members of the Council and City staff for hearing the residents tonight.

8. MAYOR, COUNCIL AND STAFF INPUT

City Administrator Ulrich announced upcoming meetings and events.

9. ADJOURNMENT

Motion by Councilmember Riley, seconded by Councilmember Musgrove, to adjourn the meeting.

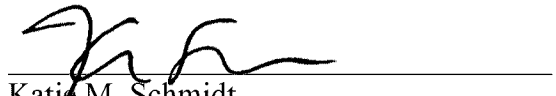
Motion carried.

The regular meeting of the City Council adjourned at 8:32 p.m.

Respectfully submitted,

Kurtis G. Ulrich
City Administrator

ATTEST:



Katie M. Schmidt
Administrative Assistant

Drafted by Amanda Staple
TimeSaver Off Site Secretarial, Inc.

A recording of this meeting is available for viewing online at www.qctv.org <http://www.qctv.org>. Recordings are available for 36 months after the date of the meeting.

Motion carried.

Chairperson Bauer closed the public hearing closed at 8:16 p.m.

Commission Business

Motion by Commissioner Gengler, seconded by Commissioner VanScoy, to recommend that City Council adopt Ordinance #21-02 amending City Code Section 117-148 (Mississippi River Corridor Critical Area).

Further discussion

Councilmember Musgrove asked if these changes could result in more project opportunities, such as riverbank stabilization and whether there would be additional funding opportunities for river property owners. Deputy City Administrator Gladhill stated that changing the zoning ordinance may not directly result in that action but having compliant regulations will assist. He advised of work that was done through the EPB that reviewed the condition of the shoreline and could result in additional funding opportunities for residents.

A roll call vote was performed:

Commissioner Gengler	aye
Commissioner Peters	aye
Commissioner Anderson	aye
Commissioner VanScoy	aye
Chairperson Bauer	aye

Motion carried.

6.04: Public Hearing: Consider Recommendations Related to Riverstone South; Case of Capstone Homes/Riverstone Development

1. **Adopt Resolution #21-015 Approving Comprehensive Plan Amendment from Low Density Residential to Medium Density Residential for Detached Townhome Section and Preliminary Plat for Riverstone South**
2. **Adopt Ordinance #21-03 Approving Zoning Amendment from R-1 Residential (MUSA – 80) District to R-1 Residential (MUSA – 65) District, R-1 Residential MUSA – 50) District and R-2 Residential (Detached Townhome) District**

Public Hearing

Chairperson Bauer called the public hearing to order at 8:20 p.m.

Presentation

Deputy City Administrator Gladhill presented the staff report stating staff recommends approval of the project with the contingencies noted in the staff report.

Commissioner VanScoy stated that in general he likes the plan but is concerned with the safety of the residents on Bowers Drive. He recognized that those residents do not like the concept of an additional access but stated that he believes that is critical for safety and without that he cannot support this request.

Deputy City Administrator commented that originally staff proposed that connection, but it did not move forward. He stated that he would not want to tie that to this project as the developer is not responsible for that.

Chairperson Bauer commented that this development has nothing to do with a second access for Bowers Drive, as that will continue to be an issue regardless of this proposal.

Commissioner Anderson asked if this development would have an HOA and private streets. He commented that the street width seems narrow.

Deputy City Administrator Gladhill commented that he would let the developer speak to whether there would be an HOA. He stated that in terms of road widths there is a menu of options that can be selected with different levels of parking allowed. He stated that a 32-foot width road would allow parking on both sides of the street, whereas parking would only be allowed on one side of the street for the road width proposed. He stated that the main street that goes through this development would be a little wider, whereas the spur roads would be 29 feet in width with no parking on one side of the street.

Commissioner Anderson commented that he has been plowing snow for the City this season and the narrower roads can be tough, therefore he would support wider streets where possible.

Councilmember Musgrove commented that she would also prefer a wider road. She asked if there would be sidewalks, and whether that would be on one side or both sides. She also asked if there would be fencing between the homes and solar garden.

Deputy City Administrator Gladhill replied that sidewalks would be along one side of the road, as required by the City. He stated that the smaller lot homes will be adjacent to the solar garden and noted that he would allow the developer to provide details on the buffering between those homes and solar garden.

Citizen Input

Tom Bakritges, Capstone Homes, acknowledged the landowners noting that the Pearson family has trusted them with developing a project to preserve their legacy. He also expressed appreciation to City staff, the Commissions and City Council for the communication and cooperation throughout the past year of planning. He stated that the overall site is about 78 acres and it was

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important for them to figure out the right transition of density transitioning throughout the site. He noted that the larger lots are proposed on the south side, adjacent the existing homes and preserved trees, transitioning to smaller lots as you move towards the solar garden. He stated that there would be a landscaping buffer along the length of Riverdale Drive. He stated that as you enter into the site onto Pearson Drive, people would pass the preserved area of trees and park area. He commented that there will be seven acres of tree preservation that will be dedicated to the City along with another eight acres of open space and ponding. He stated that they have created a 15-acre area to act as a buffer between this development and adjacent development. He stated that they developed this plan after receiving input from City staff, the City Council and advisory groups, and residents. He stated that the townhomes will have a lawn maintenance HOA while the single-family homes would be under a master that includes the buffer area along Riverdale Drive. He stated that the street widths proposed match the road width in Riverstone North and has worked very well. He stated that they are required to provide sidewalks on one side of the road and have those proposed on the plans. He stated that there is vegetation on the other side of the existing fence around the solar garden site. He noted that with the existing vegetation they would not propose additional screening for that area.

Steve Bona, Capstone Homes, stated that throughout the site they would have homes similar to Riverstone North but noted that they would have more of the larger homes in this development. He commented that there will a great variety of homes throughout the development. He provided details on the townhome product offerings that they would propose for this development in order to match the desires of home buyers. He stated that there is a large variety of front elevations and home plans included in the preliminary plat for the detached townhome product, noting that they have been selling extremely well in their other developments. He commented that the 29-foot width for streets has worked well in Riverstone North, noting that this would be similar with amenities provided in return for the 29-foot-wide streets. He commented that Unicorn is proposed for a street name. He recognized that the City has a street naming policy but asked that a different name be selected for that roadway in order to assist in marketing.

Commissioner Peters stated that he lives in the Brookfield development, in a Capstone home, and asked if the front porches would be wood or concrete.

Mr. Bona replied that they do wood front porches because they continue building in the winter and therefore concrete cannot be poured in the winter months.

Commissioner Peters asked if the wood would be treated or left raw.

Mr. Bona was unsure but noted that he could follow up on that.

Commissioner Peters stated that in his neighborhood some of the homeowners were not aware of how to treat a porch and used paint, which does not hold up well. He suggested that the porches be stained/treated to ensure they look the same.

Mr. Bona commented that he would be happy to pass those comments on and can recommend that to their production team. He stated that it is a significant process to make a change to every home but would be happy to share the comment and get feedback.

Commissioner Anderson referenced the northeast corner, specifically lots 16 through 20, noting that those lots appear to be less than 40 feet in width and asked for details.

Mr. Bakritges stated that those lots are not less than 40 feet, as they are measured at the setback and not the right-of-way.

Chairperson Bauer commented that he lives in Riverstone North and has not had a problem with the 29-foot width.

Mr. Bona commented that the narrower road provides a benefit to calming traffic, as traffic travels at higher speeds on wider roads.

John Dionne, 14806 Bowers Drive, stated that he was previously a member of the Ramsey City Council before transitioning to being a District Court Judge. He commented that virtually no one along Bowers Drive likes the density higher than it needs to be. He recognized the concept that if someone does not want something to be built next to them, they should purchase the land themselves. He commented that with the required amendments, it is an ability for the City to follow the plan that was set forth before them. He asked why the number of houses is being packed in above what is allowed by the Comprehensive Plan and zoning. He used the example of 29-foot roads, which developers like because they are less costly and allow more lots, but they are not good for cities and maintenance. He believed that higher density housing should continue to be concentrated around The COR rather than increasing the density in this area. He stated that often sidewalks are setback into yards with tree planting between the road and sidewalk while other times sidewalks are against the road and asked which option this plan would propose. He stated that this is an opportunity for the Commission to require the developer to follow the guidance of the Comprehensive Plan and not increase the density in this more rural area. He appreciated the architectural considerations included in this plan to ensure that all the homes would not look the same. He commented that developers will come and go but residents often remain in the community for longer terms. He asked the Commission to deny the amendment to the Comprehensive Plan and require the developer to rework its plan to meet the guidance of the Comprehensive Plan.

Dave Nathe, 14453 Llama Street, stated that he owns the adjoining property. He asked what would happen with Lazy Dayz RV, as that business parks on both sides of the street. He asked if there would be a buffer zone or fence buffering his property. He asked if the ponding area on the site would be increased or whether another ponding area would be added.

Deputy City Administrator Gladhill commented that he will work with Lazy Dayz to evaluate the parking as he believed the intent was to only allow parking on one side of the street. He commented that as the connection for this development is made that parking issue will become more important. He stated that the Nathe property is undeveloped and abuts 65-foot lots. He

stated that he could follow up with Mr. Nathe to speak in further detail. He stated that this development will need to treat its own stormwater and its plans will be reviewed by the City and Lower Rum River Water Management Organization and confirmed that new ponds will be created on the site.

Mr. Dionne commented that anyone coming out of Bowers Drive would need to travel one mile down onto Armstrong to get onto Highway 10 to head west to Elk River, which would dramatically change the access to the highway for those residents.

Deputy City Administrator Gladhill commented that is not a Capstone improvement but a highway planning process for the City and encouraged residents to continue to provide input as they continue to walk through the design for Riverdale Drive.

Eric Nathe, 14453 Llama Street, asked for clarification on the lift station on the east. He stated that the plot shows Pearson Drive almost coming into their property and commented that he would love to see a buffer zone between this development and his property. He stated that people from Bowers Drive often come onto their property and believed that additional residents in this area would only increase this problem.

Deputy City Administrator Gladhill commented that the lift station is the sanitary sewer connection for wastewater and provided details on that system. He stated that the connection is shown in order to provide a connection in the case the property to the east is developed. He stated that pavement could be put in or a sign could be placed stating of a possible connection in the future, noting that it is important for residents to know of a possible road connection to prevent issues in the future.

John Jacobson, 14691 Bowers Drive, stated that he is concerned with vehicles entering Highway 10 to go towards Anoka from Bowers Drive, noting a slight turn to the northwest which makes it difficult to see if cars are coming from the Elk River direction. He asked if there would be a way to add an acceleration lane to allow Bowers Drive traffic to reach the traveling speed.

Deputy City Administrator Gladhill provided details on the Riverdale Drive project which would be setup before new motorists are added to the area. He noted that the City would develop plans and specifications which would be reviewed and approved by MnDOT. He agreed that an at grade acceleration lane could be considered, as there is right-of-way available. He stated that the constraining factor will be the distance between Bowers Drive and Armstrong on Highway 10. He stated that staff will discuss that option as the Riverdale Drive process moves forward and hoped that process would begin later this year.

Gretchen Morris, 14820 Bowers Drive, commented that she believes the issue of density was previously discussed. She stated that while she is not a fan of ten feet between townhouses, she recognizes that there is a return on investment that is necessary to make a project feasible. She asked the number of homes that would be needed to make the development work.

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Deputy City Administrator Gladhill commented that there were multiple open houses for the project, which incorporated a lot of input from residents on Bowers Drive. He stated that changes were made to the design to increase the lots sizes for the properties nearest Bowers Drive along with the additional buffer in order to provide a compromise. He stated that this is the model that the Planning Commission and City Council agreed to move forward in terms of neighborhood design and variety of housing products.

Mr. Bona stated that they have been working on this process for one year with six or more meetings with neighbors on the design along with concept design meetings with the Planning Commission and City Council. He stated that the tree preservation land and buffer area was provided as a compromise, removing 21 lots, in order to address the input received from the Bowers Drive residents. He stated that the five-foot side yard setback is the typical setback for detached townhome products. He noted that he would be willing to meet with the Nathe family to discuss buffering concerns. He noted that they do not have buffering proposed in that area because of existing vegetation and the tree preservation and landscaping that would be provided on the overall plan.

Motion by Commissioner VanScoy, seconded by Commissioner Peters, to close the public hearing.

A roll call vote was performed:

Commissioner Gengler	aye
Commissioner Anderson	aye
Commissioner VanScoy	aye
Commissioner Peters	aye
Chairperson Bauer	aye

Motion carried.

Chairperson Bauer closed the public hearing closed at 9:31 p.m.

Commission Business

Commissioner VanScoy stated that he expressed his concern with the disregard for public safety and feeling very strongly about that. He stated that staff made the comment that the issue is not related to this case and asked for clarification.

Deputy City Administrator Gladhill stated that the Commission could take action on this proposal, and if desired could provide a second motion asking the City Council to reconsider a second access for Bowers Drive.

Chairperson Bauer commented that a second access for Bowers Drive is a separate issue from this specific development. He noted that although that connection was part of one of the original sketch plans, it was removed as a result of the input from the Bowers Drive residents and not the position of Capstone.

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Motion by Commissioner Gengler, seconded by Commissioner Peters, to recommend that City Council adopt Ordinance #21-03 and Resolution #21-015 approving actions related to the Riverstone South Preliminary Plat.

Further discussion

Commissioner Anderson asked for a friendly amendment to the motion to request the Council to review the second access to Bowers Drive as he is also opposed to not having a second access for that neighborhood. Chairperson Bauer asked for input from the Council discussion on that topic. Councilmember Musgrove commented that the consensus was divided, but overall, the Council respected the concerns from the Bowers Drive residents related to safety concerns that would arise from adding additional traffic onto the narrow Bowers Drive. Deputy City Administrator Gladhill commented that the was a strong consensus from the Council to not have that connection. He noted that there were even concerns from the Bowers Drive neighborhood with a pedestrian connection because of the narrow road and lack of sidewalk. He stated that while one or two members of the Council may have still favored the connection, the strong majority opposed that. Chairperson Bauer stated that the issue of a second access to Bowers Drive is separate of this request and stated that this action should first be considered and then a separate action could be taken related to a secondary access for Bowers Drive.

A roll call vote was performed:

Commissioner Gengler	aye
Commissioner Peters	aye
Commissioner Anderson	nay
Commissioner VanScoy	aye
Chairperson Bauer	aye

Motion carried.

Motion by Commissioner VanScoy, seconded by Commissioner Anderson, to recommend that City Council reconsider the connection to Bowers Drive, at some form, for public safety reasons.

Further discussion

Commissioner Peters stated that he thought he recalled different ways to manage an emergency pathway for vehicles and asked what happened with that. Deputy City Administrator Gladhill stated that option was discussed internally but there was not enough support to move anything forward that would allow pedestrians or vehicles.

A roll call vote was performed:

Commissioner Anderson	aye
Commissioner VanScoy	aye

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Commissioner Gengler	nay
Commissioner Peters	nay
Chairperson Bauer	aye

Motion carried.

Chairperson Bauer asked that Councilmember Musgrove share the input from the Commission when the issue is considered by the Council.

7. COMMISSION BUSINESS

7.01: Center Street Framework and Policy Plan

Presentation

Parks and Assistant Public Works Superintendent Riverblood presented the Staff Report and highlighted the Center Street Area Framework and Policy Plan and welcomed any comments or feedback the Commission may have on draft plans or its elements.

Commission Business

Commissioner Gengler commented that this is a great plan and appreciated the thought and details that went into the plan. She stated that the pumphouse treatment stands out as being something that will add so much value to the center of the city. She also appreciated the thoughtful amenities and stormwater treatments. She asked where public art might come into this as it could be an additional amenity that could attract more visitors.

Parks and Assistant Public Works Superintendent Riverblood provided an example of public art/display. He stated that he appreciated the notion of more traditional public art and identified concrete placeholders that could be foundational elements for public sculpture that could become wayfinding areas and provide a sense of community. He stated that he is excited about public art in this location as well as throughout the park system. He recognized that there would need to be additional discussion on possible funding for public art elements in the parks.

Commissioner Anderson stated that he also likes the plan. He stated that if he were asked to prioritize, he would suggest beginning with the pumphouse and then Municipal Plaza as that was promised to Affinity. He stated that the remaining items could fall in line after those two items.

Chairperson Bauer commented that some of the projects within The COR are on hold right now with the challenges of the past year and stated that perhaps this would be the right time to begin on these elements which would continue to attract people to this area. He stated that housing in this area continues to fill up as soon as it is built and that increase in population will continue to attract the interest of retailers when the economy opens up more and restrictions are lifted.

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Connection to Bowers Drive (Public Safety)

Council Direction = No Connection

Connection to Bowers Drive (Public Safety)

Council Direction = No Connection

- Alternative #1
  - Full Public Street (28 foot width OK)
- Alternative #2
  - Heavy Duty 'Driveway'
  - Surmountable Curb on Riverstone South Side – Local Road
    - Access itself does not need curb
  - Signage – Public Safety Access
  - 20 Foot Width
  - Landscaping
- Need turning templates

PREVIOUS REVIEW
Sketch Plan Review

CC Regular Session **7. 7.**

Meeting Date: 01/26/2021

By: Tim Gladhill, Community Development

Information

Title:

Consider Preliminary Approvals Related to Riverstone South; Case of Capstone Homes/Riverstone Development

1. Adopt Resolution #21-015 Approving Comprehensive Plan Amendment from Low Density Residential to Medium Density Residential for Detached Townhome Section
2. Adopt Ordinance #21-03 Approving Zoning Amendment from R-1 Residential (MUSA - 80) District to R-1 Residential (MUSA - 65) District, R-1 Residential (MUSA - 50) District and R-2 Residential (Detached Townhome) District

Purpose/Background:

The purpose of this case is to consider initial approvals (Comprehensive Plan Amendment and Zoning Amendment) related to the proposed Riverstone South neighborhood. The City has been working with the Developer, Capstone Homes, over the past year on a long-range planning exercise to come to a consensus on a concept plan for this site. This Preliminary Plat Submittal represents conformance to the planning framework approved by the Planning Commission and City Council as well as the Sketch Plan recently submitted and reviewed by the Planning Commission. The Preliminary Plat will be forwarded for consideration at a future date.

Notification:

The Planning Commission held a Public Hearing on January 7, 2021. At that time, Staff has attempted to notify all Property Owners listed with Anoka County Property Records within 700 feet of the Subject Property and the Bowers Drive Neighborhood via Standard US Mail. The Public Hearing Notice was properly advertised in the Anoka County UnionHerald, the City's Official Newsletter. Notification is not required at this time.

Previously, the same mailing list was used to invite residents to 2 virtual/hybrid Open Houses as well as Sketch Plan Review.

Observations/Alternatives:

This step is the result of a 12 month planning and collaboration process between the City, Developer, Property Owner and adjacent neighborhood. The Preliminary Plat has been prepared consistent with previous City direction. This case has been prepared at a summary level. Materials from the City Council direction at the Sketch Plan Phase are attached for more detailed background.

Comprehensive Plan

A majority of the site is consistent with the 2040 Comprehensive Plan showing this portion of the site as Low Density Residential. The smaller detached townhome portion will need to be amended to Medium Density Residential.

Zoning Code

The project site is generally located in the R-1 Residential (MUSA) District allowing for detached single-family homes on municipal services. However, lot sizes are smaller than allowed within this district and will need to be amended accordingly to R-1 Residential (MUSA - 65) and R-1 Residential (MUSA - 50). The detached townhomes will need to be amended to be included in the R-2 (Detached Townhome) District. Note - a previous case amends City Code to have a more logical distinction of districts and subdistricts based on lot size. Additional detail is

included in the attached review memo.

Environmental Assessment Worksheet (EAW)

The State of Minnesota Environmental Quality Board (EQB) administers mandatory environmental review parameters. For a project of this type, an EAW would not be required if the project is consistent with the City's Comprehensive Plan and less than 250 units. While the project is less than 250 units, it does require a Comprehensive Plan Amendment due to the detached townhomes and therefore meets the criteria for Mandatory EAW. The City Council cannot take action on the Preliminary Plat until the EAW process is finalized. The Riverstone North Neighborhood went through this same process without issue. Given the quality ecological resources (significant native tree canopy and proximity to Mississippi River), the relative closeness of meeting the mandatory criteria based on lot count (242/250), Staff was leaning towards recommending a discretionary EAW anyway. All materials have been prepared for the EAW, it is just a matter of process at this point.

Bowers Drive Connection

Direction of the City Council at Sketch Plan Phase was to not create a second connection within the previous Pearson Place to Bowers Drive as previously discussed. However, the Developer shall still be required to extend watermain with a hydrant at Bowers Drive through the City-Owned Parcel for public safety purposes and improved Fire Department Response.

Architectural Standards

Generally speaking, the City requires a sliding scale of increased architectural elements as density increases/lot sizes decrease. This is a fair trade off for allowing smaller lots. The intent of the regulations is not simply to create a smaller lot for a standard, basic dwelling. There remain ample opportunities for the style of homes in areas throughout the community. Staff will honor any direction provided by the Planning Commission and City Council, but highly recommends a higher degree of architectural control, especially for the detached townhomes. The parameters have been included in the attached resolution.

The City has some additional discretion in this project.

1. Project Requires Comprehensive Plan Amendment and Zoning Amendment (highest level of discretion the City can have in land use decisions)
2. The Project is requesting that the City contribute dollars to the Riverdale Drive Extension

Previous Steps

- Concept Plan Review
- Planning Framework
- Sketch Plan

Future Steps

- Environmental Assessment Worksheet (EAW)
- Final Plat
- Riverdale Drive Extension Approval

Alternatives

1. Approve the project as presented
2. Request amendments to the project
3. Postpone action requesting additional information
4. Deny the project

Funding Source:

All costs associated with reviewing this Application are the responsibility of the Applicant.

This site will require the extension of Riverdale Drive from Llama Street to Highway 10/Bowers Drive. While not a binding agreement, the Council's approved framework for cost share/funding essentially splits the cost of this extension evenly between the City, Property Owner (Pearson Properties of Ramsey) and Developer (Capstone Homes). This cost share agreement is discussed as part of a separate case.

Additionally, the City has not yet secured a funding source for the acquisition of the 7 acre Tree Preservation Area. Staff strongly recommends against using Park Dedication Dollars for this purpose, as it will not leave sufficient funding to develop the 1 acre park also included within the proposed subdivision. The Preliminary Plat is also not valid until this funding source is solved.

Recommendation:

The Planning Commission recommends approval of the Comprehensive Plan Amendment and Zoning Amendment.

For future reference and verification with the City Council, the Planning Commission recommends approval of the Preliminary Plat at a future date following completion of the required EAW with the following contingencies:

- Address any comments contained within the Official EAW Review Record when available
- Plans subject to current Staff Review Comments and final approval by City Engineer
- Approval of a contract for the Riverdale Drive Extension along with Cost Share Agreement consistent with previous City Council Direction
    - Must also include an Assessment/Petition and Waiver Agreement to assess the Property Owner and Developer shares back to benefiting properties
- Securing $350,000 for the acquisition of the Tree Preservation Area
- Architectural Approval for Detached Townhomes - *Shall include all of the following minimum requirements:*
    - *Garage may not extend closer to the front property line than the covered front porch/stoop – garage must be even with or behind*
    - *Garage must be tucked under second level – second level should extend over the entire garage*
    - *Front façade must have at least 3 materials (exception 'farm house' design) – should not be dominated by horizontal siding*
    - *Stoop/front porch must be covered*
    - *Plans must include the minimum number of windows shown on the approved master plans*
- Architectural approval is limited to those models included in the review record. Any significant changes from these models shall require City Council approval
- Noise Study Meeting MnDOT Requirements must be completed and approved by City
- Post-Preliminary Plat Approvals Required
    - Comprehensive Plan Amendment Approval by Metropolitan Council
    - Critical Area Overlay District Amendment by Minnesota DNR
    - City Approval of Zoning Amendment
    - Approval of the Environmental Assessment Worksheet (EAW)

Action:

Motion to introduce Ordinance #21-03 and adopt Resolution #21-015 approving actions related to the Riverstone South Preliminary Plat.

(Note: recommended contingencies are already included in the attached Resolution).

Attachments

Site Location Map

Plan Set (clean)

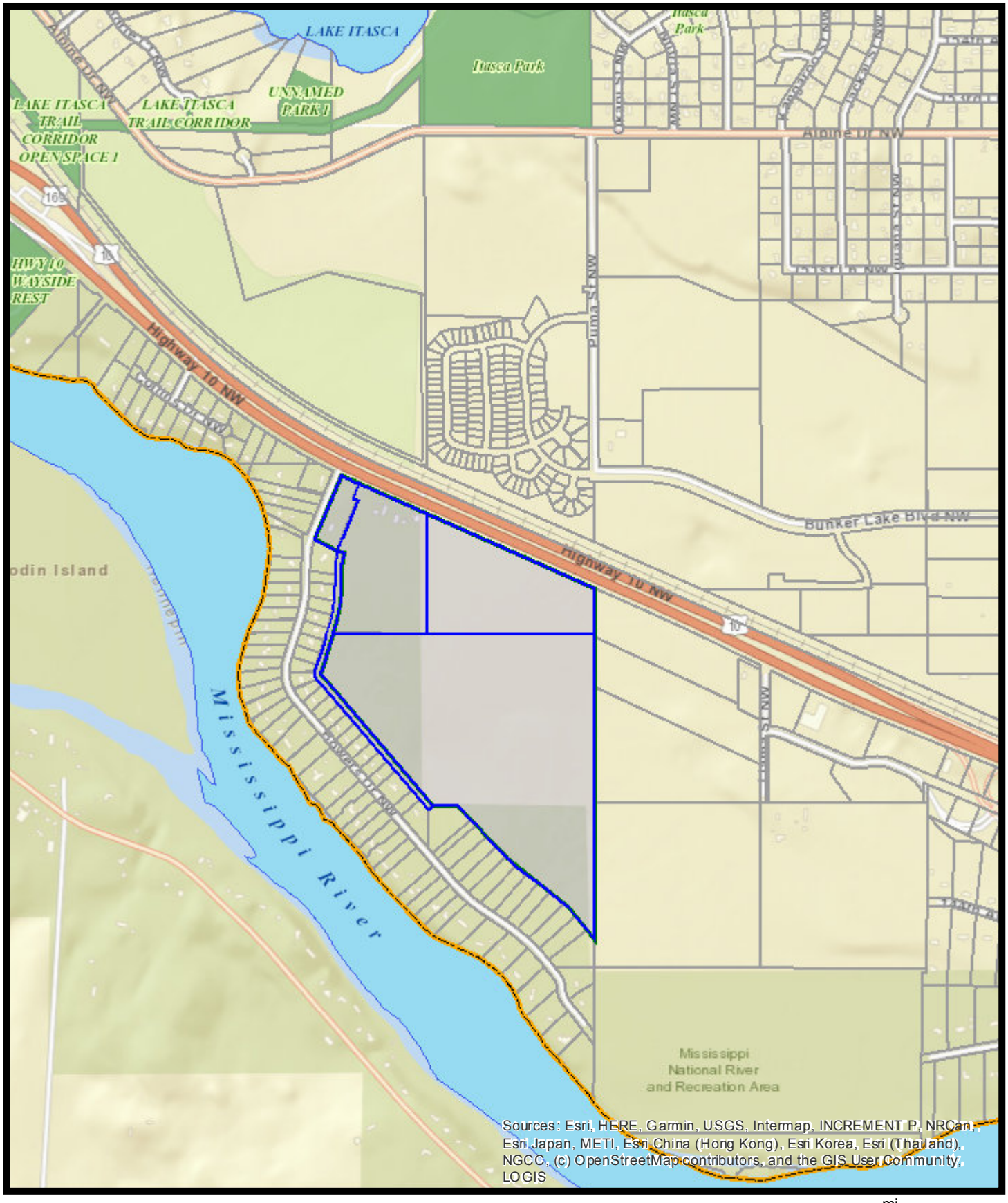
Architectural Renderings

Density Exhibit
Sketch Plan
Phasing Plan
Plan Set (redlined sheets only)
Zoning Review Memo
Technical Review Comments
Additional Technical Comments
MnDOT Review Comments
CONTEXT: Most Recent Action
CONTEXT: Previous Minutes
EAW
Archaeological Survey
Resolution #21-015
Ordinance #21-03
DRAFT Planning Commission Minutes dated January 7, 2021

Form Review

Inbox	Reviewed By	Date
Tim Gladhill (Originator)	Tim Gladhill	01/21/2021 11:51 AM
Kurt Ulrich	Kurt Ulrich	01/21/2021 03:26 PM
Form Started By: Tim Gladhill		Started On: 01/08/2021 10:01 AM
Final Approval Date: 01/21/2021		

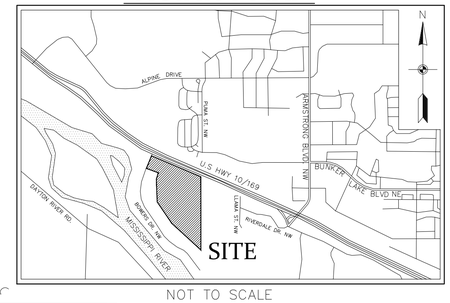
Site Location Map



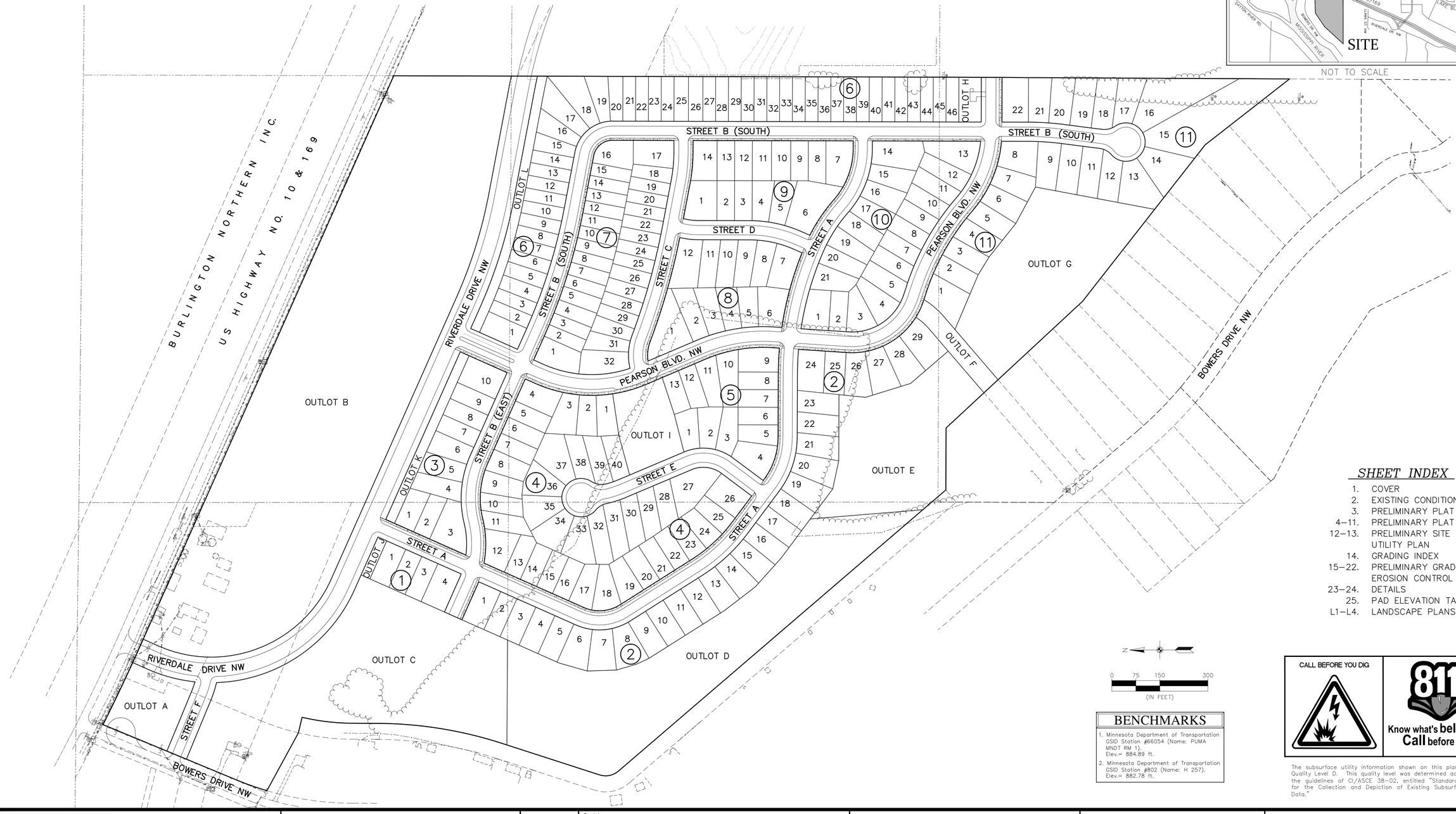
RIVERSTONE SOUTH

RAMSEY, MINNESOTA

VICINITY MAP



NOT TO SCALE



SHEET INDEX

1.	COVER
2.	EXISTING CONDITIONS
3.	PRELIMINARY PLAT INDEX
4–11.	PRELIMINARY PLAT
12–13.	PRELIMINARY SITE & UTILITY PLAN
14.	GRADING INDEX
15–22.	PRELIMINARY GRADING & EROSION CONTROL PLANS
23–24.	DETAILS
25.	PAD ELEVATION TABLES
L1–L4.	LANDSCAPE PLANS

0 75 150 300

(IN FEET)

BENCHMARKS

1. Minnesota Department of Transportation GSID Station #66054 (Name: PUMA MNDT RM 1). Elev.= 884.89 ft.
2. Minnesota Department of Transportation GSID Station #802 (Name: H 257). Elev.= 882.78 ft.

CALL BEFORE YOU DIG

811 Know what's **below.** **Call** before you dig.

The subsurface utility information shown on this plan is utility Quality Level D. This quality level was determined according to the guidelines of CI/ASCE 38-02, entitled "Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data."

CARLSON McCAIN ENGINEERING SURVEYING ENVIRONMENTAL

3890 PHEASANT RIDGE DR NE
SUITE 100
BLAINE, MN 55449
TEL 763.489.7900
FAX 763.489.7959
CARLSONMCCAIN.COM

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota

Print Name: Brian J. Krystofiak, P.E.
Signature:
Date: 11/25/20 License #: 25063

Drawn: ADB
Designed: BJK
Date: 11/25/20

Revisions:
1.

RIVERSTONE DEVELOPMENT, LLC
14015 Sunfish Lake B, Suite 400
Ramsey, MN 55303

RIVERSTONE SOUTH
Ramsey, MN

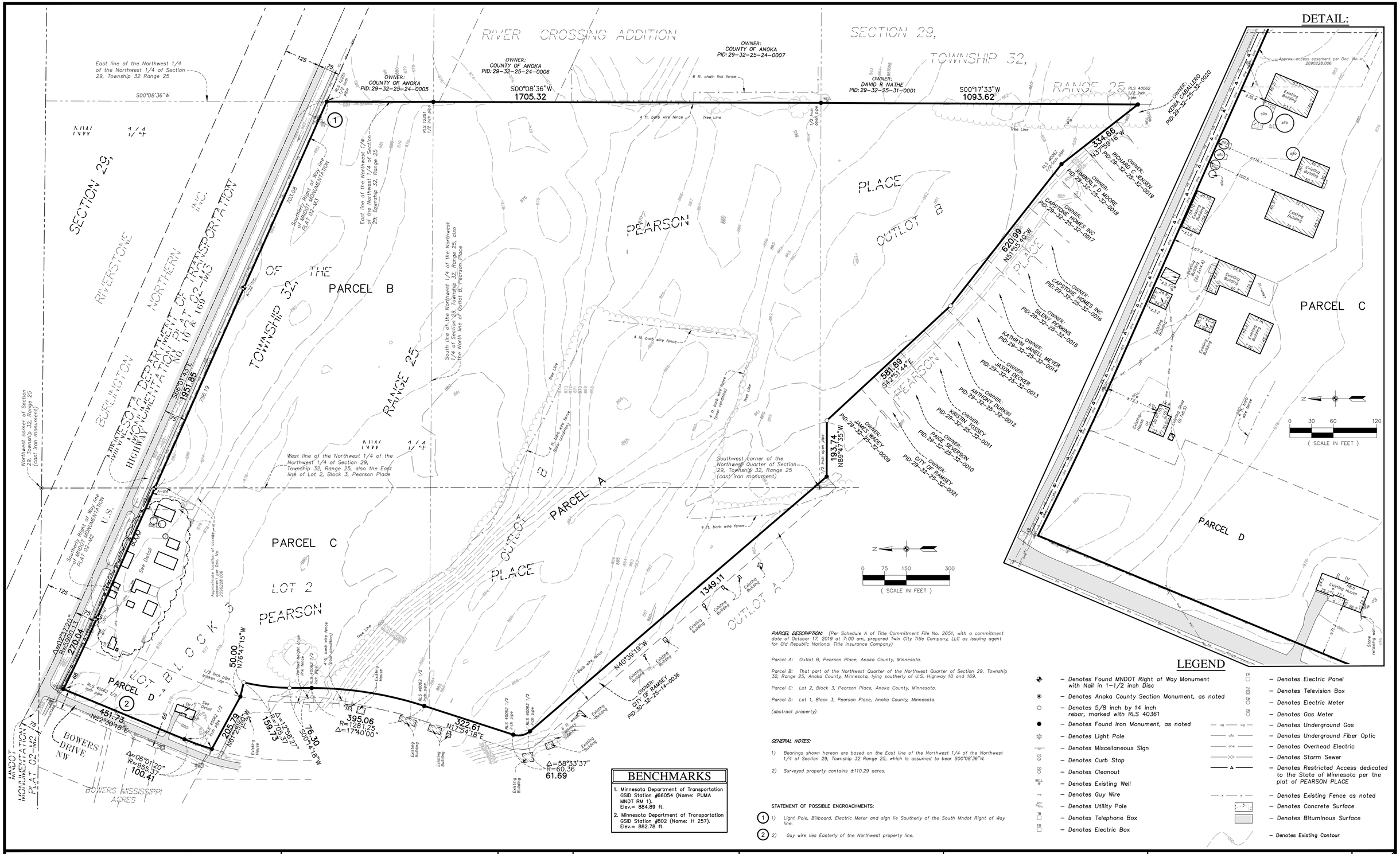
COVER SHEET

1 of 25

Save Date: 12/02/20 | F:\jobs\8481 - 8500\8494 - pearson place 2nd\cad c3d\engineering\prelim plans\8494_cover.dwg

#8494

DETAIL:


East line of the Northwest 1/4 of the Northwest 1/4 of Section 29, Township 32 Range 25
S00°08'36"W
RIVER CROSSING ADDITION
SECTION 29, TOWNSHIP 32, RANGE 25
OWNER: COUNTY OF ANOKA PID: 29-32-25-24-0005
OWNER: COUNTY OF ANOKA PID: 29-32-25-24-0006
OWNER: COUNTY OF ANOKA PID: 29-32-25-24-0007
OWNER: DAVID R NATHE PID: 29-32-25-31-0001
S00°08'36"W 1705.32
S00°17'33"W 1093.62
RLS 40062 1/2 inch pipe
6 ft. chain link fence
4 ft. barb wire fence
Tree Line
WCL
OWNER: KENIA CABALLERO PID:29-32-25-32-0020
Approx. access easement per Doc. No. 2090228.006
OWNER: RICHARD C. JENSEN PID: 29-32-25-32-0019
334.66 N37°59'16"W
OWNER: KIMBERLY D. MOORE PID: 29-32-25-32-0018
OWNER: CAPSTONE HOMES INC PID: 29-32-25-32-0017
620.89 N57°53'40"W
OWNER: CAPSTONE HOMES INC PID: 29-32-25-32-0016
OWNER: SILONY PERKINS PID: 29-32-25-32-0015
OWNER: KATHRYN VANELL MEYER PID: 29-32-25-32-0014
OWNER: JASON DECKER PID: 29-32-25-32-0013
OWNER: ANTHONY DURKIN PID: 29-32-25-32-0012
OWNER: KRISTIN TERSEY PID: 29-32-25-32-0011
OWNER: PAGE SEVERSON PID: 29-32-25-32-0010
OWNER: CITY OF RAMSEY PID: 29-32-25-32-0021
581.89 S42°51'44"E
193.74 N89°47'35"W
1349.11 N40°39'19"W
OWNER: CITY OF RAMSEY PID:35-32-25-14-0036
PLACE
OUTLOT B
PEARSON
PARCEL A
PARCEL B
PARCEL C
PARCEL D
LOT 2
BLOCK 3
OUTLOT A
Existing Building
Existing House
Existing Shed
Existing Garage
Existing Pool
Existing Deck
Existing Fence
Existing Gazebo
Existing Pergola
Existing Pool Equipment
Existing Hot Tub
Existing Fire Pit
Existing Playground Equipment
Existing Sport Court
Existing Basketball Hoop
Existing Trampoline
Existing Landscaping Wall
Existing Retaining Wall
Existing Concrete Patio
Existing Concrete Walk
Existing Concrete Driveway
Existing Asphalt Driveway
Existing Asphalt Parking Lot
Existing Gravel Driveway
Existing Gravel Parking Lot
Existing Gravel Shed
Existing Gravel Garage
Existing Gravel Pergola
Existing Gravel Pool Equipment
Existing Gravel Hot Tub
Existing Gravel Fire Pit
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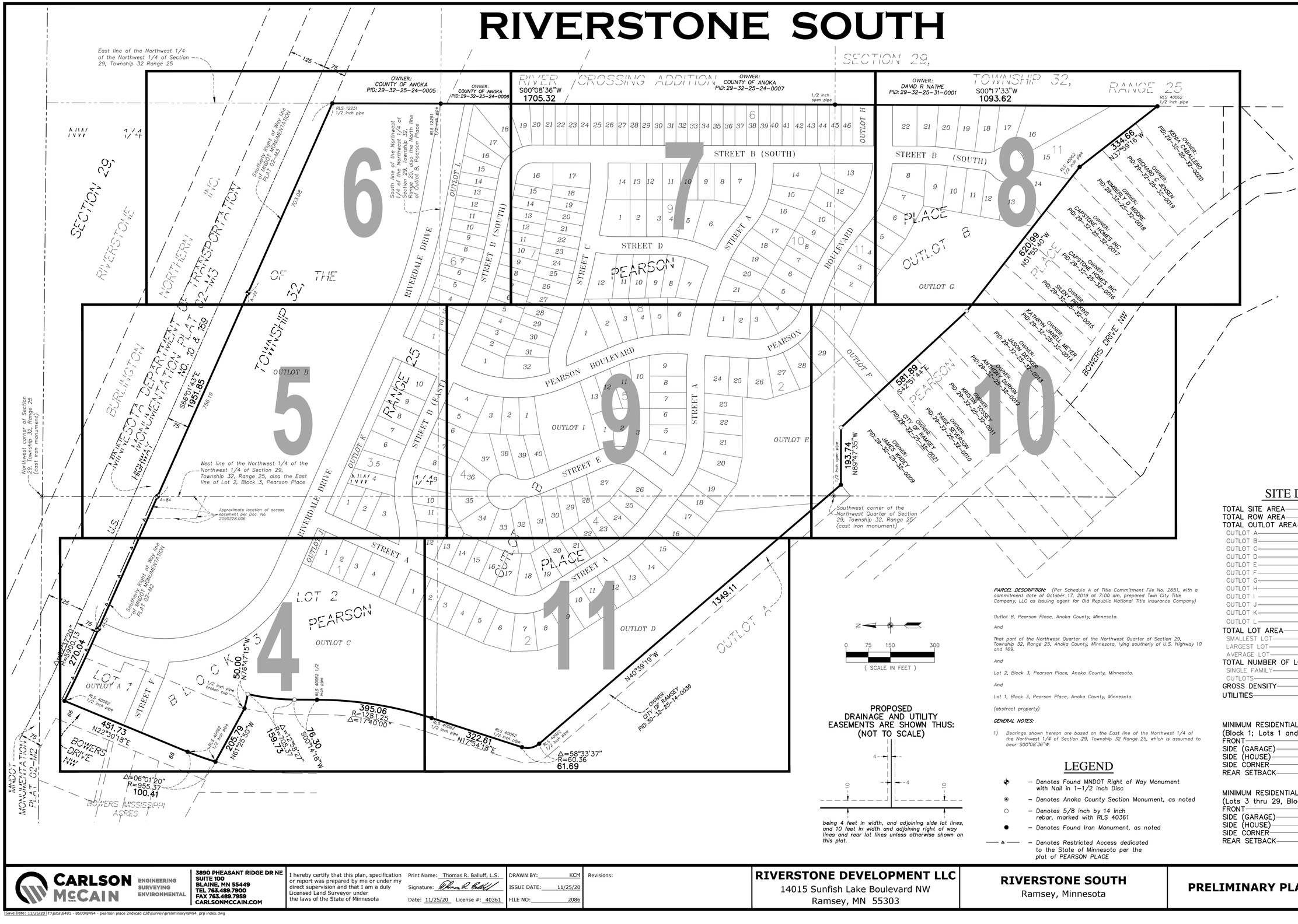
Existing Gravel Gravel Gravel Asphalt Driveway
Existing Gravel Gravel Gravel Asphalt Parking Lot
Existing Gravel

RIVERSTONE SOUTH



SITE DATA

TOTAL SITE AREA	±110.29 AC.
TOTAL ROW AREA	±18.73 AC.
TOTAL OUTLOT AREA	±45.67 AC.
OUTLOT A	±1.05 AC.
OUTLOT B	±19.75 AC.
OUTLOT C	±7.51 AC.
OUTLOT D	±7.00 AC.
OUTLOT E	±3.49 AC.
OUTLOT F	±0.45 AC.
OUTLOT G	±4.14 AC.
OUTLOT H	±0.22 AC.
OUTLOT I	±1.01 AC.
OUTLOT J	±0.09 AC.
OUTLOT K	±0.39 AC.
OUTLOT L	±0.57 AC.
TOTAL LOT AREA	±45.89 AC.
SMALLEST LOT	±5,040 S.F.
LARGEST LOT	±46,280 S.F.
AVERAGE LOT	±8,227 S.F.
TOTAL NUMBER OF LOTS	255
SINGLE FAMILY	243
OUTLOTS	12
GROSS DENSITY	2.31 LOTS/AC.
UTILITIES	AVAILABLE

N

0 75 150 300

(SCALE IN FEET)

PROPOSED DRAINAGE AND UTILITY EASEMENTS ARE SHOWN THUS: (NOT TO SCALE)

being 4 feet in width, and adjoining side lot lines, and 10 feet in width and adjoining right of way lines and rear lot lines unless otherwise shown on this plat.

PARCEL DESCRIPTION: *(Per Schedule A of Title Commitment File No. 2651, with a commitment date of October 17, 2019 at 7:00 am, prepared Twin City Title Company, LLC as issuing agent for Old Republic National Title Insurance Company)*

Outlot B, Pearson Place, Anoka County, Minnesota.

And

That part of the Northwest Quarter of the Northwest Quarter of Section 29, Township 32, Range 25, Anoka County, Minnesota, lying southerly of U.S. Highway 10 and 169.

And

Lot 2, Block 3, Pearson Place, Anoka County, Minnesota.

And

Lot 1, Block 3, Pearson Place, Anoka County, Minnesota.

(abstract property)

GENERAL NOTES:

1) *Bearings shown hereon are based on the East line of the Northwest 1/4 of the Northwest 1/4 of Section 29, Township 32 Range 25, which is assumed to bear S00°08'36"W.*

LEGEND

- – Denotes *MNDOT* Right of Way Monument with Nail in 1–1/2 inch Disc
- – Denotes Anoka County Section Monument, as noted
- – Denotes 5/8 inch by 14 inch rebar, marked with RLS 40361
- – Denotes Found Iron Monument, as noted
- – Denotes Restricted Access dedicated to the State of Minnesota per the plat of PEARSON PLACE

MINIMUM RESIDENTIAL SETBACK DATA:
(Block 1; Lots 1 and 2, Block 2; Blocks 3 thru 10)

FRONT	25 FT.
SIDE (GARAGE)	5 FT.
SIDE (HOUSE)	5 FT.
SIDE CORNER	25 FT.
REAR SETBACK	30 FT.

MINIMUM RESIDENTIAL SETBACK DATA:
(Lots 3 thru 29, Block 2; Block 11)

FRONT	25 FT.
SIDE (GARAGE)	7.5 FT.
SIDE (HOUSE)	7.5 FT.
SIDE CORNER	25 FT.
REAR SETBACK	30 FT.

CARLSON McCAIN ENGINEERING SURVEYING ENVIRONMENTAL
3890 PHEASANT RIDGE DR NE
SUITE 100
BLAINE, MN 55449
TEL 763.489.7900
FAX 763.489.7959
CARLSONMCCAIN.COM

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Land Surveyor under the laws of the State of Minnesota

Print Name: Thomas R. Balluff, L.S.
Signature:
Date: 11/25/20 License #: 40361

DRAWN BY: KCM
ISSUE DATE: 11/25/20
FILE NO: 2086

Revisions:

RIVERSTONE DEVELOPMENT LLC
14015 Sunfish Lake Boulevard NW
Ramsey, MN 55303

RIVERSTONE SOUTH
Ramsey, Minnesota

PRELIMINARY PLAT INDEX

Save Date: 11/25/20 | F:\jobs\8481 - 8500\8494 - pearson place 2nd\cad c3d\survey\preliminary\8494_prp index.dwg

BURLINGTON NORTHERN

U.S. HIGHWAY NO. 10 & 169

Approximate location of access easement per Doc. No. 2090228.006

Southerly Right of Way Line of MNDOT MONUMENTATION PLAT 02-M2

MNDOT MONUMENTATION PLAT 02-M2

RIVERDALE DRIVE

STREET A

OUTLOT J
±3,900 sq.ft.

1 ±8,117 sq.ft.
2 ±7,364 sq.ft.
3 ±12,486 sq.ft.
10 ±7,360 sq.ft.
11 ±7,934 sq.ft.
35 ±9,882 sq.ft.
34 ±10,252 sq.ft.
12 ±10,229 sq.ft.
13 ±7,289 sq.ft.
14 ±6,875 sq.ft.
15 ±6,875 sq.ft.

1 ±8,456 sq.ft.
2 ±7,150 sq.ft.
3 ±7,150 sq.ft.
4 ±10,397 sq.ft.

1 ±9,752 sq.ft.
2 ±7,150 sq.ft.
3 ±8,455 sq.ft.
4 ±8,450 sq.ft.
5 ±8,450 sq.ft.

LOT 2

PEARSON PLACE

OUTLOT C
±326,970 sq.ft.

OUTLOT A
±45,670 sq.ft.

LOT 1

STREET F

BLOCK 3

BOWERS DRIVE NW

OUTLOT A

644.0 R=450.0 706.8 528.8 548.3

Δ=023°7'0" R=5300.13 270.04

451.73 N22°30'18"E

100.41 R=955.37 Δ=06°01'20"

205.79 N61°25'50"W

50.00 N76°47'15"W

159.73 R=705.37 Δ=12°58'27"

76.30 N00°14'18"E

395.06 R=1281.25 Δ=17°40'00"

322.61 N17°54'18"E

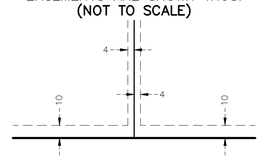
R=300.0 19.2

351.4 717.0 365.6 670.0 3271.7

RLS 40062 1/2 inch pipe

1/2 inch pipe w/cap illegible

PROPOSED DRAINAGE AND UTILITY EASEMENTS ARE SHOWN THUS: (NOT TO SCALE)



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0 25 50 100
(SCALE IN FEET)

LEGEND

- ✥ – Denotes Found MNDOT Right of Way Monument with Nail in 1–1/2 inch Disc
- ◉ – Denotes Anoka County Section Monument, as noted
- ○ – Denotes 5/8 inch by 14 inch rebar, marked with RLS 40361
- ● – Denotes Found Iron Monument, as noted
- ——△—— – Denotes Restricted Access dedicated to the State of Minnesota per the plat of PEARSON PLACE

CARLSON McCAIN
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Signature: Thomas R. Balluff
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Revisions:

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14015 Sunfish Lake Boulevard NW
Ramsey, MN 55303

RIVERSTONE SOUTH
Ramsey, Minnesota

PRELIMINARY PLAT

Save Date: 12/02/20 f:\jobs\8481 - 8500\8494 - pearson place 2nd\cad c3d\survey\preliminary\8494_prp.dwg

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0 25 50 100

(SCALE IN FEET)

PROPOSED DRAINAGE AND UTILITY EASEMENTS ARE SHOWN THUS: (NOT TO SCALE)

4 – 4 | 10 | 10

being 4 feet in width, and adjoining side lot lines, and 10 feet in width and adjoining right of way lines and rear lot lines unless otherwise shown on this plat.

SECTION 29, TOWNSHIP 32, RANGE 25

NORTHERN BURLINGTON INC.

U.S. HIGHWAY NO. 10 & 169

MNDOT MONUMENTATION PLAT 02-M2

S66°01'43"E 1951.85

756.19

A-84

West line of the Northwest 1/4 of the Northwest 1/4 of Section 29, Township 32, Range 25, also the East line of Lot 2, Block 3, Pearson Place

Approximate location of access easement per Doc. No. 2090228.006

OUTLOT B ±860,221 sq.ft.

RIVERDALE DRIVE

STREET A

STREET B (EAST)

OUTLOT J ±3,980 sq.ft.

OUTLOT K ±17,180 sq.ft.

RANGE 25

R=400.0 328.3

R=300.0 197.2

R=60.0 274.8

R=1758.0 399.8

1 ±9,301 sq.ft.	2 ±5,330 sq.ft.	3 ±5,348 sq.ft.	4 ±6,003 sq.ft.	5 ±6,002 sq.ft.
1 ±10,639 sq.ft.	2 ±5,134 sq.ft.	3 ±5,134 sq.ft.	4 ±5,786 sq.ft.	5 ±5,786 sq.ft.
6 ±5,144 sq.ft.	7 ±5,144 sq.ft.	26 ±5,858 sq.ft.	27 ±5,867 sq.ft.	28 ±5,190 sq.ft.
29 ±5,192 sq.ft.	30 ±5,912 sq.ft.	31 ±6,551 sq.ft.	32 ±10,655 sq.ft.	
1 ±8,117 sq.ft.	2 ±7,364 sq.ft.	3 ±12,486 sq.ft.	4 ±9,925 sq.ft.	5 ±8,657 sq.ft.
6 ±8,470 sq.ft.	7 ±7,150 sq.ft.	8 ±7,150 sq.ft.	9 ±7,150 sq.ft.	10 ±11,802 sq.ft.
1 ±8,450 sq.ft.	2 50 sq.ft.	1 ±7,651 sq.ft.	2 ±7,511 sq.ft.	3 ±9,567 sq.ft.
4 ±9,863 sq.ft.	5 ±6,875 sq.ft.	6 ±6,875 sq.ft.	7 ±6,875 sq.ft.	8 ±7,860 sq.ft.
9 ±8,090 sq.ft.	10 ±7,360 sq.ft.	11 ±7,934 sq.ft.	12 ±10,229 sq.ft.	13 ±7,289 sq.ft.
14 ±6,875 sq.ft.	15 875 sq.ft.	35 ±9,882 sq.ft.	36 ±9,794 sq.ft.	37 ±12,885 sq.ft.
38 ±7,985 sq.ft.	39 ±8,493 sq.ft.	40 ±7,626 sq.ft.	31 ±9,448 sq.ft.	32 ±9,340 sq.ft.
33 ±10,806 sq.ft.	34 ±10,252 sq.ft.	±8,704 sq.ft.		

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PRELIMINARY PLAT

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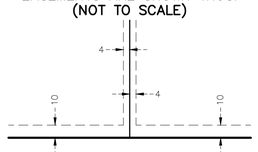

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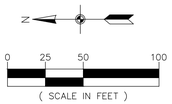

BURLINGTON NORTHERN INC. — U.S. HIGHWAY NO. 10 & 169 — MNDOT MONUMENTATION PLAT 02-M12

125 75

East line of the Northwest 1/4 of the Northwest 1/4 of Section 29, Township 32 Range 25

OWNER: COUNTY OF ANOKA PID: 29-32-25-24-0005

OWNER: COUNTY OF ANOKA PID: 29-32-25-24-0006

RIVER CROSSING ADDITION

RLS 12251 1/2 inch pipe

S00°08'36"W 1705.32

367.1

South line of the Northwest 1/4 of the Northwest 1/4 of Section 29, Township 32, Range 25, also the North line of Outlot B, Pearson Place

703.08

Southwest Right of Way line MNDOT MONUMENTATION PLAT 02-M12

OUTLOT L ±24,748 sq.ft.

RIVERDALE DRIVE

STREET B (SOUTH)

STREET C

Utility

Easement

Drainage

1 ±9,301 sq.ft. 130.0	2 ±5,330 sq.ft. 130.0	3 ±5,348 sq.ft. 130.0	4 ±6,003 sq.ft. 130.0
5 ±6,002 sq.ft. 130.0	6 ±5,347 sq.ft. 130.0	7 ±5,351 sq.ft. 130.0	8 ±5,347 sq.ft. 130.0
9 ±5,347 sq.ft. 130.0	10 ±5,298 sq.ft. 130.0	11 ±5,215 sq.ft. 130.0	12 ±5,200 sq.ft. 130.0
13 ±5,200 sq.ft. 130.0	14 ±5,200 sq.ft. 130.0	15 ±6,059 sq.ft. 130.0	16 ±7,487 sq.ft. 133.2
17 ±11,221 sq.ft. 135.6	18 ±12,082 sq.ft. 211.0	19 ±7,744 sq.ft. 135.2	20 ±5,971 sq.ft. 140.0
21 ±5,600 sq.ft. 140.0	22 ±5,600 sq.ft. 140.0	23 ±5,600 sq.ft. 140.0	24 ±5,600 sq.ft. 140.0
25 ±6,300 sq.ft. 140.0	26 ±6,300 sq.ft. 140.0		

1 ±5,134 sq.ft. 125.5	2 ±5,134 sq.ft. 126.0	3 ±5,134 sq.ft. 125.5	4 ±5,786 sq.ft. 126.0
5 ±5,786 sq.ft. 126.0	6 ±5,144 sq.ft. 126.0	7 ±5,144 sq.ft. 126.0	8 ±5,144 sq.ft. 126.0
9 ±5,144 sq.ft. 126.0	10 ±5,144 sq.ft. 126.0	11 ±5,144 sq.ft. 126.0	12 ±5,047 sq.ft. 126.0
13 ±5,040 sq.ft. 126.0	14 ±5,040 sq.ft. 126.0	15 ±5,040 sq.ft. 126.0	16 ±9,453 sq.ft. 126.0
17 ±10,231 sq.ft. 125.0	18 ±5,466 sq.ft. 126.0	19 ±5,040 sq.ft. 126.0	20 ±5,040 sq.ft. 126.0
21 ±5,040 sq.ft. 126.0	22 ±5,091 sq.ft. 126.2	23 ±5,132 sq.ft. 126.2	24 ±5,176 sq.ft. 126.3
25 ±5,179 sq.ft. 126.4	26 ±5,858 sq.ft. 126.5	27 ±5,867 sq.ft. 126.6	28 ±5,190 sq.ft. 126.7
29 ±5,192 sq.ft. 126.7	30 ±5,912 sq.ft. 129.1	31	

1 ±16,117 sq.ft. — 2 ±9,916 sq.ft. — 12 ±12,577 sq.ft.

CARLSON McCAIN ENGINEERING SURVEYING ENVIRONMENTAL
3890 PHEASANT RIDGE DR NE
SUITE 100
BLAINE, MN 55449
TEL 763.489.7900
FAX 763.489.7959
CARLSONMCCAIN.COM

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Land Surveyor under the laws of the State of Minnesota

Print Name: Thomas R. Balluff, L.S.
Signature: Thomas R. Balluff
Date: 11/25/20 License #: 40361

DRAWN BY: KCM
ISSUE DATE: 11/25/20
FILE NO: 2086

Revisions:

RIVERSTONE DEVELOPMENT LLC
14015 Sunfish Lake Boulevard NW
Ramsey, MN 55303

RIVERSTONE SOUTH
Ramsey, Minnesota

PRELIMINARY PLAT

Save Date: 12/02/20 | F:\jobs\8481 - 8500\8494 - pearson place 2nd\cad c3d\survey\preliminary\8494_prp.dwg

PROPOSED
DRAINAGE AND UTILITY
EASEMENTS ARE SHOWN THUS:
(NOT TO SCALE)

4 — 4 — 10 — 10

being 4 feet in width, and adjoining side lot lines, and 10 feet in width and adjoining right of way lines and rear lot lines unless otherwise shown on this plat.

0 25 50 100
(SCALE IN FEET)

LEGEND

- ◆ – Denotes Found MNDOT Right of Way Monument with Nail in 1–1/2 inch Disc
- ◉ – Denotes Anoka County Section Monument, as noted
- ○ – Denotes 5/8 inch by 14 inch rebar, marked with RLS 40361
- ● – Denotes Found Iron Monument, as noted
- ——△—— – Denotes Restricted Access dedicated to the State of Minnesota per the plat of PEARSON PLACE

OWNER:
COUNTY OF ANOKA
PID: 29-32-25-24-0006

RIVER CROSSING ADDITION

S00°08'36"W
1705.32

OWNER:
COUNTY OF ANOKA
PID: 29-32-25-24-0007

SECTION 29,

1/2 inch open pipe

OWNER:
DAVID R NATHE
PID: 29-32-25-31-0001

STREET B (SOUTH)

STREET C

STREET D

STREET A

PEARSON PLACE

PEARSON BOULEVARD

OUTLOT H ±9,783 sq.ft.

OUTLOT L ±24,748 sq.ft.

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SECTION 29, TOWNSHIP 32, RANGE 25

OWNER: DAVID R NATHE
PID: 29-32-25-31-0001

1/2 inch open pipe

S00°17'33"W 1093.62

RLS 40062 1/2 inch pipe

OWNER: KENIA CABALLERO
PID: 29-32-25-32-0020

334.66 N37°59'16"W

OWNER: RICHARD C JENSEN
PID: 29-32-25-32-0019

OWNER: KIMBERLY D MOORE
PID: 29-32-25-32-0018

RLS 40062 1/2 inch pipe

OWNER: CAPSTONE HOMES INC
PID: 29-32-25-32-0017

OWNER: CAPSTONE HOMES INC
PID: 29-32-25-32-0016

620.99 N51°55'10"W

OWNER: SILENY PERKINS
PID: 29-32-25-32-0015

OWNER: KATHRYN JANELL MEYER
PID: 29-32-25-32-0014

OWNER: JASON DECKER
PID: 29-32-25-32-0013

OWNER: ANTHONY DURKIN
PID: 29-32-25-32-0012

OWNER: KRISTIN TOSSEY
PID: 29-32-25-32-0011

581.89 N42°51'44"W

OWNER: JASON PERSON
PID: 29-32-25-32-0010

PEARSON PLACE

BOWERS DRIVE NW

STREET B (SOUTH)

PEARSON BOULEVARD

OUTLOT B

OUTLOT G
±180,354 sq.ft.

OUTLOT F
±19,723 sq.ft.

OUTLOT H
±9,783 sq.ft.

Drainage & Utility Easement

LEGEND

- ◆ – Denotes Found MNDOT Right of Way Monument with Nail in 1-1/2 inch Disc
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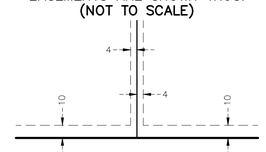
PROPOSED DRAINAGE AND UTILITY EASEMENTS ARE SHOWN THUS: (NOT TO SCALE)



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N

0 25 50 100

(SCALE IN FEET)

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PEARSON BOULEVARD

STREET A

STREET B (EAST)

STREET E

OUTLOT I
±43,993 sq.ft.

OUTLOT E
±151,921 sq.ft.

OUTLOT F
±19,123 sq.ft.

OWNER:
JAMES WADEY
PID: 29-32-25-12-0009

Southwest corner of the Northwest Quarter of Section 29, Township 32, Range 25 (cast iron monument)

1/2 inch open pipe

193.74
N89°47'35"W

PROPOSED
DRAINAGE AND UTILITY
EASEMENTS ARE SHOWN THUS:
(NOT TO SCALE)

being 4 feet in width, and adjoining side lot lines, and 10 feet in width and adjoining right of way lines and rear lot lines unless otherwise shown on this plat.

0 25 50 100
(SCALE IN FEET)

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OUTLOT G
±180,354 sq.ft.

OUTLOT F
±19,723 sq.ft.

OUTLOT E
±151,921 sq.ft.

STREET A

PEARSON PLACE

581.89
N42°51'44"W

193.74
N89°47'35"W

OWNER:
PAIGE SEVERSON
PID:29-32-25-32-0010

OWNER:
KRISTIN TOSSEY
PID:29-32-25-32-0011

OWNER:
ANTHONY DURKIN
PID:29-32-25-32-0012

OWNER:
JASON L BECKER
PID:29-32-25-32-0013

OWNER:
KATHRYN JANELL MEYER
PID:29-32-25-32-0014

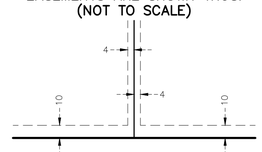
CITY OWNER OF RAMSEY
PID:29-32-25-32-0021

OWNER:
JAMES WAILEY
PID:29-32-25-32-0009

Southwest corner of the Northwest Quarter of Section 29, Township 32, Range 25 (cast iron monument)

1/2 inch open pipe

PROPOSED
DRAINAGE AND UTILITY
EASEMENTS ARE SHOWN THUS:
(NOT TO SCALE)



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N

0 25 50 100
(SCALE IN FEET)

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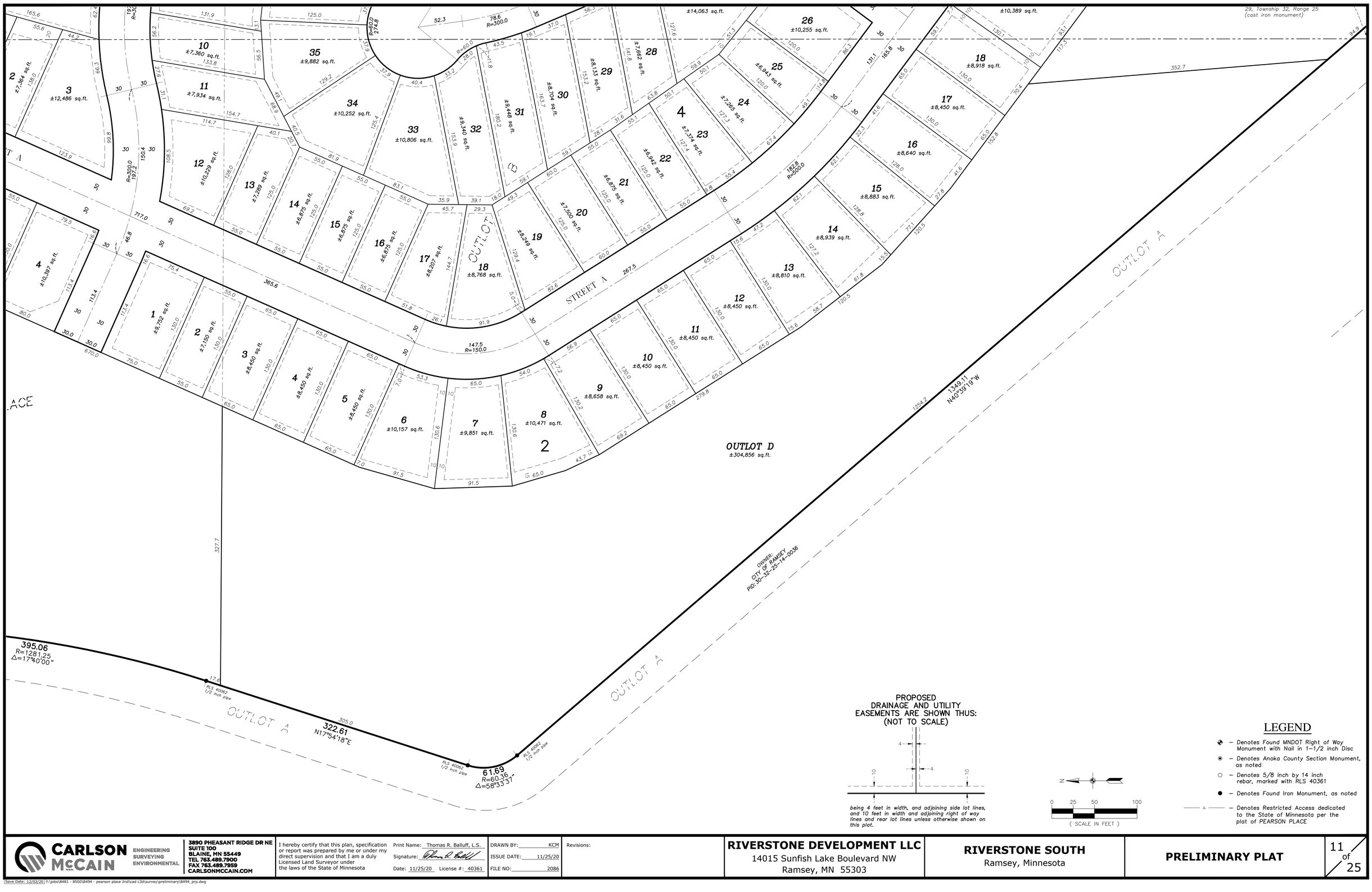

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SEE SHEET 13

SEE SHEET 13

US HIGHWAY NO. 10 & 169

EXISTING BITUMINOUS TRAIL

~ concept commercial ~

OUTLOT B

OUTLOT C

OUTLOT D

OUTLOT E

OUTLOT F

OUTLOT G

OUTLOT H

OUTLOT I

OUTLOT J

OUTLOT K

OUTLOT L

STREET A

STREET B (SOUTH)

STREET B (EAST)

STREET C

STREET D

STREET E

PEARSON BLVD. NW

RIVERDALE DRIVE NW

BOWERS DRIVE NW

LAKE

POND

INFILTRATION BASIN

INFILTRATION BENCH

OUTLET CONTROL STRUCTURE

LIFT STATION
*IE: 845.86
(BY OTHERS)

SAN SWR STUB
*IE.: 846.72

* SEWER DEPTH FOR FUTURE DEVELOPMENT TO THE EAST TO BE VERIFIED BY CITY.

REMOVE & ABANDON EXISTING WELL PER MDH STANDARDS.

12" WM EXTENSION (BY OTHERS)

12" WM EXTENSION (BY OTHERS)

8" PVC SAN SWR STUB IE.: 864.27

8" PVC SAN SWR STUB IE.: 862.67

8" PVC SAN SWR STUB IE.: 861.00

8" PVC SAN SWR STUB IE.: 862.24

8" PVC SAN SWR STUB IE.: 863.54

8" PVC SAN SWR STUB IE.: 864.84

SAN SWR STUB IE.: 864.00

RE 873.40
IE 863.25 W,SE

RE 877.35
IE 864.07
IE 863.97

RE 876.15
IE 862.47 N
IE 862.47 E
IE 862.37 W

RE 877.85
IE 860.80 N
IE 860.80 W
IE 860.80 E
IE 860.70 S

RE 876.15
IE 862.04 N
IE 862.04 W
IE 861.94 E

RE 877.35
IE 863.34 N
IE 863.34 W
IE 863.24 E

RE 876.95
IE 864.64
IE 864.54

RE 872.95
IE 862.16
IE 862.06

RE 873.45
IE 858.76 W
IE 858.76 N
IE 858.66 S

RE 872.35
IE 860.15
IE 860.05

RE 871.05
IE 857.61
IE 857.51

RE 868.47
IE 856.33 W
IE 856.33 N
IE 856.23 S

RE 868.75
IE 854.33 S
IE 854.33 N
IE 847.78 W
IE 847.68 E

RE 867.00
IE 846.51 E
IE 846.51 W
IE 846.41 N

RE 869.08
IE 857.06

RE 867.40
IE 855.83
IE 855.73

RE 868.65
IE 848.41
IE 848.31

RE 867.50
IE 856.93
IE 856.83

RE 867.43
IE 857.43
IE 857.33

RE 867.15
IE 849.51
IE 849.41

RE 864.85
IE 850.41
IE 850.31

RE 865.45
IE 850.91
IE 850.81

RE 868.55
IE 858.71

RE 869.78
IE 856.71 N
IE 852.48 W
IE 852.38 S

RE 868.20
IE 851.42
IE 851.31

RE 867.85
IE 854.39
IE 854.29

RE 867.25
IE 854.89
IE 854.79

RE 868.39
IE 855.79
IE 855.69

RE 870.05
IE 857.28
IE 857.18

RE 870.90
IE 857.53
IE 857.43

RE 870.75
IE 859.53
IE 859.43

RE 869.59
IE 858.43 W
IE 858.43 N
IE 858.33 E

RE 873.50
IE 862.27

RE 872.05
IE 861.55

RE 872.05
IE 861.01

RE 872.05
IE 860.68
IE 860.58

RE 872.95
IE 860.41
IE 860.31

RE 873.70
IE 862.50 W
IE 859.78 E
IE 859.78 N
IE 859.68 S

RE 871.65
IE 859.13
IE 859.03

RE 872.71
IE 858.84 E
IE 858.84 N
IE 858.74 S

RE 872.25
IE 858.43
IE 858.33

RE 868.55
IE 857.60
IE 857.50

RE 875.30
IE 863.30

RE 878.00
IE 867.00 E,W

RE 878.23
IE 867.17

RE 877.10
IE 866.01
IE 865.91

RE 876.07
IE 864.96 /E
IE 864.96 /N
IE 863.36 /W
IE 863.26 /S

RE 867.95
IE 857.06
IE 856.96

RE 873.45
IE 862.51
IE 862.41

RE 871.45
IE 859.28
IE 859.18

RE 870.70
IE 858.88
IE 858.78

INSERT A:

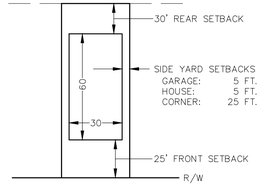
- 1.5" TYPE SP 9.5 WEARING COURSE MIXTURE (SPWEA340C)
- BITUMINOUS MATERIAL FOR TACK COAT
- 2" TYPE SP 12.5 NON WEARING COURSE MIXTURE (SPNWB330C)
- MIN. 4" MODIFIED CLASS 5 AGGREGATE BASE (2)
- PLACED ON PREPARED SUBGRADE (3)

BENCHMARKS

1. Minnesota Department of Transportation GSID Station #66054 (Name: PUMA MNDT RM 1). Elev.= 884.89 ft.
2. Minnesota Department of Transportation GSID Station #802 (Name: H 257). Elev.= 882.78 ft.

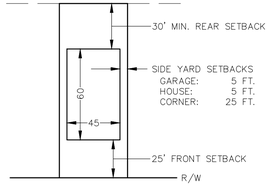
0 50 100 200

40' LOT DETAIL
(NOT TO SCALE)



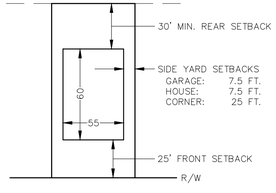
TYPICAL SERVICES SHALL BE:
WATER: 1" COPPER TYPE K
SEWER: 4" PVC SDR 26
CURB STOP TO BE PLACED AT THE R/W

55' LOT DETAIL
(NOT TO SCALE)



TYPICAL SERVICES SHALL BE:
WATER: 1" COPPER TYPE K
SEWER: 4" PVC SDR 26
CURB STOP TO BE PLACED AT THE R/W

65' LOT DETAIL
(NOT TO SCALE)



TYPICAL SERVICES SHALL BE:
WATER: 1" COPPER TYPE K
SEWER: 4" PVC SDR 26
CURB STOP TO BE PLACED AT THE R/W

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I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota

Print Name: Brian J. Krystofiak, P.E.
Signature:
Date: 11/25/20 License #: 25063

Drawn: ADB
Designed: BJK
Date: 11/25/20

Revisions:
1.

RIVERSTONE DEVELOPMENT, LLC
14015 Sunfish Lake B, Suite 400
Ramsey, MN 55303

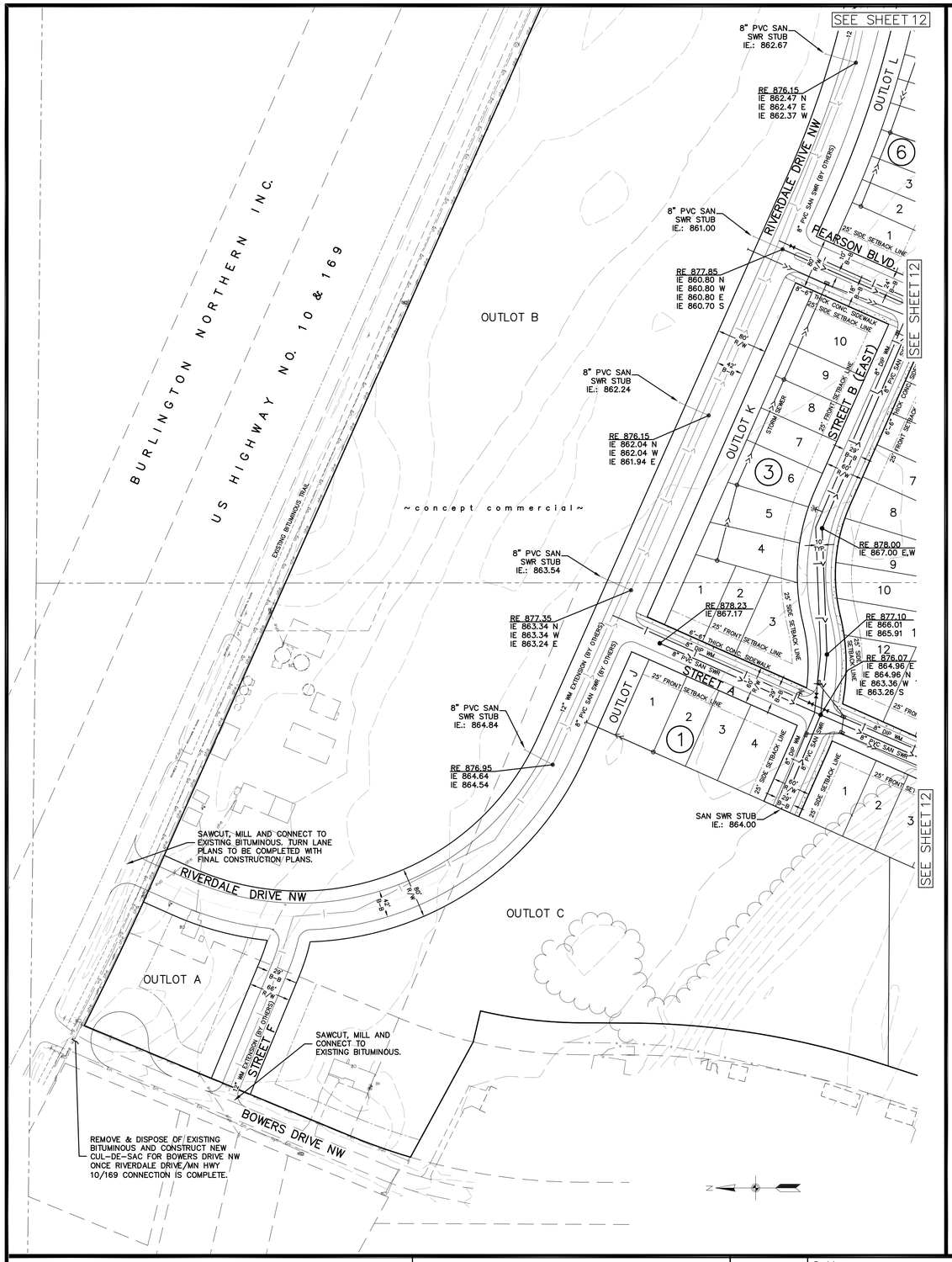
RIVERSTONE SOUTH
Ramsey, MN

PRELIMINARY SITE & UTILITY PLAN

12 of 25

Save Date: 12/02/20 | F:\jobs\8481 - 8500\8494 - pearson place 2nd\cad c3d\engineering\prelim plans\8494_site.dwg

#8494



SITE PLAN LEGEND

	EXISTING	PROPOSED
LIGHT POLE		
SANITARY MANHOLE	SAN	
MISCELLANEOUS SIGN		
EXISTING SPOT ELEVATION	x0000.0	
EXISTING TREE		
TELEVISION BOX	TV	
FIRE HYDRANT	FIRE	
FLUSHING HYDRANT		
GATE VALVE	GV	
CLEANOUT	CO	
ELECTRIC BOX	ELEC	
GAS METER	GAS	
CATCH BASIN	or	or
RAIN GUARDIAN		RG
ELECTRIC METER	ELEC	
TELEPHONE BOX	TEL	
UTILITY POLE		
FLARED END SECTION	FES HES	
STORM MANHOLE	STORM	
SERVICE	SAN GAS W	
SOIL BORING/TEST HOLE		

	MODULAR	ROCK
RETAINING WALL		
WATERMAIN		
SANITARY SEWER		
FORCEMAIN	FM	FM
STORM SEWER		
PROPERTY LINE		
SETBACK LINE		
CURB		
WETLAND		
DITCH		
UNDERGROUND TELEPHONE	ut	ut
UNDERGROUND ELECTRIC	ue	ue
UNDERGROUND GAS	ug	ug
UNDERGROUND FIBEROPTIC	ufo	ufo
FENCE		
OVERHEAD ELECTRIC	ohe	ohe
CONCRETE SURFACE		
BITUMINOUS SURFACE		

N

0 50 100 200

BENCHMARKS

1. Minnesota Department of Transportation GSID Station #66054 (Name: PUMA MNDT RM 1). Elev.= 884.89 ft.
2. Minnesota Department of Transportation GSID Station #802 (Name: H 257). Elev.= 882.78 ft.

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Print Name: Brian J. Krystofiak, P.E.
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Date: 11/25/20 License #: 25063

Drawn: ADB
Designed: BJK
Date: 11/25/20

Revisions:
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Ramsey, MN

PRELIMINARY SITE & UTILITY PLAN

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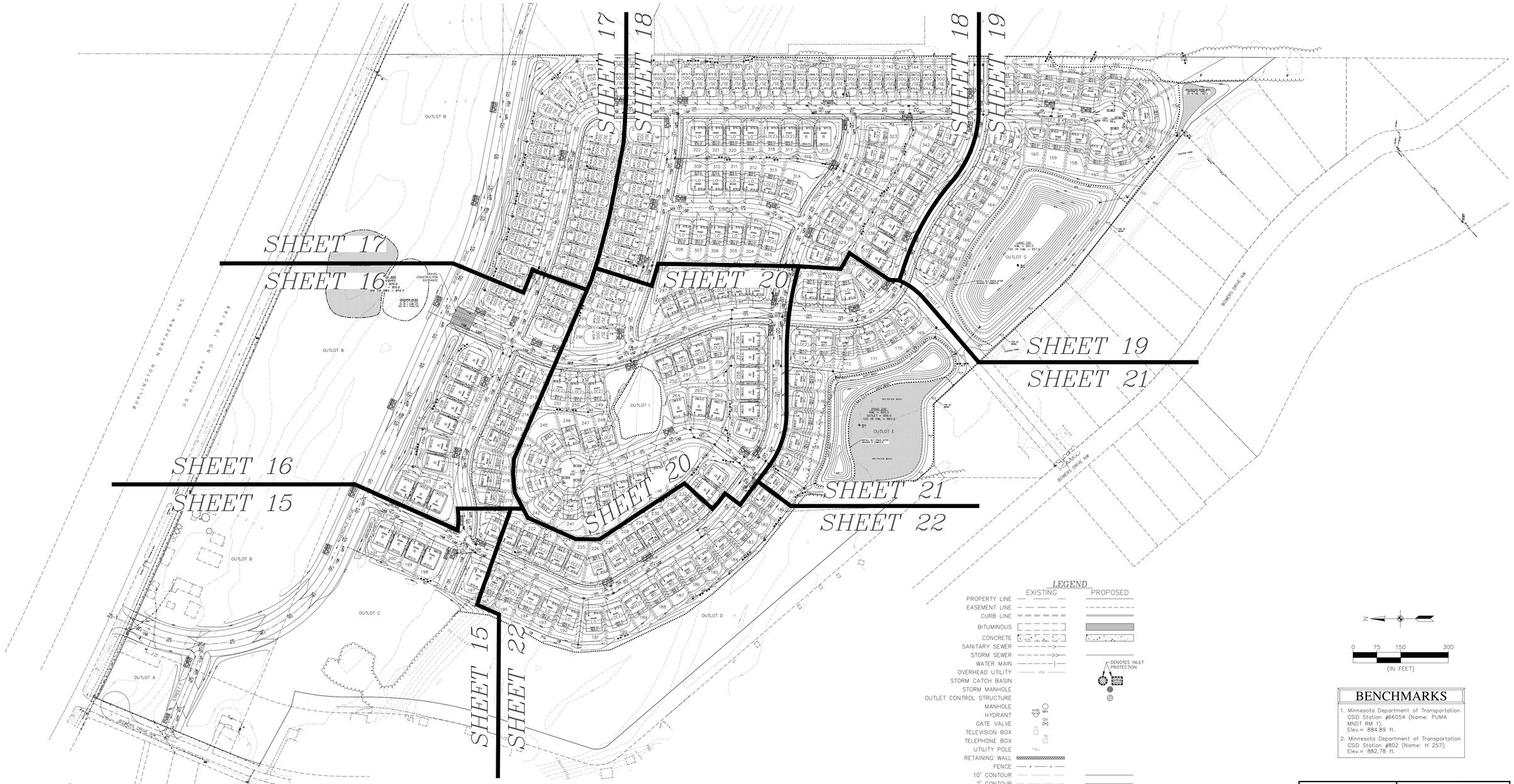

WETLAND SUMMARY

THERE ARE NO DELINEATED WETLANDS ONSITE.

LEGEND

	EXISTING	PROPOSED
PROPERTY LINE		
EASEMENT LINE		
CURB LINE		
BITUMINOUS		
CONCRETE		
SANITARY SEWER		
STORM SEWER		
WATER MAIN		
OVERHEAD UTILITY		
STORM CATCH BASIN		DENOTES INLET PROTECTION
STORM MANHOLE		
OUTLET CONTROL STRUCTURE		
MANHOLE		
HYDRANT		
GATE VALVE		
TELEVISION BOX		
TELEPHONE BOX		
UTILITY POLE		
RETAINING WALL		
FENCE		
10' CONTOUR		
2' CONTOUR		
SPECIFIED CONTOUR		
FEMA FLOOD PLAIN		
WETLAND LINE		
SPOT ELEVATION		00.0
EMERGENCY OVERFLOW		E.O.F. 000.0
SILT FENCE		
TREE FENCE		
GRADING LIMITS		
TREELINE		
SOIL BORING		

N

0 75 150 300

(IN FEET)

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CALL BEFORE YOU DIG

811 Know what's below. Call before you dig.

The subsurface utility information shown on this plan is utility Quality Level D. This quality level was determined according to the guidelines of CI/ASCE 38-02, entitled "Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data."

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GRADING INDEX

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#8494

SEE SHEET 16

OUTLOT B

OUTLOT C

OUTLOT A

RIVERDALE DRIVE

STREET A

STREET F

BOWERS DRIVE NW

SEE SHEET 22

N

0 25 50 100

(IN FEET)

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PRELIMINARY GRADING & EROSION CONTROL PLAN

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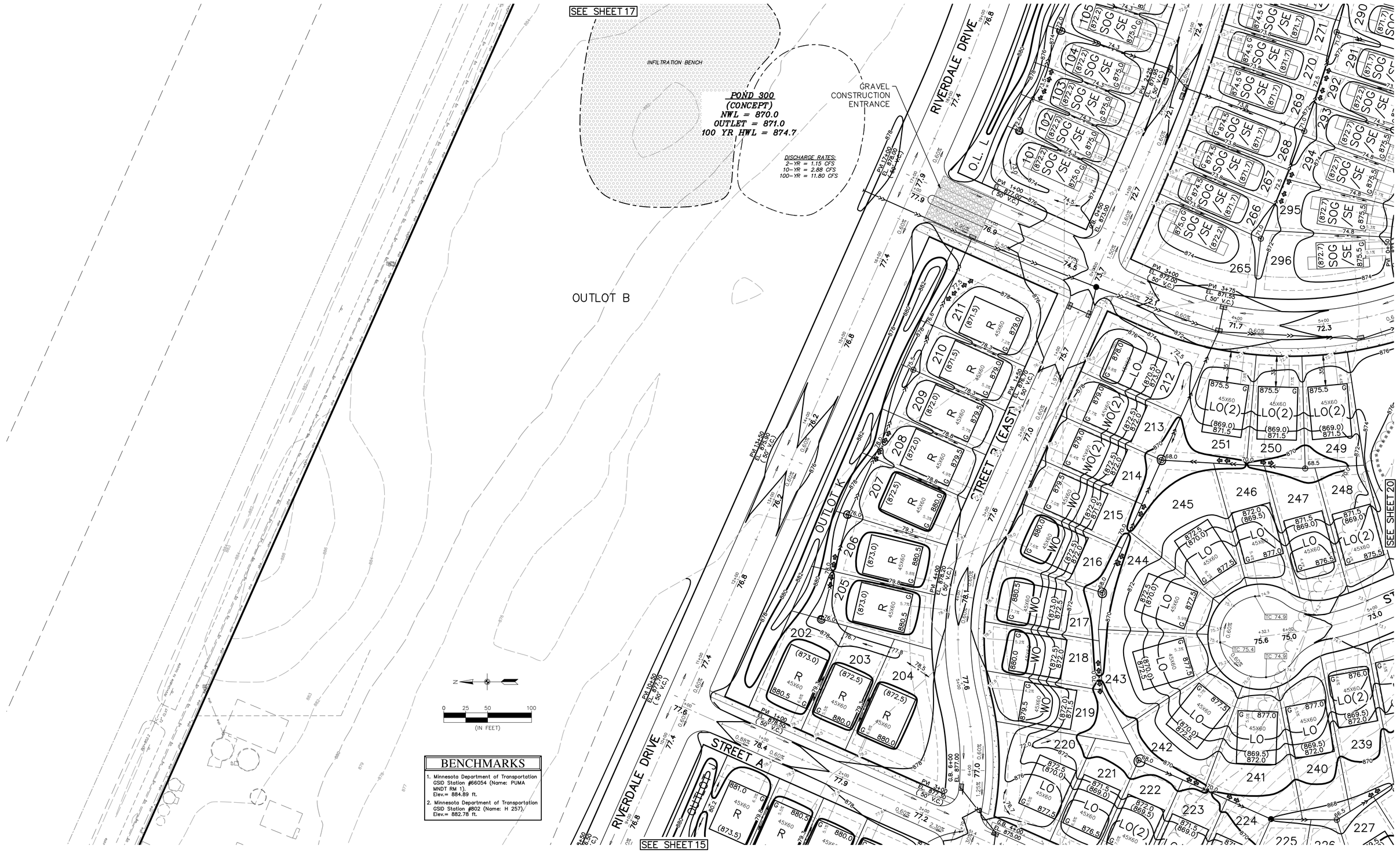

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PRELIMINARY GRADING & EROSION CONTROL PLAN

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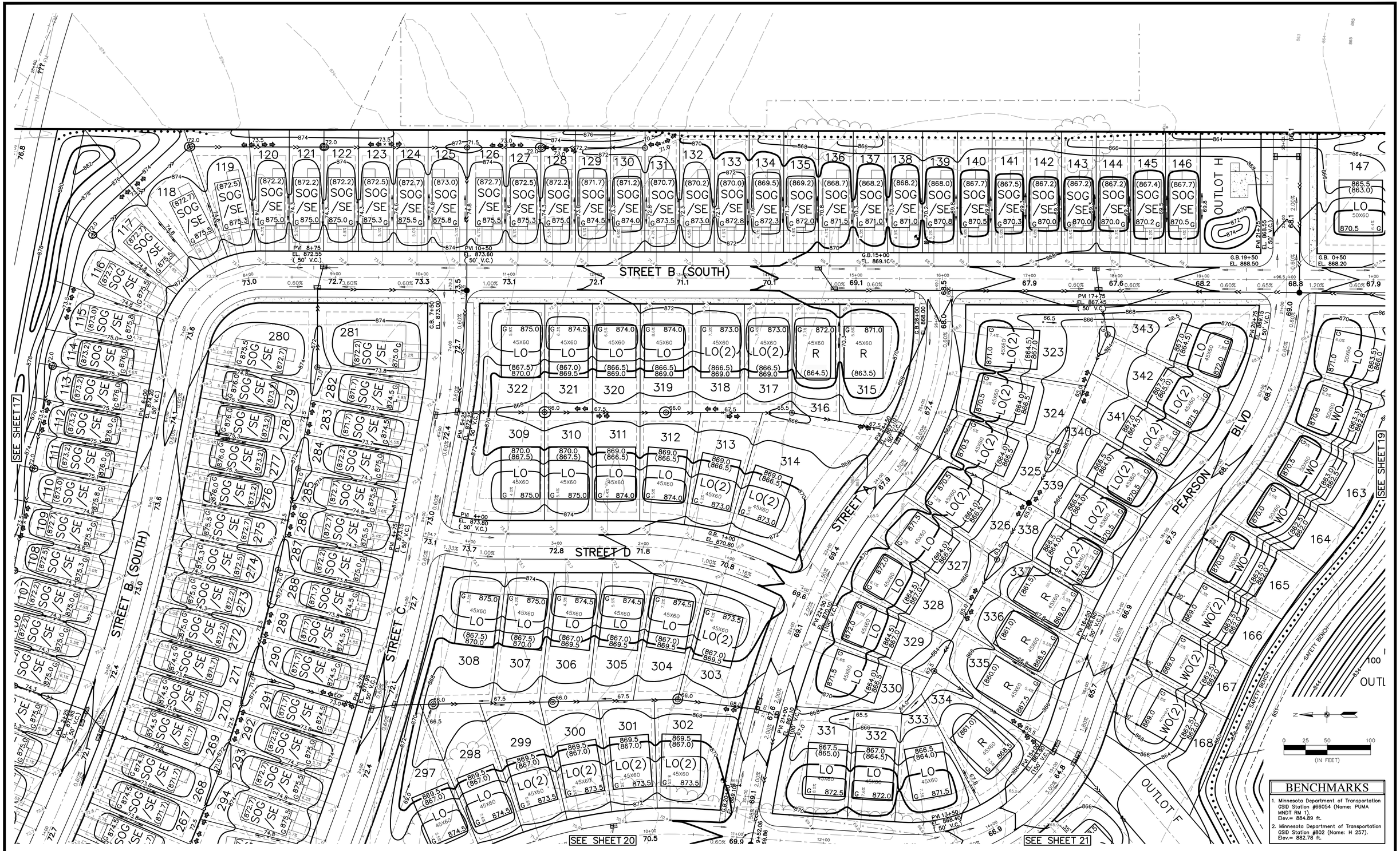

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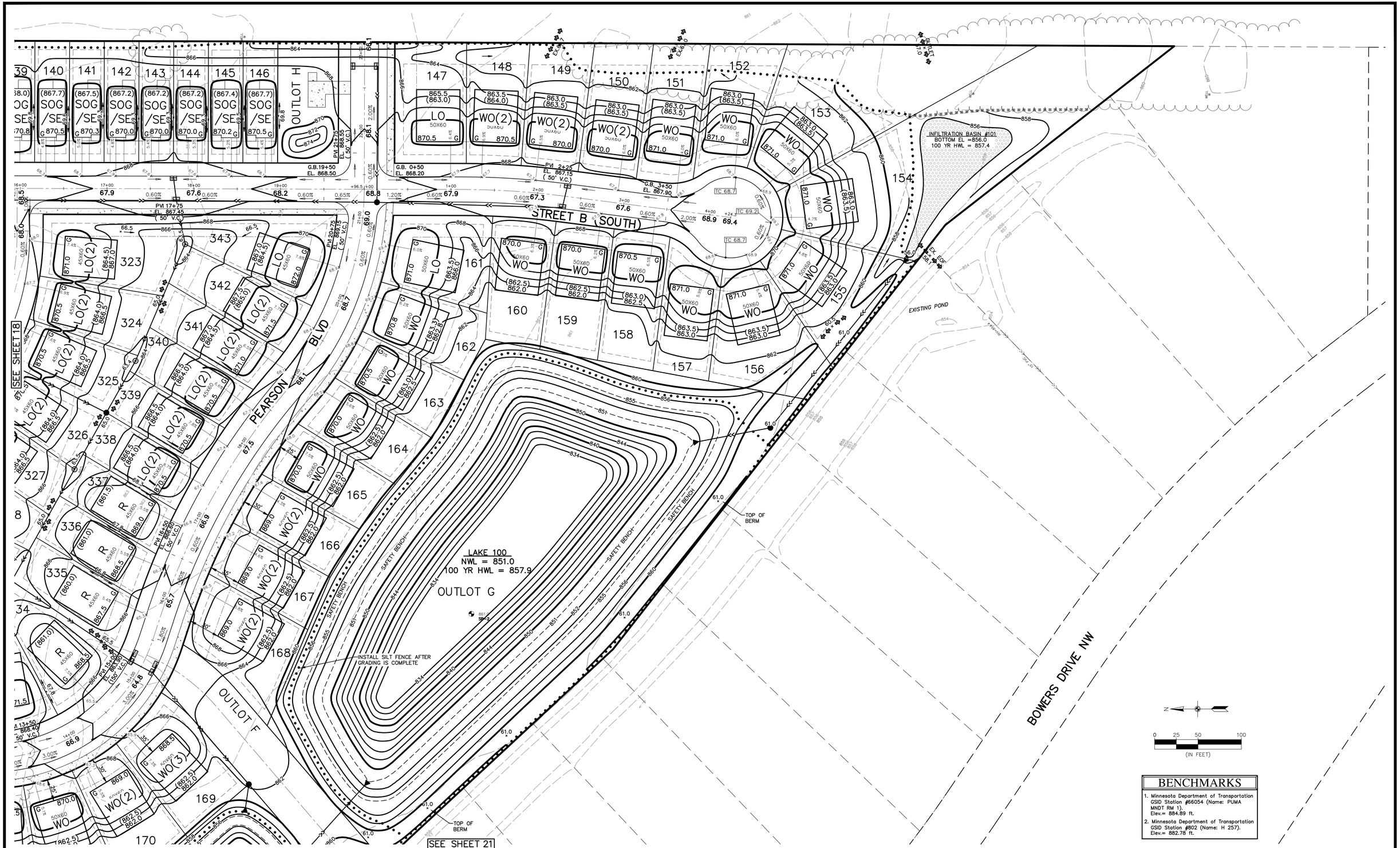

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#8494

BENCHMARKS

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#8494

SEE SHEET 18

SEE SHEET 19

SEE SHEET 20

SEE SHEET 22

LAKE 100
NWL = 851.0
100 YR HWL = 857.9

OUTLOT G

OUTLOT F

OUTLOT E

INSTALL SILT FENCE AFTER GRADING IS COMPLETE

TOP OF BERM

EXISTING POND

SAFETY BENCH

INFILTRATION BENCH

POND 200
NWL = 855.5
OUTLET = 856.5
100 YR HWL = 860.0

STREET A

BOWERS DRIVE NW

0 25 50 100
(IN FEET)

BENCHMARKS

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N

0 25 50 100
(IN FEET)

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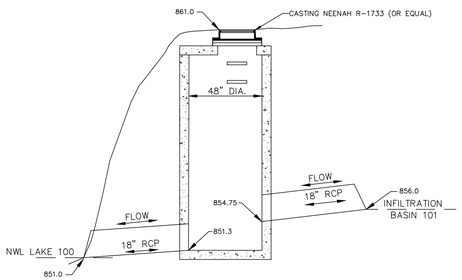
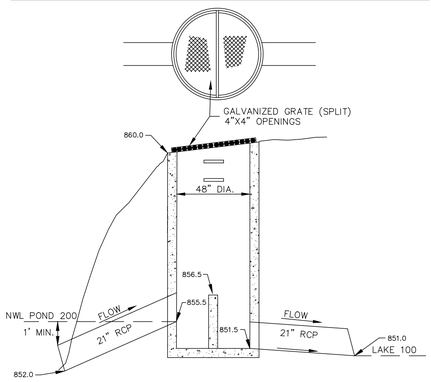
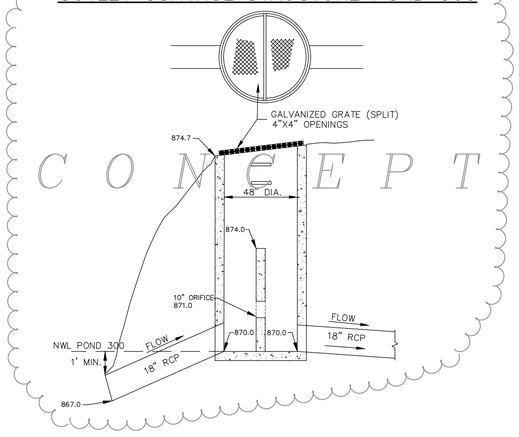
OUTLET CONTROL STRUCTURE LAKE 100



OUTLET CONTROL STRUCTURE POND 200

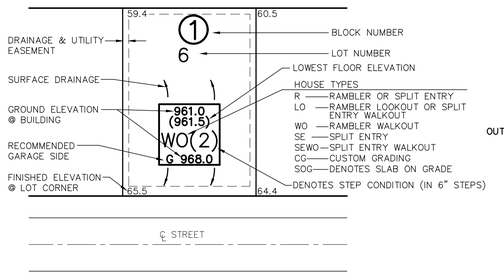


OUTLET CONTROL STRUCTURE POND 300

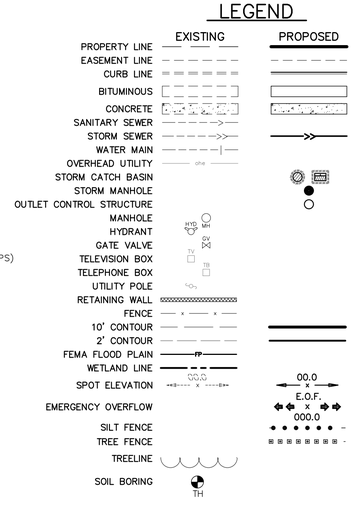


CONCEPT

GRADING PLAN LOT KEY

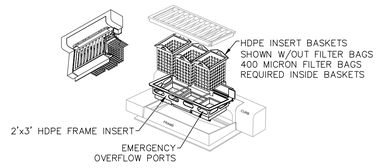


LEGEND



INFRASAFE – 2'x3' DEBRIS COLLECTION DEVICE

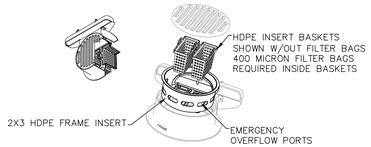
AS MANUFACTURED BY ROYAL ENVIRONMENTAL SYSTEMS



- MEETS MN/DOT SPECIFICATION 3891.F "STORM DRAIN INLET PROTECTION – FILTER BAG INSERT"
- DESIGNED FOR NEENAH R-3067 OR R-3290 SERIES

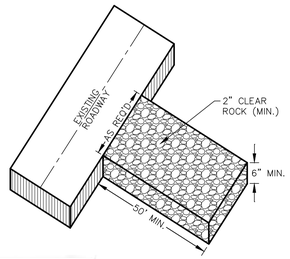
INFRASAFE – 27" DEBRIS COLLECTION DEVICE

AS MANUFACTURED BY ROYAL ENVIRONMENTAL SERVICES

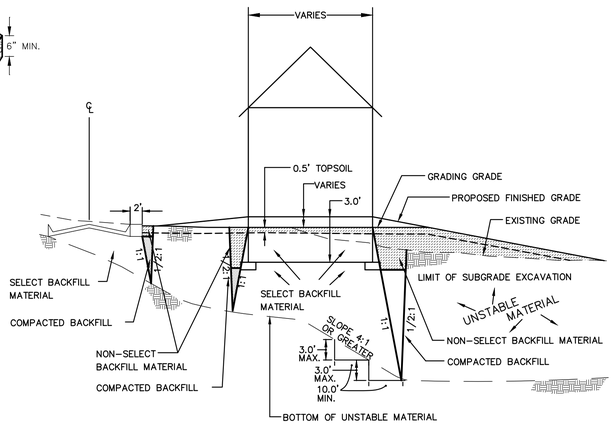


- MEETS MN/DOT SPECIFICATION 3891.F "STORM DRAIN INLET PROTECTION – FILTER BAG INSERT"
- DESIGNED FOR NEENAH R-3250-A OR R-3250-1 (MNDOT 801) FRAME CASTING

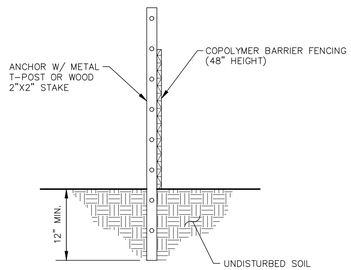
ROCK CONSTRUCTION ENTRANCE



SUBGRADE CORRECTION



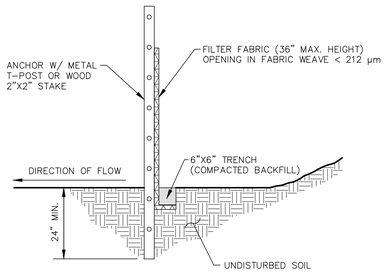
TREE FENCE



NOTES:

1. TREE FENCING SHALL BE PLACED A MINIMUM OF 1 FOOT PER CALIPER INCH OF TREE DIAMETER FROM TREE(S) THAT IS/ARE TO BE SAVED.
2. ANCHOR POST MAY BE SPACED UP TO 10 FEET APART.
3. SECURELY ATTACH TREE FENCE TO ANCHOR POSTS W/ MINIMUM OF TWO ATTACHMENTS PER POST.
4. SEE MNDOT SPECIFICATION 2572.

SILT FENCE



NOTES:

1. DIG A 6"X6" TRENCH ALONG THE INTENDED SILT FENCE LINE.
2. DRIVE ALL ANCHOR POSTS INTO THE GROUND AT THE DOWNHILL SIDE OF THE TRENCH.
3. POSTS SHALL BE SPACED A MAXIMUM OF 6 FEET APART.
4. LAY OUT SILT FENCE ALONG THE UPHILL SIDE OF THE ANCHOR POSTS AND BACK FILL 6"X6" TRENCH.
5. SECURELY ATTACH SILT FENCE TO ANCHOR POSTS W/ MINIMUM OF THREE ATTACHMENTS PER POST.
6. SEE MNDOT SPECIFICATIONS 2573 & 3886.

TABLE A
MODIFIED CLASS 5 SPECIFICATIONS

% PASSING

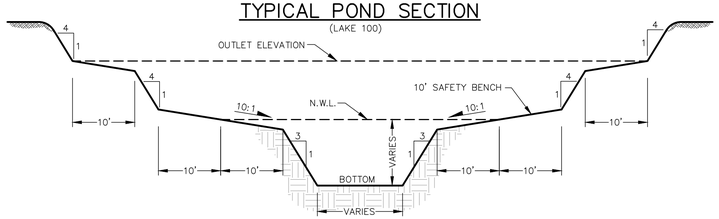
1"	100
3/4"	90 – 100
3/8"	50 – 80
No.4	35 – 70
No.10	20 – 60
No.40	10 – 35
No.200	5 – 10

NOTES:
1. THE AGGREGATE BASE CONSTRUCTION WILL BE ACCEPTED FOR PAYMENT IN ACCORDANCE WITH THE PROVISIONS IN TABLE A.
2. IF THE AGGREGATE BASE FAILS TO MEET THE REQUIREMENTS OF TABLE A THE MATERIAL CAN BE CORRECTED IN PLACE OR REMOVED AND REPLACED WITH MATERIAL THAT MEET THE REQUIREMENTS OF TABLE A.
3. IN THE EVENT THAT RECYCLED MATERIAL IS USE IT MUST MEET MNDOT REQUIREMENTS FOR RECYCLED BASE.

APPROVED: 2 - 2003
City of RAMSEY
STANDARD DETAILS: MODIFIED CLASS 5 SPECIFICATIONS
CITY PLATE No. STR-26

TYPICAL POND SECTION

(LAKE 100)



TURF ESTABLISHMENT

TURF ESTABLISHMENT SHALL APPLY TO ALL DISTURBED AREAS AND SHALL BE ACCORDING TO MnDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION (LATEST EDITION) EXCEPT AS MODIFIED BELOW.

TURF ESTABLISHMENT SHALL OCCUR AS SOON AS POSSIBLE BUT IN NO CASE MORE THAN 7 DAYS.

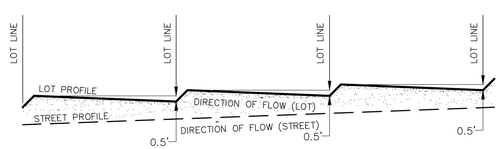
SEED: MnDOT MIXTURE 25-141 AT 60 POUNDS PER ACRE.

DORMANT SEED: SHALL BE APPLIED AT TWICE THE NORMAL RATE AFTER NOVEMBER 1ST.

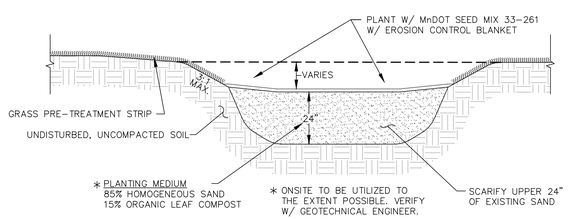
MULCH: TYPE 1 AT 2 TONS PER ACRE (DISK ANCHORED).

FERTILIZER: TYPE 1 10-10-10 AT 200 POUNDS PER ACRE.

LOT BENCHING DETAIL

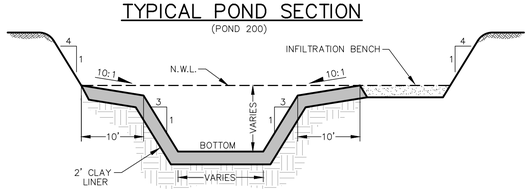


INFILTRATION BASIN



TYPICAL POND SECTION

(POND 200)



CARLSON McCAIN
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3890 PHEASANT RIDGE DR NE
SUITE 100
BLAINE, MN 55449
TEL 763.489.7900
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CARLSONMCCAIN.COM

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota

Print Name: Brian J. Krystofiak, P.E.
Signature:
Date: 11/25/20 License #: 25063

Drawn: ADB
Designed: BJK
Date: 11/25/20

Revisions:
1.

RIVERSTONE DEVELOPMENT, LLC
14015 Sunfish Lake B, Suite 400
Ramsey, MN 55303

RIVERSTONE SOUTH
Ramsey, MN

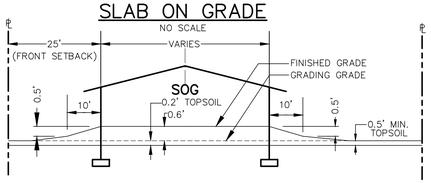
DETAILS

Save Date: 12/02/20 | F:\jobs\8481 - 8500\8494 - pearson place 2nd\cad c3d\engineering\prelim plans\8494_dtls.dwg

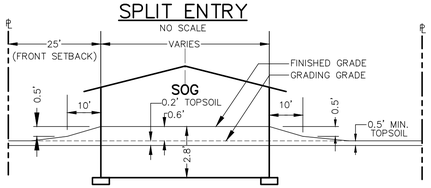
#8494

40 'LOTS
DETACHED TOWNHOME HOLDDOWNS

SLAB ON GRADE
NO SCALE

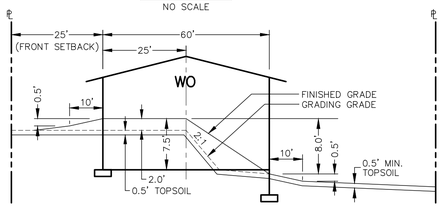


SPLIT ENTRY
NO SCALE



65' LOTS

WALKOUT
NO SCALE



LOOKOUT
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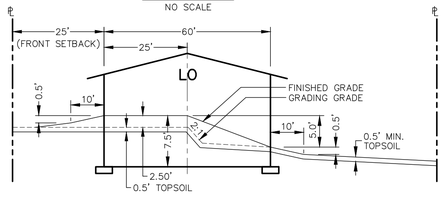

MODIFIED WALKOUT
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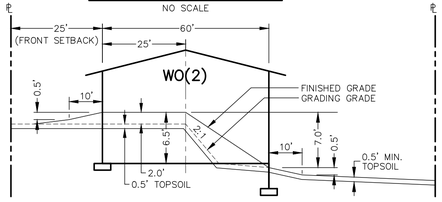

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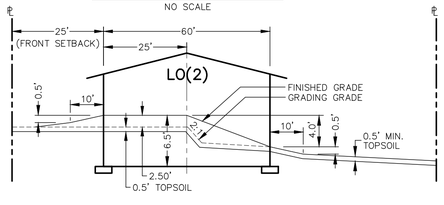

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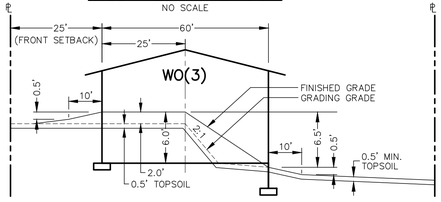

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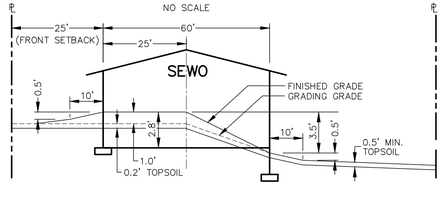
NO SCALE



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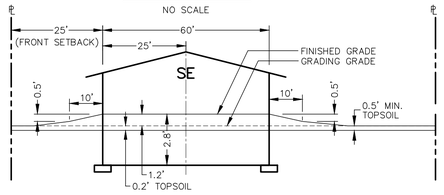
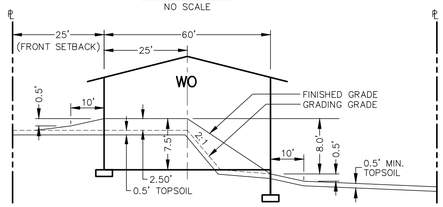
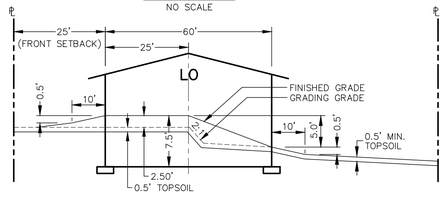


55' LOTS

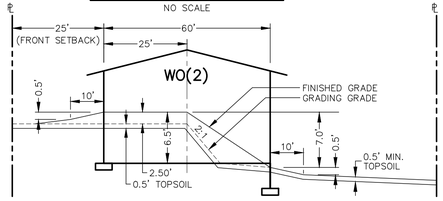
WALKOUT
NO SCALE



LOOKOUT
NO SCALE



MODIFIED WALKOUT
NO SCALE



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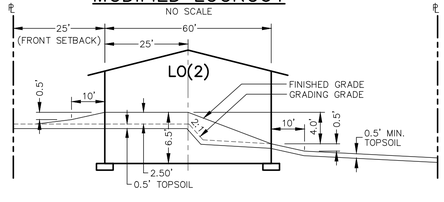
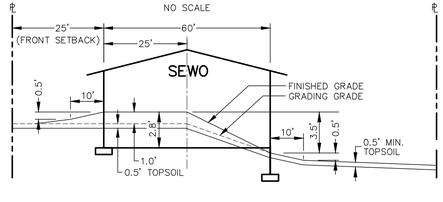
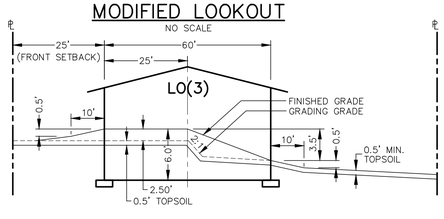


SPLIT ENTRY WALKOUT
NO SCALE



MODIFIED LOOKOUT
NO SCALE



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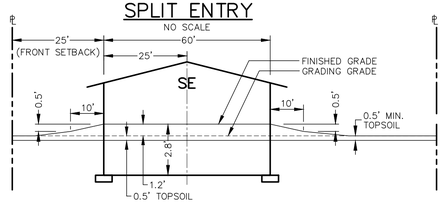
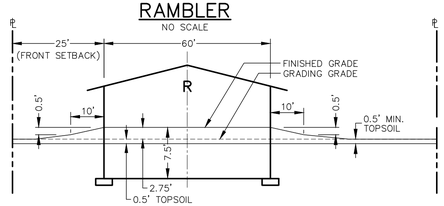


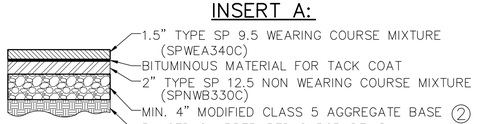
RAMBLER
NO SCALE



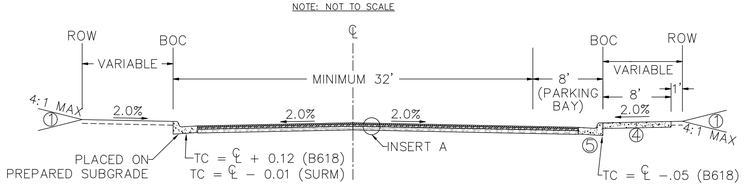
REFERENCE NOTES:

1. GRADE TO MATCH EXISTING SURFACE MINIMUM 4" COMMON TOPSOIL BORROW IN BOULEVARDS. SEE CITY PLATE No. ERO-6
2. CLASS 5 GRADATION IS MODIFIED PER CITY PLATE No. STR-26
3. CONTRACTOR SHALL SCARIFY AND COMPACT, ACCORDING TO THE SPECIFIED DENSITY METHOD, THE TOP 12 INCHES OF MATERIAL PRIOR TO PLACING ANY FILL MATERIALS OR CLASS 5 AGGREGATE BASE.
4. ALL SIDEWALKS SHALL BE 6" THICK, 6' WIDE, PLACED ON PREPARED SUBGRADE.
5. CONCRETE CURB AND GUTTER PER PLAN. SEE CITY PLATE No. STR-1.

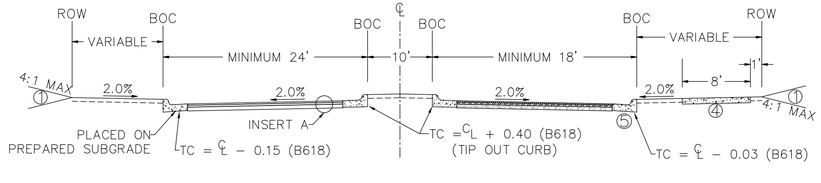
INSERT A:



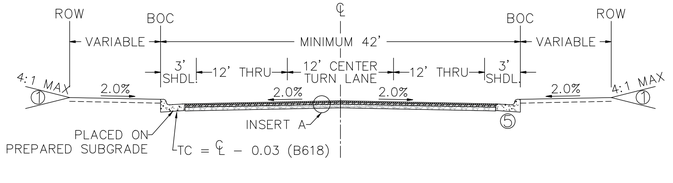
32' – URBAN STREET
W/ PARKING BAY
NOTE: NOT TO SCALE



ENTRANCE W/CENTER MEDIAN
NOTE: NOT TO SCALE



42' – URBAN STREET
NOTE: NOT TO SCALE



32' – URBAN STREET
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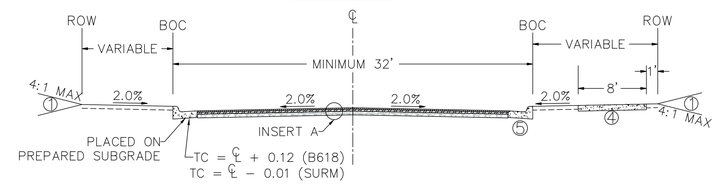
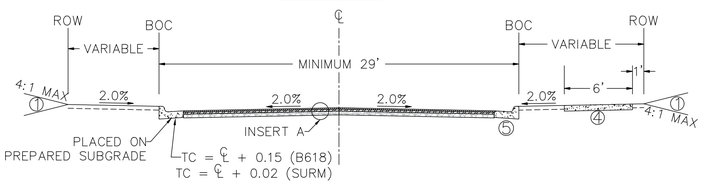


29' – URBAN STREET
NOTE: NOT TO SCALE



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I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota

Print Name: Brian J. Krystofiak, P.E.
Signature:
Date: 11/25/20 License #: 25063

Drawn: ADB
Designed: BJK
Date: 11/25/20

Revisions:
1.

RIVERSTONE DEVELOPMENT, LLC
14015 Sunfish Lake B, Suite 400
Ramsey, MN 55303

RIVERSTONE SOUTH
Ramsey, MN

DETAILS

Save Date: 12/02/20 | F:\jobs\8481 - 8500\8494 - pearson place 2nd\cad c3d\engineering\prelim plans\8494_dtls.dwg

#8494

Grading Lot Number	Addition	Block	Lot	Proposed				Split Entry Alternate (if applicable)				EOF	100 Year	Water Table	Controlling Elevation		Method
				House Type	Garage Floor Elevation	Lowest Floor Elevation	Lowest opening Elevation	House Type	Garage Floor Elevation	Lowest Floor Elevation	Lowest opening Elevation				LF	LO	
101	-	-	-	SOG	875.0	875.0	875.0	SE	875.0	872.2	875.0	873.5	-	855.0	-	874.5	EOF
102	-	-	-	SOG	875.0	875.0	875.0	SE	875.0	872.2	875.0	873.5	-	855.0	-	874.5	EOF
103	-	-	-	SOG	875.0	875.0	875.0	SE	875.0	872.2	875.0	873.5	-	855.0	-	874.5	EOF
104	-	-	-	SOG	875.0	875.0	875.0	SE	875.0	872.2	875.0	873.5	-	855.0	-	874.5	EOF
105	-	-	-	SOG	875.0	875.0	875.0	SE	875.0	872.2	875.0	873.5	-	855.0	-	874.5	EOF
106	-	-	-	SOG	875.0	875.0	875.0	SE	875.0	872.2	875.0	873.5	-	855.0	-	874.5	EOF
107	-	-	-	SOG	875.0	875.0	875.0	SE	875.0	872.2	875.0	873.5	-	855.0	-	874.5	EOF
108	-	-	-	SOG	875.3	875.3	875.3	SE	875.3	872.5	875.3	873.5	-	855.0	-	874.5	EOF
109	-	-	-	SOG	875.5	875.5	875.5	SE	875.5	872.7	875.5	873.5	-	855.0	-	874.5	EOF
110	-	-	-	SOG	875.8	875.8	875.8	SE	875.8	873.0	875.8	873.5	-	855.0	-	874.5	EOF
111	-	-	-	SOG	876.0	876.0	876.0	SE	876.0	873.2	876.0	873.5	-	855.0	-	874.5	EOF
112	-	-	-	SOG	876.0	876.0	876.0	SE	876.0	873.2	876.0	873.5	-	855.0	-	874.5	EOF
113	-	-	-	SOG	876.0	876.0	876.0	SE	876.0	873.2	876.0	873.5	-	855.0	-	874.5	EOF
114	-	-	-	SOG	876.0	876.0	876.0	SE	876.0	873.2	876.0	873.5	-	855.0	-	874.5	EOF
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116	-	-	-	SOG	875.5	875.5	875.5	SE	875.5	872.7	875.5	873.5	-	855.0	-	874.5	EOF
117	-	-	-	SOG	875.5	875.5	875.5	SE	875.5	872.7	875.5	873.5	-	855.0	-	874.5	EOF
118	-	-	-	SOG	875.5	875.5	875.5	SE	875.5	872.7	875.5	873.5	-	855.0	-	874.5	EOF
119	-	-	-	SOG	875.3	875.3	875.3	SE	875.3	872.5	875.3	873.5	-	855.0	-	874.5	EOF
120	-	-	-	SOG	875.0	875.0	875.0	SE	875.0	872.2	875.0	873.5	-	855.0	-	874.5	EOF
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123	-	-	-	SOG	875.3	875.3	875.3	SE	875.3	872.5	875.3	873.5	-	855.0	-	874.5	EOF
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127	-	-	-	SOG	875.3	875.3	875.3	SE	875.3	872.5	875.3	873.0	-	855.0	-	874.0	EOF
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129	-	-	-	SOG	874.5	874.5	874.5	SE	874.5	871.7	874.5	871.0	-	855.0	-	872.0	EOF
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132	-	-	-	SOG	873.0	873.0	873.0	SE	873.0	870.2	873.0		-	855.0	858.0	-	WATER
133	-	-	-	SOG	872.8	872.8	872.8	SE	872.8	870.0	872.8		-	855.0	858.0	-	WATER
134	-	-	-	SOG	872.3	872.3	872.3	SE	872.3	869.5	872.3		-	855.0	858.0	-	WATER
135	-	-	-	SOG	872.0	872.0	872.0	SE	872.0	869.2	872.0		-	855.0	858.0	-	WATER
136	-	-	-	SOG	871.5	871.5	871.5	SE	871.5	868.7	871.5		-	855.0	858.0	-	WATER
137	-	-	-	SOG	871.0	871.0	871.0	SE	871.0	868.2	871.0		-	855.0	858.0	-	WATER
138	-	-	-	SOG	871.0	871.0	871.0	SE	871.0	868.2	871.0		-	855.0	858.0	-	WATER
139	-	-	-	SOG	870.8	870.8	870.8	SE	870.8	868.0	870.8		-	855.0	858.0	-	WATER
140	-	-	-	SOG	870.5	870.5	870.5	SE	870.5	867.7	870.5		-	855.0	858.0	-	WATER
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143	-	-	-	SOG	870.0	870.0	870.0	SE	870.0	867.2	870.0		-	855.0	858.0	-	WATER
144	-	-	-	SOG	870.0	870.0	870.0	SE	870.0	867.2	870.0		-	855.0	858.0	-	WATER
145	-	-	-	SOG	870.2	870.2	870.2	SE	870.2	867.4	870.2		-	855.0	858.0	-	WATER
146	-	-	-	SOG	870.5	870.5	870.5	SE	870.5	867.7	870.5		-	855.0	858.0	-	WATER
147	-	-	-	LO	870.5	863.0	865.5	SEWO	870.0	867.2	867.2	861.7	-	855.0	-	862.7	EOF
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152	-	-	-	WO	871.0	863.5	863.5	-	-	-	-	861.0	-	855.0	-	862.0	EOF
153	-	-	-	WO	871.0	863.5	863.5	-	-	-	-	857.0	857.4	855.0	859.4	-	100 YR
154	-	-	-	WO	871.0	863.5	863.5	-	-	-	-	857.0	857.4	855.0	859.4	-	100 YR
155	-	-	-	WO	871.0	863.5	863.5	-	-	-	-	857.0	857.9	855.0	859.9	-	100 YR
156	-	-	-	WO	871.0	863.5	863.5	-	-	-	-	860.5	857.9	855.0	861.5	-	100 YR
157	-	-	-	WO	871.0	863.5	863.5	-	-	-	-	860.5	857.9	855.0	861.5	-	100 YR
158	-	-	-	WO	870.5	863.0	863.0	-	-	-	-	860.5	857.9	855.0	861.5	-	100 YR
159	-	-	-	WO	870.0	862.5	862.5	-	-	-	-	860.5	857.9	855.0	861.5	-	100 YR
160	-	-	-	WO	870.0	862.5	862.5	-	-	-	-	860.5	857.9	855.0	861.5	-	100 YR
161	-	-	-	LO	871.0	863.5	866.0	SEWO	870.5	867.7	867.7	860.5	857.9	855.0	861.5	-	100 YR
162	-	-	-	WO	870.8	863.3	863.3	-	-	-	-	860.5	857.9	855.0	861.5	-	100 YR
163	-	-	-	WO	870.5	863.0	863.0	-	-	-	-	860.5	857.9	855.0	861.5	-	100 YR
164	-	-	-	WO	870.0	862.5	862.5	-	-	-	-	860.5	857.9	855.0	861.5	-	100 YR
165	-	-	-	WO	870.0	862.5	862.5	-	-	-	-	860.5	857.9	855.0	861.5	-	100 YR
166	-	-	-	WO(2)	869.0	862.5	862.5	-	-	-	-	860.5	857.9	855.0	861.5	-	100 YR
167	-	-	-	WO(2)	869.0	862.5	862.5	-	-	-	-	860.5	857.9	855.0	861.5	-	100 YR
168	-	-	-	WO(2)	869.0	862.5	862.5	-	-	-	-	860.5	857.9	855.0	861.5	-	100 YR
169	-	-	-	WO(3)	968.5	862.5	862.5	-	-	-	-	860.5	860.0	855.0	862.0	-	100 YR
170	-	-	-	WO(2)	869.0	862.5	862.5	-	-	-	-	860.5	860.0	855.0	862.0	-	100 YR
171	-	-	-	WO	870.0	862.5	862.5	-	-	-	-	860.5	860.0	855.0	862.0	-	100 YR
172	-	-	-	WO	870.5	863.0	863.0	-	-	-	-	860.5	860.0	855.0	862.0	-	100 YR
173	-	-	-	WO	871.0	863.5	863.5	-	-	-	-	860.5	860.0	855.0	862.0	-	100 YR
174	-	-	-	LO(2)	871.0	864.5	867.0	SEWO	870.5	867.7	867.7	860.5	860.0	855.0	862.0	-	100 YR
175	-	-	-	WO	871.0	863.5	863.5	-	-	-	-	860.5	860.0	855.0	862.0	-	100 YR
176	-	-	-	WO	870.5	863.0	863.0	-	-	-	-	860.5	860.0	855.0	862.0	-	100 YR
177	-	-	-	WO	870.0	862.5	862.5	-	-	-	-	860.5	860.0	855.0	862.0	-	100 YR
178	-	-	-	WO	870.0	862.5	862.5	-	-	-	-	860.5	860.0	855.0	862.0	-	100 YR
179	-	-	-	WO	870.0	862.5	862.5	-	-	-	-	860.5	860.0	855.0	862.0	-	100 YR
180	-	-	-	WO	870.0	862.5	862.5	-	-	-	-	860.5	860.0	855.0	862.0	-	100 YR
181	-	-	-	WO	870.5	863.0	863.0	-	-	-	-	860.5	-	855.0	-	861.5	EOF

Grading Lot Number	Addition	Block	Lot	Proposed				Split Entry Alternate (if applicable)				EOF	100 Year	Water Table	Controlling Elevation		Method
				House Type	Garage Floor Elevation	Lowest Floor Elevation	Lowest opening Elevation	House Type	Garage Floor Elevation	Lowest Floor Elevation	Lowest opening Elevation				LF	LO	
182	-	-	-	WO	871.5	864.0	864.0	-	-	-	-	861.5	-	855.0	-	862.5	EOF
183	-	-	-	WO	872.0	864.5	864.5	-	-	-	-	861.5	-	855.0	-	862.5	EOF
184	-	-	-	WO	872.5	865.0	865.0	-	-	-	-	862.0	-	855.0	-	863.0	EOF
185	-	-	-	WO	873.0	865.5	865.5	-	-	-	-	862.0	-	855.0	-	863.0	EOF
186	-	-	-	WO	873.5	866.0	866.0	-	-	-	-	862.5	-	855.0	-	863.5	EOF
187	-	-	-	WO	874.0	866.5	866.5					862.5	-	855.0	-	863.5	EOF
188	-	-	-	WO	874.0	866.5	866.5	-	-	-	-	862.5	-	855.0	-	863.5	EOF
189	-	-	-	WO(2)	874.0	866.5	866.5	-	-	-	-	862.5	-	855.0	-	863.5	EOF
190	-	-	-	LO(?)	873.0	866.5	869.0	SEWO	872.5	869.7	869.7	866.5	-	855.0	-	867.5	FOF
191	-	-	-	LO	874.0	866.5	869.0	SEWO	873.5	870.7	870.7	866.5	-	855.0	-	867.5	EOF
192	-	-	-	LO	874.0	866.5	869.0	SEWO	873.5	870.7	870.7	866.5	-	855.0	-	867.5	EOF
193	-	-	-	LO	874.5	867.0	869.5	SEWO	874.0	871.2	871.2	866.5	-	855.0	-	867.5	EOF
194	-	-	-	LO	875.5	868.0	870.5	SEWO	875.0	872.2	872.2	866.5	-	855.0	-	867.5	EOF
195	-	-	-	WO(2)	876.0	869.5	869.5	-	-	-	-	866.5	-	855.0	-	867.5	EOF
196	-	-	-	LO(2)	877.0	870.5	873.0	SEWO	876.5	873.7	873.7	866.5	-	855.0	-	867.5	EOF
197	-	-	-	R	877.5	870.0	877.5	SE	877.0	874.2	877.0	866.5	-	855.0	-	867.5	EOF
198	-	-	-	R	880.0	872.5	880.0	SE	880.0	877.2	880.0	878.5	-	855.0	-	879.5	EOF
199	-	-	-	R	880.0	872.5	880.0	SE	880.0	877.2	880.0	878.5	-	855.0	-	879.5	EOF
200	-	-	-	R	880.5	873.0	880.5	SE	880.5	877.7	880.5	878.5	-	855.0	-	879.5	EOF
201	-	-	-	R	881.0	873.5	881.0	SE	881.0	878.2	881.0	878.5	-	855.0	-	879.5	EOF
202	-	-	-	R	880.5	873.0	880.5	SE	880.5	877.7	880.5	878.0	-	855.0	-	879.0	EOF
203	-	-	-	R	880.0	872.5	880.0	SE	880.0	877.2	880.0	878.0	-	855.0	-	879.0	EOF
204	-	-	-	R	880.0	872.5	880.0	SE	880.0	877.2	880.0	878.0	-	855.0	-	879.0	EOF
205	-	-	-	R	880.5	873.0	880.5	SE	880.5	877.7	880.5	878.0	-	855.0	-	879.0	EOF
206	-	-	-	R	880.5	873.0	880.5	SE	880.5	877.7	880.5	878.0	-	855.0	-	879.0	EOF
207	-	-	-	R	880.0	872.5	880.0	SE	880.5	877.7	880.5	878.0	-	855.0	-	879.0	EOF
208	-	-	-	R	879.5	872.0	879.5	SE	879.5	876.7	879.5	878.0	-	855.0	-	879.0	EOF
209	-	-	-	R	879.5	872.0	879.5	SE	879.5	876.7	879.5	877.5	-	855.0	-	878.5	EOF
210	-	-	-	R	879.0	871.5	879.0	SE	879.0	876.2	879.0	877.5	-	855.0	-	878.5	EOF
211	-	-	-	R	879.0	871.5	879.0	SE	879.0	876.2	879.0	877.5	-	855.0	-	878.5	FOF
212	-	-	-	LO	878.0	870.5	873.0	SEWO	877.5	875.2	875.2	870.0		855.0	-	871.0	EOF
213	-	-	-	WO(2)	879.0	872.5	872.5	-	-	-	-	870.0	-	855.0	-	871.0	EOF
214	-	-	-	WO(2)	879.0	872.5	872.5	-	-	-	-	870.0	-	855.0	-	871.0	EOF
215	-	-	-	WO	879.5	872.0	877.0	-	-	-	-	870.0	-	855.0	-	871.0	FOF
216	-	-	-	WO	880.0	872.5	872.5	-	-	-	-	870.0	-	855.0	-	871.0	EOF
217	-	-	-	WO	880.5	873.0	873.0	-	-	-	-	870.0	-	855.0	-	871.0	EOF
218	-	-	-	WO	880.0	872.5	872.5	-	-	-	-	870.0	-	855.0	-	871.0	EOF
219	-	-	-	WO	879.5	872.0	872.0	-	-	-	-	870.0	-	855.0	-	871.0	EOF
220	-	-	-	LO	877.5	870.0	872.5	SEWO	877.0	874.2	874.2	870.0	-	855.0	-	871.0	EOF
221	-	-	-	LO	876.5	869.0	871.5	SEWO	876.0	873.2	873.2	870.0	-	855.0	-	871.0	EOF
222	-	-	-	LO(2)	876.0	869.5	872.0	SEWO	875.5	872.7	872.7	870.0	-	855.0	-	871.0	EOF
223	-	-	-	LO(2)	875.5	869.0	871.5	SEWO	875.0	872.2	872.2	870.0	-	855.0	-	871.0	EOF
224	-	-	-	LO(2)	875.0	868.5	871.0	SEWO	874.5	871.7	871.7	868.0	-	855.0	-	869.0	EOF
225	-	-	-	LO(2)	874.5	868.0	870.5	SEWO	874.0	871.2	871.2	868.0	-	855.0	-	869.0	EOF
226	-	-	-	LO(2)	873.5	867.0	869.5	SEWO	873.0	870.2	870.2	868.0	-	855.0	-	869.0	EOF
227	-	-	-	LO(2)	873.5	867.0	869.5	SEWO	873.0	870.2	870.2	868.0	-	855.0	-	869.0	EOF
228	-	-	-	LO(2)	874.0	867.5	870.0	SEWO	873.5	870.7	870.7	868.0	-	855.0	-	869.0	EOF
229	-	-	-	LO(2)	874.0	867.5	870.0	SEWO	873.5	870.7	870.7	867.5	-	855.0	-	868.5	EOF
230	-	-	-	LO(2)	873.5	867.0	869.5	SEWO	873.0	870.2	870.2	867.5	-	855.0	-	868.5	EOF
231	-	-	-	LO(2)	873.0	866.5	869.0	SEWO	872.5	869.7	869.7	687.5	-	855.0	-	858.0	EOF
232	-	-	-	LO(3)	872.5	866.5	869.0	SEWO	872.0	869.2	869.2	867.5	-	855.0	-	868.5	EOF
233	-	-	-	R	871.5	864.0	871.5	SE	871.5	868.7	871.5	867.5	-	855.0	-	868.5	EOF
234	-	-	-	R	871.0	863.5	871.0	SE	871.0	868.2	871.0	867.5	-	855.0	-	868.5	EOF
235	-	-	-	R	872.0	864.5	872.0	SE	872.0	869.2	872.0	867.5	-	855.0	-	868.5	EOF
236	-	-	-	LO(?)	874.0	867.5	870.0	SEWO	873.5	870.7	870.7	867.5	-	855.0	-	868.5	FOF
237	-	-	-	LO(2)	874.0	867.5	870.0	SEWO	873.5	870.7	870.7	867.5	-	855.0	-	868.5	EOF
238	-	-	-	LO	875.0	867.5	870.0	SEWO	874.5	871.7	871.7	867.5	-	855.0	-	868.5	EOF
239	-	-	-	LO(2)	876.0	869.5	872.0	SEWO	875.5	872.7	872.7	868.0	-	855.0	-	869.0	EOF
240	-	-	-	LO	877.0	869.5	872.0	SEWO	876.5	873.7	873.7	868.0	-	855.0	-	869.0	EOF
241	-	-	-	LO	877.0	869.5	872.0	SEWO	876.5	873.7	873.7	868.0	-	855.0	-	869.0	EOF
242	-	-	-	LO	877.5	870.0	872.5	SEWO	877.0	874.2	874.2	870.0	-	855.0	-	871.0	EOF
243	-	-	-	LO	877.5	870.0	872.5	SEWO	877.0	874.2	874.2	870.0	-	855.0	-	871.0	EOF
244	-	-	-	LO	877.5	870.0	872.5	SEWO	877.0	874.2	874.2	870.0	-	855.0	-	871.0	EOF
245	-	-	-	LO	877.5	870.0	872.5	SEWO	877.0	874.2	874.2	870.0	-	855.0	-	871.0	EOF
246	-	-	-	LO	877.0	869.5	872.0	SEWO	876.5	873.7	873.7	870.0	-	855.0	-	871.0	EOF
247	-	-	-	LO	876.5	869.0	871.5	SEWO	876.0	873.2	873.2	870.0	-	855.0	-	871.0	EOF
248	-	-	-	LO(2)	875.5	869.0	871.5	SEWO	875.0	872.2	872.2	870.0	-	855.0	-	871.0	EOF
249	-	-	-	LO(2)	875.5	869.0	871.5	SEWO	875.0	872.2	872.2	870.0	-	855.0	-	871.0	EOF
250	-	-	-	LO(2)	875.5	869.0	871.5	SEWO	875.0	872.2	872.2	870.0	-	855.0	-	871.0	EOF
251	-	-	-	LO(2)	875.5	869.0	871.5	SEWO	875.0	872.2	872.2	870.0	-	855.0	-	871.0	EOF
252	-	-	-	LO(2)	874.0	867.5	870.0	SEWO	873.5	870.7	870.7	868.5	-	855.0	-	869.5	EOF
253	-	-	-	LO(2)	874.0	867.5	870.0	SEWO	873.5	870.7	870.7	868.5	-	855.0	-	869.5	EOF
254	-	-	-	LO(2)	874.5	868.0	870.5	SEWO	874.0	871.2	871.2	868.5	-	855.0	-	869.5	EOF
255	-	-	-	LO(2)	874.0	867.5	870.0	SEWO	873.5	870.7	870.7	868.5	-	855.0	-	869.5	EOF
256	-	-	-	R	871.5	864.0	871.5	SE	871.5	868.7	871.5	868.5	-	855.0	-	869.5	EOF
257	-	-	-	R	871.0	863.5	871.0	SE	871.0	868.2	871.0	868.5	-	855.0	-	869.5	EOF
258	-	-	-	R	871.0	863.5	871.0	SE	871.0	868.2	871.0	868.5	-	855.0	-	869.5	EOF
259	-	-	-	R	870.5	863.0	870.5	SE	870.5	867.7	870.5	868.5	-	855.0	-	869.5	EOF
260	-	-	-	R	870.0	862.5	870.0	SE	870.0	867.2	870.0	868.5	-	855.0	-	869.5	EOF
261	-	-	-	R	870.0	862.5	870.0	SE	870.0	867.2	870.0	868.5	-	855.0	-	869.5	EOF
262	-	-	-	R	870.2	862.7	870.2	SE	870.2	867.4	870.2	868.5	-	855.0	-	869.5	EOF

Grading Lot Number	Addition	Block	Lot	Proposed				Split Entry Alternate (if applicable)				EOF	100 Year	Water Table	Controlling Elevation		Method
				House Type	Garage Floor Elevation	Lowest Floor Elevation	Lowest opening Elevation	House Type	Garage Floor Elevation	Lowest Floor Elevation	Lowest opening Elevation				LF	LO	
263	-	-	-	R	870.5	863.0	870.5	SE	870.5	867.7	870.5	868.5	-	855.0	-	869.5	EOF
264	-	-	-	R	871.0	863.5	871.0	SE	871.0	868.2	871.0	868.5	-	855.0	-	869.5	EOF
265	-	-	-	SOG	875.0	875.0	875.0	SE	875.0	872.2	875.0	873.0	-	855.0	-	874.0	EOF
266	-	-	-	SOG	874.5	874.5	874.5	SE	874.5	871.7	874.5	873.0	-	855.0	-	874.0	EOF
267	-	-	-	SOG	874.5	874.5	874.5	SE	874.5	871.7	874.5	873.0	-	855.0	-	874.0	EOF
268	-	-	-	SOG	874.5	874.5	874.5	SE	874.5	871.7	874.5	873.0	-	855.0	-	874.0	EOF
269	-	-	-	SOG	874.5	874.5	874.5	SE	874.5	871.7	874.5	873.0	-	855.0	-	874.0	EOF
270	-	-	-	SOG	874.5	874.5	874.5	SE	874.5	871.7	874.5	873.0	-	855.0	-	874.0	EOF
271	-	-	-	SOG	874.5	874.5	874.5	SE	874.5	871.7	874.5	873.0	-	855.0	-	874.0	EOF
272	-	-	-	SOG	875.0	875.0	875.0	SE	875.0	872.2	875.0	873.0	-	855.0	-	874.0	EOF
273	-	-	-	SOG	875.0	875.0	875.0	SE	875.0	872.2	875.0	873.0	-	855.0	-	874.0	EOF
274	-	-	-	SOG	875.3	875.3	875.3	SE	875.3	872.5	875.3	873.0	-	855.0	-	874.0	EOF
275	-	-	-	SOG	875.5	875.5	875.5	SE	875.5	872.7	875.5	873.0	-	855.0	-	874.0	EOF
276	-	-	-	SOG	876.0	876.0	876.0	SE	876.0	873.2	876.0	873.0	-	855.0	-	874.0	EOF
277	-	-	-	SOG	876.0	876.0	876.0	SE	876.0	873.2	876.0	873.0	-	855.0	-	874.0	EOF
278	-	-	-	SOG	876.0	876.0	876.0	SE	876.0	873.2	876.0	873.0	-	855.0	-	874.0	EOF
279	-	-	-	SOG	876.0	876.0	876.0	SE	876.0	873.2	876.0	873.0	-	855.0	-	874.0	EOF
280	-	-	-	SOG	875.5	875.5	875.5	SE	875.5	872.7	875.5	873.0	-	855.0	-	874.0	EOF
281	-	-	-	SOG	875.0	875.0	875.0	SE	875.0	872.2	875.0	873.0	-	855.0	-	874.0	EOF
282	-	-	-	SOG	874.5	874.5	874.5	SE	874.5	871.7	874.5	873.0	-	855.0	-	874.0	EOF
283	-	-	-	SOG	874.5	874.5	874.5	SE	874.5	871.7	874.5	873.0	-	855.0	-	874.0	EOF
284	-	-	-	SOG	875.0	875.0	875.0	SE	875.0	872.2	875.0	873.0	-	855.0	-	874.0	EOF
285	-	-	-	SOG	875.5	875.5	875.5	SE	875.5	872.7	875.5	873.0	-	855.0	-	874.0	EOF
286	-	-	-	SOG	875.5	875.5	875.5	SE	875.5	872.7	875.5	873.0	-	855.0	-	874.0	EOF
287	-	-	-	SOG	875.0	875.0	875.0	SE	875.0	872.2	875.0	873.0	-	855.0	-	874.0	EOF
288	-	-	-	SOG	874.5	874.5	874.5	SE	874.5	871.7	874.5	873.0	-	855.0	-	874.0	EOF
289	-	-	-	SOG	874.5	874.5	874.5	SE	874.5	871.7	874.5	873.0	-	855.0	-	874.0	EOF
290	-	-	-	SOG	874.5	874.5	874.5	SE	874.5	871.7	874.5	873.0	-	855.0	-	874.0	EOF
291	-	-	-	SOG	874.5	874.5	874.5	SE	874.5	871.7	874.5	873.0	-	855.0	-	874.0	EOF
292	-	-	-	SOG	875.0	875.0	875.0	SE	875.0	872.7	875.0	873.0	-	855.0	-	874.0	FOF
293	-	-	-	SOG	875.5	875.5	875.5	SE	875.5	872.7	875.5	873.0	-	855.0	-	874.0	EOF
294	-	-	-	SOG	875.5	875.5	875.5	SE	875.5	872.7	875.5	873.0	-	855.0	-	874.0	EOF
295	-	-	-	SOG	875.5	875.5	875.5	SE	875.5	872.7	875.5	873.0	-	855.0	-	874.0	EOF
296	-	-	-	SOG	875.5	875.5	875.5	SE	875.5	872.7	875.5	873.0	-	855.0

CITY OF RAMSEY NOTES

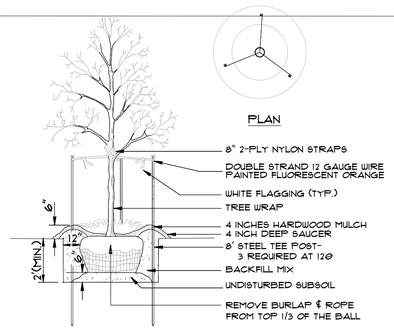
1. CONTRACTOR SHALL GUARANTEE ALL NEW PLANT MATERIAL FOR TWO (2) FULL GROWING SEASONS AFTER THE DATE OF WRITTEN FINAL ACCEPTANCE BY THE landscape architect. ANY PLANT MATERIAL THAT DIES, TURNS BROWN OR DEFOLIATES DURING THE GUARANTEE PERIOD SHALL BE IMMEDIATELY REPLACED AT NO ADDITIONAL COST TO THE OWNER AND SHALL BE COVERED BY THE SAME GUARANTEE.
2. TREES SHALL NOT BE PLANTED WITHIN THE VISION TRIANGLE AS DEFINED IN CITY CODE 117-348
3. ALL TREES IN ISLANDS/CENTER MEDIAN SHALL BE PRIVATELY MAINTAINED PER THE PER THE HOME OWNERS ASSOCIATION DOCTRINE
4. TOPSOIL MEETING THE CITY'S SPECIFICATION SHALL BE REQUIRED PER EACH LOT. COPIES OF THE LOAD TICKET SHALL BE PROVIDED AND CITY INSPECTION IS REQUIRED PRIOR TO INSTALLATION OF SOD.
5. NO TOPSOIL (OR OTHER FILL) SHALL BE PLACED WITHIN ANY WETLAND OR WETLAND SETBACK AREA.
6. IRRIGATION SYSTEM SHALL BE DESIGN BUILT BY THE CONTRACTOR AND SHALL UTILIZE MATCH PRECIPITATION HEADS, HEAD TO HEAD COVERAGE AND WEATHER COMPENSATING SMART CONTROLLER.

1 L1 OVERALL LANDSCAPE PLAN

0 75 150 300 (IN FEET)

LANDSCAPE PLAN NOTES

1. EXISTING CONDITIONS. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS PRIOR TO BIDDING AND CONSTRUCTION START. ANY DISCREPANCIES FOUND THAT AFFECT THE WORK SHALL BE REPORTED TO THE OWNER/LANDSCAPE ARCHITECT FOR CLARIFICATION PRIOR TO BIDDING OR APPROVING ANY ADDITIONAL WORK REQUIRED.
2. UTILITY LOCATES. CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND VERIFYING ALL PUBLIC AND PRIVATE UTILITIES, INCLUDING IRRIGATION LINES, AT LEAST 48 HOURS BEFORE EXCAVATING OR IN ACCORDANCE WITH STATE LAW. IN MINNESOTA, CALL GOPHER STATE ONE-CALL AT 651-454-0002 FOR FIELD LOCATION OF PUBLIC UNDERGROUND UTILITY LINES. ALL LOCATES AND ITEMS NOTED AS 'FIELD VERIFY' ON THE PLANS SHALL BE VERIFIED BY THE CONTRACTOR AT THEIR EXPENSE.
3. PERMITS. CONTRACTOR SHALL VERIFY WITH THE OWNER/LANDSCAPE ARCHITECT THAT THE REQUIRED PERMITS HAVE BEEN OBTAINED PRIOR TO CONSTRUCTION START. CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLYING WITH ALL APPLICABLE CODES, REGULATIONS, AND PERMITS GOVERNING THE WORK.
4. EXISTING ITEMS TO REMAIN. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING PAVEMENT, STRUCTURES, UTILITIES, TREES, SITE AMENITIES, ETC. THAT ARE TO REMAIN FROM DAMAGE DURING CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR CORRECTING ANY DAMAGE (AT CONTRACTOR'S EXPENSE) TO EXISTING ITEMS TO REMAIN.
5. CONSTRUCTION STAGING AND ACCESS. CONTRACTOR SHALL VERIFY THE LOCATION FOR CONSTRUCTION STAGING AND SITE ACCESS WITH THE OWNER/LANDSCAPE ARCHITECT PRIOR TO CONSTRUCTION START. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING PEDESTRIAN AND VEHICLE ACCESS WITHIN AND ADJACENT TO THE SITE THROUGHOUT THE CONSTRUCTION PERIOD UNLESS OTHERWISE NOTED. LONG-TERM STORAGE OF MATERIALS OR SUPPLIES ON-SITE WILL NOT BE PERMITTED. ALL WASTE AND/OR UNUSED MATERIAL SHALL BE PROMPTLY REMOVED FROM THE SITE.
6. SITE REMOVALS. REFER TO CIVIL PLANS FOR GENERAL SITE REMOVALS. ALL ITEMS NOTED TO BE REMOVED SHALL BE COMPLETED BY THE CONTRACTOR AND IMMEDIATELY DISPOSED OF OFF-SITE, IN ACCORDANCE WITH LOCAL REGULATIONS, UNLESS OTHERWISE NOTED. COORDINATE WITH OWNER/LANDSCAPE ARCHITECT FOR ANY ITEMS NOTED AS 'REMOVED BY OTHERS' OR 'REMOVE AND SALVAGE.'
7. UTILITY COORDINATION. REFER TO CIVIL PLAN SHEETS FOR INFORMATION RELATED TO PROPOSED UTILITIES. COORDINATE WITH ELECTRICAL CONTRACTORS FOR SITE ELECTRICAL WORK AND SITE LIGHTING.
8. CONSTRUCTION STAKING. UNLESS OTHERWISE NOTED, CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING CONTROL POINTS AND ALL CONSTRUCTION FIELD STAKING DURING THE COURSE OF THE PROJECT.
9. DIMENSIONS. DIMENSIONS TAKE PRECEDENCE OVER SCALE. DIMENSIONS ARE TO FACE OF CURB, EDGE OF PAVEMENT/WALKWAY, OR OUTSIDE FACE OF BUILDING UNLESS OTHERWISE NOTED.
10. PLAN QUANTITIES. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL MATERIAL QUANTITIES PER PLAN. MATERIAL SCHEDULES ARE PROVIDED SOLELY FOR CONTRACTOR'S CONVENIENCE.
11. REFERENCE SPECIFICATIONS. THE FOLLOWING SPECIFICATIONS SHALL GOVERN THIS PROJECT ACCORDING TO THE FOLLOWING ORDER:
    1. ADDENDA, WITH THOSE OF A LATER DATE HAVING PRECEDENCE OVER THOSE OF AN EARLIER DATE
    2. LANDSCAPE SPECIFICATIONS.
    3. PLAN DRAWINGS.
    4. PLANT / MATERIAL SCHEDULES.
    5. CITY STANDARD SPECIFICATIONS AND DETAILS.
    6. MnDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION, LATEST EDITION.



NOTE: SEE PLANTING NOTES FOR THE TYPE OF MULCH MATERIAL TO USE.

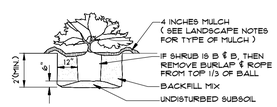
A DECIDUOUS TREE PLANTING DETAIL
NOT TO SCALE

1. SCARIFY BOTTOM AND SIDES OF HOLE PRIOR TO PLANTING
2. TRIM OUT DEAD WOOD AND WEAK AND/OR DEFORMED TWIGS. DO NOT CUT A LEADER. DO NOT PAINT CUTS.
3. SET PLANT ON UNDISTURBED NATIVE SOIL OR THOROUGHLY COMPACTED BACKFILL SOIL. INSTALL PLANT SO THE ROOT FLARE IS AT OR UP TO 2" ABOVE THE FINISHED GRADE.
4. PLACE PLANT IN PLANTING HOLE WITH BURLAP AND WIRE BASKET (IF USED), INTACT. BACKFILL WITH APPROXIMATELY 12" OF THE TOP OF ROOTBALL. WATER PLANT. REMOVE TOP 1/3 OF THE BASKET OR THE TOP TWO HORIZONTAL RINGS, WHICHEVER IS GREATER. REMOVE ALL BURLAP AND NAILS FROM TOP 1/3 OF THE BALL. REMOVE ALL TWINE
5. PLUMB AND BACKFILL WITH BACKFILL SOIL
6. WATER TO SETTLE PLANTS AND FILL VOIDS.
7. WATER WITHIN TWO HOURS OF INSTALLATION. WATERING MUST BE SUFFICIENT TO THOROUGHLY SATURATE ROOT BALL AND PLANTING HOLE.
8. PLACE MULCH WITHIN 48 HOURS OF THE SECOND WATERING UNLESS SOIL MOISTURE IS EXCESSIVE.

NOTE: GUY ASSEMBLY OPTIONAL BUT CONTRACTOR ASSUMES FULL RESPONSIBILITY FOR MAINTAINING TREE IN A PLUMB POSITION FOR THE DURATION OF THE GUARANTEE PERIOD

GUY ASSEMBLY- 16" POLYPROPYLENE OR POLYETHYLENE (40 MIL) 1-1/2" WIDE STRAP (TYP.) DOUBLE STRAND 10 GA. WIRE, 2-T" ROLLED STEEL POSTS (MNDOT 3401) @ 180° O.C. (SEE STAKING DIAGRAM)

B CONIFEROUS TREE PLANTING DETAIL
NOT TO SCALE



C SHRUB & CONTAINER PLANTING DETAIL
NOT TO SCALE

CARLSON McCAIN ENGINEERING SURVEYING ENVIRONMENTAL
3890 PHEASANT RIDGE DR NE
SUITE 100
BLAINE, MN 55449
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I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Landscape Architect under the laws of the State of Minnesota

Print Name: Ryan J. Ruttger, RLA
Signature:
Date: 11/25/20 License #: 56346

Drawn: RJR
Designed: RJR
Date: 11/25/20

Revisions:
1.

RIVERSTONE DEVELOPMENT, LLC.
14015 Sunfish Lake B, Suite 400
Ramsey, MN 55303

RIVERSTONE SOUTH
Ramsey, MN

PRELIMINARY LANDSCAPE PLAN

L1 of 4

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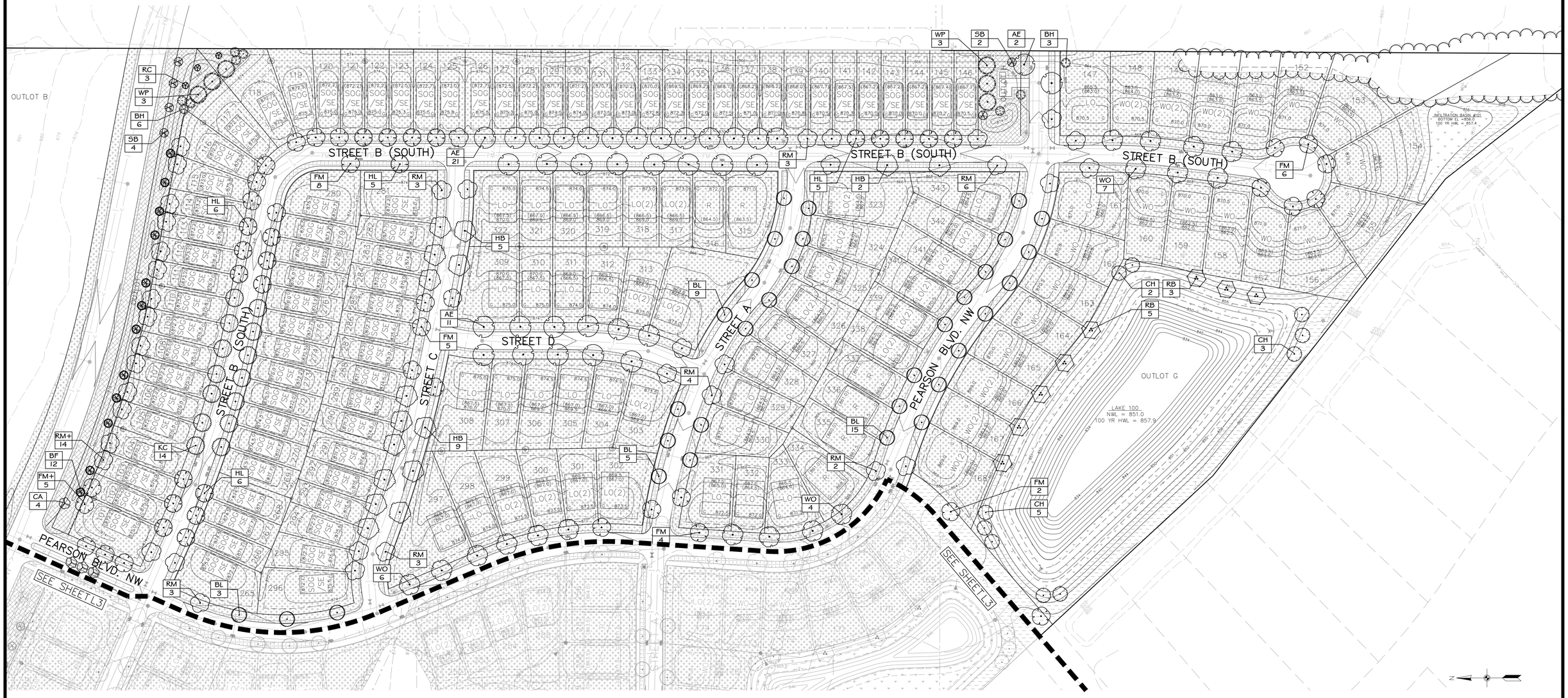

1/L2 LANDSCAPE PLAN ENLARGEMENT

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(IN FEET)

CARLSON McCAIN
ENGINEERING
SURVEYING
ENVIRONMENTAL

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RIVERSTONE SOUTH
Ramsey, MN

PRELIMINARY LANDSCAPE PLAN

L2 of 4

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#8494

1/L3 LANDSCAPE PLAN ENLARGEMENT

N

0 40 80 160
(IN FEET)

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PRELIMINARY LANDSCAPE PLAN

L3 of 4

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LANDSCAPE SPECIFICATIONS

1. TREE PROTECTION. ALL TREES NOT SPECIFICALLY NOTED OR MARKED ON SITE FOR REMOVAL SHALL REMAIN PROTECTED AND UNDISTURBED DURING CONSTRUCTION. TREE PROTECTION SHALL EXTEND TO THE DRIP LINE, WITHIN WHICH NO CONSTRUCTION ACTIVITY, MATERIAL STORAGE, OR VEHICLE PARKING SHALL BE PERMITTED. TREE PROTECTION FENCING SHALL BE ERECTED PRIOR TO CONSTRUCTION START PER PLANS OR AS DIRECTED BY OWNER/LANDSCAPE ARCHITECT AND SHALL CONSIST OF 4' TALL HEAVY DUTY ORANGE CONSTRUCTION FENCING WITH 6' STEEL FENCE POSTS SPACED 6' O.C. MAX.

2. EROSION CONTROL. REFER TO CIVIL PLAN SHEETS FOR STORMWATER POLLUTION PREVENTION PLAN (SWPPP), AND TEMPORARY AND PERMANENT STORMWATER BMPS, INCLUDING SILT FENCE, BIO-ROLLS, INLET PROTECTION, EROSION CONTROL BLANKETING, DUST CONTROL, SWEEPING AND ROCK CONSTRUCTION ENTRANCE. ALL DISTURBED AREAS SHALL RECEIVE PERMANENT STABILIZATION IN ACCORDANCE WITH THE LANDSCAPE PLAN WITHIN 7 DAYS AFTER CONSTRUCTION ACTIVITY IN THE DISTURBED AREA HAS CEASED. IN THE EVENT PERMANENT STABILIZATION CANNOT BE IMPLEMENTED WITHIN 7 DAYS, TEMPORARY STABILIZATION BMPS MUST BE IMPLEMENTED WITHIN 7 DAYS USING.

3. CLEARING AND GRUBBING. CONTRACTOR SHALL BE RESPONSIBLE FOR CLEARING AND GRUBBING ALL AREAS INDICATED AS BEING DISTURBED OR OTHERWISE SHOWN ON PLANS. CLEARING AND GRUBBING SHALL INCLUDE REMOVAL AND DISPOSAL OF ALL TREES, STUMPS, BRUSH, GRASS, ROOTS AND OTHER ORGANIC MATERIAL AT AN APPROVED OFF-SITE DISPOSAL LOCATION.

4. SOIL PREPARATION. REFER TO GEOTECHNICAL REPORT FOR ANY REQUIRED SOIL CORRECTIONS, AMENDMENTS OR ADDITIONAL INFORMATION (IF APPLICABLE). EXISTING TOPSOIL SHALL BE STRIPPED FROM ALL DISTURBED AREAS AND STOCKPILED IN AN APPROVED LOCATION FOR RE-SPREAD. ALL AREAS WHERE SOIL HAS BEEN COMPACTED BY CONSTRUCTION ACTIVITY AND THAT ARE INDICATED TO BE SODDED, SEEDED OR PLANTING BED SHALL BE DE-COMPACTED TO A MINIMUM DEPTH OF 12 INCHES BY SOIL RIPPING, TILLING OR OTHER APPROVED SOIL LOOSENING METHOD.

5. TOPSOIL MATERIAL. ALL EXISTING, AMENDED OR IMPORTED TOPSOIL SHALL MEET THE REQUIREMENTS OF WDOT TOPSOIL TYPE A. A MINIMUM 4 INCH DEPTH OF TOPSOIL SHALL BE PLACED ON ALL AREAS TO BE SODDED OR SEEDED. A MINIMUM 12 INCH DEPTH OF TOPSOIL SHALL BE PLACED WITHIN ALL PLANTING BED AREAS. ALL TOPSOIL SHALL BE FINE GRADED, RAKED AND DRAGGED TO PROVIDE A SMOOTH, UNIFORM SURFACE. TOPSOIL GRADES SHALL BE WITHIN .1 FEET OF INDICATED FINISHED GRADE AND SHALL BE TRUE TO GRADIENTS SHOWN ON PLANS. REFER TO CIVIL PLAN SHEETS FOR FILTRATION BASIN SOIL REQUIREMENTS.

6. SEEDING AND TURF ESTABLISHMENT. CONTRACTOR SHALL OBTAIN OWNER/LANDSCAPE ARCHITECT'S APPROVAL OF FINAL GRADES AND TOPSOIL PREP PRIOR TO SEEDING. APPLY 12-12-12 GRANULAR STARTER FERTILIZER AT A RATE OF 250 LBS PER ACRE PRIOR TO SEEDING.. SEEDS SHALL BE SOWED IN 2 PERPENDICULAR PASSES, EACH PASS AT ONE-HALF THE INDICATED RATE, VIA BROADCAST SPREADER, DROP SEEDER OR DRILL SEEDER. FOLLOWING SEED APPLICATION, INSTALL TYPE 3N EROSION CONTROL BLANKET ON ALL SLOPES GREATER THAN 4:1. IN ALL OTHER AREAS, APPLY HYDROMULCH COVER (MUST BE A SEPARATE OPERATION FROM SEEDING) AT A TARGETED DRY WEIGHT RATE OF 3500 LBS PER ACRE. SOIL SHALL BE KEPT MOIST DURING ESTABLISHMENT WITH ADDITIONAL RE-SEEDING AS NECESSARY TO ACHIEVE A HEALTHY, UNIFORM STAND OF GRASS, FREE OF WEEDS AND WITH COVERAGE EXCEEDING 75% IN ANY 10'x10' AREA PRIOR TO FINAL ACCEPTANCE.

7. SODDING. CONTRACTOR SHALL OBTAIN OWNER/LANDSCAPE ARCHITECT'S APPROVAL OF FINAL GRADES AND TOPSOIL PREP PRIOR TO SODDING. APPLY 12-12-12 GRANULAR STARTER FERTILIZER AT A RATE OF 250 LBS PER ACRE PRIOR TO SODDING AND ROLL TOPSOIL TO CREATE A UNIFORM SURFACE FOR LAYING SOD. SOD SHALL NOT BE CUT MORE THAN 24-HOURS IN ADVANCE OF INSTALLATION. CONTRACTOR SHALL KEEP SOD MOIST FOR A MINIMUM OF 30 DAYS AND SHALL BE RESPONSIBLE FOR MAINTAINING THE SOD UNTIL FINAL ACCEPTANCE.

8. PLANT MATERIAL. ALL PLANTING STOCK SHALL CONFORM TO THE "AMERICAN STANDARD FOR NURSERY STOCK," ANSI-Z60, LATEST EDITION, OF THE AMERICAN ASSOCIATION OF NURSERYMEN, INC. AND SHALL CONSTITUTE MINIMUM QUALITY REQUIREMENTS FOR PLANT MATERIALS. OWNER/LANDSCAPE ARCHITECT RESERVE THE RIGHT TO REJECT ANY PLANTS WHICH ARE DEEMED UNSATISFACTORY BEFORE, DURING, OR AFTER INSTALLATION. NO SUBSTITUTION OF PLANT MATERIAL SHALL BE ACCEPTED UNLESS APPROVED IN WRITING BY THE OWNER/LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.

9. PLANT MATERIAL SUBSTITUTIONS. ALL REQUESTS FOR PLANT SUBSTITUTIONS SHALL BE MADE IN WRITING TO THE OWNER/LANDSCAPE ARCHITECT AND MUST BE APPROVED BY THE CITY.

10. PLANT INSTALLATION AND ESTABLISHMENT. REFER TO STANDARD PLANTING DETAILS. CONTRACTOR SHALL STAKE TREE LOCATIONS FOR APPROVAL BY OWNER/LANDSCAPE ARCHITECT PRIOR TO PLANTING. ANY PLANT MATERIAL WHICH DIES, TURNS BROWN, OR DEFOLIATES (PRIOR TO TOTAL ACCEPTANCE OF THE WORK) SHALL BE PROMPTLY REMOVED FROM THE SITE AND REPLACED WITH MATERIAL OF THE SAME SPECIES, QUANTITY, AND SIZE.

11. MULCH MATERIAL. DOUBLE SHREDDED HARDWOOD MULCH OR ROCK MULCH AS INDICATED ON PLANS. ALL MULCH SHALL BE CLEAN AND FREE OF NOXIOUS WEEDS, SOIL, OR OTHER DELETERIOUS MATERIAL, AND SHALL BE INSTALLED OVER A NON-WOVEN GEOTEXTILE FABRIC (INCIDENTAL) OR OTHER APPROVED WEED BARRIER TO A MINIMUM SETTLED DEPTH OF 4". MULCH SHALL BE HELD BACK FROM PLANT STEMS/TRUNKS A MINIMUM OF 3". WOOD MULCH SHALL BE PLACED AROUND INDIVIDUAL TREES TO A 4' MINIMUM DIAMETER. MULCH SHALL BE INSTALLED WITHIN 48-HOURS OF PLANT INSTALLATION.

12. LANDSCAPE EDGING. INSTALL LANDSCAPE EDGING BETWEEN ALL MULCH AREAS AND TURF. EDGING SHALL BE COMMERCIAL GRADE BLACK POLYETHYLENE OR VINYL EDGING, 0.1 INCH THICK BY 5 INCHES DEEP, V-LIPPED BOTTOM, HORIZONTALLY GROOVED, 1-INCH ROUND TOP, EXTRUDED IN STANDARD LENGTHS, WITH 9-INCH STEEL ANGLE STAKES.

13. IRRIGATION. DESIGN, FURNISH AND INSTALL A COMPLETE UNDERGROUND IRRIGATION SYSTEM FROM APPROVED POINT(S)-OF-CONNECTION WITHIN THE SITE COVERING ALL TURF AND PLANTING AREAS AS SHOWN ON THE LANDSCAPE PLAN. INCLUDES FLOW/PRESSURE TESTING, PLANS WITH DESIGN CALCULATIONS, AS-BUILT DRAWINGS, LABOR, MATERIALS, EQUIPMENT, AND SERVICES FOR THE TESTING, ADJUSTING, RETESTING AND READJUSTING AS REQUIRED TO PLACE THE SYSTEM IN AN APPROVED OPERATING CONDITION. THE IRRIGATION SYSTEM SHALL INCLUDE THE DESIGN AND INSTALLATION OF THE FOLLOWING: PIPING, METER AND BACKFLOW ASSEMBLIES, SPRINKLER HEADS, CABINETS, VALVES AND VALVE BOXES, CONTROLLERS, CONTROL WIRING, FITTINGS, ELECTRICAL CONNECTIONS, QUICK-COUPLERS, ALL OTHER NECESSARY ACCESSORIES, SYSTEM MANUALS, 1-YEAR MAINTENANCE PERIOD INCLUDING 1 FALL WINTERIZATION AND 1 SPRING START-UP. IRRIGATION PLANS TO BE PREPARED BY A QUALIFIED IRRIGATION DESIGNER AND SUBMITTED TO OWNER/LANDSCAPE ARCHITECT FOR APPROVAL.

14. MAINTENANCE. MAINTENANCE SHALL BEGIN IMMEDIATELY AFTER EACH PORTION OF THE WORK IS IN PLACE. PLANT MATERIAL SHALL BE PROTECTED AND MAINTAINED UNTIL THE INSTALLATION OF THE PLANTS IS COMPLETE, INSPECTION HAS BEEN MADE, AND PLANTINGS ARE ACCEPTED EXCLUSIVE OF THE GUARANTEE. MAINTENANCE SHALL INCLUDE MOWING, TRIMMING, WATERING, FERTILIZING, WEED AND PESTICIDE CONTROL, MULCHING, REMOVAL OF DEAD MATERIALS, RE-SETTING PLANTS TO PROPER GRADE AND KEEPING PLANTS IN A PLUMB POSITION. AFTER ACCEPTANCE, THE OWNER SHALL ASSUME MAINTENANCE RESPONSIBILITIES, HOWEVER, THE CONTRACTOR SHALL RETAIN RESPONSIBILITY FOR ALL PLANT MATERIAL THROUGH THE COMPLETION OF THE WARRANTY PERIOD.

15. WATERING. UPON ESTABLISHMENT OF SEED AND INSTALLATION OF PLANTS, CONTRACTOR SHALL MAINTAIN A WATERING SCHEDULE WHICH WILL THOROUGHLY WATER ALL PLANTS AND TURF AREAS A MINIMUM OF ONCE A WEEK. MORE FREQUENT WATERING MAY BE REQUIRED DURING PERIODS OF HOT, DRY WEATHER. CONTRACTOR SHALL MAKE THE NECESSARY ARRANGEMENTS FOR WATER. IN THE ABSENCE OF PERMANENT IRRIGATION, TEMPORARY IRRIGATION, TREE WATERING BAGS, OR HAND-WATERING ARE ACCEPTABLE.

16. FINAL ACCEPTANCE. UPON SUBSTANTIAL COMPLETION OF THE WORK, CONTRACTOR SHALL REQUEST FINAL ACCEPTANCE OF THE WORK IN WRITING BY THE OWNER/LANDSCAPE ARCHITECT. IF ANY WORK IS FOUND TO BE INCOMPLETE OR UNSATISFACTORY IN THE OPINION OF THE OWNER/LANDSCAPE ARCHITECT, A WRITTEN PUNCH LIST WILL BE PREPARED LISTING ALL ITEMS THAT REQUIRE COMPLETING OR CORRECTING BEFORE FINAL ACCEPTANCE.

17. WARRANTY. ALL PLANTS, MATERIALS AND WORKMANSHIP SHALL BE GUARANTEED FOR THREE (3) YEARS FROM THE DATE OF FINAL ACCEPTANCE, UNLESS OTHERWISE SPECIFIED. THE GUARANTEE SHALL COVER THE FULL COST OF REPLACEMENT INCLUDING LABOR AND MATERIAL.

PLANT SCHEDULE

TREES	CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER
	RM	37	Acer rubrum `Northwood`	Northwoods Red Maple	2" Cal.	B&B
	RM+	21	Acer rubrum `Northwood`	Northwoods Red Maple	3" Cal.	B&B
	FM	45	Acer x freemanii `Sienna`	Sienna Glen Maple	2" Cal.	B&B
	FM+	10	Acer x freemanii `Sienna`	Sienna Glen Maple	2.5" Cal.	B&B
	RB	14	Betula nigra Clump Form, 2" Cal Equivalent	River Birch Multi-Trunk	8` Ht.	B&B
	HB	25	Celtis occidentalis	Common Hackberry	2" Cal.	B&B
	HL	22	Gleditsia triacanthos inermis `Harve`	Northern Acclaim Thornless Honey Locust	2" Cal.	B&B
	KC	14	Gymnocladus dioica `Espresso`	Kentucky Coffeetree	2" Cal.	B&B
	WO	35	Quercus bicolor	Swamp White Oak	2" Cal.	B&B
	BL	59	Tilia americana `Boulevard`	Boulevard Linden	2" Cal.	B&B
	AE	60	Ulmus americana `Princeton`	American Elm	2" Cal.	B&B
CONIFEROUS TREES	CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER
	BF	22	Abies balsamea	Balsam Fir	6` Ht.	B&B
	RC	3	Juniperus virginiana	Eastern Red Cedar	5 gal.	Cont.
	BH	9	Picea glauca densata	Black Hills Spruce	6` Ht.	B&B
	WP	6	Pinus strobus	White Pine	6` Ht.	B&B
	CH	17	Tsuga canadensis	Canadian Hemlock	6` Ht.	B&B
ORNAMENTAL TREES	CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER
	SB	6	Amelanchier x grandiflora `Autumn Brilliance` Clump Form, 1.5" Cal Equivalent	Autumn Brilliance Serviceberry	7` Ht.	B&B
	CA	7	Malus x `Prairifire` Red Flowers	Prairifire Crabapple	1.5" Cal.	B&B
GROUND COVERS	CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER
	SOD	135,011 sf	Turf Sod Bluegrass	Kentucky Bluegrass	sod	
	TI	2,202,069 sf	Type I - Low Maint. Turf Seed Refer to notes for acceptable seeding methods Seeding Rate 330 lb/ac	MnDOT Seed Mix 25-131	seed	
	TII	85,297 sf	Type II - High Maint. Turf Seed Refer to notes for acceptable seeding methods Seeding Rate 180 lb/ac	MnDOT Seed Mix 25-151	seed	
	TIII	174,580 sf	Type III - Stormwater Pond Pollinator Seed Mix Refer to notes for acceptable seeding methods. Seeding Rate 47.5 lb/ac	BWSR Stormwater Pond Pollinator NE	seed	
	TIV	95,767 sf	Type IV - Native Seed Mix Refer to notes for acceptable seeding methods. Seeding Rate 50.0 lb/ac	MnDOT Seed Mix 35-241	seed	

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RIVERSTONE SOUTH
Ramsey, MN

PRELIMINARY LANDSCAPE PLAN

L4 of 4

CAPSTONE
HOMES

FLOOR PLANS

TWO STORY

RAMBLER

MULTI LEVEL

RAISED RANCH

LIBERTY SERIES

CAPSTONE
— HOMES —

TWO STORY

PATTERSON

FOSTER II

CREEK VIEW III

MULBERRY III - 2 CAR

MULBERRY III

BROOK VIEW II

WATER STONE II

— PATTERSON —

TWO STORY

3 BED | 3 BATH | 2 STALL GARAGE | 2,173 SQ FT LIVING SPACE

ELEVATION A

ELEVATION B

ELEVATION C

CAPSTONE HOMES

763-427-3090 | CAPSTONEHOMES-MN.COM

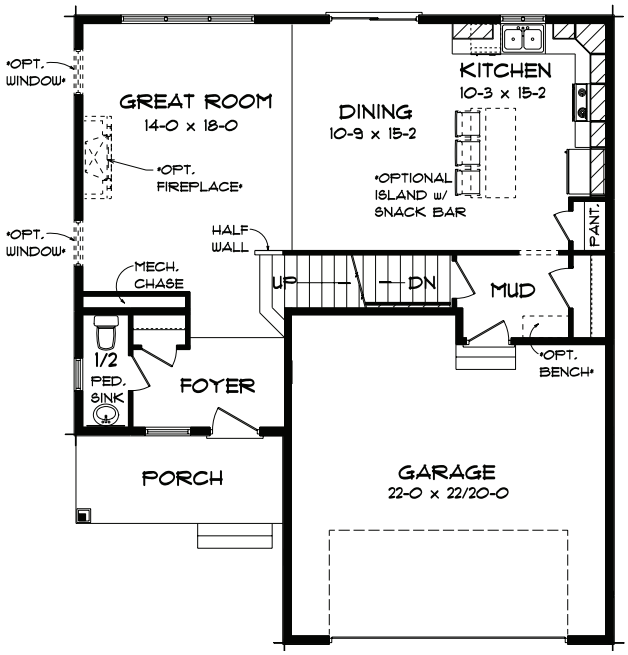
Floor plans, materials, products and options are subject to change without notice. Floor plans are renderings and may very slight from actual homes. Landscaping packages will depend on community. MN Bldr Lic BC637318

EQUAL HOUSING OPPORTUNITY

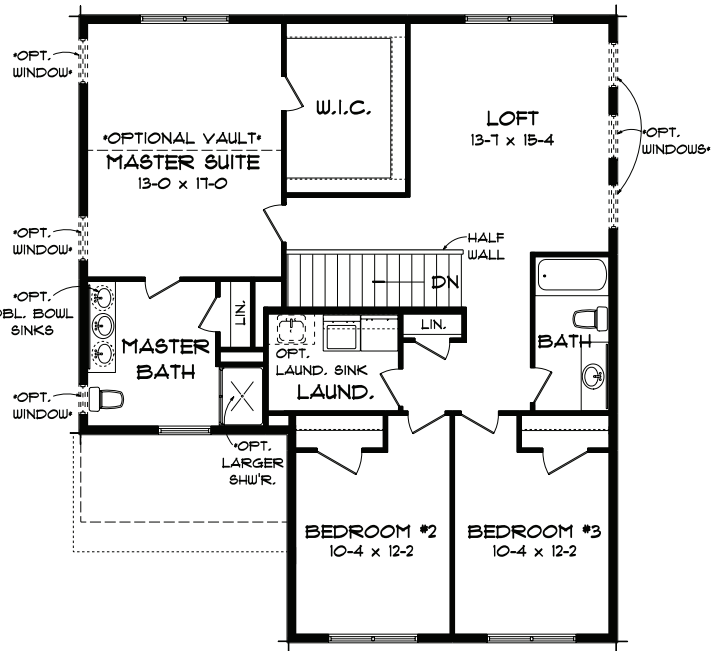
— PATTERSON —

FLOOR PLANS

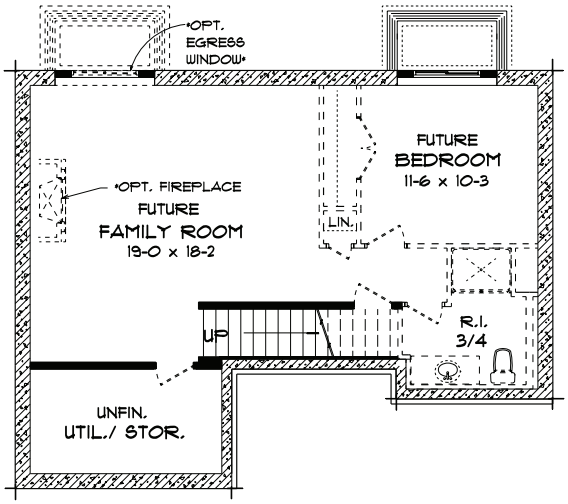
3 BED | 3 BATH | 2 STALL GARAGE | 2,173 SQ FT LIVING SPACE



MAIN LEVEL



SECOND LEVEL



LOWER LEVEL

CAPSTONE HOMES

763-427-3090 | CAPSTONEHOMES-MN.COM

Floor plans, materials, products and options are subject to change without notice. Floor plans are renderings and may very slight from actual homes. Landscaping packages will depend on community. MN Bldr Lic BC637318

EQUAL HOUSING OPPORTUNITY

— FOSTER II —

TWO STORY
3 BED | 3 BATH | 3 STALL GARAGE | 2,266 SQ FT LIVING SPACE

ELEVATION A

ELEVATION B

ELEVATION C

CAPSTONE
— HOMES —

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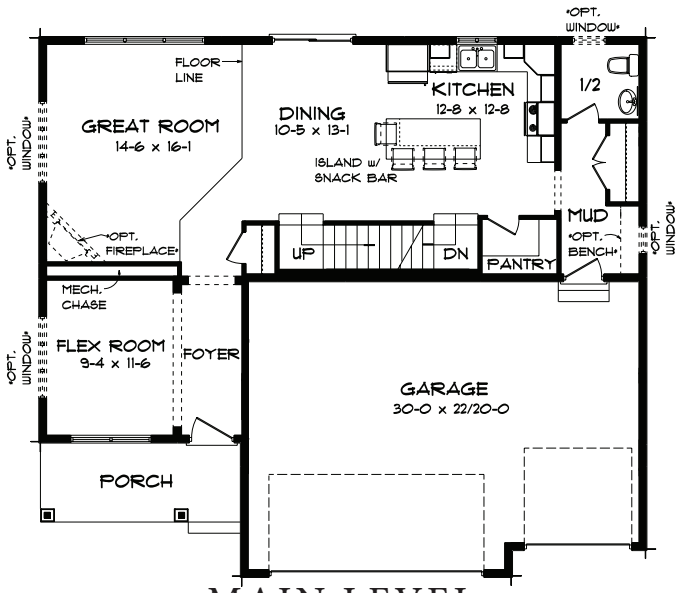
EQUAL HOUSING OPPORTUNITY

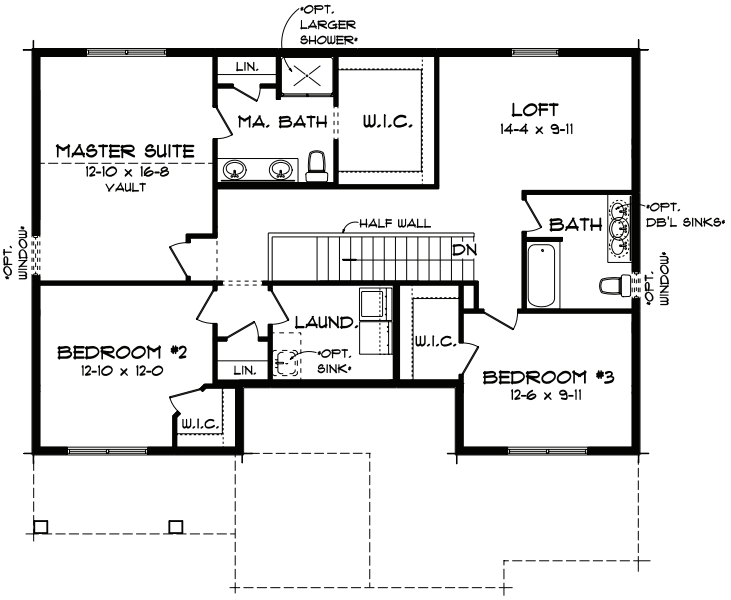
— FOSTER II —

FLOOR PLANS

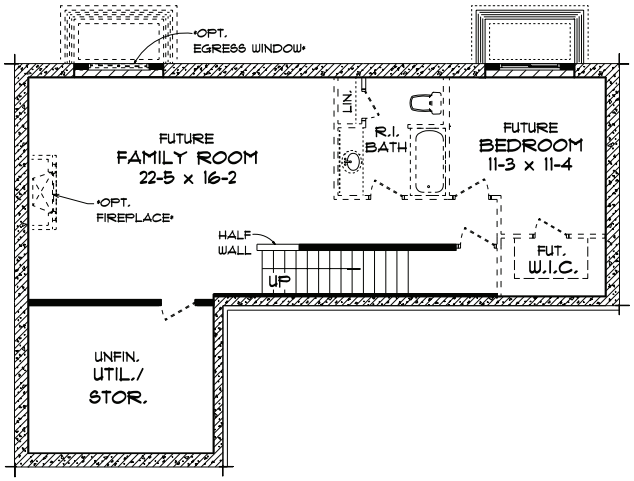
3 BED | 3 BATH | 3 STALL GARAGE | 2,266 SQ FT LIVING SPACE



MAIN LEVEL



SECOND LEVEL



LOWER LEVEL

CAPSTONE HOMES

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EQUAL HOUSING OPPORTUNITY

— CREEK VIEW III —

TWO STORY
3 BED | 3 BATH | 3 STALL GARAGE | 2,471 SQ FT LIVING SPACE

ELEVATION A

ELEVATION B

ELEVATION C

CAPSTONE
— HOMES —

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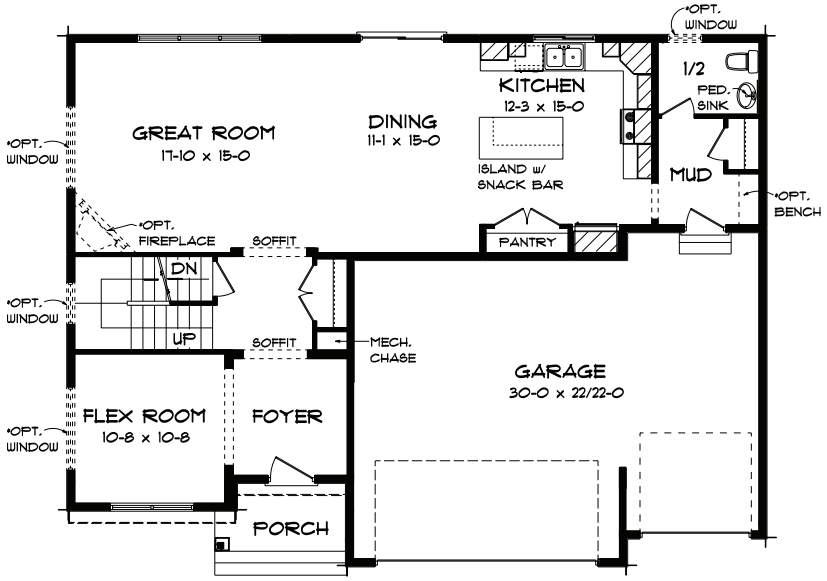
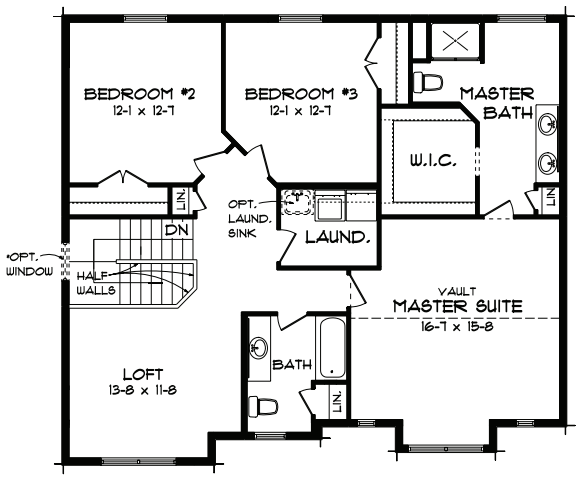
EQUAL HOUSING OPPORTUNITY

— CREEK VIEW III —

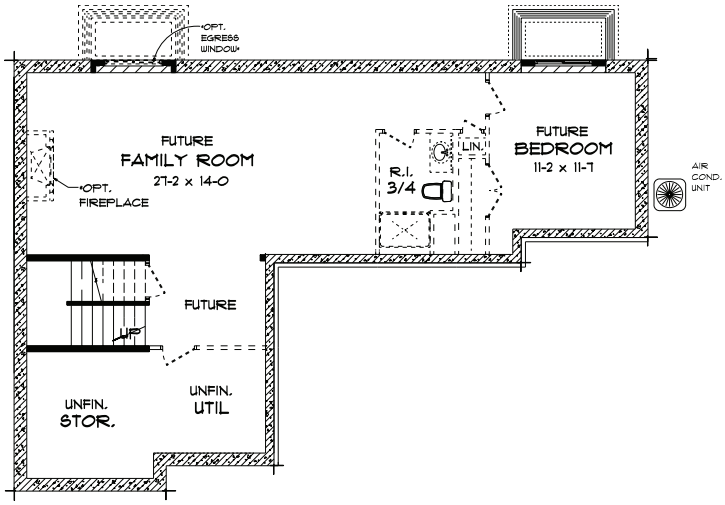
FLOOR PLANS

3 BED | 3 BATH | 3 STALL GARAGE | 2,471 SQ FT LIVING SPACE





MAIN LEVEL



LOWER LEVEL

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EQUAL HOUSING OPPORTUNITY

— MULBERRY III —

TWO STORY
4 BED | 3 BATH | 2 STALL GARAGE | 2,607 SQ FT LIVING SPACE

ELEVATION A

ELEVATION B

ELEVATION C

ELEVATION D

CAPSTONE
— HOMES —

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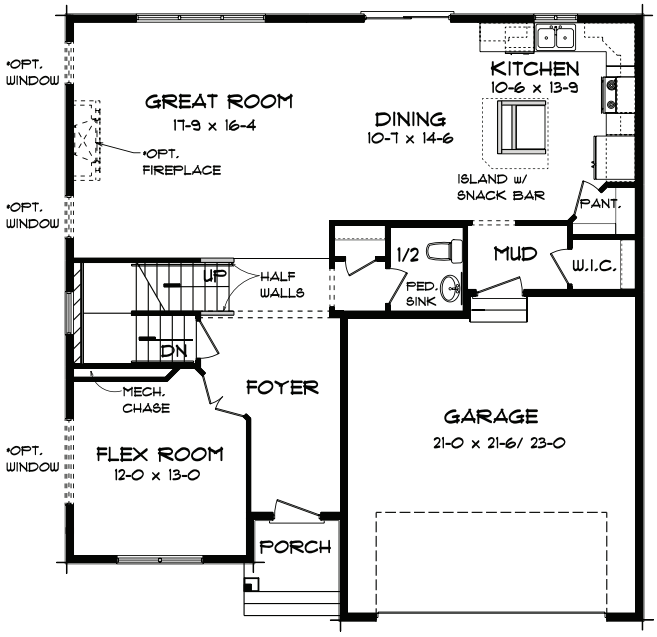
EQUAL HOUSING OPPORTUNITY

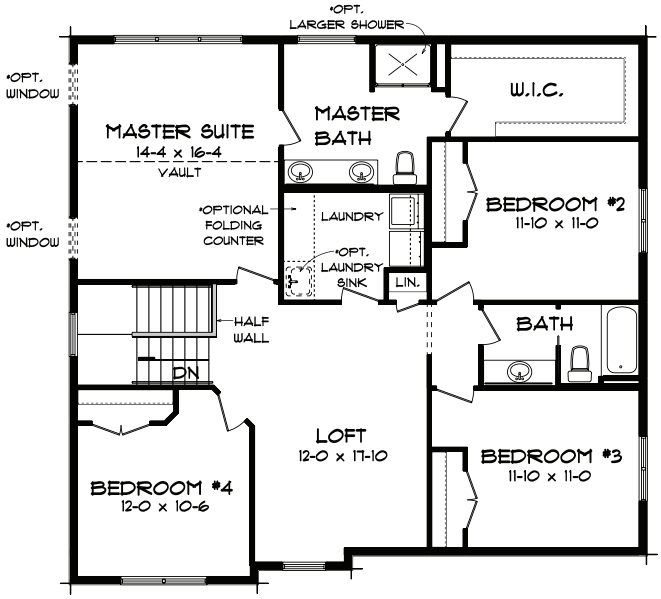
— MULBERRY III —

TWO STORY

4 BED | 3 BATH | 2 STALL GARAGE | 2,607 SQ FT LIVING SPACE



MAIN LEVEL



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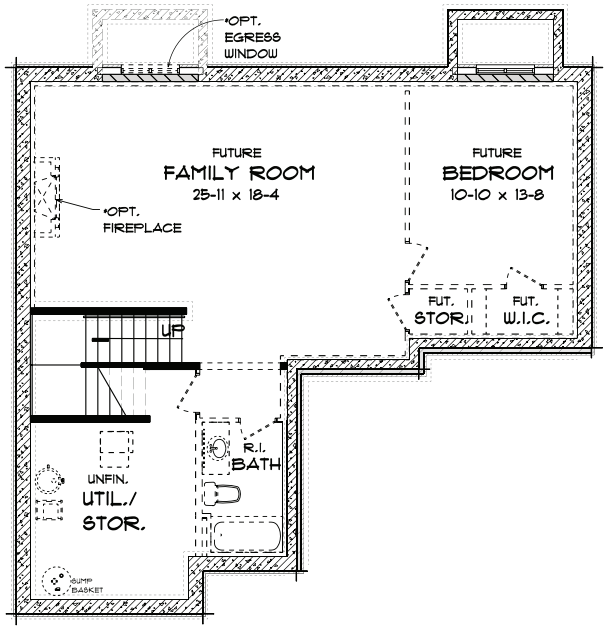

LOWER LEVEL

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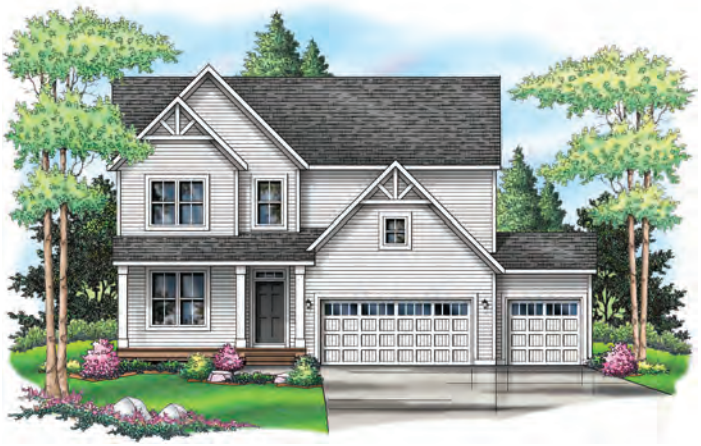
EQUAL HOUSING OPPORTUNITY

— MULBERRY III —

TWO STORY
4 BED | 3 BATH | 3 STALL GARAGE | 2,607 SQ FT LIVING SPACE

ELEVATION A

ELEVATION B



ELEVATION C

ELEVATION D

CAPSTONE
— HOMES —

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EQUAL HOUSING OPPORTUNITY

— MULBERRY III —

FLOOR PLANS

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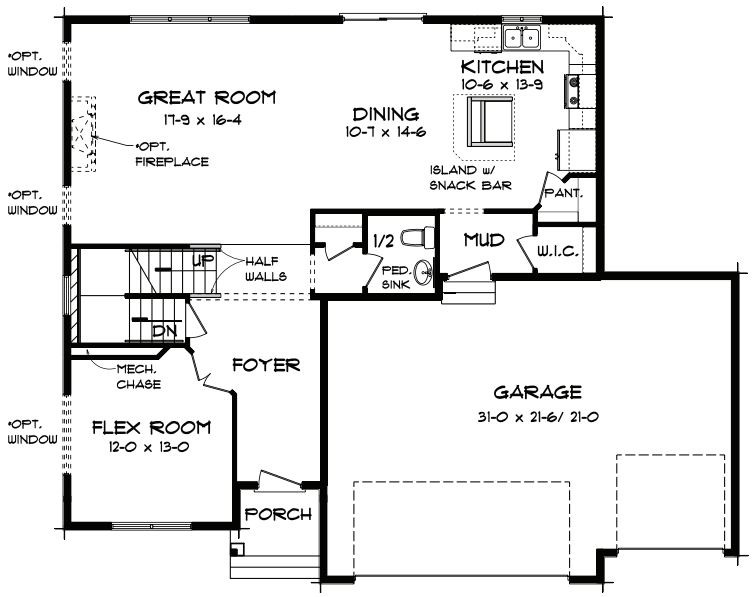

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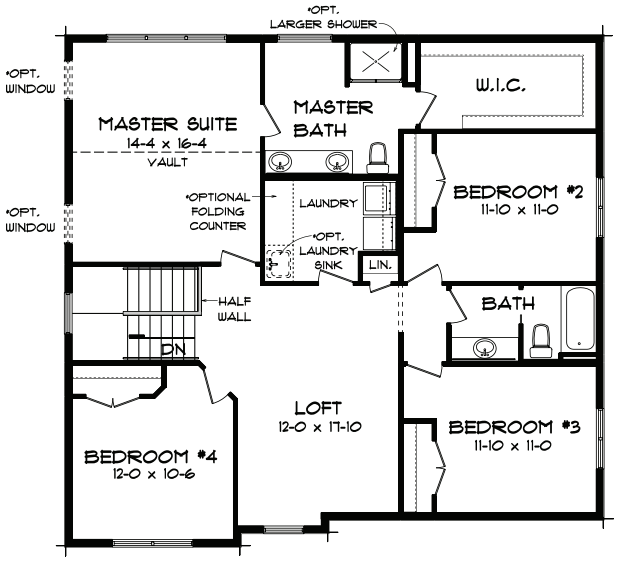
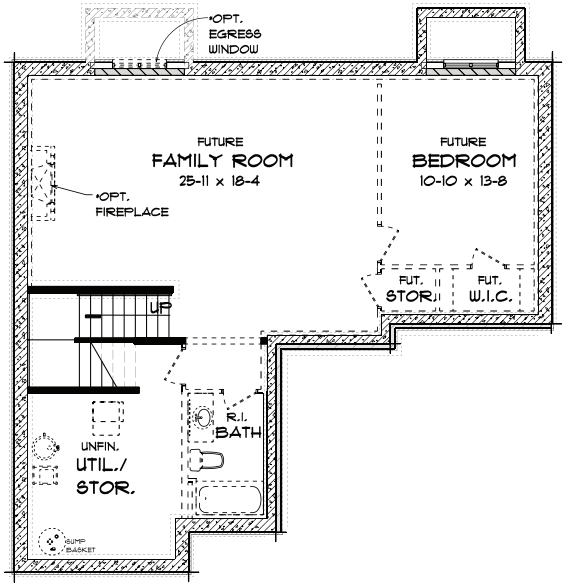


SECOND LEVEL



LOWER LEVEL

CAPSTONE
— HOMES —

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EQUAL HOUSING OPPORTUNITY

— BROOK VIEW II —

TWO STORY

4 BED | 3 BATH | 3 STALL GARAGE | 2,788 SQ FT LIVING SPACE

ELEVATION A

ELEVATION B

ELEVATION C

CAPSTONE HOMES

763-427-3090 | CAPSTONEHOMES-MN.COM

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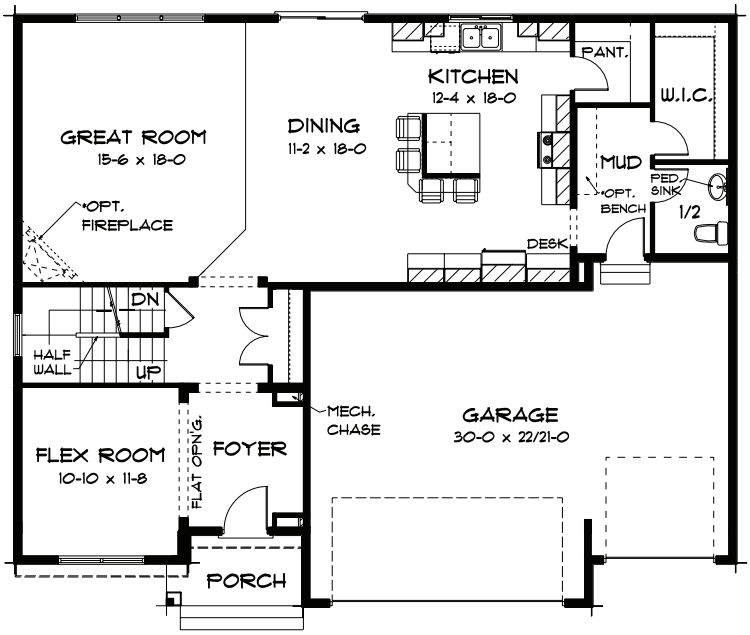
EQUAL HOUSING OPPORTUNITY

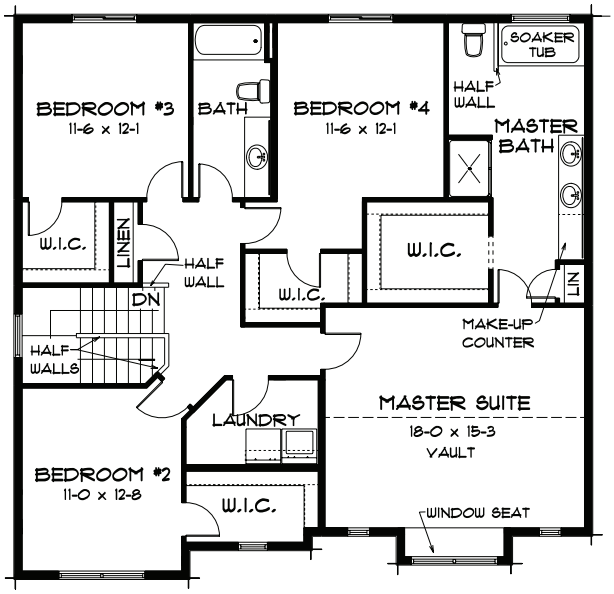
— BROOK VIEW II —

FLOOR PLANS

4 BED | 3 BATH | 3 STALL GARAGE | 2,788 SQ FT LIVING SPACE



MAIN LEVEL



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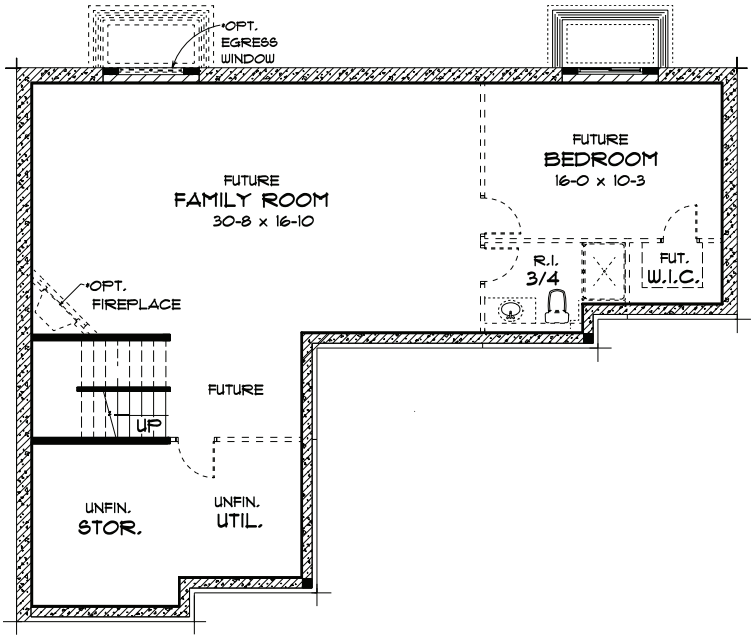

LOWER LEVEL

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EQUAL HOUSING OPPORTUNITY

— WATER STONE II —

TWO STORY
5 BED | 3 BATH | 3 STALL GARAGE | 3,401 SQ FT LIVING SPACE

ELEVATION A

ELEVATION B

ELEVATION C

ELEVATION D

CAPSTONE
— HOMES —

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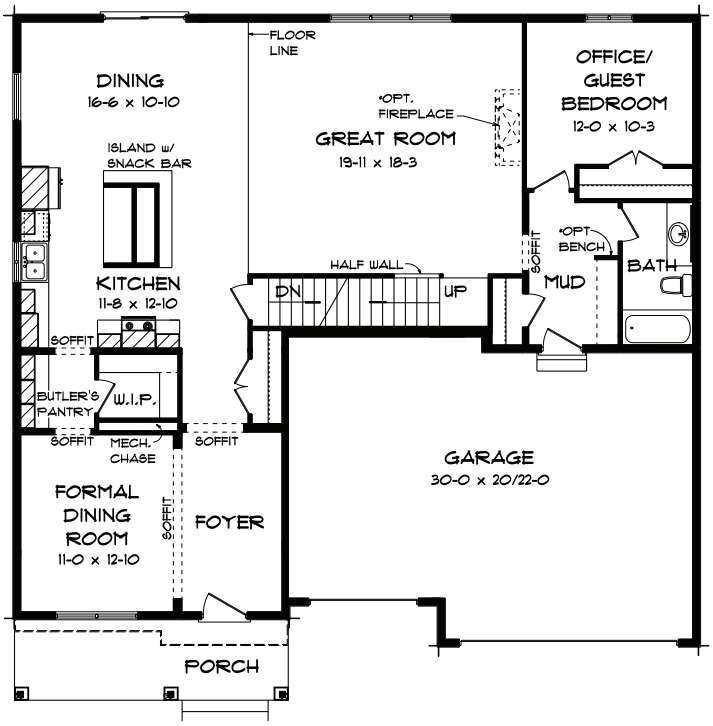
EQUAL HOUSING OPPORTUNITY

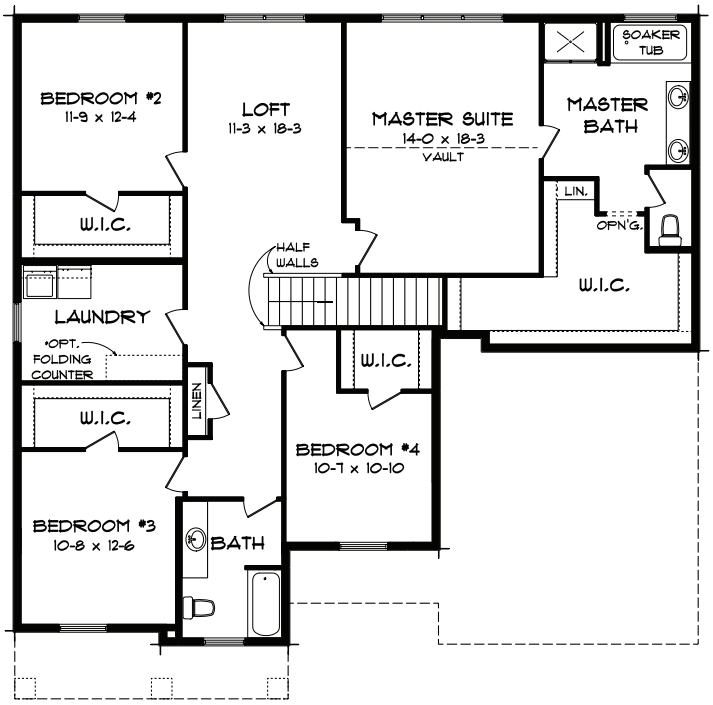
— WATER STONE II —

FLOOR PLANS

5 BED | 3 BATH | 3 STALL GARAGE | 3,401 SQ FT LIVING SPACE



MAIN LEVEL



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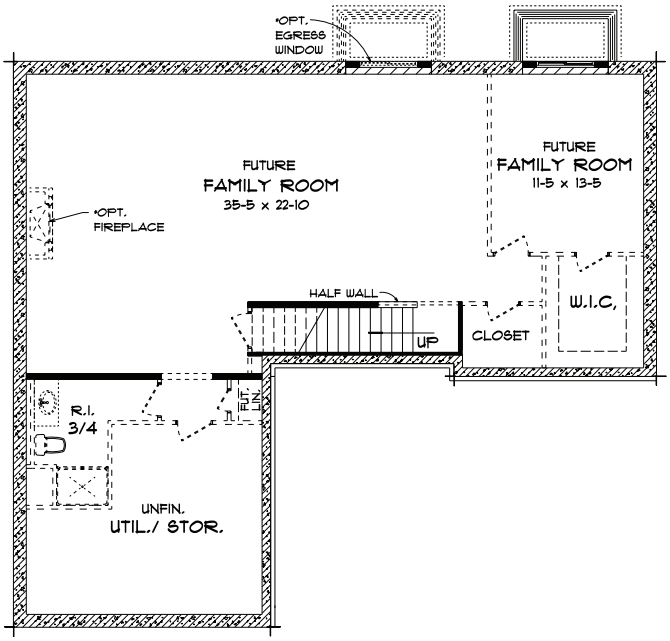

LOWER LEVEL

CAPSTONE HOMES

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EQUAL HOUSING OPPORTUNITY

CAPSTONE
HOMES

RAMBLER

BIRCHWOOD II - 2 CAR

BIRCHWOOD

CEDAR II

HEMLOCK III - 2 CAR

HEMLOCK III

— BIRCHWOOD II —

RAMBLER

3 BED | 2 BATH | 2 STALL GARAGE | 1,559 SQ FT LIVING SPACE

ELEVATION A

ELEVATION B

ELEVATION C

ELEVATION D

CAPSTONE
— HOMES —

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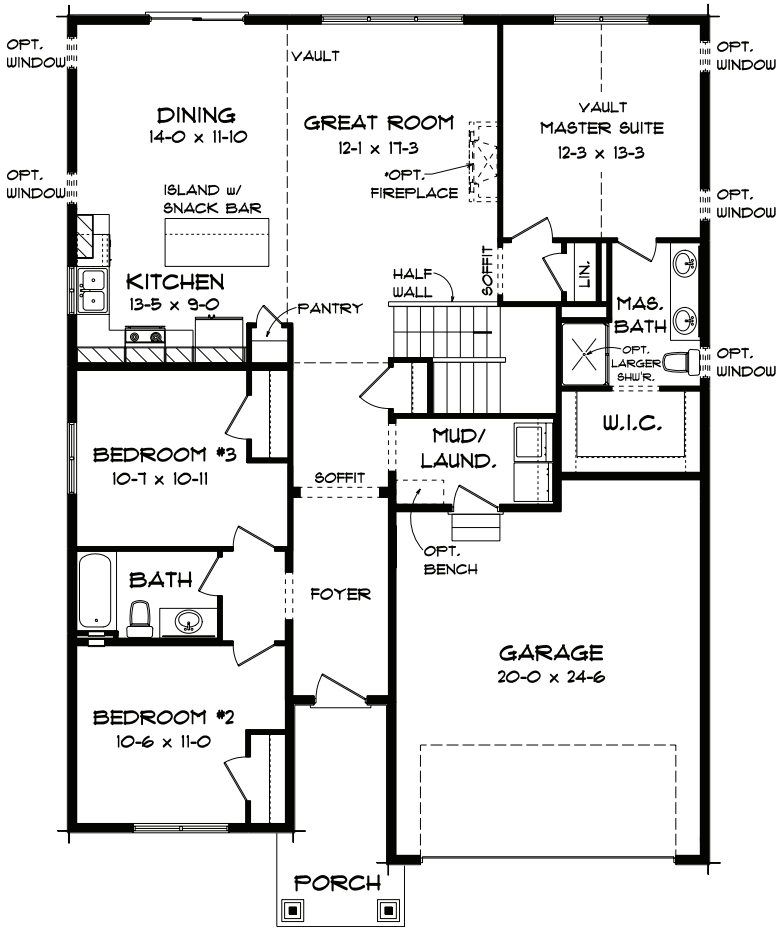
EQUAL HOUSING OPPORTUNITY

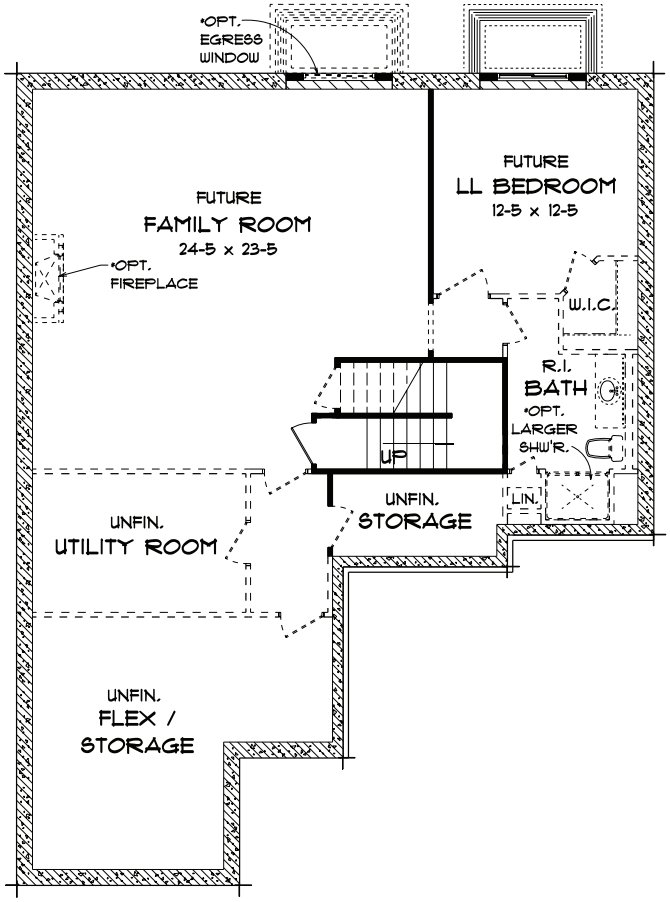
— BIRCHWOOD II —

FLOOR PLANS

3 BED | 2 BATH | 2 STALL GARAGE | 1,559 SQ FT LIVING SPACE



MAIN LEVEL



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— BIRCHWOOD II —

RAMBLER

3 BED | 2 BATH | 3 STALL GARAGE | 1,559 SQ FT LIVING SPACE

ELEVATION A

ELEVATION B

ELEVATION C

ELEVATION D

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— HOMES —

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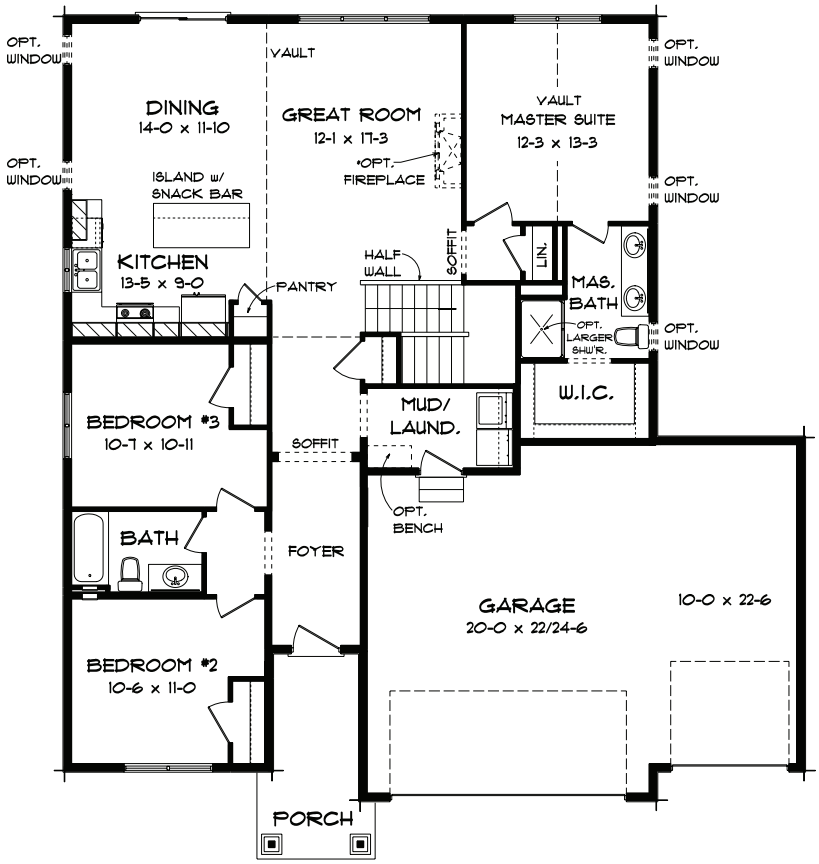
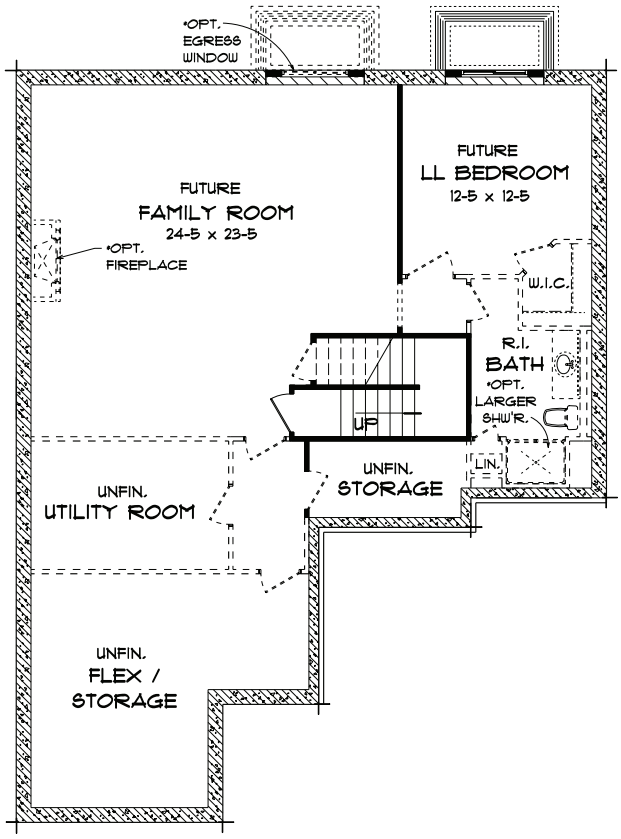
— BIRCHWOOD II —

FLOOR PLANS

3 BED | 2 BATH | 3 STALL GARAGE | 1,559 SQ FT LIVING SPACE



MAIN LEVEL



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EQUAL HOUSING OPPORTUNITY

— CEDAR II —

RAMBLER

2 BED | 2 BATH | 3 STALL GARAGE | 1,630 SQ FT LIVING SPACE

ELEVATION A

ELEVATION B

ELEVATION C

CAPSTONE HOMES

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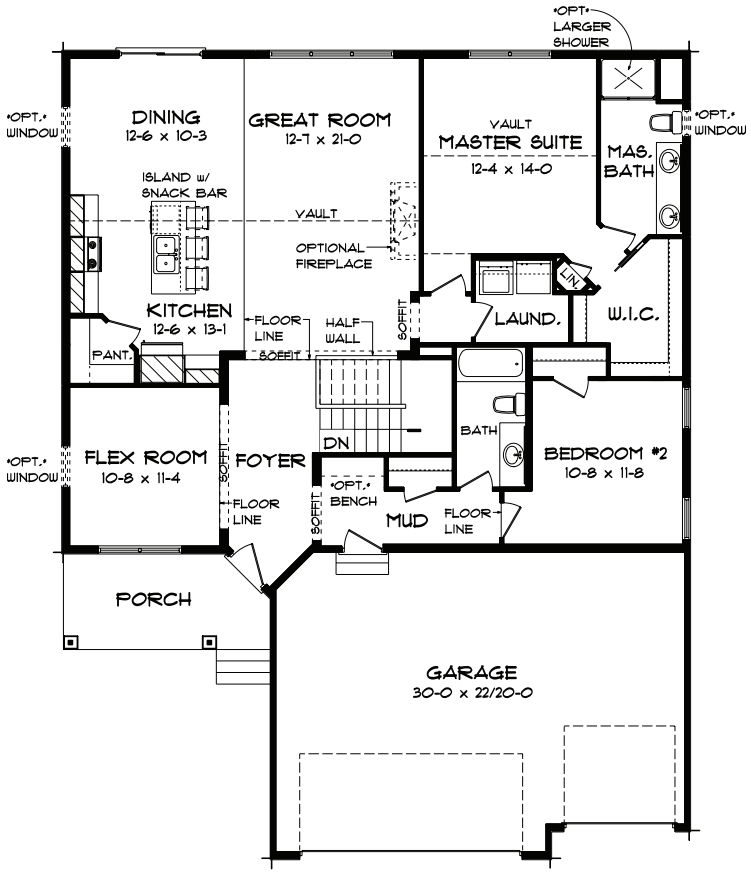
EQUAL HOUSING OPPORTUNITY

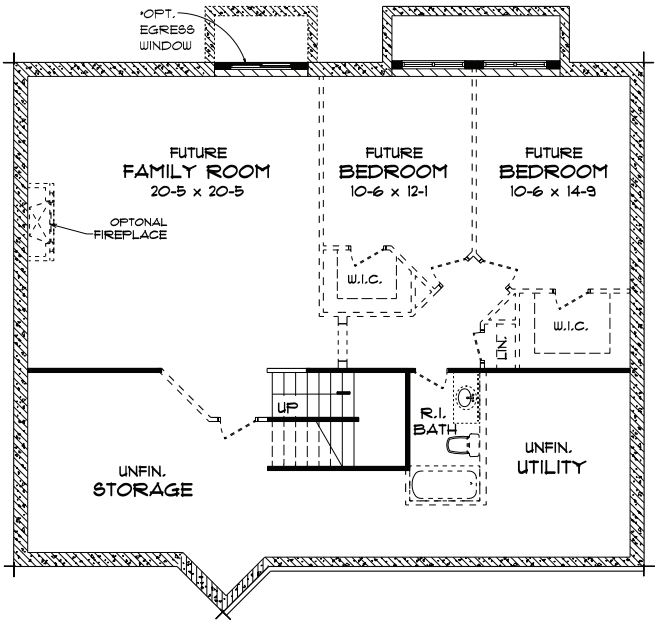
— CEDAR II —

FLOOR PLANS

2 BED | 2 BATH | 3 STALL GARAGE | 1,630 SQ FT LIVING SPACE



MAIN LEVEL



LOWER LEVEL

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EQUAL HOUSING OPPORTUNITY

— HEMLOCK III —

RAMBLER

3 BED | 2 BATH | 2 STALL GARAGE | 1,786 SQ FT LIVING SPACE

ELEVATION A

ELEVATION B

ELEVATION C

CAPSTONE HOMES

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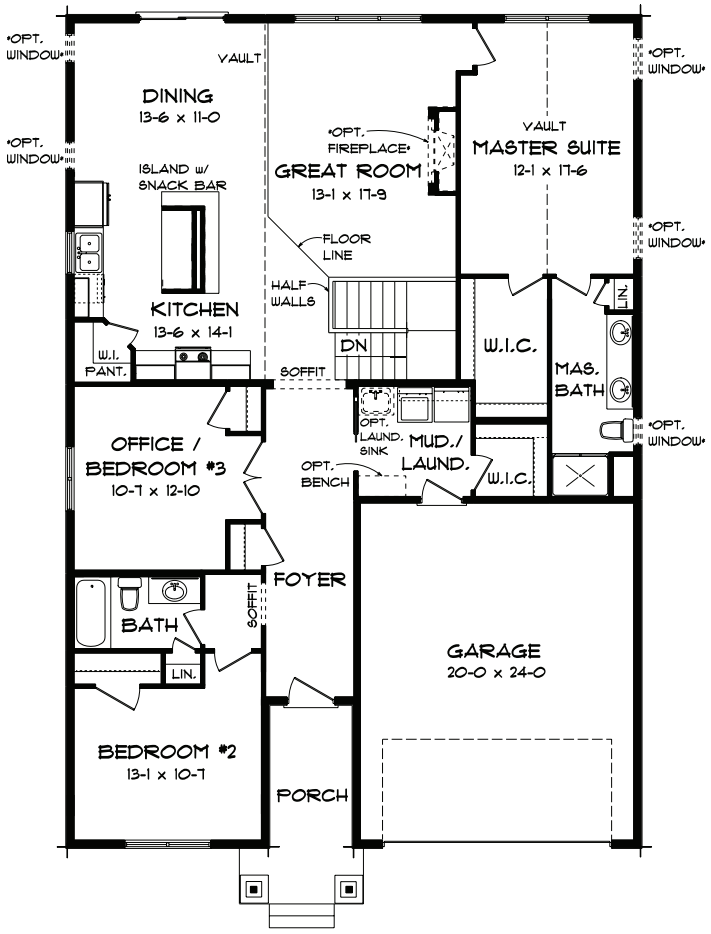
EQUAL HOUSING OPPORTUNITY

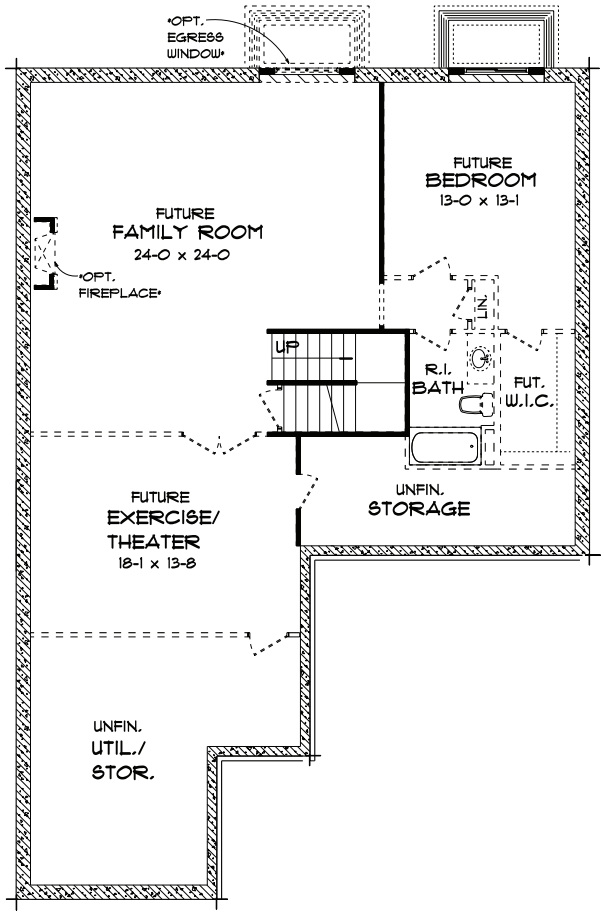
— HEMLOCK III —

FLOOR PLANS

3 BED | 2 BATH | 2 STALL GARAGE | 1,786 SQ FT LIVING SPACE



MAIN LEVEL



LOWER LEVEL

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EQUAL HOUSING OPPORTUNITY

— HEMLOCK III —

RAMBLER

3 BED | 2 BATH | 3 STALL GARAGE | 1,786 SQ FT LIVING SPACE

ELEVATION A

ELEVATION B

ELEVATION C

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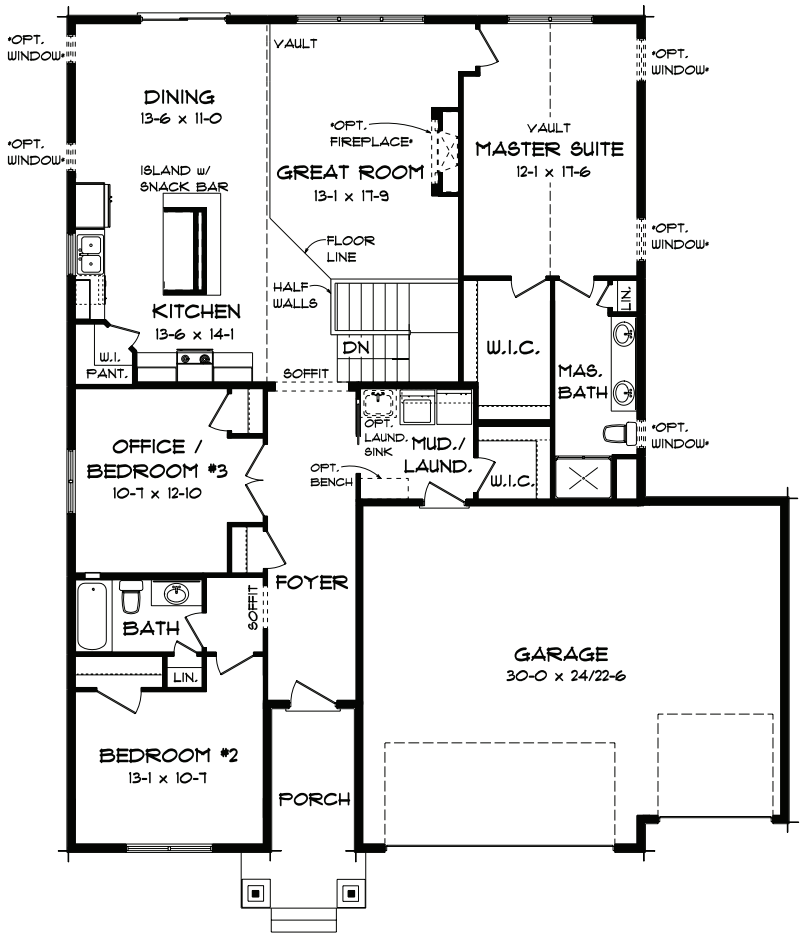
EQUAL HOUSING OPPORTUNITY

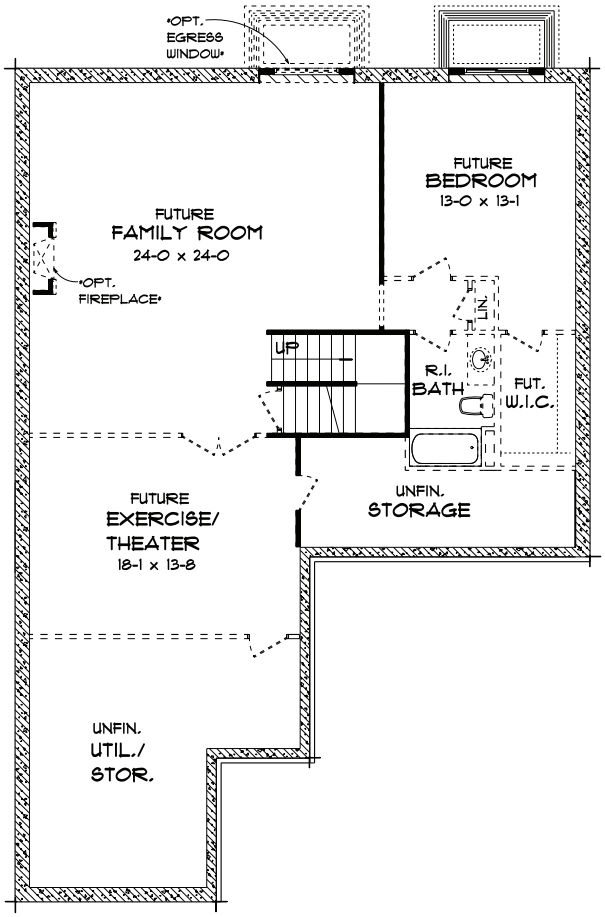
— HEMLOCK III —

FLOOR PLANS

3 BED | 2 BATH | 3 STALL GARAGE | 1,786 SQ FT LIVING SPACE



MAIN LEVEL



LOWER LEVEL

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EQUAL HOUSING OPPORTUNITY

CAPSTONE
HOMES

MULTI LEVEL

LINWOOD II

PRIMROSE III - 2 CAR

PRIMROSE III

WESLEY

— LINWOOD II —

TRI LEVEL

3 BED | 2 BATH | 3 STALL GARAGE | 1,540 SQ FT LIVING SPACE

ELEVATION A

ELEVATION B

ELEVATION C

CAPSTONE HOMES

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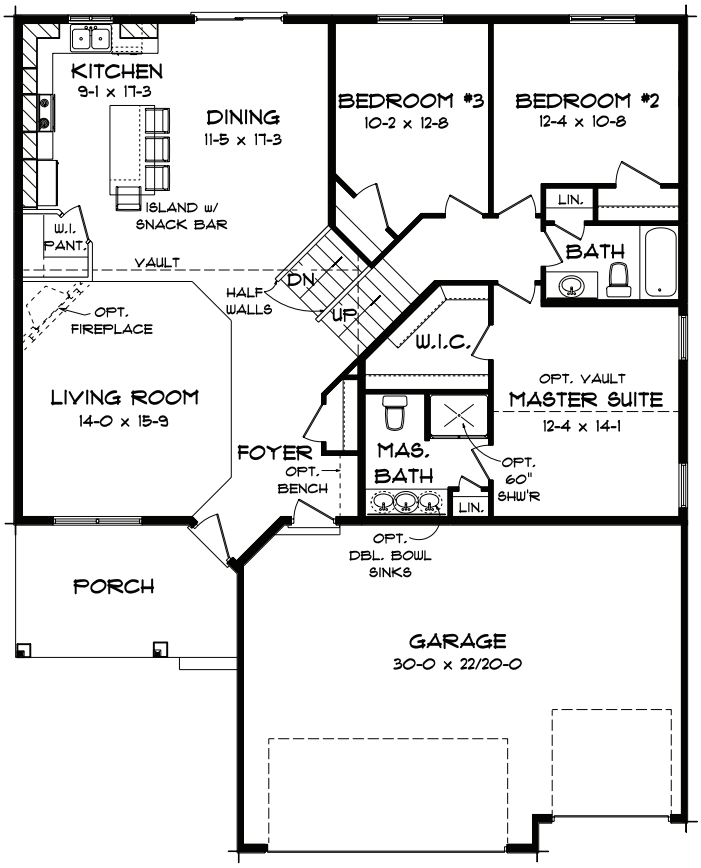
EQUAL HOUSING OPPORTUNITY

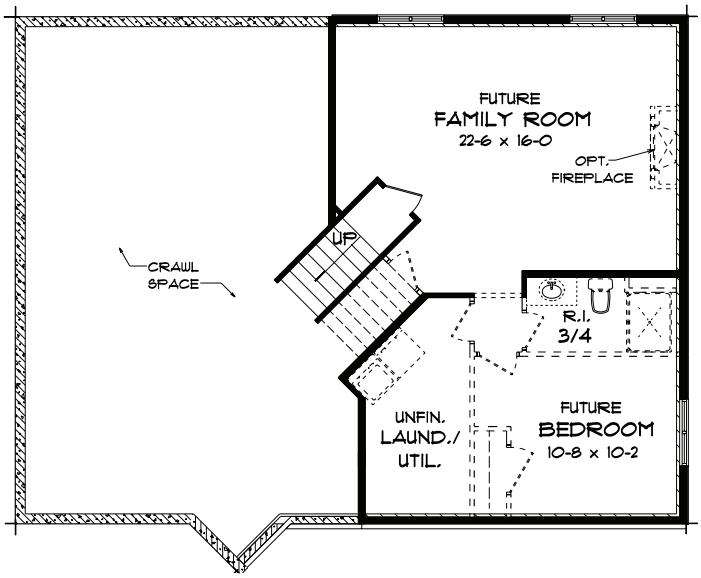
— LINWOOD II —

FLOOR PLANS

3 BED | 2 BATH | 3 STALL GARAGE | 1,540 SQ FT LIVING SPACE



MAIN LEVEL



LOWER LEVEL

CAPSTONE
— HOMES —

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EQUAL HOUSING OPPORTUNITY

— PRIMROSE III —

MULTI LEVEL

3 BED | 2 BATH | 2 STALL GARAGE | 1,609 SQ FT LIVING SPACE

ELEVATION A

ELEVATION B

ELEVATION C

CAPSTONE HOMES

763-427-3090 | CAPSTONEHOMES-MN.COM

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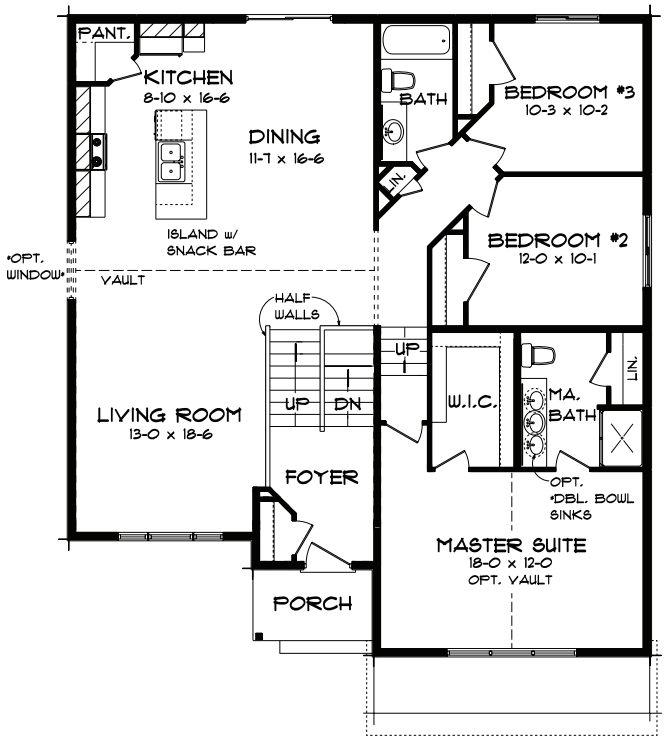
EQUAL HOUSING OPPORTUNITY

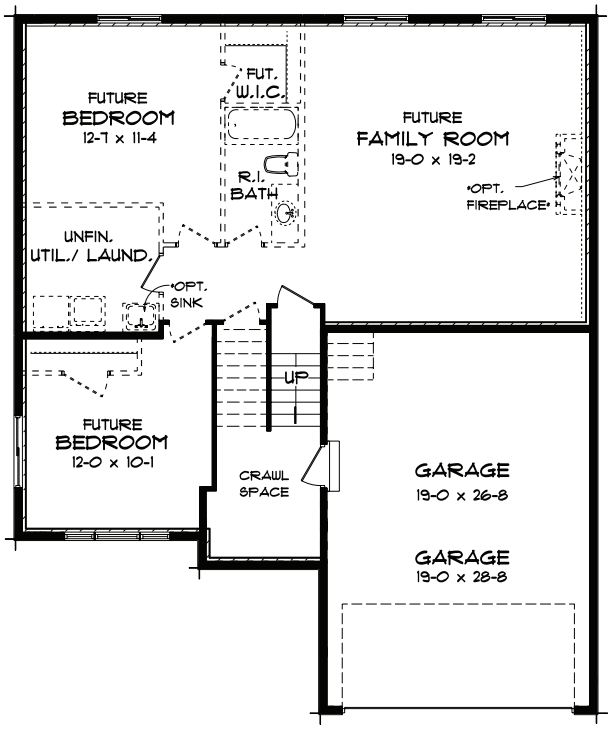
— PRIMROSE III —

FLOOR PLANS

3 BED | 2 BATH | 2 STALL GARAGE | 1,609 SQ FT LIVING SPACE



MAIN LEVEL



LOWER LEVEL

CAPSTONE
— HOMES —

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EQUAL HOUSING OPPORTUNITY

— PRIMROSE III —

MULTI LEVEL
3 BED | 2 BATH | 3 STALL GARAGE | 1,609 SQ FT LIVING SPACE

ELEVATION A

ELEVATION B

ELEVATION C

CAPSTONE
— HOMES —

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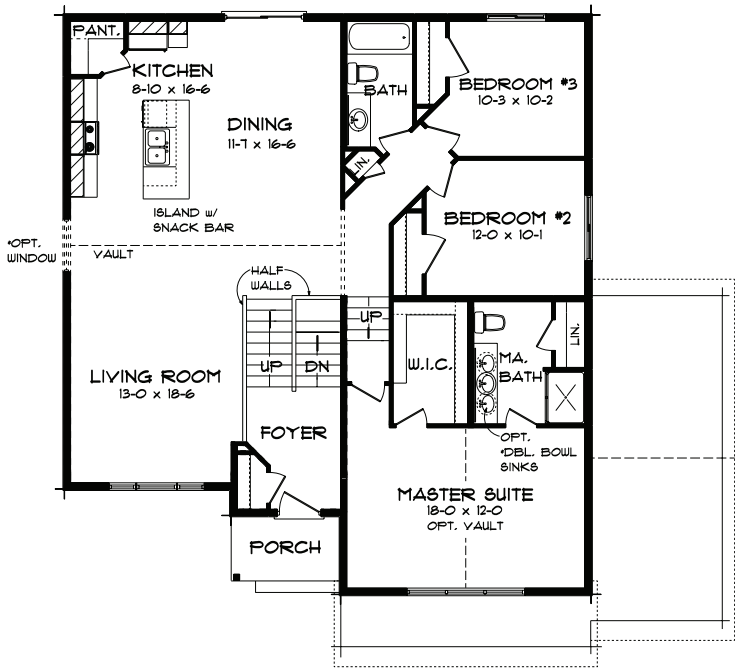
EQUAL HOUSING OPPORTUNITY

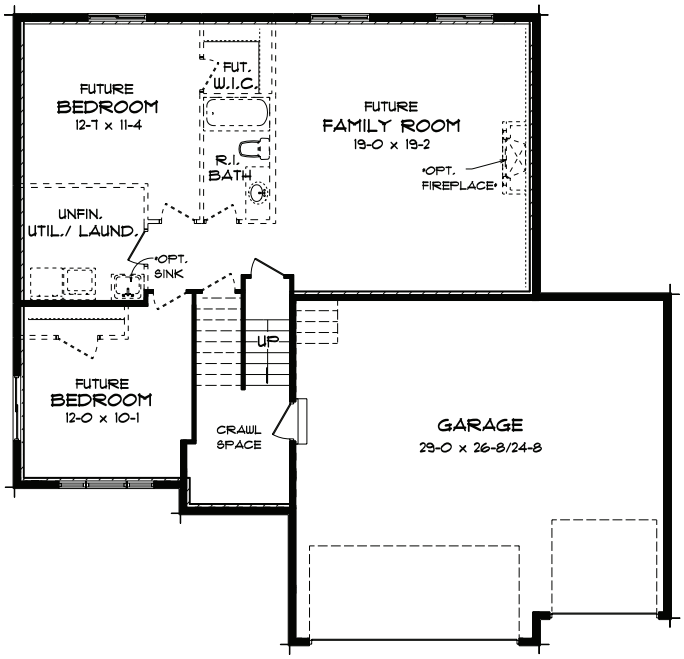
— PRIMROSE III —

FLOOR PLANS

3 BED | 2 BATH | 3 STALL GARAGE | 1,609 SQ FT LIVING SPACE



MAIN LEVEL



LOWER LEVEL

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EQUAL HOUSING OPPORTUNITY

— WESLEY —

MULTI LEVEL

3 BED | 2 BATH | 3 STALL GARAGE | 1,842 SQ FT LIVING SPACE

ELEVATION A

ELEVATION B

ELEVATION C

CAPSTONE HOMES

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EQUAL HOUSING OPPORTUNITY

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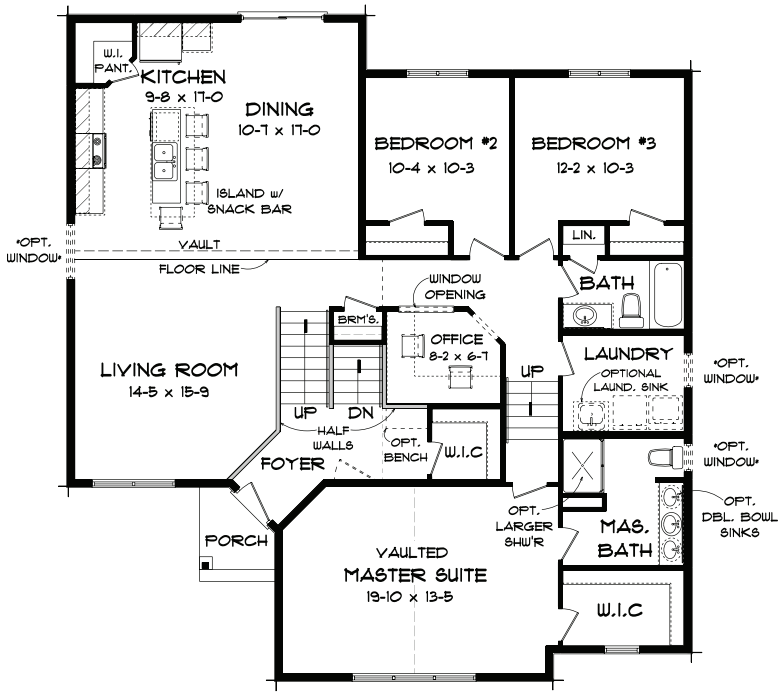
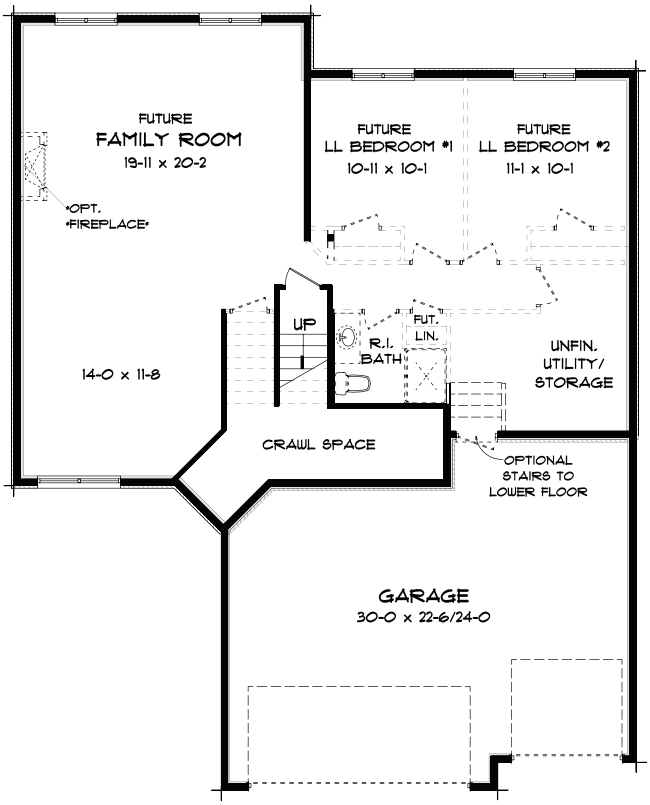


MAIN LEVEL



LOWER LEVEL

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EQUAL HOUSING OPPORTUNITY

CAPSTONE
HOMES

RAISED RANCH

SPURGEON II

ROCKPORT III - 2 CAR

ROCKPORT III

CHEYENNE IV

— SPURGEON II —

RAISED RANCH
2 BED | 1 BATH | 2 STALL GARAGE | 966 SQ FT LIVING SPACE

ELEVATION A

ELEVATION B

ELEVATION C

ELEVATION D

CAPSTONE
— HOMES —

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EQUAL HOUSING OPPORTUNITY

— SPURGEON II —

FLOOR PLANS

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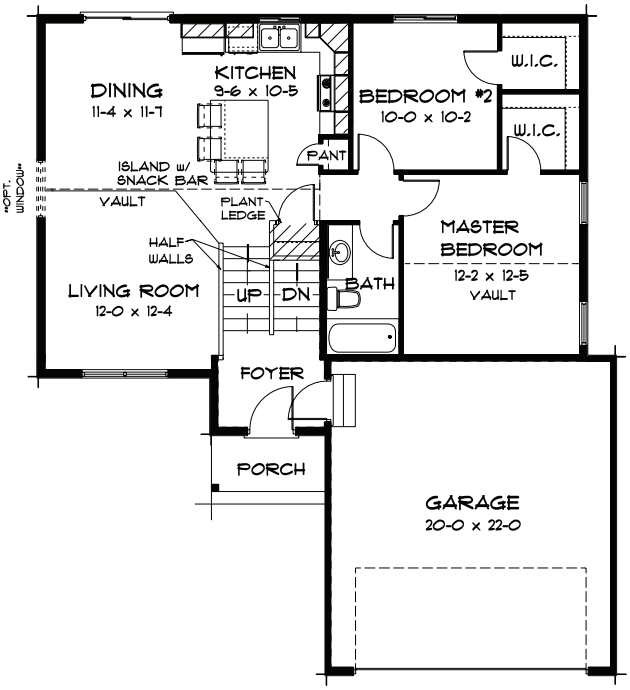

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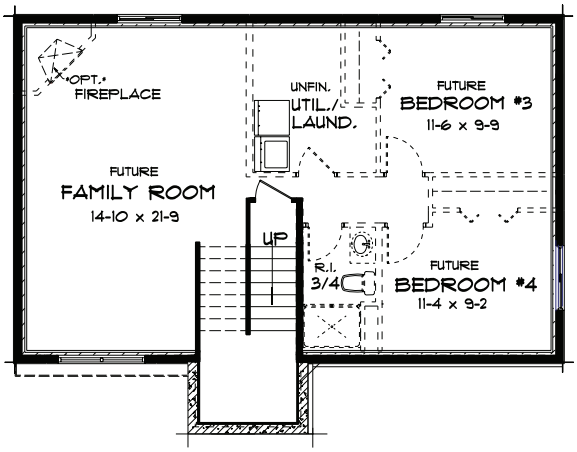

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EQUAL HOUSING OPPORTUNITY

— ROCKPORT III —

RAISED RANCH

3 BED | 2 BATH | 2 STALL GARAGE | 1,283 SQ FT LIVING SPACE

ELEVATION A

ELEVATION B

ELEVATION C

CAPSTONE HOMES

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EQUAL HOUSING OPPORTUNITY

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FLOOR PLANS

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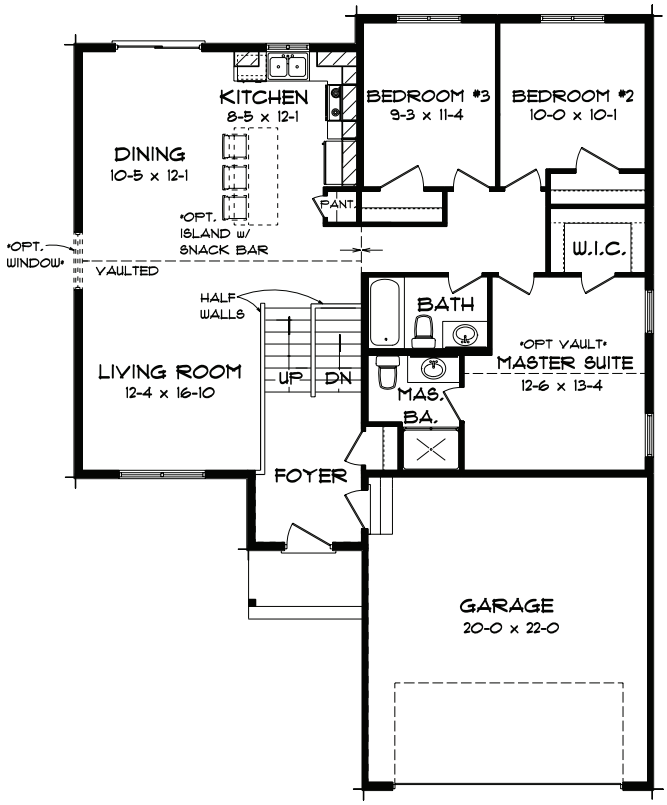

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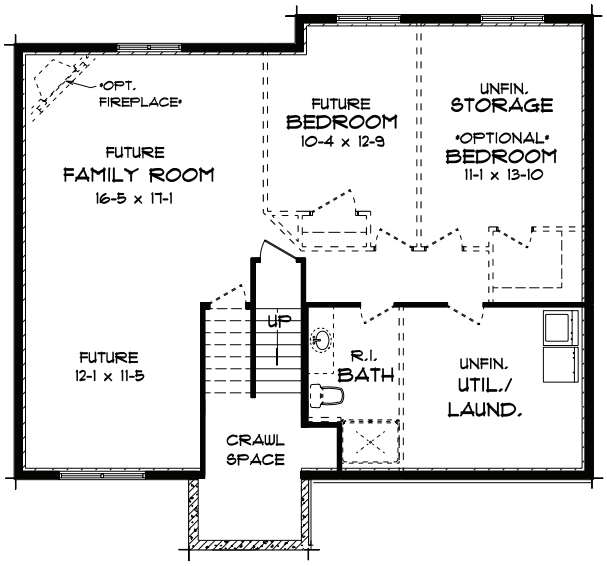

LOWER LEVEL

CAPSTONE
— HOMES —

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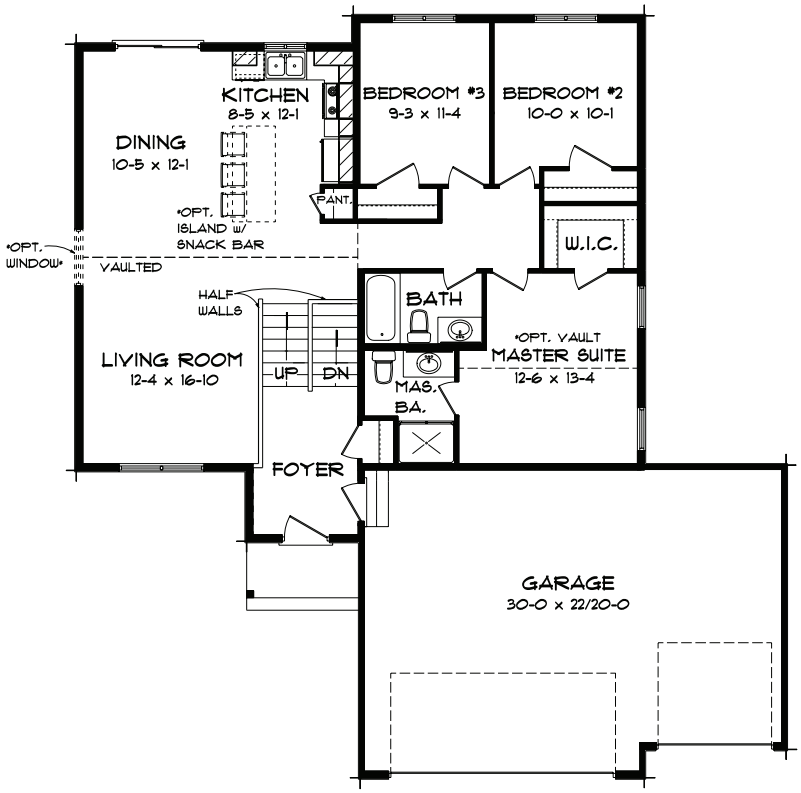

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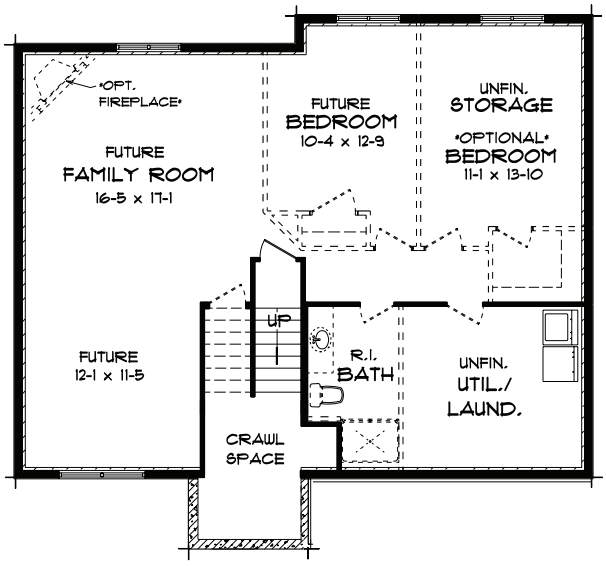

LOWER LEVEL

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EQUAL HOUSING OPPORTUNITY

— CHEYENNE IV —

RAISED RANCH

3 BED | 2 BATH | 3 STALL GARAGE | 1,589 SQ FT LIVING SPACE

ELEVATION A

ELEVATION B

ELEVATION C

CAPSTONE HOMES

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EQUAL HOUSING OPPORTUNITY

— CHEYENNE IV —

FLOOR PLANS

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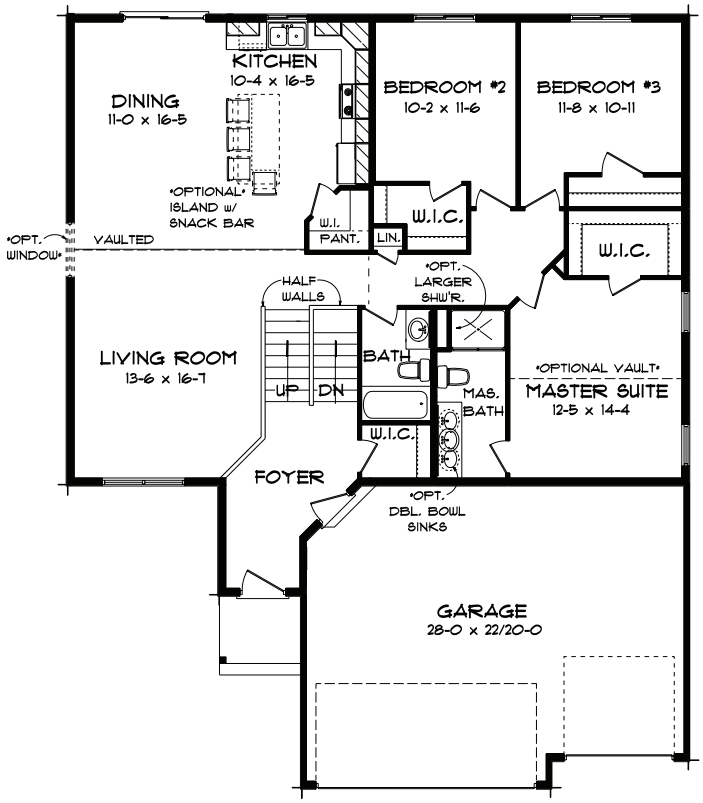

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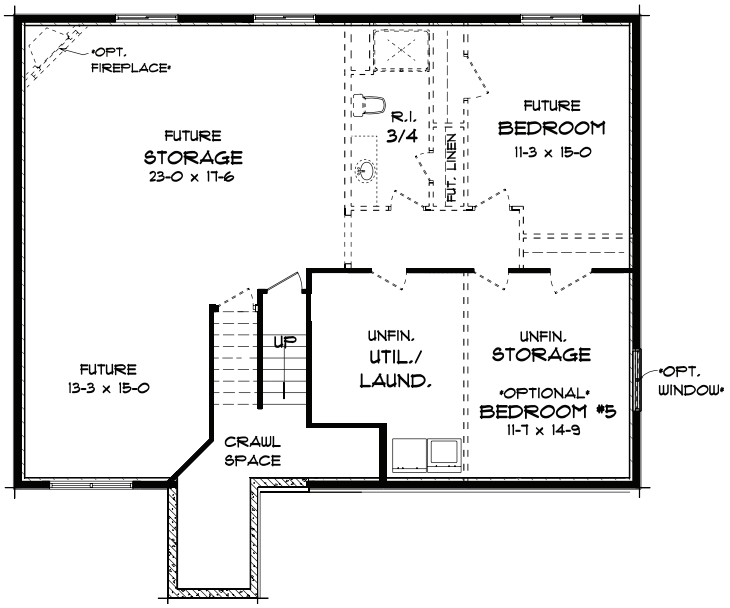

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EQUAL HOUSING OPPORTUNITY

CAPSTONE
HOMES

LIBERTY SERIES

CAMDEN I

CAMDEN II

ITASCA

ADLEY

BALDWIN

BECKER

— CAMDEN I —

LIBERTY SERIES

2 BED | 2 BATH | 2 STALL GARAGE | 1,080 SQ FT LIVING SPACE

ELEVATION A

ELEVATION B

ELEVATION C

CAPSTONE HOMES

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EQUAL HOUSING OPPORTUNITY

— CAMDEN I —

LIBERTY SERIES

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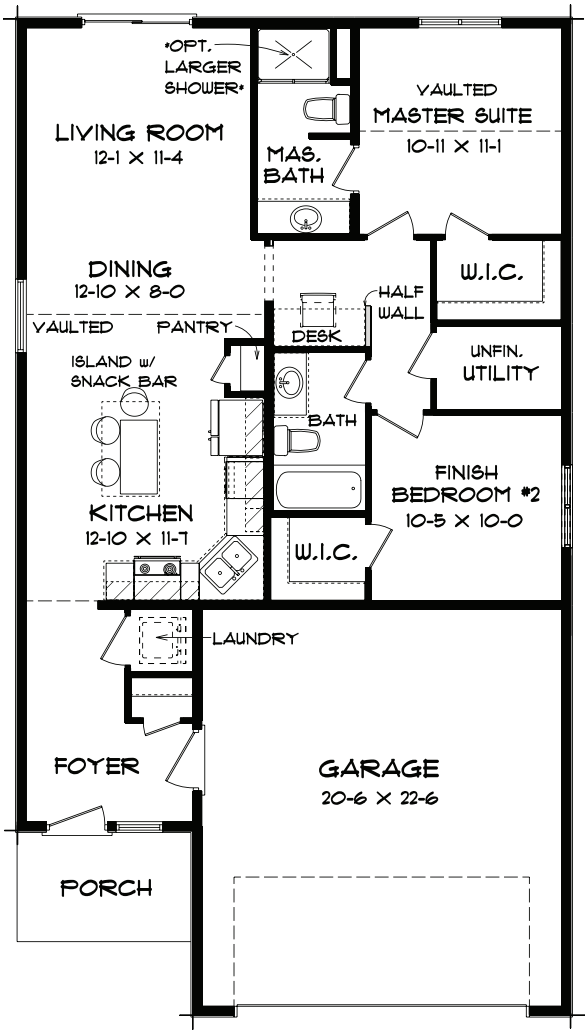

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CAPSTONE HOMES

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EQUAL HOUSING OPPORTUNITY

— CAMDEN II —

LIBERTY SERIES

3 BED | 2 BATH | 2 STALL GARAGE | 1,280 SQ FT LIVING SPACE

ELEVATION A

ELEVATION B

ELEVATION C

CAPSTONE
— HOMES —

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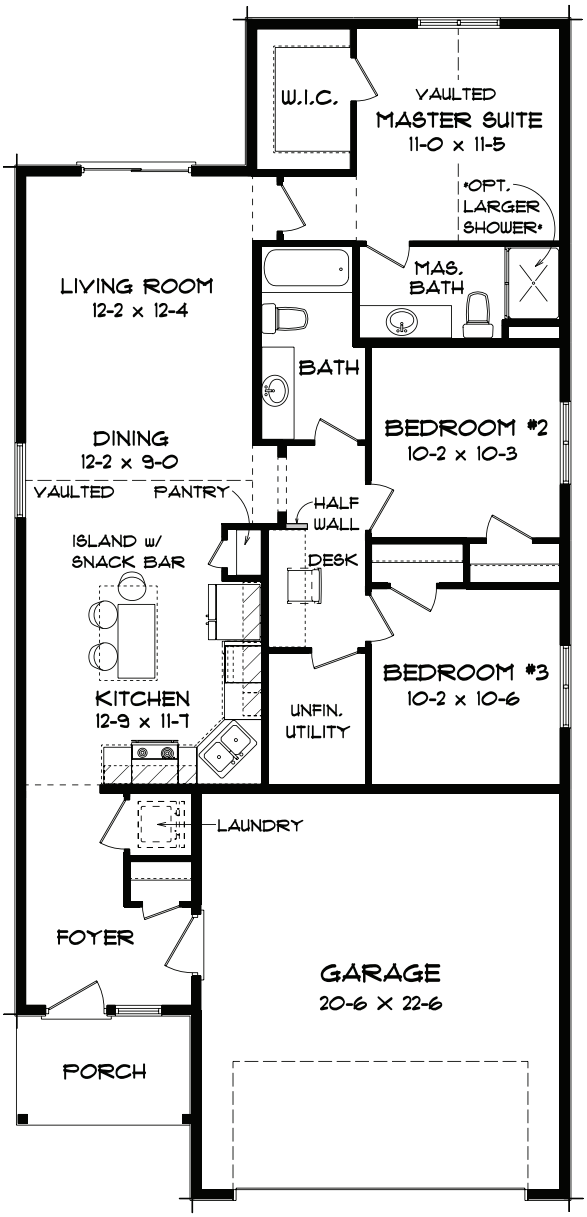

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EQUAL HOUSING OPPORTUNITY

— ITASCA —

LIBERTY SERIES
2 BED | 2 BATH | 2 STALL GARAGE | 1,393 SQ FT LIVING SPACE

ELEVATION A

ELEVATION B

ELEVATION C

ELEVATION D

CAPSTONE
— HOMES —

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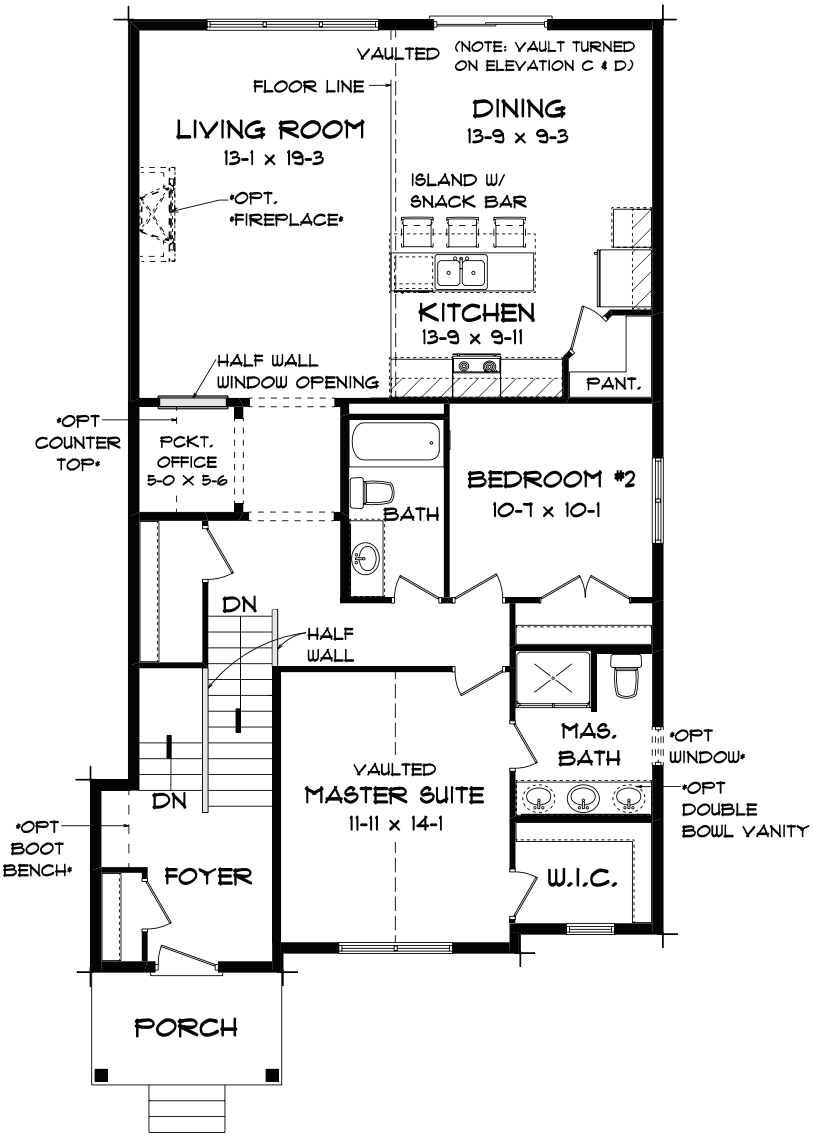
EQUAL HOUSING OPPORTUNITY

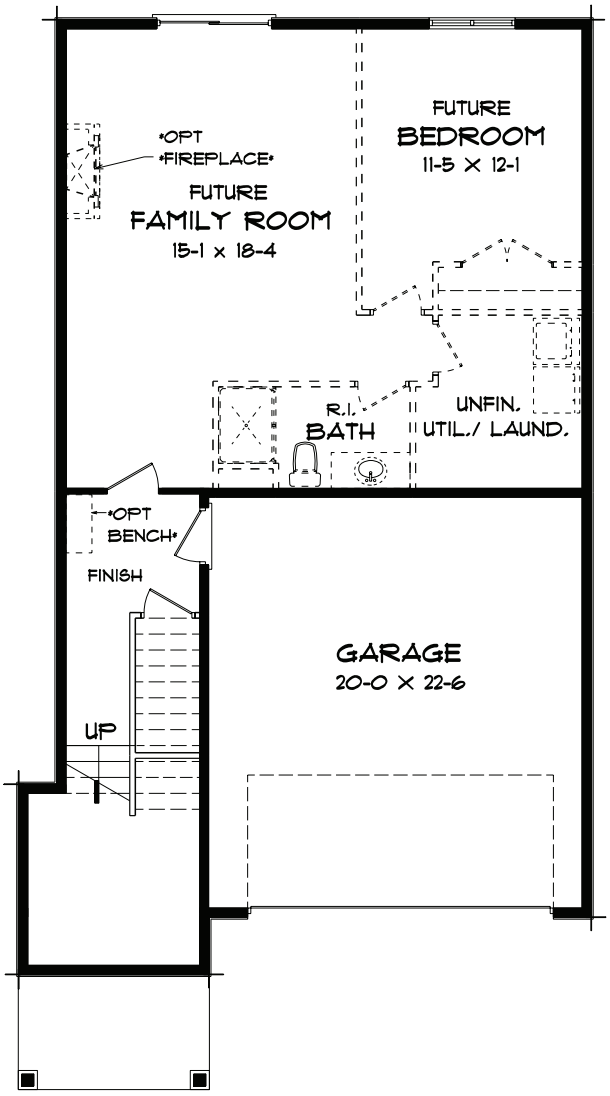
— ITASCA —

FLOOR PLANS

2 BED | 2 BATH | 2 STALL GARAGE | 1,393 SQ FT LIVING SPACE



MAIN LEVEL



LOWER LEVEL

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EQUAL HOUSING OPPORTUNITY

— ADLEY —

LIBERTY SERIES

3 BED | 2 BATH | 2 STALL GARAGE | 1,617 SQ FT LIVING SPACE

ELEVATION A

ELEVATION B

ELEVATION C

CAPSTONE HOMES

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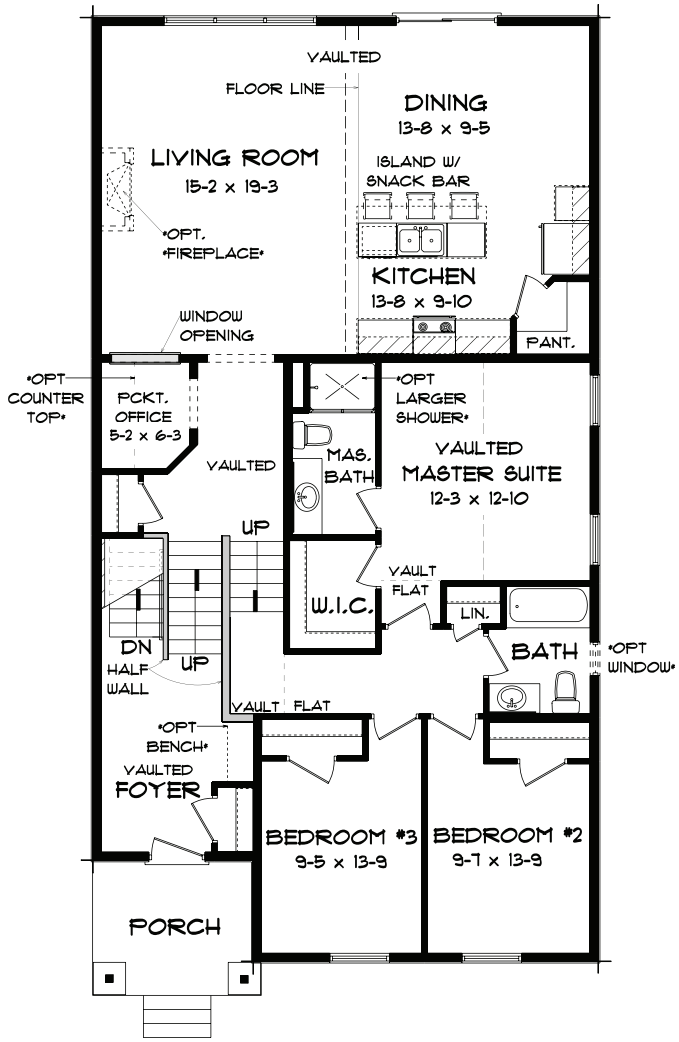
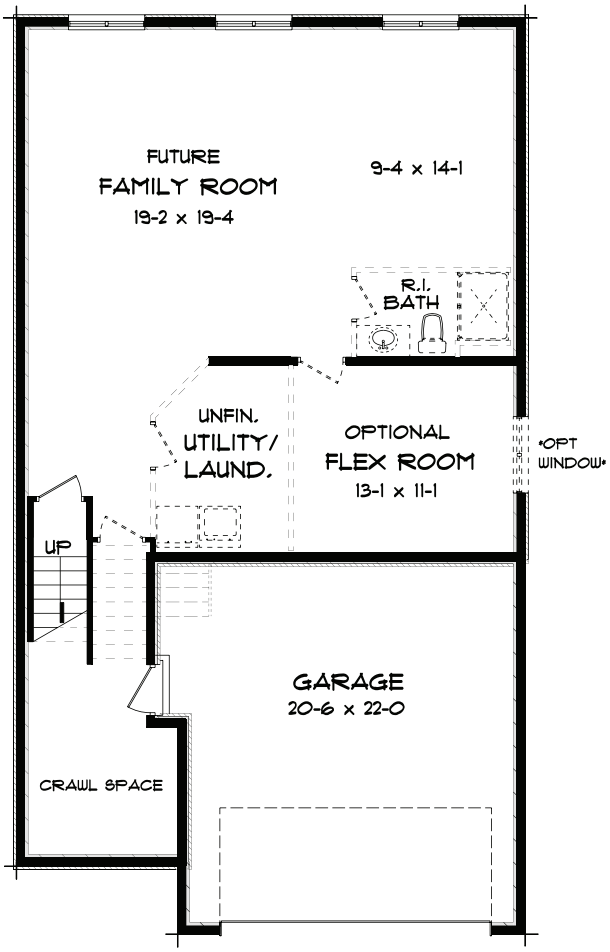


MAIN LEVEL



LOWER LEVEL

CAPSTONE
— HOMES —

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EQUAL HOUSING OPPORTUNITY

— BALDWIN —

LIBERTY SERIES

3 BED | 2 BATH | 2 STALL GARAGE | 1,690 SQ FT LIVING SPACE

ELEVATION A

ELEVATION B

ELEVATION C

CAPSTONE HOMES

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EQUAL HOUSING OPPORTUNITY

— BALDWIN —

FLOOR PLANS

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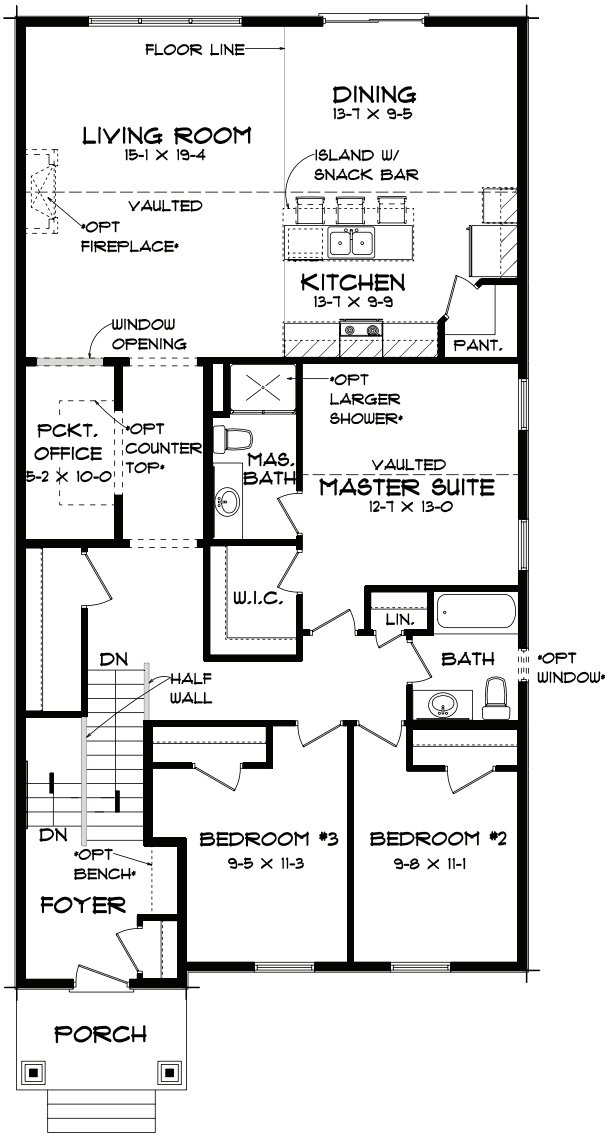

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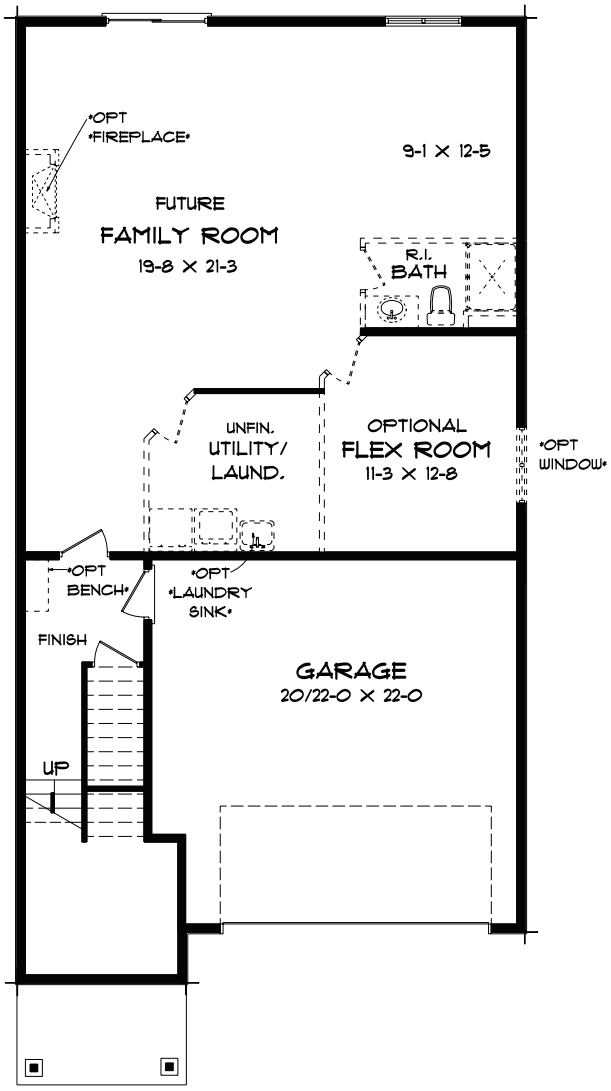

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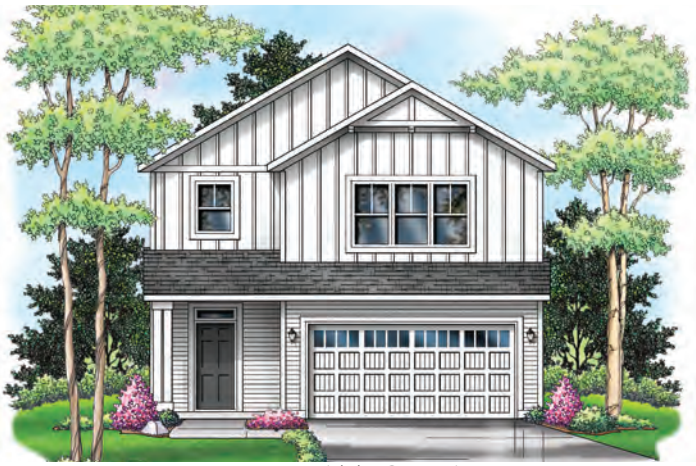
EQUAL HOUSING OPPORTUNITY

— BECKER —

LIBERTY SERIES

3 BED | 3 BATH | 2 STALL GARAGE | 2,040 SQ FT LIVING SPACE



ELEVATION A

ELEVATION B

ELEVATION C

CAPSTONE HOMES

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— BECKER —

FLOOR PLANS

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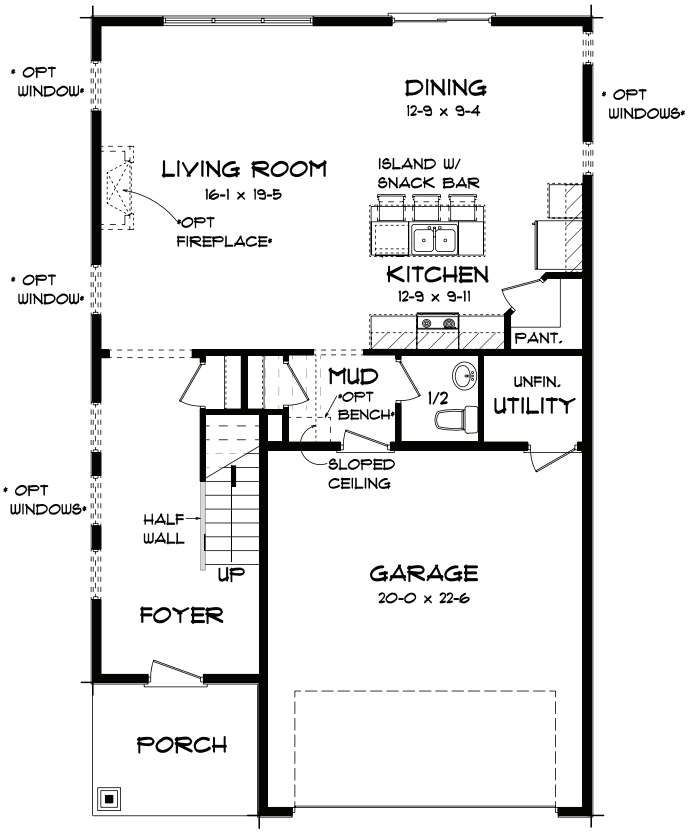
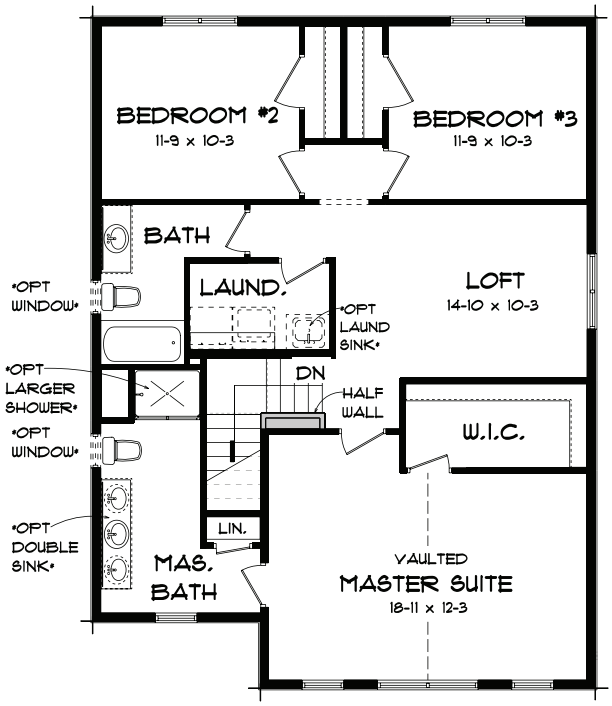


MAIN LEVEL



UPPER LEVEL

CAPSTONE HOMES

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EQUAL HOUSING OPPORTUNITY

LEGAL DESCRIPTION

PARCEL DESCRIPTION: (Per Schedule A of Title Commitment File No. 2651, with a commitment date of October 17, 2019 at 7:00 am, prepared Twin City Title Company, LLC as issuing agent for Old Republic National Title Insurance Company)

Parcel A: Outlot B, Pearson Place, Anoka County, Minnesota.

Parcel B: That part of the Northwest Quarter of the Northwest Quarter of Section 29, Township 32, Range 25, Anoka County, Minnesota, lying southerly of U.S. Highway 10 and 169.

Parcel C: Lot 2, Block 3, Pearson Place, Anoka County, Minnesota.

Parcel D: Lot 1, Block 3, Pearson Place, Anoka County, Minnesota.

(abstract property)

LEGEND

- OPEN SPACE
- OPEN SPACE – WOODED
- STORMWATER POND
- INFILTRATION BASIN

S00°08'36"W 1705.32

S00°17'33"W 1093.62

U.S. HIGHWAY NO. 10 & 169

COMMERCIAL DEVELOPMENT 21.96 AC

S66°01'43"E 1951.85

40' DETACHED TOWNHOMES

RESIDENTIAL DEV. 78.63 AC

65' SINGLE FAMILY

55' SINGLE FAMILY

PUBLIC PARK 1.0 AC.

PROPOSED INFILTRATION

PROPOSED POND

PROPOSED POND

STREET A

STREET B

STREET C

STREET D

STREET E

STREET F

PEARSON BLVD

RIVERDALE DRIVE

10' TRAIL

TRAIL/VEHICLE ACCESS

N51°55'40"W 620.99

S42°51'14"E 58.89

N89°47'35"W 193.74

334.66 S37°59'16"W

BOWERS DRIVE NW

MISSISSIPPI RIVER

AREA RETAINED BY LANDOWNER 9.70 AC

TREE PRESERVATION AREA 7.0 AC

EXISTING 50' TREE BUFFER

N40°39'19"W 1349.11

N17°54'18"E 322.61

S00°14'18"W 76.30

Δ=17°40'00" R=128.25 395.06

Δ=12°58'27" R=705.37 159.73

N69°29'50"W 205.79

N76°47'15"W 50.00

N22°30'16"E 451.73

Δ=06°31'20" R=955.37 100.41

Δ=03°27'10" R=450.00 270.04

Δ=58°33'37" R=60.36 61.69

0 60 120 240

(SCALE IN FEET)

SITE DATA

TOTAL AREA	±110.29 AC.
RESIDENTIAL DEVELOPMENT AREA	78.63
PUBLIC PARK AREA	1.0
TREE PRESERVATION AREA	7.0
COMMERCIAL DEVELOPMENT AREA	22.98
AREA RETAINED BY LANDOWNER	8.68

RESIDENTIAL DEVELOPMENT DATA

TOTAL NUMBER OF LOTS	242
GROSS DENSITY	3.1 U/AC
DETACHED TOWNHOMES	77
55' SINGLE FAMILY	115
65' SINGLE FAMILY	50

DETACHED TOWNHOME LOTS	77
DETACHED TOWNHOME GROSS AREA	15.05 AC.
(MINUS 30' OUTLOTS)	0.57 AC.
NET AREA	14.48 AC.
NET DENSITY	5.32 UNITS/AC.

55' SINGLE FAMILY LOTS	115
55' SINGLE FAMILY GROSS AREA	32.96 AC.
(MINUS 30' OUTLOTS & PARK)	1.48 AC.
NET AREA	31.48 AC.
NET DENSITY	3.65 UNITS/AC.

65' SINGLE FAMILY LOTS	50
65' SINGLE FAMILY GROSS AREA	14.42 AC.
NET DENSITY	3.47 UNITS/AC.

CARLSON McCAIN ENGINEERING SURVEYING ENVIRONMENTAL
3890 PHEASANT RIDGE DR NE
SUITE 100
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CARLSONMCCAIN.COM

DRAWN BY: C#
ISSUE DATE: 08/05/2020
Revisions:

CAPSTONE HOMES, INC.
14015 Sunfish Lake Blvd. NW, Suite 400
Ramsey, MN 55303

RIVERSTONE SOUTH
Ramsey, Minnesota

PRODUCT DENSITY EXHIBIT

1 of 1

[Save Date: 08/05/20] F:\jobs\8481 - 8500\8494 - pearson place 2nd\cad c3d\survey\layouts\8494_layout 4 product areas.dwg

LEGAL DESCRIPTION

PARCEL DESCRIPTION: (Per Schedule A of Title Commitment File No. 2651, with a commitment date of October 17, 2019 at 7:00 am, prepared Twin City Title Company, LLC as issuing agent for Old Republic National Title Insurance Company)

Parcel A: Outlot B, Pearson Place, Anoka County, Minnesota.

Parcel B: That part of the Northwest Quarter of the Northwest Quarter of Section 29, Township 32, Range 25, Anoka County, Minnesota, lying southerly of U.S. Highway 10 and 169.

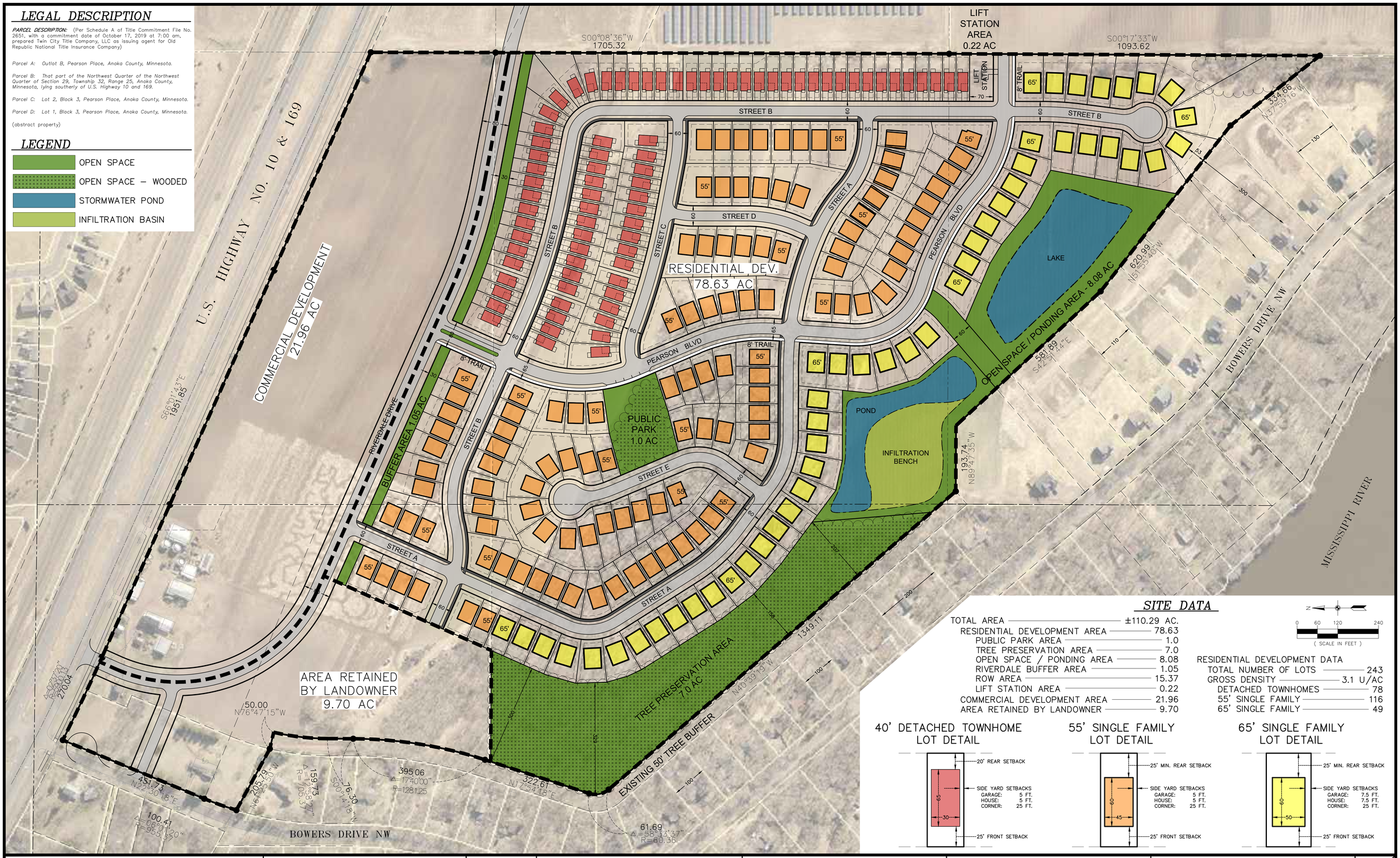
Parcel C: Lot 2, Block 3, Pearson Place, Anoka County, Minnesota.

Parcel D: Lot 1, Block 3, Pearson Place, Anoka County, Minnesota.

(abstract property)

LEGEND

- OPEN SPACE
- OPEN SPACE – WOODED
- STORMWATER POND
- INFILTRATION BASIN



SITE DATA

TOTAL AREA	±110.29 AC.
RESIDENTIAL DEVELOPMENT AREA	78.63
PUBLIC PARK AREA	1.0
TREE PRESERVATION AREA	7.0
OPEN SPACE / PONDING AREA	8.08
RIVERDALE BUFFER AREA	1.05
ROW AREA	15.37
LIFT STATION AREA	0.22
COMMERCIAL DEVELOPMENT AREA	21.96
AREA RETAINED BY LANDOWNER	9.70

N

0 60 120 240

(SCALE IN FEET)

RESIDENTIAL DEVELOPMENT DATA

TOTAL NUMBER OF LOTS	243
GROSS DENSITY	3.1 U/AC
DETACHED TOWNHOMES	78
55' SINGLE FAMILY	116
65' SINGLE FAMILY	49

40' DETACHED TOWNHOME LOT DETAIL

55' SINGLE FAMILY LOT DETAIL

65' SINGLE FAMILY LOT DETAIL

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DRAWN BY: C#/RR
ISSUE DATE: 12/3/20
Revisions:

CAPSTONE HOMES, INC.
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Ramsey, MN 55303

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Ramsey, Minnesota

SKETCH PLAN W/AERIAL

1 of 1

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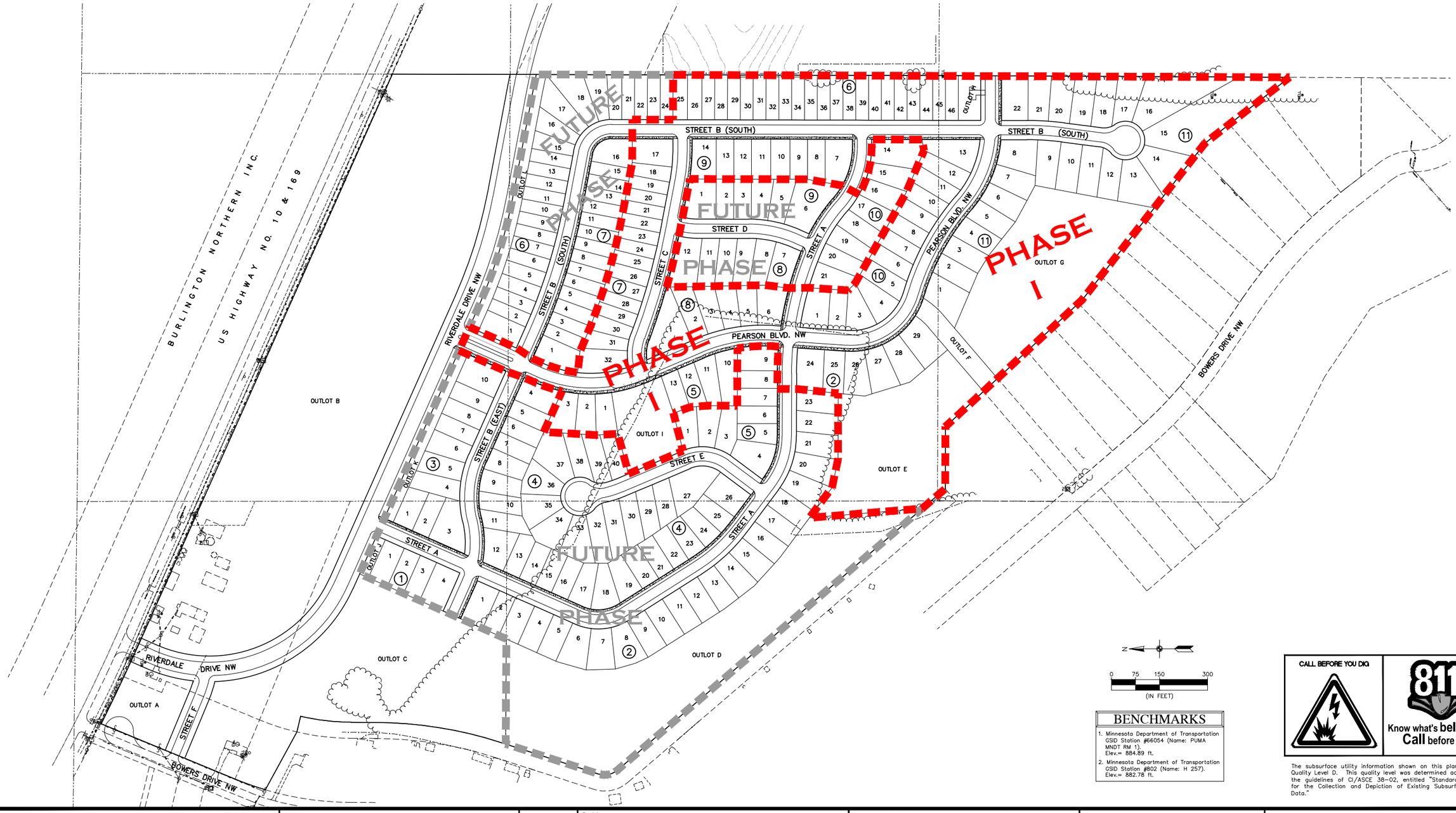
Phasing Exhibit - Development

Riverstone South



BENCHMARKS

1. Minnesota Department of Transportation GSID Station #66054 (Name: PUMA MNDT RM 1). Elev.= 884.89 ft.
2. Minnesota Department of Transportation GSID Station #802 (Name: H 257). Elev.= 882.78 ft.

CALL BEFORE YOU DIG

811

Know what's **below.** **Call** before you dig.

The subsurface utility information shown on this plan is utility Quality Level D. This quality level was determined according to the guidelines of CI/ASCE 38-02, entitled "Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data."

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Drawn: ADB
Designed: BJK
Date: 11/25/20

Revisions:
1.

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RIVERSTONE SOUTH
Ramsey, MN

PHASING EXHIBIT
DEVELOPMENT

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#8494

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DETAIL:

SECTION 29, TOWNSHIP 32, RANGE 25

RIVERSTONE

BURLINGTON NORTHERN INC.

MINNESOTA DEPARTMENT OF TRANSPORTATION MONUMENTATION PLAT 02-M3

MNDOT MONUMENTATION PLAT 02-M2

RIVER CROSSING ADDITION

PEARSON PLACE

OUTLOT A

OUTLOT B

PARCEL A

PARCEL B

PARCEL C

PARCEL D

LOT 2 BLOCK 3 PEARSON PLACE

BOWERS MISSISSIPPI ACRES

BOWERS DRIVE NW

East line of the Northwest 1/4 of the Northwest 1/4 of Section 29, Township 32 Range 25 S00°08'36"W

OWNER: COUNTY OF ANOKA PID: 29-32-25-24-0005

OWNER: COUNTY OF ANOKA PID: 29-32-25-24-0006

OWNER: COUNTY OF ANOKA PID: 29-32-25-24-0007

OWNER: DAVID R NATHE PID: 29-32-25-31-0001

S00°08'36"W 1705.32

S00°17'33"W 1093.62

RLS 12291 1/2 inch pipe

RLS 40062 1/2 inch pipe

1/2 inch iron pipe

6 ft. chain link fence

4 ft. barb wire fence

Tree Line

Southerly Right of Way line of MNDOT MONUMENTATION PLAT 02-M3

East line of the Northwest 1/4 of Section 29, Township 32, Range 25

South line of the Northwest 1/4 of the Northwest 1/4 of Section 29, Township 32, Range 25, also the North line of Outlot B, Pearson Place

West line of the Northwest 1/4 of the Northwest 1/4 of Section 29, Township 32, Range 25, also the East line of Lot 2, Block 3, Pearson Place

Southwest corner of the Northwest Quarter of Section 29, Township 32, Range 25 (cast iron monument)

Northwest corner of Section 29, Township 32, Range 25 (cast iron monument)

703.08

S66°01'33"E 1951.65

756.19

125 75 65 66

Approximate location of access easement per Doc. No. 2090228.006

See Detail

Approx. access easement per Doc. No. 2090228.006

Various height chain link fence

Garage

Existing House

Existing Building

Existing Shed

Existing Garage

Existing Pool

Existing Tennis Court

Existing Sport Court

Existing Gazebo

Existing Pergola

Existing Fire Pit

Existing Landing Pad (8'x8.5')

Existing Shed (8'x10')

Existing Shed (8'x12')

Existing Shed (8'x14')

Existing Shed (8'x16')

Existing Shed (8'x18')

Existing Shed (8'x20')

Existing Shed (8'x22')

Existing Shed (8'x24')

Existing Shed (8'x26')

Existing Shed (8'x28')

Existing Shed (8'x30')

Existing Shed (8'x32')

Existing Shed (8'x34')

Existing Shed

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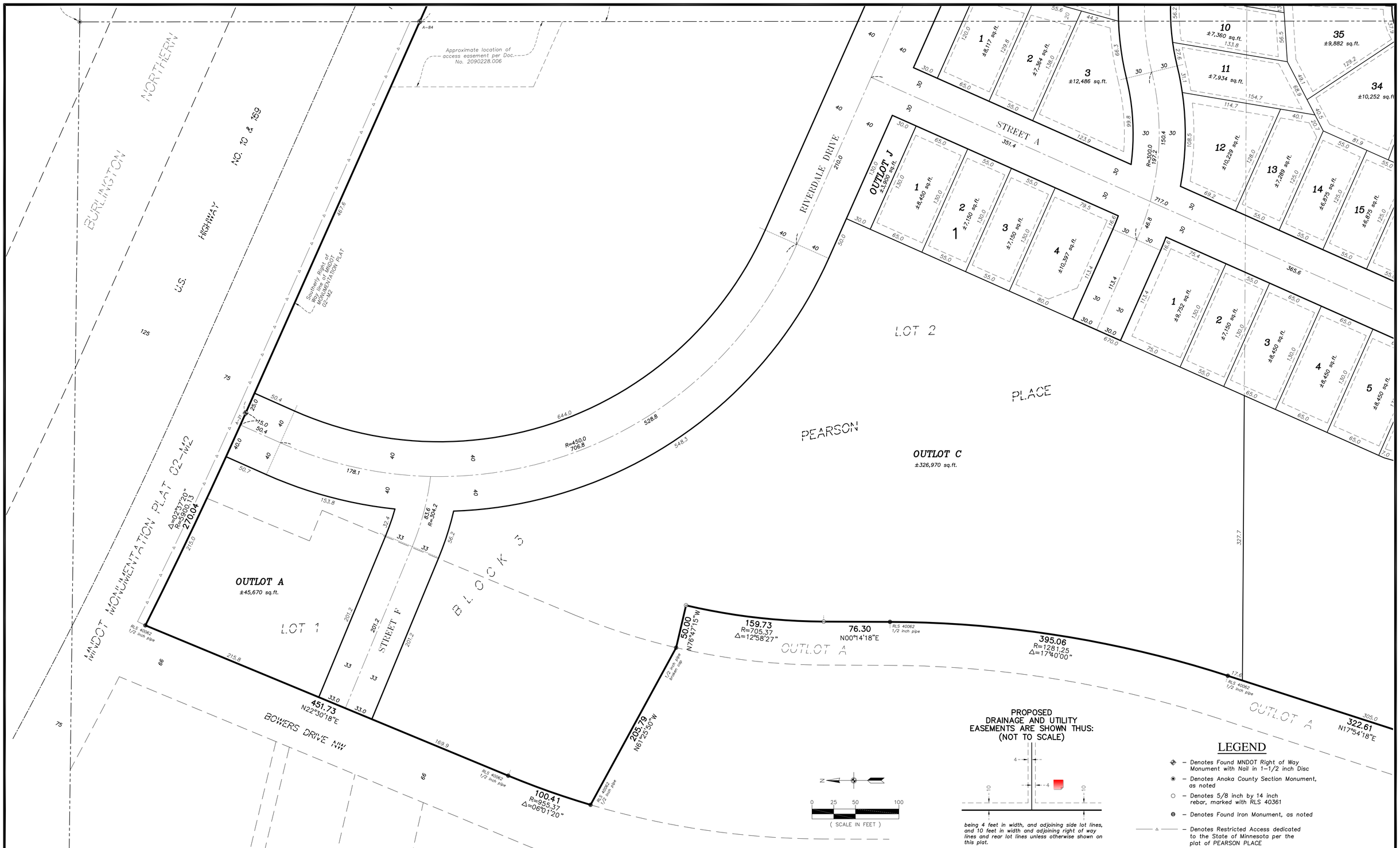

PROPOSED DRAINAGE AND UTILITY EASEMENTS ARE SHOWN THUS: (NOT TO SCALE)

being 4 feet in width, and adjoining side lot lines, and 10 feet in width and adjoining right of way lines and rear lot lines unless otherwise shown on this plat.

LEGEND

- – Denotes Found MNDOT Right of Way Monument with Nail in 1–1/2 inch Disc
- – Denotes Anoka County Section Monument, as noted
- – Denotes 5/8 inch by 14 inch rebar, marked with RLS 40361
- – Denotes Found Iron Monument, as noted
- – Denotes Restricted Access dedicated to the State of Minnesota per the plat of PEARSON PLACE

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CARLSONMCCAIN.COM

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Land Surveyor under the laws of the State of Minnesota

Print Name: Thomas R. Balluff, L.S.
Signature: Thomas R. Balluff
Date: 11/25/20 License #: 40361

DRAWN BY: KCM
ISSUE DATE: 11/25/20
FILE NO: 2086

Revisions:

RIVERSTONE DEVELOPMENT LLC
14015 Sunfish Lake Boulevard NW
Ramsey, MN 55303

RIVERSTONE SOUTH
Ramsey, Minnesota

PRELIMINARY PLAT

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Print Name: Brian J. Krystofiak, P.E.
Signature:
Date: 11/25/20 License #: 25063

Drawn: ADB
Designed: BJK
Date: 11/25/20

Revisions:
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RIVERSTONE DEVELOPMENT, LLC
14015 Sunfish Lake B, Suite 400
Ramsey, MN 55303

RIVERSTONE SOUTH
Ramsey, MN

PRELIMINARY SITE & UTILITY PLAN

12 of 25

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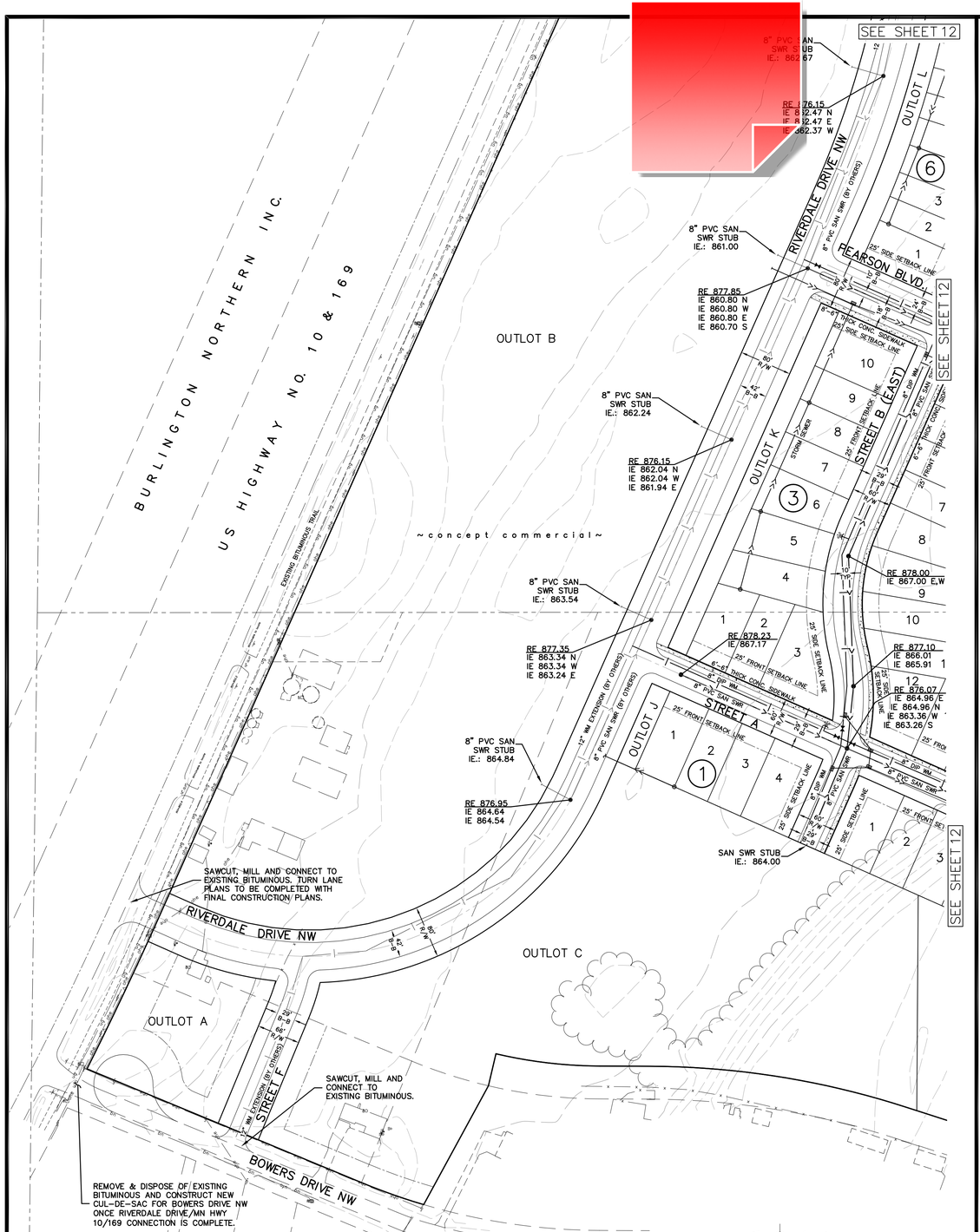

SITE PLAN LEGEND

	EXISTING	PROPOSED
LIGHT POLE		
SANITARY MANHOLE	SAN	
MISCELLANEOUS SIGN		
EXISTING SPOT ELEVATION	0000.0	
EXISTING TREE		
TELEVISION BOX	TV	
FIRE HYDRANT	FH	
FLUSHING HYDRANT		
GATE VALVE	GV	
CLEANOUT	CO	
ELECTRIC BOX	EB	
GAS METER	GM	
CATCH BASIN	or	or
RAIN GUARDIAN		RG
ELECTRIC METER	EM	
TELEPHONE BOX	TB	
UTILITY POLE	UP	
FLARED END SECTION	FES HW	
STORM MANHOLE	STMH	
SERVICE	SS W G	
SOIL BORING/TEST HOLE		

	MODULAR	ROCK
RETAINING WALL		
WATERMAIN		
SANITARY SEWER		
FORCEMAIN	FM	FM
STORM SEWER		
PROPERTY LINE		
SETBACK LINE		
CURB		
WETLAND		
DITCH		
UNDERGROUND TELEPHONE	ut	ut
UNDERGROUND ELECTRIC	ue	ue
UNDERGROUND GAS	ug	ug
UNDERGROUND FIBEROPTIC	ufo	ufo
FENCE	x	x
OVERHEAD ELECTRIC	ohe	ohe

CONCRETE SURFACE		
BITUMINOUS SURFACE		

N

0 50 100 200

BENCHMARKS

1. Minnesota Department of Transportation GSID Station #66054 (Name: PUMA MNDT RM 1). Elev.= 884.89 ft.
2. Minnesota Department of Transportation GSID Station #802 (Name: H 257). Elev.= 882.78 ft.

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Date: 11/25/20

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RIVERSTONE SOUTH
Ramsey, MN

PRELIMINARY SITE & UTILITY PLAN

13 of 25

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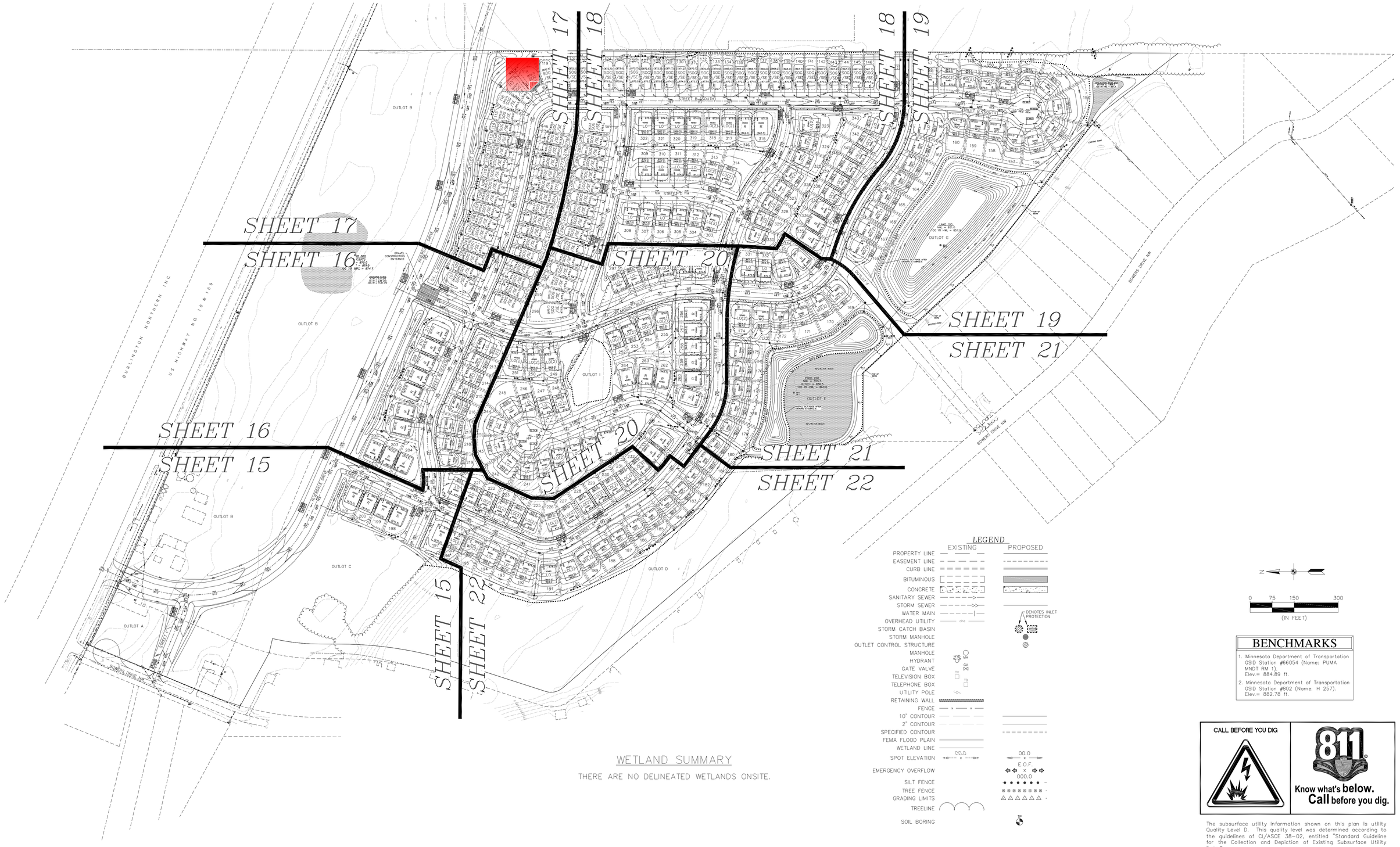

WETLAND SUMMARY

THERE ARE NO DELINEATED WETLANDS ONSITE.

LEGEND

	EXISTING	PROPOSED
PROPERTY LINE		
EASEMENT LINE		
CURB LINE		
BITUMINOUS		
CONCRETE		
SANITARY SEWER		
STORM SEWER		
WATER MAIN		
OVERHEAD UTILITY	ohe	
STORM CATCH BASIN		DENOTES INLET PROTECTION
STORM MANHOLE		
OUTLET CONTROL STRUCTURE		
MANHOLE		
HYDRANT	HYD	
GATE VALVE	GV	
TELEVISION BOX	TV	
TELEPHONE BOX	TB	
UTILITY POLE		
RETAINING WALL		
FENCE	x x	
10' CONTOUR		
2' CONTOUR		
SPECIFIED CONTOUR		
FEMA FLOOD PLAIN		
WETLAND LINE		
SPOT ELEVATION	00.0	00.0
EMERGENCY OVERFLOW		E.O.F. 000.0
SILT FENCE		
TREE FENCE		
GRADING LIMITS		
TREELINE		
SOIL BORING		TP

N

0 75 150 300
(IN FEET)

BENCHMARKS

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CALL BEFORE YOU DIG

811 Know what's below. Call before you dig.

The subsurface utility information shown on this plan is utility Quality Level D. This quality level was determined according to the guidelines of CI/ASCE 38-02, entitled "Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data."

CARLSON McCAIN
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RIVERSTONE DEVELOPMENT, LLC
14015 Sunfish Lake B, Suite 400
Ramsey, MN 55303

RIVERSTONE SOUTH
Ramsey, MN

GRADING INDEX

14 of 25

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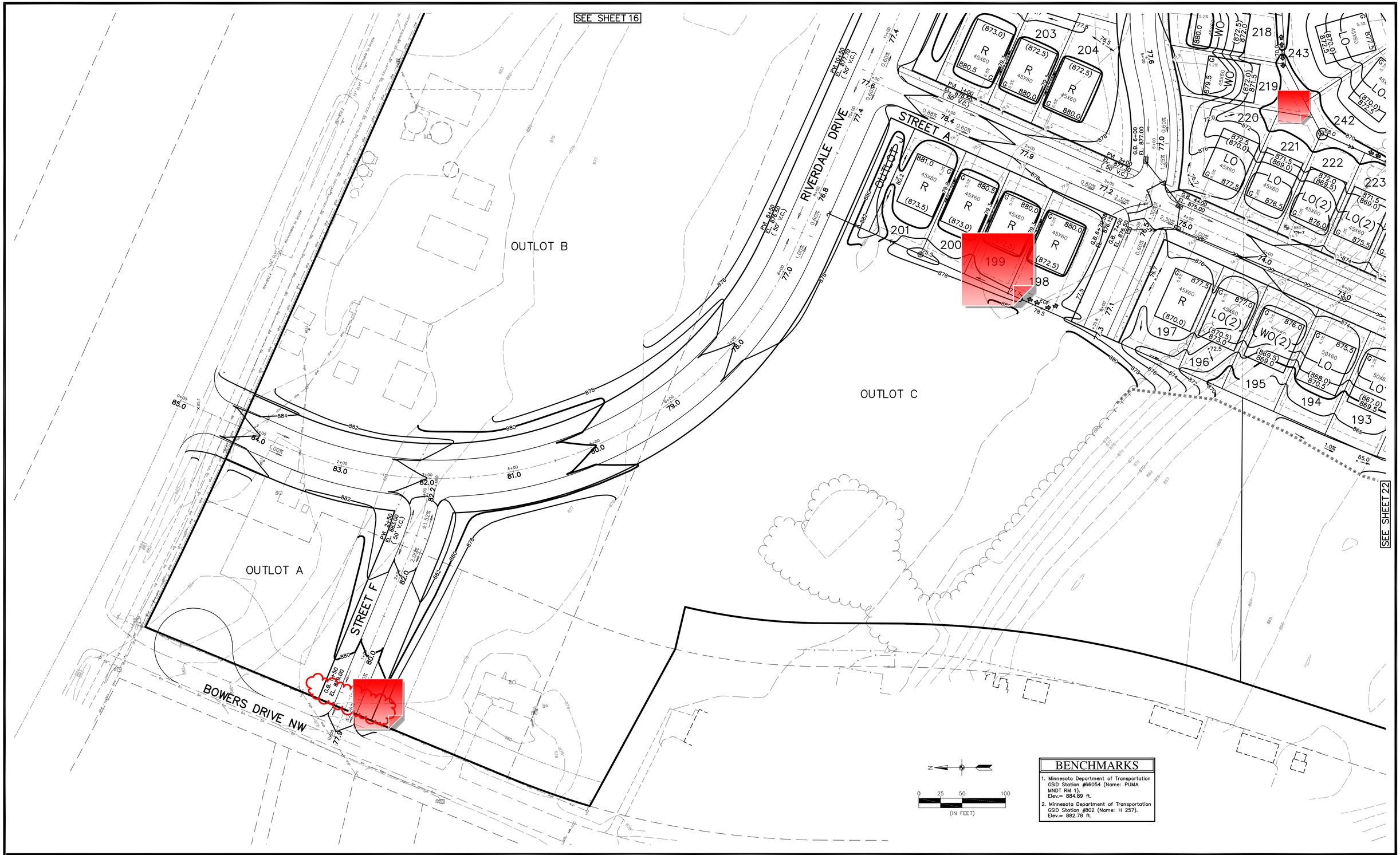

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RIVERSTONE DEVELOPMENT, LLC
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RIVERSTONE SOUTH
Ramsey, MN

PRELIMINARY GRADING & EROSION CONTROL PLAN

15 of 25

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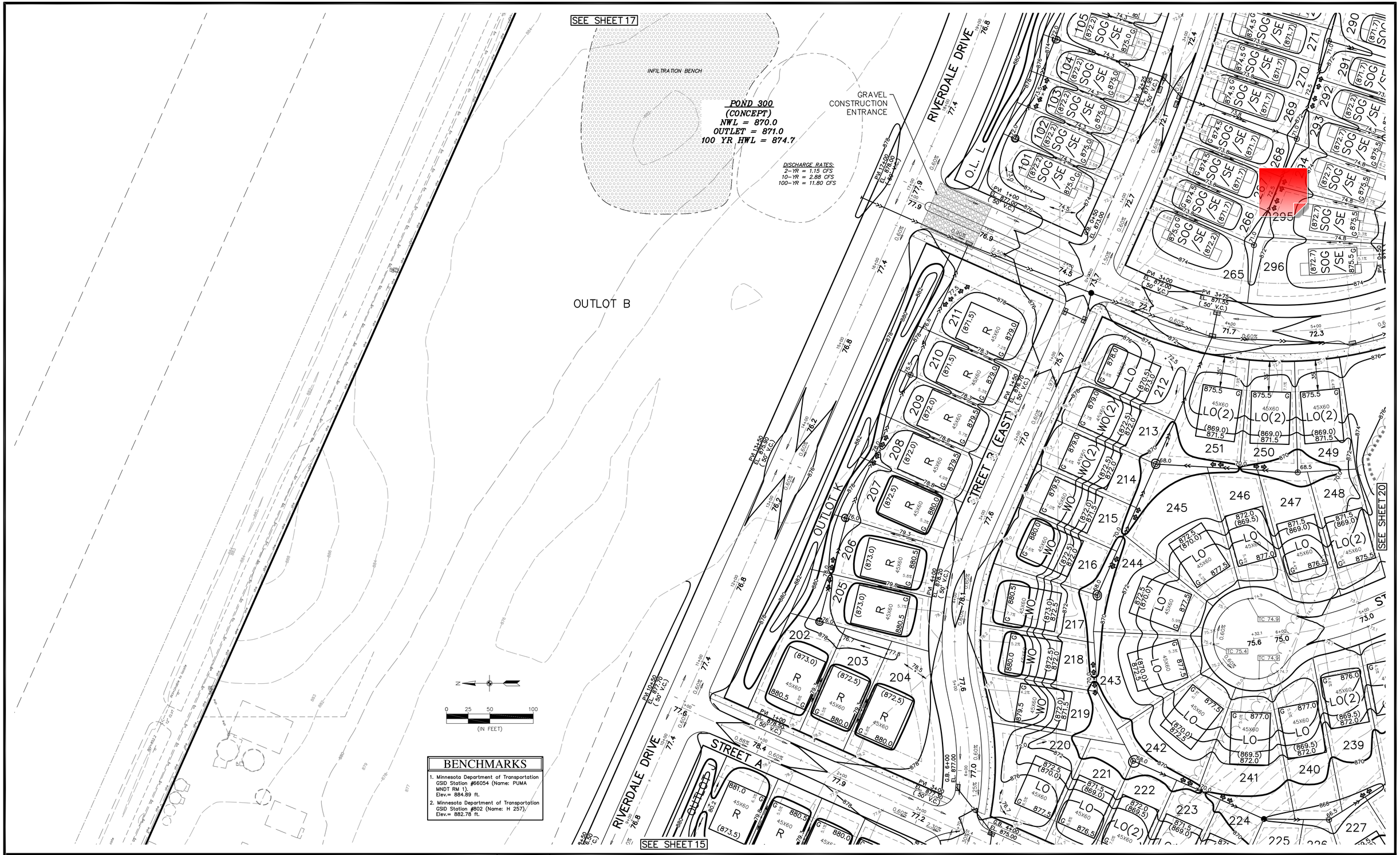

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PRELIMINARY GRADING & EROSION CONTROL PLAN

16 of 25

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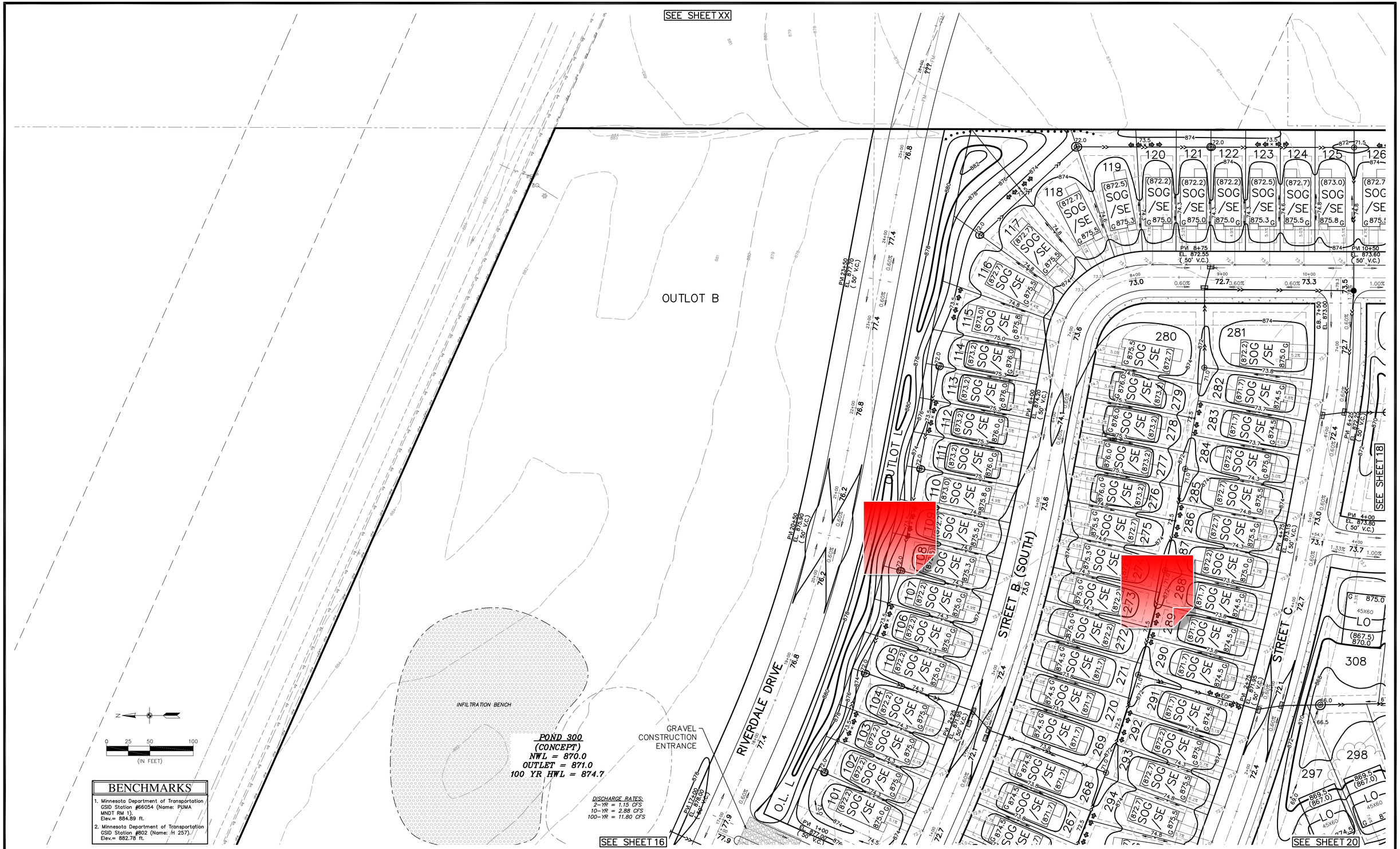

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PRELIMINARY GRADING & EROSION CONTROL PLAN

17 of 25

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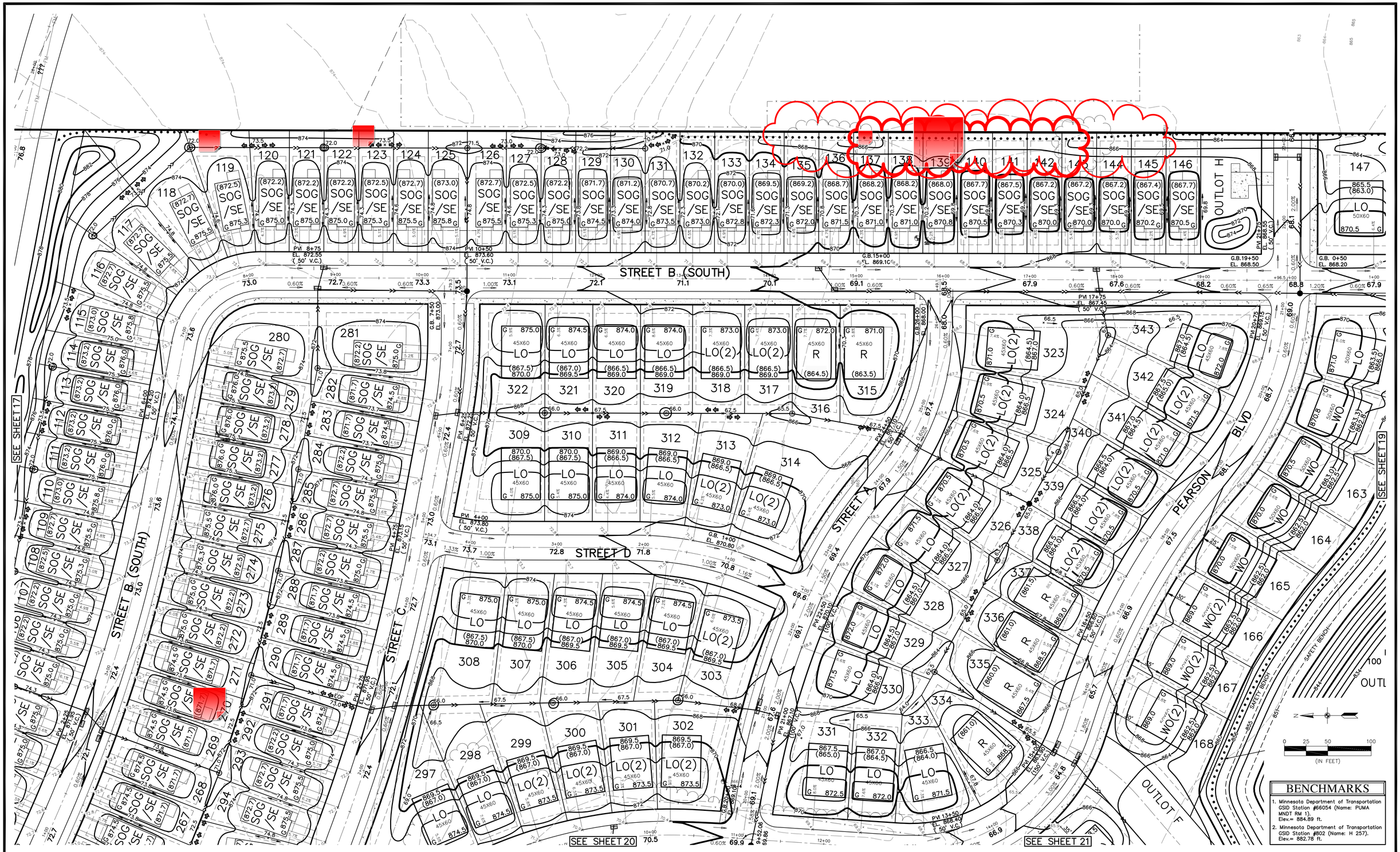

BENCHMARKS

1. Minnesota Department of Transportation CSID Station #66054 (Name: PUMA MNDT RM 1). Elev.= 884.89 ft.
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Date: 11/25/20

Revisions:
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RIVERSTONE SOUTH
Ramsey, MN

PRELIMINARY GRADING & EROSION CONTROL PLAN

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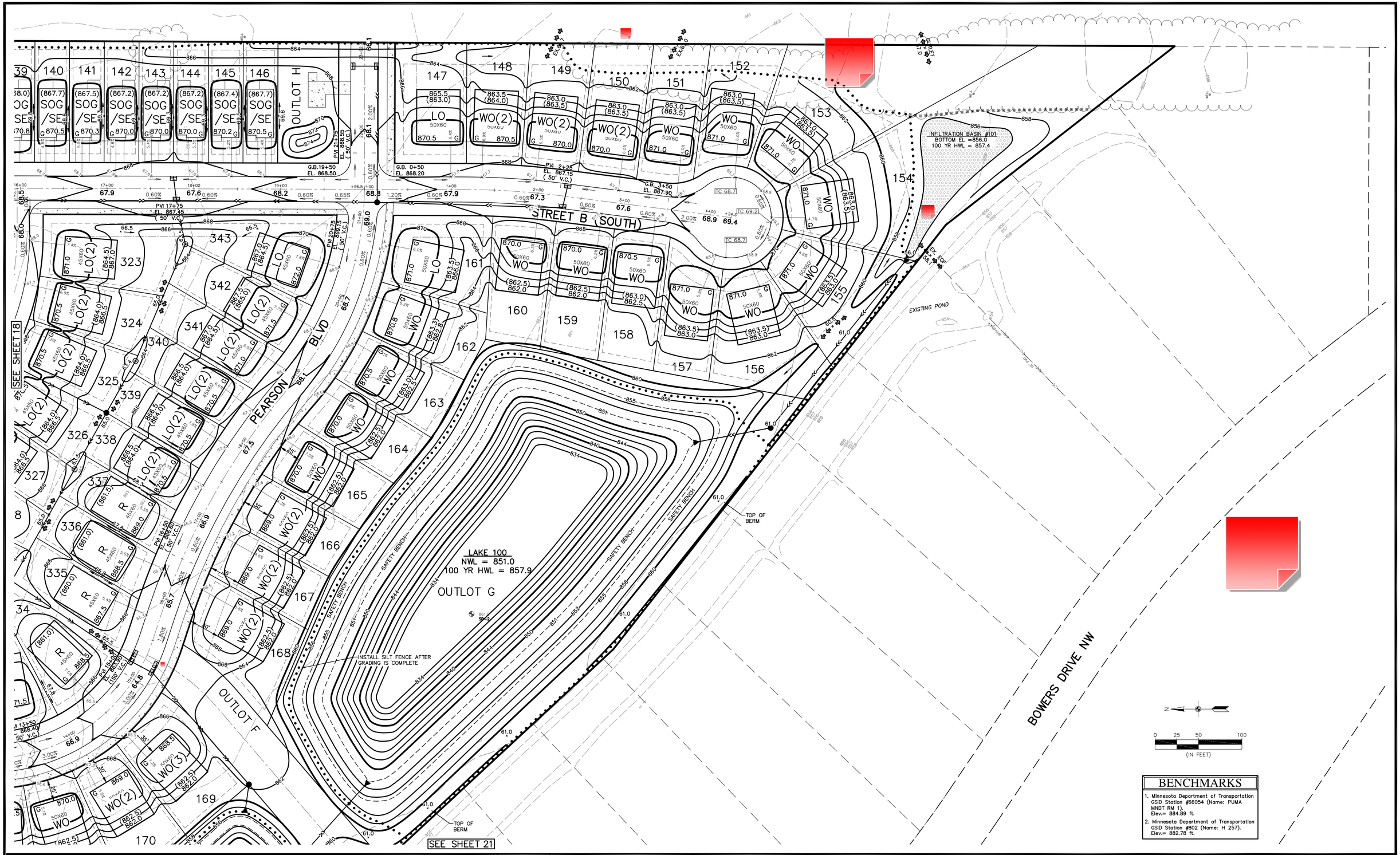

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RIVERSTONE SOUTH
Ramsey, MN

PRELIMINARY GRADING & EROSION CONTROL PLAN

19 of 25

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#8494

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SEE SHEET 17

SEE SHEET 18

SEE SHEET 16 (EAST)

SEE SHEET 21

SEE SHEET 22

PEARSON BLVD

STREET A

STREET E

OUTLOT I

OUTLOT F

OUTLOT E

POND 200
NWL = 855.5
OUTLET = 856.5
100 YR HWL = 860.0

INFILTRATION BENCH

INFILTRATION BENCH

SAFETY BENCH

SAFETY BENCH

SAFETY BENCH

TOP OF BERM

INSTALL SILT FENCE AFTER GRADING IS COMPLETE

0 25 50 100
(IN FEET)

BENCHMARKS

1. Minnesota Department of Transportation GSID Station #66054 (Name: PUMA MNDT RM 1). Elev.= 884.89 ft.
2. Minnesota Department of Transportation GSID Station #602 (Name: H 257). Elev.= 882.78 ft.

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I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota

Print Name: Brian J. Krystofiak, P.E.
Signature:
Date: 11/25/20 License #: 25063

Drawn: ADB
Designed: BJK
Date: 11/25/20

Revisions:
1.

RIVERSTONE DEVELOPMENT, LLC
14015 Sunfish Lake B, Suite 400
Ramsey, MN 55303

RIVERSTONE SOUTH
Ramsey, MN

PRELIMINARY GRADING & EROSION CONTROL PLAN

20 of 25

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#8494

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SEE SHEET 18

SEE SHEET 19

SEE SHEET 20

SEE SHEET 22

LAKE 100
NWL = 851.0
100 YR HWL = 857.9

OUTLOT G

OUTLOT F

OUTLOT E

POND 200
NWL = 855.5
OUTLET = 856.5
100 YR HWL = 860.0

INSTALL SILT FENCE AFTER GRADING IS COMPLETE

INFILTRATION BENCH

SAFETY BENCH

TOP OF BERM

EXISTING POND

STREET A

BOWERS DRIVE NW

0 25 50 100
(IN FEET)

BENCHMARKS

1. Minnesota Department of Transportation GSID Station #66054 (Name: PUMA MNDT RM 1). Elev.= 884.89 ft.
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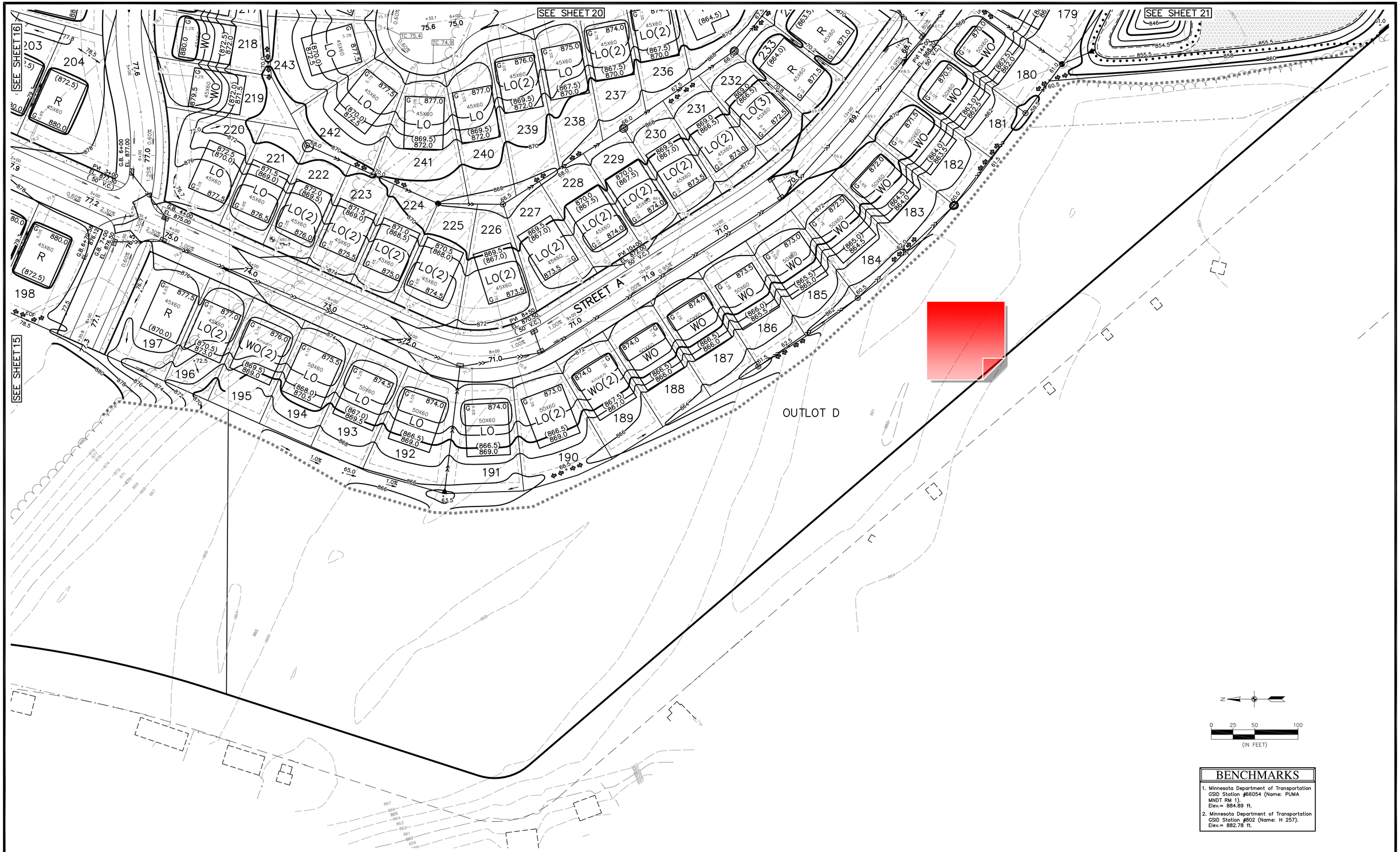

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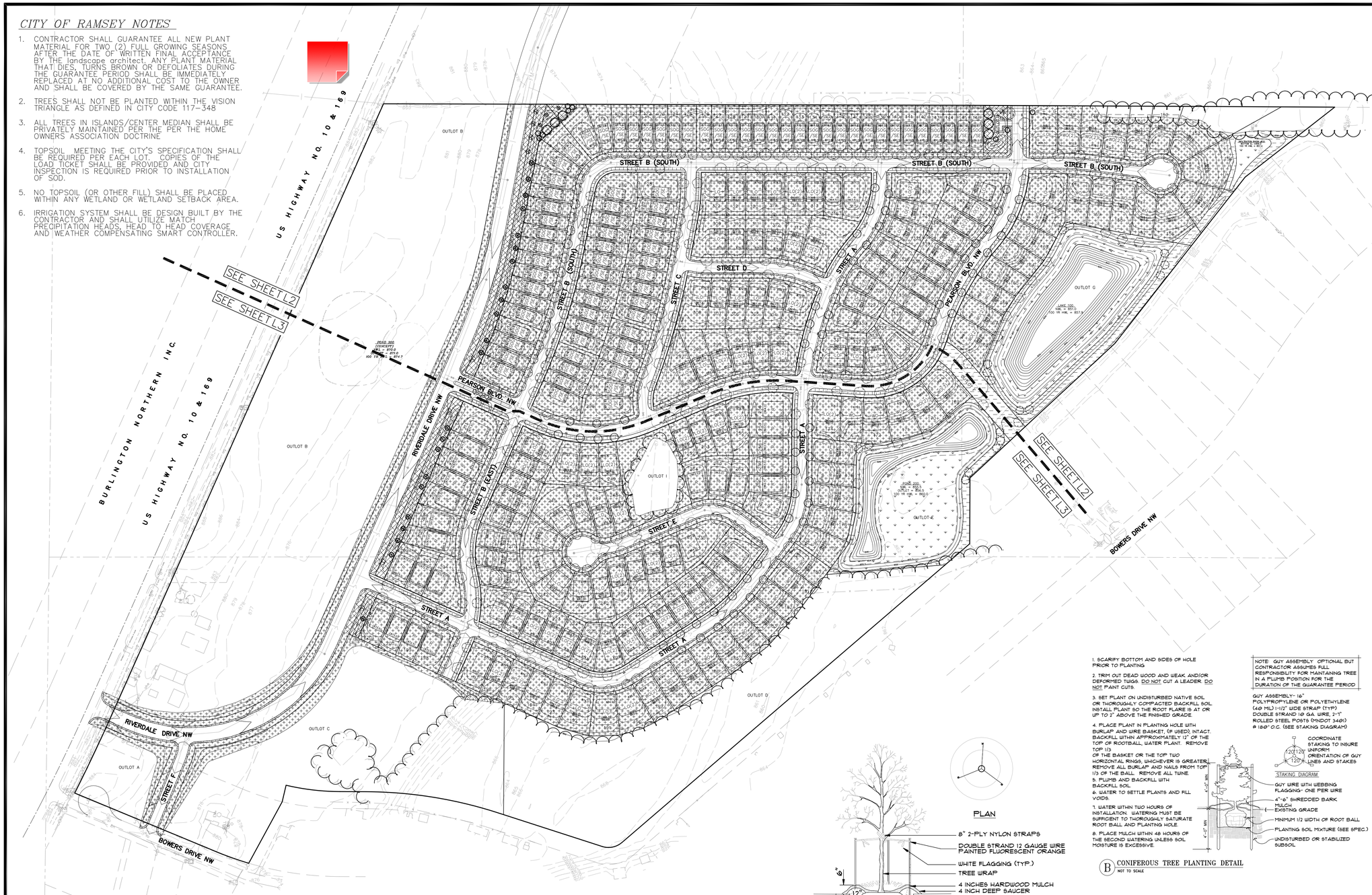
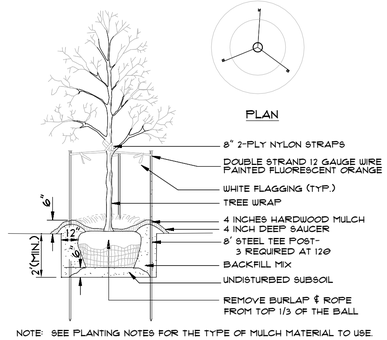
CITY OF RAMSEY NOTES

1. CONTRACTOR SHALL GUARANTEE ALL NEW PLANT MATERIAL FOR TWO (2) FULL GROWING SEASONS AFTER THE DATE OF WRITTEN FINAL ACCEPTANCE BY THE landscape architect. ANY PLANT MATERIAL THAT DIES, TURNS BROWN OR DEFOLIATES DURING THE GUARANTEE PERIOD SHALL BE IMMEDIATELY REPLACED AT NO ADDITIONAL COST TO THE OWNER AND SHALL BE COVERED BY THE SAME GUARANTEE.
2. TREES SHALL NOT BE PLANTED WITHIN THE VISION TRIANGLE AS DEFINED IN CITY CODE 117-348
3. ALL TREES IN ISLANDS/CENTER MEDIAN SHALL BE PRIVATELY MAINTAINED PER THE PER THE HOME OWNERS ASSOCIATION DOCTRINE
4. TOPSOIL MEETING THE CITY'S SPECIFICATION SHALL BE REQUIRED PER EACH LOT. COPIES OF THE LOAD TICKET SHALL BE PROVIDED AND CITY INSPECTION IS REQUIRED PRIOR TO INSTALLATION OF SOD.
5. NO TOPSOIL (OR OTHER FILL) SHALL BE PLACED WITHIN ANY WETLAND OR WETLAND SETBACK AREA.
6. IRRIGATION SYSTEM SHALL BE DESIGN BUILT BY THE CONTRACTOR AND SHALL UTILIZE MATCH PRECIPITATION HEADS, HEAD TO HEAD COVERAGE AND WEATHER COMPENSATING SMART CONTROLLER.



1 / L1 OVERALL LANDSCAPE PLAN

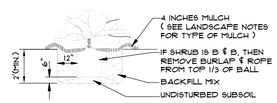


NOTE: SEE PLANTING NOTES FOR THE TYPE OF MULCH MATERIAL TO USE.

A DECIDUOUS TREE PLANTING DETAIL
NOT TO SCALE

1. SCARIFY BOTTOM AND SIDES OF HOLE PRIOR TO PLANTING.
2. TRIM OUT DEAD WOOD AND WEAK AND/OR DEFORMED TWIGS. DO NOT CUT A LEADER. DO NOT PAINT CUTS.
3. SET PLANT ON UNDISTURBED NATIVE SOIL OR THOROUGHLY COMPACTED BACKFILL SOIL. INSTALL PLANT SO THE ROOT FLARE IS AT OR UP TO 2" ABOVE THE FINISHED GRADE.
4. PLACE PLANT IN PLANTING HOLE WITH BURLAP AND WIRE BASKET, (IF USED), INTACT. BACKFILL WITHIN APPROXIMATELY 12" OF THE TOP OF ROOTBALL. WATER PLANT. REMOVE TOP 1/3 OF THE BASKET OR THE TOP TWO HORIZONTAL RINGS, WHICHEVER IS GREATER. REMOVE ALL BURLAP AND NAILS FROM TOP 1/3 OF THE BALL. REMOVE ALL TWINE.
5. PLUMB AND BACKFILL WITH BACKFILL SOIL.
6. WATER TO SETTLE PLANTS AND FILL VOIDS.
7. WATER WITHIN TWO HOURS OF INSTALLATION. WATERING MUST BE SUFFICIENT TO THOROUGHLY SATURATE ROOT BALL AND PLANTING HOLE.
8. PLACE MULCH WITHIN 48 HOURS OF THE SECOND WATERING UNLESS SOIL MOISTURE IS EXCESSIVE.

B CONIFEROUS TREE PLANTING DETAIL
NOT TO SCALE



C SHRUB & CONTAINER PLANTING DETAIL
NOT TO SCALE

LANDSCAPE PLAN NOTES

1. EXISTING CONDITIONS. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS PRIOR TO BIDDING AND CONSTRUCTION START. ANY DISCREPANCIES FOUND THAT AFFECT THE WORK SHALL BE REPORTED TO THE OWNER/LANDSCAPE ARCHITECT FOR CLARIFICATION PRIOR TO BIDDING OR APPROVING ANY ADDITIONAL WORK REQUIRED.
2. UTILITY LOCATES. CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND VERIFYING ALL PUBLIC AND PRIVATE UTILITIES, INCLUDING IRRIGATION LINES, AT LEAST 48 HOURS BEFORE EXCAVATING OR IN ACCORDANCE WITH STATE LAW. IN MINNESOTA, CALL GOPHER STATE ONE-CALL AT 651-454-0002 FOR FIELD LOCATION OF PUBLIC UNDERGROUND UTILITY LINES. ALL LOCATES AND ITEMS NOTED AS 'FIELD VERIFY' ON THE PLANS SHALL BE VERIFIED BY THE CONTRACTOR AT THEIR EXPENSE.
3. PERMITS. CONTRACTOR SHALL VERIFY WITH THE OWNER/LANDSCAPE ARCHITECT THAT THE REQUIRED PERMITS HAVE BEEN OBTAINED PRIOR TO CONSTRUCTION START. CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLYING WITH ALL APPLICABLE CODES, REGULATIONS, AND PERMITS GOVERNING THE WORK.
4. EXISTING ITEMS TO REMAIN. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING PAVEMENT, STRUCTURES, UTILITIES, TREES, SITE AMENITIES, ETC. THAT ARE TO REMAIN FROM DAMAGE DURING CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR CORRECTING ANY DAMAGE (AT CONTRACTOR'S EXPENSE) TO EXISTING ITEMS TO REMAIN.
5. CONSTRUCTION STAGING AND ACCESS. CONTRACTOR SHALL VERIFY THE LOCATION FOR CONSTRUCTION STAGING AND SITE ACCESS WITH THE OWNER/LANDSCAPE ARCHITECT PRIOR TO CONSTRUCTION START. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING PEDESTRIAN AND VEHICLE ACCESS WITHIN AND ADJACENT TO THE SITE THROUGHOUT THE CONSTRUCTION PERIOD UNLESS OTHERWISE NOTED. LONG-TERM STORAGE OF MATERIALS OR SUPPLIES ON-SITE WILL NOT BE PERMITTED. ALL WASTE AND/OR UNUSED MATERIAL SHALL BE PROMPTLY REMOVED FROM THE SITE.
6. SITE REMOVALS. REFER TO CIVIL PLANS FOR GENERAL SITE REMOVALS. ALL ITEMS NOTED TO BE REMOVED SHALL BE COMPLETED BY THE CONTRACTOR AND IMMEDIATELY DISPOSED OF OFF-SITE, IN ACCORDANCE WITH LOCAL REGULATIONS, UNLESS OTHERWISE NOTED. COORDINATE WITH OWNER/LANDSCAPE ARCHITECT FOR ANY ITEMS NOTED AS 'REMOVED BY OTHERS' OR 'REMOVE AND SALVAGE.'
7. UTILITY COORDINATION. REFER TO CIVIL PLAN SHEETS FOR INFORMATION RELATED TO PROPOSED UTILITIES. COORDINATE WITH ELECTRICAL CONTRACTORS FOR SITE ELECTRICAL WORK AND SITE LIGHTING.
8. CONSTRUCTION STAKING. UNLESS OTHERWISE NOTED, CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING CONTROL POINTS AND ALL CONSTRUCTION FIELD STAKING DURING THE COURSE OF THE PROJECT.
9. DIMENSIONS. DIMENSIONS TAKE PRECEDENCE OVER SCALE. DIMENSIONS ARE TO FACE OF CURB, EDGE OF PAVEMENT/WALKWAY, OR OUTSIDE FACE OF BUILDING UNLESS OTHERWISE NOTED.
10. PLAN QUANTITIES. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL MATERIAL QUANTITIES PER PLAN. MATERIAL SCHEDULES ARE PROVIDED SOLELY FOR CONTRACTOR'S CONVENIENCE.
11. REFERENCE SPECIFICATIONS. THE FOLLOWING SPECIFICATIONS SHALL GOVERN THIS PROJECT ACCORDING TO THE FOLLOWING ORDER:
    1. ADDENDA, WITH THOSE OF A LATER DATE HAVING PRECEDENCE OVER THOSE OF AN EARLIER DATE
    2. LANDSCAPE SPECIFICATIONS.
    3. PLAN DRAWINGS.
    4. PLANT / MATERIAL SCHEDULES.
    5. CITY STANDARD SPECIFICATIONS AND DETAILS.
    6. MnDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION, LATEST EDITION.

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Print Name: Ryan J. Ruttger, RLA
Signature:
Date: 11/25/20 License #: 56346

Drawn: RJR
Designed: RJR
Date: 11/25/20

Revisions:
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Ramsey, MN 55303

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Ramsey, MN

PRELIMINARY LANDSCAPE PLAN

L1 of 4

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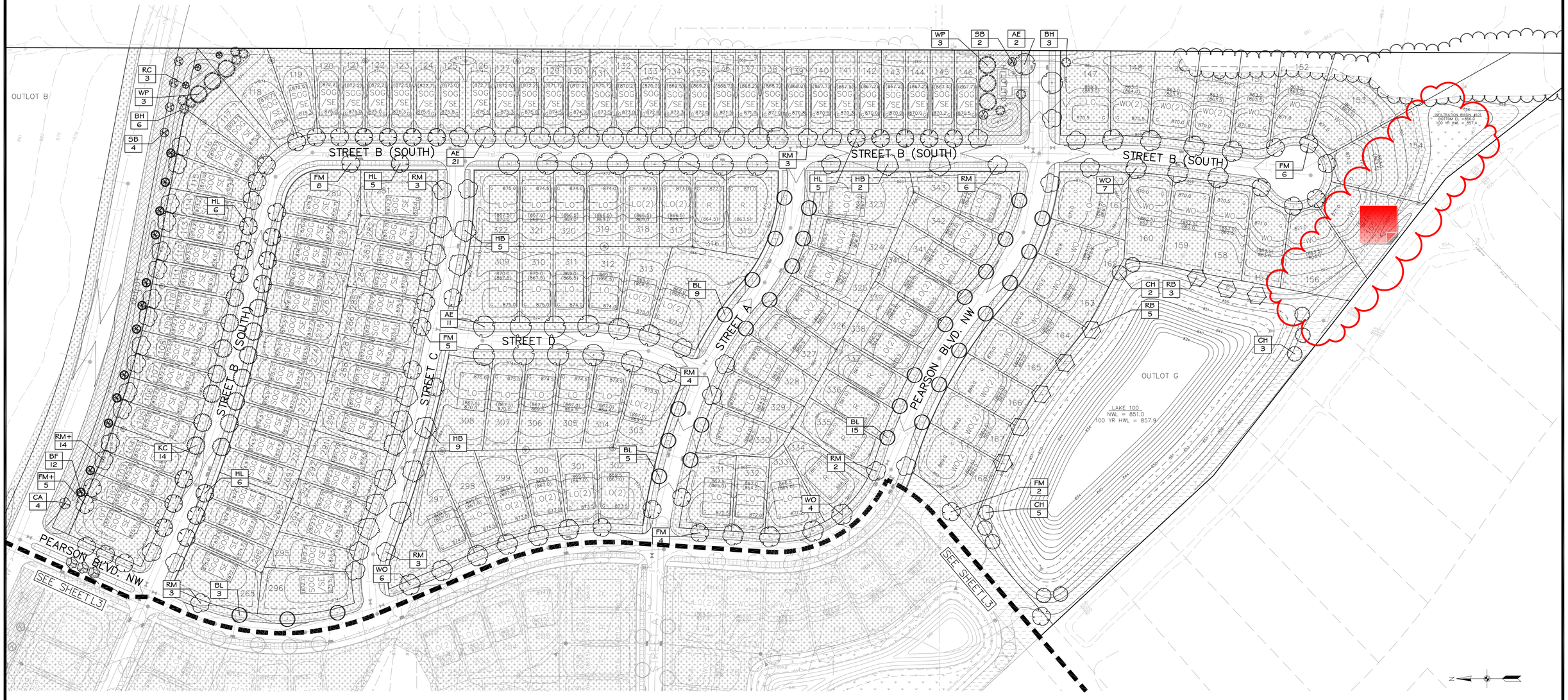

1/L2 LANDSCAPE PLAN ENLARGEMENT

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PRELIMINARY LANDSCAPE PLAN

L2 of 4

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#8494

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LANDSCAPE SPECIFICATIONS

1. TREE PROTECTION. ALL TREES NOT SPECIFICALLY NOTED OR MARKED ON SITE FOR REMOVAL SHALL REMAIN PROTECTED AND UNDISTURBED DURING CONSTRUCTION. TREE PROTECTION SHALL EXTEND TO THE DRIP LINE, WITHIN WHICH NO CONSTRUCTION ACTIVITY, MATERIAL STORAGE, OR VEHICLE PARKING SHALL BE PERMITTED. TREE PROTECTION FENCING SHALL BE ERECTED PRIOR TO CONSTRUCTION START PER PLANS OR AS DIRECTED BY OWNER/LANDSCAPE ARCHITECT AND SHALL CONSIST OF 4' TALL HEAVY DUTY ORANGE CONSTRUCTION FENCING WITH 6' STEEL FENCE POSTS SPACED 6' O.C. MAX.

2. EROSION CONTROL. REFER TO CIVIL PLAN SHEETS FOR STORMWATER POLLUTION PREVENTION PLAN (SWPPP), AND TEMPORARY AND PERMANENT STORMWATER BMPS, INCLUDING SILT FENCE, BIO-ROLLS, INLET PROTECTION, EROSION CONTROL BLANKETING, DUST CONTROL, SWEEPING AND ROCK CONSTRUCTION ENTRANCE. ALL DISTURBED AREAS SHALL RECEIVE PERMANENT STABILIZATION IN ACCORDANCE WITH THE LANDSCAPE PLAN WITHIN 7 DAYS AFTER CONSTRUCTION ACTIVITY IN THE DISTURBED AREA HAS CEASED. IN THE EVENT PERMANENT STABILIZATION CANNOT BE IMPLEMENTED WITHIN 7 DAYS, TEMPORARY STABILIZATION BMPS MUST BE IMPLEMENTED WITHIN 7 DAYS USING.

3. CLEARING AND GRUBBING. CONTRACTOR SHALL BE RESPONSIBLE FOR CLEARING AND GRUBBING ALL AREAS INDICATED AS BEING DISTURBED OR OTHERWISE SHOWN ON PLANS. CLEARING AND GRUBBING SHALL INCLUDE REMOVAL AND DISPOSAL OF ALL TREES, STUMPS, BRUSH, GRASS, ROOTS AND OTHER ORGANIC MATERIAL AT AN APPROVED OFF-SITE DISPOSAL LOCATION.

4. SOIL PREPARATION. REFER TO GEOTECHNICAL REPORT FOR ANY REQUIRED SOIL CORRECTIONS, AMENDMENTS OR ADDITIONAL INFORMATION (IF APPLICABLE). EXISTING TOPSOIL SHALL BE STRIPPED FROM ALL DISTURBED AREAS AND STOCKPILED IN AN APPROVED LOCATION FOR RE-SPREAD. ALL AREAS WHERE SOIL HAS BEEN COMPACTED BY CONSTRUCTION ACTIVITY AND THAT ARE INDICATED TO BE SODDED, SEEDED OR PLANTING BED SHALL BE DE-COMPACTED TO A MINIMUM DEPTH OF 12 INCHES BY SOIL RIPPING, TILLING OR OTHER APPROVED SOIL LOOSENING METHOD.

5. TOPSOIL MATERIAL. ALL EXISTING, AMENDED OR IMPORTED TOPSOIL SHALL MEET THE REQUIREMENTS OF WDOT TOPSOIL TYPE A. A MINIMUM 4 INCH DEPTH OF TOPSOIL SHALL BE PLACED ON ALL AREAS TO BE SODDED OR SEEDED. A MINIMUM 12 INCH DEPTH OF TOPSOIL SHALL BE PLACED WITHIN ALL PLANTING BED AREAS. ALL TOPSOIL SHALL BE FINE GRADED, RAKED AND DRAGGED TO PROVIDE A SMOOTH, UNIFORM SURFACE. TOPSOIL GRADES SHALL BE WITHIN .1 FEET OF INDICATED FINISHED GRADE AND SHALL BE TRUE TO GRADIENTS SHOWN ON PLANS. REFER TO CIVIL PLAN SHEETS FOR FILTRATION BASIN SOIL REQUIREMENTS.

6. SEEDING AND TURF ESTABLISHMENT. CONTRACTOR SHALL OBTAIN OWNER/LANDSCAPE ARCHITECT'S APPROVAL OF FINAL GRADES AND TOPSOIL PREP PRIOR TO SEEDING. APPLY 12-12-12 GRANULAR STARTER FERTILIZER AT A RATE OF 250 LBS PER ACRE PRIOR TO SEEDING.. SEEDS SHALL BE SOWED IN 2 PERPENDICULAR PASSES, EACH PASS AT ONE-HALF THE INDICATED RATE, VIA BROADCAST SPREADER, DROP SEEDER OR DRILL SEEDER. FOLLOWING SEED APPLICATION, INSTALL TYPE 3N EROSION CONTROL BLANKET ON ALL SLOPES GREATER THAN 4:1. IN ALL OTHER AREAS, APPLY HYDROMULCH COVER (MUST BE A SEPARATE OPERATION FROM SEEDING) AT A TARGETED DRY WEIGHT RATE OF 3500 LBS PER ACRE. SOIL SHALL BE KEPT MOIST DURING ESTABLISHMENT WITH ADDITIONAL RE-SEEDING AS NECESSARY TO ACHIEVE A HEALTHY, UNIFORM STAND OF GRASS, FREE OF WEEDS AND WITH COVERAGE EXCEEDING 75% IN ANY 10'x10' AREA PRIOR TO FINAL ACCEPTANCE.

7. SODDING. CONTRACTOR SHALL OBTAIN OWNER/LANDSCAPE ARCHITECT'S APPROVAL OF FINAL GRADES AND TOPSOIL PREP PRIOR TO SODDING. APPLY 12-12-12 GRANULAR STARTER FERTILIZER AT A RATE OF 250 LBS PER ACRE PRIOR TO SODDING AND ROLL TOPSOIL TO CREATE A UNIFORM SURFACE FOR LAYING SOD. SOD SHALL NOT BE CUT MORE THAN 24-HOURS IN ADVANCE OF INSTALLATION. CONTRACTOR SHALL KEEP SOD MOIST FOR A MINIMUM OF 30 DAYS AND SHALL BE RESPONSIBLE FOR MAINTAINING THE SOD UNTIL FINAL ACCEPTANCE.

8. PLANT MATERIAL. ALL PLANTING STOCK SHALL CONFORM TO THE "AMERICAN STANDARD FOR NURSERY STOCK," ANSI-Z60, LATEST EDITION, OF THE AMERICAN ASSOCIATION OF NURSERYMEN, INC. AND SHALL CONSTITUTE MINIMUM QUALITY REQUIREMENTS FOR PLANT MATERIALS. OWNER/LANDSCAPE ARCHITECT RESERVE THE RIGHT TO REJECT ANY PLANTS WHICH ARE DEEMED UNSATISFACTORY BEFORE, DURING, OR AFTER INSTALLATION. NO SUBSTITUTION OF PLANT MATERIAL SHALL BE ACCEPTED UNLESS APPROVED IN WRITING BY THE OWNER/LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.

9. PLANT MATERIAL SUBSTITUTIONS. ALL REQUESTS FOR PLANT SUBSTITUTIONS SHALL BE MADE IN WRITING TO THE OWNER/LANDSCAPE ARCHITECT AND MUST BE APPROVED BY THE CITY.

10. PLANT INSTALLATION AND ESTABLISHMENT. REFER TO STANDARD PLANTING DETAILS. CONTRACTOR SHALL STAKE TREE LOCATIONS FOR APPROVAL BY OWNER/LANDSCAPE ARCHITECT PRIOR TO PLANTING. ANY PLANT MATERIAL WHICH DIES, TURNS BROWN, OR DEFOLIATES (PRIOR TO TOTAL ACCEPTANCE OF THE WORK) SHALL BE PROMPTLY REMOVED FROM THE SITE AND REPLACED WITH MATERIAL OF THE SAME SPECIES, QUANTITY, AND SIZE.

11. MULCH MATERIAL. DOUBLE SHREDDED HARDWOOD MULCH OR ROCK MULCH AS INDICATED ON PLANS. ALL MULCH SHALL BE CLEAN AND FREE OF NOXIOUS WEEDS, SOIL, OR OTHER DELETERIOUS MATERIAL, AND SHALL BE INSTALLED OVER A NON-WOVEN GEOTEXTILE FABRIC (INCIDENTAL) OR OTHER APPROVED WEED BARRIER TO A MINIMUM SETTLED DEPTH OF 4". MULCH SHALL BE HELD BACK FROM PLANT STEMS/TRUNKS A MINIMUM OF 3". WOOD MULCH SHALL BE PLACED AROUND INDIVIDUAL TREES TO A 4' MINIMUM DIAMETER. MULCH SHALL BE INSTALLED WITHIN 48-HOURS OF PLANT INSTALLATION.

12. LANDSCAPE EDGING. INSTALL LANDSCAPE EDGING BETWEEN ALL MULCH AREAS AND TURF. EDGING SHALL BE COMMERCIAL GRADE BLACK POLYETHYLENE OR VINYL EDGING, 0.1 INCH THICK BY 5 INCHES DEEP, V-LIPPED BOTTOM, HORIZONTALLY GROOVED, 1-INCH ROUND TOP, EXTRUDED IN STANDARD LENGTHS, WITH 9-INCH STEEL ANGLE STAKES.

13. IRRIGATION. DESIGN, FURNISH AND INSTALL A COMPLETE UNDERGROUND IRRIGATION SYSTEM FROM APPROVED POINT(S)-OF-CONNECTION WITHIN THE SITE COVERING ALL TURF AND PLANTING AREAS AS SHOWN ON THE LANDSCAPE PLAN. INCLUDES FLOW/PRESSURE TESTING, PLANS WITH DESIGN CALCULATIONS, AS-BUILT DRAWINGS, LABOR, MATERIALS, EQUIPMENT, AND SERVICES FOR THE TESTING, ADJUSTING, RETESTING AND READJUSTING AS REQUIRED TO PLACE THE SYSTEM IN AN APPROVED OPERATING CONDITION. THE IRRIGATION SYSTEM SHALL INCLUDE THE DESIGN AND INSTALLATION OF THE FOLLOWING: PIPING, METER AND BACKFLOW ASSEMBLIES, SPRINKLER HEADS, CABINETS, VALVES AND VALVE BOXES, CONTROLLERS, CONTROL WIRING, FITTINGS, ELECTRICAL CONNECTIONS, QUICK-COUPLERS, ALL OTHER NECESSARY ACCESSORIES, SYSTEM MANUALS, 1-YEAR MAINTENANCE PERIOD INCLUDING 1 FALL WINTERIZATION AND 1 SPRING START-UP. IRRIGATION PLANS TO BE PREPARED BY A QUALIFIED IRRIGATION DESIGNER AND SUBMITTED TO OWNER/LANDSCAPE ARCHITECT FOR APPROVAL.

14. MAINTENANCE. MAINTENANCE SHALL BEGIN IMMEDIATELY AFTER EACH PORTION OF THE WORK IS IN PLACE. PLANT MATERIAL SHALL BE PROTECTED AND MAINTAINED UNTIL THE INSTALLATION OF THE PLANTS IS COMPLETE, INSPECTION HAS BEEN MADE, AND PLANTINGS ARE ACCEPTED EXCLUSIVE OF THE GUARANTEE. MAINTENANCE SHALL INCLUDE MOWING, TRIMMING, WATERING, FERTILIZING, WEED AND PESTICIDE CONTROL, MULCHING, REMOVAL OF DEAD MATERIALS, RE-SETTING PLANTS TO PROPER GRADE AND KEEPING PLANTS IN A PLUMB POSITION. AFTER ACCEPTANCE, THE OWNER SHALL ASSUME MAINTENANCE RESPONSIBILITIES, HOWEVER, THE CONTRACTOR SHALL RETAIN RESPONSIBILITY FOR ALL PLANT MATERIAL THROUGH THE COMPLETION OF THE WARRANTY PERIOD.

15. WATERING. UPON ESTABLISHMENT OF SEED AND INSTALLATION OF PLANTS, CONTRACTOR SHALL MAINTAIN A WATERING SCHEDULE WHICH WILL THOROUGHLY WATER ALL PLANTS AND TURF AREAS A MINIMUM OF ONCE A WEEK. MORE FREQUENT WATERING MAY BE REQUIRED DURING PERIODS OF HOT, DRY WEATHER. CONTRACTOR SHALL MAKE THE NECESSARY ARRANGEMENTS FOR WATER. IN THE ABSENCE OF PERMANENT IRRIGATION, TEMPORARY IRRIGATION, TREE WATERING BAGS, OR HAND-WATERING ARE ACCEPTABLE.

16. FINAL ACCEPTANCE. UPON SUBSTANTIAL COMPLETION OF THE WORK, CONTRACTOR SHALL REQUEST FINAL ACCEPTANCE OF THE WORK IN WRITING BY THE OWNER/LANDSCAPE ARCHITECT. IF ANY WORK IS FOUND TO BE INCOMPLETE OR UNSATISFACTORY IN THE OPINION OF THE OWNER/LANDSCAPE ARCHITECT, A WRITTEN PUNCH LIST WILL BE PREPARED LISTING ALL ITEMS THAT REQUIRE COMPLETING OR CORRECTING BEFORE FINAL ACCEPTANCE.

17. WARRANTY. ALL PLANTS, MATERIALS AND WORKMANSHIP SHALL BE GUARANTEED FOR THREE (3) YEARS FROM THE DATE OF FINAL ACCEPTANCE, UNLESS OTHERWISE SPECIFIED. THE GUARANTEE SHALL COVER THE FULL COST OF REPLACEMENT INCLUDING LABOR AND MATERIAL.

PLANT SCHEDULE

TREES	CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER
	RM	37	Acer rubrum `Northwood`	Northwoods Red Maple	2" Cal.	B&B
	RM+	21	Acer rubrum `Northwood`	Northwoods Red Maple	3" Cal.	B&B
	FM	45	Acer x freemanii `Sienna`	Sienna Glen Maple	2" Cal.	B&B
	FM+	10	Acer x freemanii `Sienna`	Sienna Glen Maple	2.5" Cal.	B&B
	RB	14	Betula nigra Clump Form, 2" Cal Equivalent	River Birch Multi-Trunk	8` Ht.	B&B
	HB	25	Celtis occidentalis	Common Hackberry	2" Cal.	B&B
	HL	22	Gleditsia triacanthos inermis `Harve`	Northern Acclaim Thornless Honey Locust	2" Cal.	B&B
	KC	14	Gymnocladus dioica `Espresso`	Kentucky Coffeetree	2" Cal.	B&B
	WO	35	Quercus bicolor	Swamp White Oak	2" Cal.	B&B
	BL	59	Tilia americana `Boulevard`	Boulevard Linden	2" Cal.	B&B
	AE	60	Ulmus americana `Princeton`	American Elm	2" Cal.	B&B
CONIFEROUS TREES	CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER
	BF	22	Abies balsamea	Balsam Fir	6` Ht.	B&B
	RC	3	Juniperus virginiana	Eastern Red Cedar	5 gal.	Cont.
	BH	9	Picea glauca densata	Black Hills Spruce	6` Ht.	B&B
	WP	6	Pinus strobus	White Pine	6` Ht.	B&B
	CH	17	Tsuga canadensis	Canadian Hemlock	6` Ht.	B&B
ORNAMENTAL TREES	CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER
	SB	6	Amelanchier x grandiflora `Autumn Brilliance` Clump Form, 1.5" Cal Equivalent	Autumn Brilliance Serviceberry	7` Ht.	B&B
	CA	7	Malus x `Prairifire` Red Flowers	Prairifire Crabapple	1.5" Cal.	B&B
GROUND COVERS	CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER
	SOD	135,011 sf	Turf Sod Bluegrass	Kentucky Bluegrass	sod	
	TI	2,202,069 sf	Type I - Low Maint. Turf Seed Refer to notes for acceptable seeding methods Seeding Rate 330 lb/ac	MnDOT Seed Mix 25-131	seed	
	TII	85,297 sf	Type II - High Maint. Turf Seed Refer to notes for acceptable seeding methods Seeding Rate 180 lb/ac	MnDOT Seed Mix 25-151	seed	
	TIII	174,580 sf	Type III - Stormwater Pond Pollinator Seed Mix Refer to notes for acceptable seeding methods. Seeding Rate 47.5 lb/ac	BWSR Stormwater Pond Pollinator NE	seed	
	TIV	95,767 sf	Type IV - Native Seed Mix Refer to notes for acceptable seeding methods. Seeding Rate 50.0 lb/ac	MnDOT Seed Mix 35-241	seed	

CARLSON McCAIN ENGINEERING SURVEYING ENVIRONMENTAL
3890 PHEASANT RIDGE DR NE
SUITE 100
BLAINE, MN 55449
TEL 763.489.7900
FAX 763.489.7959
CARLSONMCCAIN.COM

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Landscape Architect under the laws of the State of Minnesota

Print Name: Ryan J. Ruttger, RLA
Signature:
Date: 11/25/20 License #: 56346

Drawn: RJR
Designed: RJR
Date: 11/25/20

Revisions:
1.

RIVERSTONE DEVELOPMENT, LLC.
14015 Sunfish Lake B, Suite 400
Ramsey, MN 55303

RIVERSTONE SOUTH
Ramsey, MN

PRELIMINARY LANDSCAPE PLAN

L4 of 4

Save Date: 11/30/20 F:\jobs\8481 - 8500\8494 - pearson place 2nd\cad c3d\landscape\prelim plans\8494_landscape_city.dwg

#8494

Memorandum

To: Tim Gladhill, Deputy City Administrator
Chloe McGuire, Senior Planner

From: Kristin Moen, Planning Consultant

Date: December 30, 2020

Re: Riverstone South Preliminary Plat Zoning Compliance Review
City Project Number 19-152
WSB Project No. 015204-000 Phase 10

Overview
The purpose of this memo is to provide an analysis of Comprehensive Plan and Zoning Code compliance for the Riverstone South development project (subject property).

The preliminary plat phase is the most significant approval step in the overall process. Preliminary Plat gives entitlement to the project, in which the City cannot reverse overall layout. The last step in the phase, Final Plat, simply approves construction documents and the Final Plat Sheet for recording and legal subdivision. Please see last page for list of contingencies of approval.

Please note that the zoning review assumed adoption of Ordinance #20-01 updating subdistrict structure and Zoning District Descriptions.

General
The project property is currently unplatted and unaddressed. It is approximately 110.29 acres, with 78.63 acres of residential development, 1 acre of public park area, 7 acres of tree preservation area, 22.98 acres of commercial development area, and 8.68 acres to be retained by the landowner. The proposed project is located south of Highway 10, between Bowers Drive NW and a proposed commercial strip located along the south side of Highway 10. The project is located in PIDs 29-32-25-23-0004, part of 30-32-25-11-0032 and part of 29-32-25-22-0003.

The project proposes 3 types of residential development as follows:

Lot Width and Type	Units Proposed	Gross Area (acres)	Net Density (units/acre)	Zoning District & Category
65-foot single-family lots	50	14.42	3.47	R-1 Residential (MUSA – 65) District
55-foot single-family lots	115	32.96	3.65	R-1 Residential (MUSA – 50) District
40-foot detached townhome lots	77	15.05	5.32	R-2 Residential (Detached Townhome) District

701 XENIA AVENUE S | SUITE 300 | MINNEAPOLIS, MN | 55416 | 763.541.4800 | WSBENG.COM

Comprehensive Plan
The Ramsey 2040 Comprehensive Plan guides the subject property as Low Density Residential (LDR). A Comprehensive Plan Amendment is required to change areas of Low Density Residential to Medium Density Residential.

Zoning
The site is currently zoned R-1 Residential (MUSA – 80), and a portion will need to be rezoned with this project to R-2 Residential (Detached Towhome). The area directly east of the subject property is zoned R-2 Residential (Attached Towhome) and the project proposes medium density residential on the eastern edge, to be adjacent to existing medium density homes.

Bulk Standards

R-1 Residential (MUSA -65) District		
Standard	**Required**	**Complies?**
Minimum Lot Size	0.15 acres	Y
Density Range	2.5 to 4 units per acre	Y
Minimum Lot Width	65 feet	Y
Front yard setback	25 feet	Y
Rear yard setback	20 feet	Y
Side yard setback	5 feet	Y
Maximum Lot Coverage (All buildings, excludes paving)	35%	Y
Maximum Driveway Width at Street	30 feet; 24 feet on cul-de-sac	Y
Driveway Surface	Bituminous or Concrete	Y
Maximum Height	35 feet	Y

R-1 Residential (MUSA – 50) District		
Standard	**Required**	**Complies?**
Minimum Lot Size	0.15 acres	Y
Density Range	2.5 to 4 units per acre	Y
Minimum Lot Width	50 feet	Y
Front yard setback	25 feet	Y
Rear yard setback	20 feet	Y
Side yard setback	5 feet	Y
Side yard setback for corner lots	25 feet	Y
Maximum Lot Coverage (All buildings, excludes paving)	50%	Y
Maximum Driveway Width at Street	30 feet; 24 feet on cul-de-sac	Y
Driveway Surface	Bituminous or Concrete	Y

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Maximum Height	35 feet	Y

R-2 Residential (Detached Townhome) District		
Standard	**Required**	**Complies?**
Minimum Lot Size	0.10 acres	Y
Density Range	4 to 7 units per acre	Y
Minimum Lot Width	40 feet	Y
Front yard setback	25 feet	Y
Rear yard setback	20 feet	Y
Side yard setback	5 feet	Y
Side yard setback for corner lots	25 feet	Y
Maximum Lot Coverage (All buildings, excludes paving)	50%	Y
Maximum Driveway Width at Street	30 feet; 24 feet on cul-de-sac	Y
Driveway Surface	Bituminous or Concrete	Y
Maximum Height	35 feet	Y
Accessory Structures	Not allowed	Y

Floodplains: Floodplains exist on a portion of the site. Proposed improvements appear to comply with applicable floodplain regulations.

Wetlands: There do not appear to be any wetlands onsite, though they would be required to be identified during the preliminary plat process via survey and delineation.

Streets and Access: The Applicant has proposed several 29-foot-wide streets running through the site. The required 60-foot right of way has been met. Ramsey Public Works and Public Safety generally prefer 32-foot-wide streets. However, 29-foot-wide streets with restricted parking on one side of the street is acceptable to Ramsey City Code and was allowed in the Riverstone Neighborhood. Staff has directed the Developer that given the number of lots, these shall be public streets.

Landscape Plan: A landscape plan will be required with preliminary plat, which needs to include a tree survey of the site.

Parking: As proposed, parking would only be allowed on one side of the street. Driveways should be paired up to maximize open area along the street. Mailboxes must be clustered.

Lighting: The applicant should submit a lighting plan as part of site plan review with preliminary plat for any street lighting.

Grading: A grading plan will be required with preliminary plat.

Utilities and Municipal Services: The property is proposed to be connected to City Utilities. A Utility Plan will be required with preliminary plat.

Development Fees: The Applicant will be responsible for paying development fees at time of final plat. The Applicant will also be responsible for signing a development agreement with the City prior to recording and releasing final plat.

ProjectDox

Current Project - Project Markups Listing

Riverstone South (Project No. 19-152)

File Name	Markup Name	Markup Text	Markup Date	Created by
4 PRP.pdf	JJF	Understanding is city code is being ammended to address smaller lots and will include a 4-foot side yard easement along newly platted common property lines, which will no longer require a variance to allow. Recommend follow up with planning department on this issue.	12/30/2020	Joe Feriancek
19 grade.pdf	JJF	There is no access to this basin from the CDS, how is maintenance equipment proposed to get back to this infiltration basin. The basin only appears to be infiltrating water from the back of 3 houses, is this more of an emergency overflow for the lake?	12/30/2020	Joe Feriancek
19 grade.pdf	JJF	Assuming Outlot F is the maintance access for the 2 ponds, may want to consider concrete in the boulevard, as a pseudo driveway.	12/30/2020	Joe Feriancek
12 Site.pdf	LL	This area is not consistent with sheet 13. See note on 13 for additional informatoin.	12/30/2020	Len Linton
12 Site.pdf	LL	Sheets 12 & 13 are listed as utility plans. The storm sewer is shown; however, inverts are not listed. The preliminary plat utility sheets must list storm sewer inverts and pipe sizes. Pond outlet invert information must also be shown.	12/30/2020	Len Linton
_Riverston South_SWMP.pdf	LL	Per MIDS calculator: Forest 5.425 Acre Managed Turf 43.965 Acre Impervious Cover 47.587 Acre Required treatment volume 172,400 CF 3.965 Acre Feet The City uses 1 inch of runoff which is the LRRWMO standard.	12/30/2020	Len Linton

ProjectDox

Current Project - Project Markups Listing

File Name	Markup Name	Markup Text	Markup Date	Created by
_Riverston South_SWMP.pdf	LL	Infiltrated Volume The City did a takeoff and got an area of 61,500 sq ft at 855.5, the base of the infiltrarion bench. We enlarged the area using 4:1 slopes for 1 foot depth and got 65,700 square feet. The maximum drawdown depth when using 0.25 in/ hour is 0.8 ft per the MIDS Calculator. The plans as presented to not come close to meeting the LRRWMO/ City requirements. The retained volume at 0.8 feet is 50,900 cubic feet, which is 30% of the required volume. The maximum drawdown depth when using 0.5 in/ hour is 1.8 ft per the MIDS Calculator. Using these surface areas with a depth of 1.8 feet retains 114,500 cubic feet, which is 66% of the required volume.	12/30/2020	Len Linton
_Riverston South_SWMP.pdf	LL	Please attach the MIDS input sheets for infiltration device used.	12/30/2020	Len Linton
25 Grade Tables.pdf	LL	See comment from Tim Gladhill regarding number of split entry lots in the narrow lot area. The maximum number of split entry lots must be established before final plat and all lots that are SOG must not have entries for SE in this table.	12/30/2020	Len Linton
25 Grade Tables.pdf	LL	The LRRWMO critera for lowest floor elevation is the highest of 3 feet above ground water, 2 feet above the nearest 100 year flood elevation or 1 foot above the nearest Emergency Overflow Elevation. Comments were made on the grading plans indicating areas where detailed analysis will be required to document the lowest floor will not be impacted when the floor elevation is below one of these criteria. This table must be updated to demonstrate compliance with these requirements.	12/30/2020	Len Linton

ProjectDox

Current Project - Project Markups Listing

File Name	Markup Name	Markup Text	Markup Date	Created by
2 Excon.pdf	LL	Existing well must be properly abandoned. Provide copy of sealing record to City.	12/29/2020	Len Linton
13 Site.pdf	LL	The continuation labels on sheet 13 and sheet 12 are confusing and do not provide clear direction on where to find the next page. The right view on these sheet should be line work or the left view should have the aerial background for consistency on this page. Update the labels.	12/29/2020	Len Linton
18 grade.pdf	JF		12/29/2020	Joe Feriancek
18 grade.pdf	JF	Doesn't seem to be an path for storm runnoff in the rear yards of Lots 134-142	12/29/2020	Joe Feriancek
19 grade.pdf	JF	Cannot read the text of the high points on Lots 149 & 151	12/29/2020	Joe Feriancek
16 grade.pdf	LL	LRRWMO calculations are required to demonstrate lowest floor will not be impacted if water flows over emergency overflow.	12/29/2020	Len Linton
17 grade.pdf	LL	Minimum grade along all lot lines must be 2.0%.	12/29/2020	Len Linton
17 grade.pdf	LL	Use LRRWMO procedure to demonstrate lowest floors will not be impacted if water goes over the nearest emergency overflow.	12/29/2020	Len Linton
18 grade.pdf	LL	Minimum grade acros lots must be 2.0%.	12/29/2020	Len Linton
18 grade.pdf	LL	Must use LRRWMO method to show lowest floor will not be impacted by water going over the nearest emergency overflow.	12/29/2020	Len Linton
18 grade.pdf	LL	Provide some contour labels on both sides of backyard lot lines.	12/29/2020	Len Linton
18 grade.pdf	LL		12/29/2020	Len Linton
18 grade.pdf	LL	Must provide positive drainage along this lot line to keep runoff from flowing to the east.	12/29/2020	Len Linton

ProjectDox

Current Project - Project Markups Listing

File Name	Markup Name	Markup Text	Markup Date	Created by
19 grade.pdf	LL	A legend is required on each sheet identifying the lines and symbols used on that sheet.	12/29/2020	Len Linton
19 grade.pdf	LL	Must provide positive drainage along lot lines and not allow runoff from develpoped areas to flow unchecked onto adjacent parcels.	12/29/2020	Len Linton
20 grade.pdf	LL	Must provide LRRWMO calculations demonstrating lowest floor will not be impacted by water going over emergency overflow.	12/29/2020	Len Linton
21 grade.pdf	LL	The stormwater management plan states a clay liner will be installed in the plan. A note to this effect must be added to this sheet at preliminary plat stage.	12/29/2020	Len Linton
22 grade.pdf	LL	Add existing contour labels in this area.	12/29/2020	Len Linton
15 grade.pdf	LL	Minimug grade must be 2.0% along all lot lines.	12/29/2020	Len Linton
15 grade.pdf	LL	Submit calculations for all blocks showing lowest floor elevation will not be impacted by water reaching nearest emergency overflow elevation.	12/29/2020	Len Linton
15 grade.pdf	LL		12/29/2020	Len Linton
15 grade.pdf	LL	Storm Sewer will be required on Street F at the intersection with Bowers Drive to capture most of the runoff from Street F.	12/29/2020	Len Linton
RiverstoneSouthEAW.pdf	CA	The CIty has a contract for residential curbside recycling but an open hauling system for garbage service. Residents can also enroll in the City's organics recycling program to further reduce solid waste.	12/28/2020	Chris Anderson
RiverstoneSouthEAW.pdf	CA		12/28/2020	Chris Anderson
L4.pdf	CA		12/23/2020	Chris Anderson
L4.pdf	CA	What is the definition for WDOT Topsoil Type A? Please include so we can verify this material complies with the topsoil standard of the City.	12/23/2020	Chris Anderson

ProjectDox

Current Project - Project Markups Listing

File Name	Markup Name	Markup Text	Markup Date	Created by
L4.pdf	CA	Irrigation system must have some form of water efficient technology such as a smart controller and soil moisture sensors.	12/23/2020	Chris Anderson
L1.pdf	CA	While seed is acceptable for yard establishment, an escrow may be required if the Certificate of Occupancy for a particular lot is requested prior to the seed germinating and growing to the point that it is ready for mowing.	12/23/2020	Chris Anderson
L2.pdf	CA		12/23/2020	Chris Anderson
L2.pdf	CA	Add some additional tree plantings in these rear yards to assist with transitioning to the adjacent neighborhood. This was discussed and agreed to during the public input sessions that were held.	12/23/2020	Chris Anderson
13 Site.pdf	CA	Add symbol for proposed street light and prepare and submit a Street Light Plan for review by the City.	12/23/2020	Chris Anderson
14 INDEX.pdf	Tim Gladhill	For detached townhomes only - no more than 50% of units to be Split Entry. Please add this note to this plan sheet.	12/08/2020	Tim Gladhill
12 Site.pdf	Tim Gladhill	How are we accessing this pond? Perhaps this was addressed in previous comments. Should we carve this out as a separate outlot to avoid the issues we had with Pearson Place? Issue being placing topsoil and sod eliminating the infiltration functionality of the infiltration pond.	12/08/2020	Tim Gladhill
12 Site.pdf	Tim Gladhill	This watermain extension to be completed by Developer to be reimbursed by City.	12/08/2020	Tim Gladhill
12 Site.pdf	Tim Gladhill	Add note that Riverdale Drive to be constructed by others, but a contingency of Riverstone South to move forward. Riverstone South may not move forward until Riverdale Drive is approved with an executed construction contract (similar to Puma Street for Riverstone North).	12/08/2020	Tim Gladhill
12 Site.pdf	Tim Gladhill	Add a Future Street Sign here.	12/08/2020	Tim Gladhill

ProjectDox

Current Project - Project Markups Listing

File Name	Markup Name	Markup Text	Markup Date	Created by
12 Site.pdf	Tim Gladhill	Add a Future Street Sign here.	12/08/2020	Tim Gladhill
12 Site.pdf	Tim Gladhill	This is not a lake. Please revise notation to show Stormwater Pond (dry pond).	12/08/2020	Tim Gladhill
12 Site.pdf	Tim Gladhill	Is it possible to sharpen this curve with a 45 degree angle at the corner? This would help with street naming.	12/08/2020	Tim Gladhill
12 Site.pdf	Tim Gladhill	Street Name Change here.	12/08/2020	Tim Gladhill
12 Site.pdf	Tim Gladhill	Street name change here? If so, make this the corner and straighten to the east to next intersection.	12/08/2020	Tim Gladhill
Riverstone South Sketch Plan.pdf	CA	Show the Mississippi River Corridor Critical Area (MRRCA) boundary.	08/06/2020	Chris Anderson
Riverstone South Sketch Plan.pdf	CA		08/06/2020	Chris Anderson
Riverstone South Sketch Plan.pdf	CA		08/06/2020	Chris Anderson
Riverstone South Sketch Plan.pdf	CA	Consider some landscaping in these backyards for transitioning.	08/06/2020	Chris Anderson
Pearson South Riverdale Realignment.pdf	JJF	MSA Rules for 35 MPH with crowned road, 454 minimum radius of curvature, if this becomes a 40 mph Rmin 667 feet. Don't know what the speed limit will be, but may want to give more space incase it becomes 40.	07/29/2020	Joe Feriancek
Pearson South Riverdale Realignment.pdf	JJF	Perminant CDS need 50' radius.	07/29/2020	Joe Feriancek
Pearson South Riverdale Realignment.pdf	LL	Consider increasing building setback from Riverdale to provide better site distance from left.	07/29/2020	Len Linton
Riverstone South Sketch Plan.pdf	JJF	Please consider working with the adjacent property owners to possibly combine the ponding for this site with the existing pond put in with the Pearson Place development. This pond is adjacent to the proposed pond as shown.	07/29/2020	Joe Feriancek

ProjectDox

Current Project - Project Markups Listing

File Name	Markup Name	Markup Text	Markup Date	Created by
Riverstone South Sketch Plan.pdf	JJF	My understanding is this connection was going to be a road connection rather than a trail. A road connection would make the most sense in my opinion.	07/29/2020	Joe Feriancek
Riverstone South Sketch Plan.pdf	JJF	The stub location does not appear to leave much buildable area on the north side of the road if the next parcel develops before the Solar Farm site developes.	07/29/2020	Joe Feriancek
Riverstone South Sketch Plan.pdf	JJF	To give more comment to Tim's comment, it is not desirable for the City to have trunk utiliies, or any sanitary or water utilities in green space due to access/maintenance concerns.	07/29/2020	Joe Feriancek
Riverstone South Sketch Plan.pdf	JJF	Do you have a plan with proposed house types, or not that far along yet? Are the townhomes planned to be slab on grade, spacing wise they appear close together to have a walkout type design.	07/29/2020	Joe Feriancek
Riverstone South Sketch Plan.pdf	LL	The project to the south showed stormwater overflow from their pond onto this site. The overflow route for this site must be called out on the preliminary plat.	07/29/2020	Len Linton
Riverstone South Sketch Plan.pdf	LL	This muist be a full cul-de-sac, loosing the lots on either side of the stub until the next phase develops. The proximity of this stub to the south line of the solar farm limits future development until the solar farm is closed and the land redeveloped.	07/29/2020	Len Linton
Riverstone South Sketch Plan.pdf	LL	Trunk Sanitary Sewer will require deducation of adequate drainage and utility easements. Layout may need to be changed to provide the necessary easements. A forcemain from the lift station will also be required which will require additional easement width.	07/29/2020	Len Linton

ProjectDox

Current Project - Project Markups Listing

File Name	Markup Name	Markup Text	Markup Date	Created by
Riverstone South Sketch Plan.pdf	LL	Street widths must be 32 feet or the lot widths must be increased. The 29 foot lots require restriction of parking to one side of the street. The combination of narrow lot widht and driveway width limit the number of available parking spaces even more with parking on one side of the street.	07/29/2020	Len Linton
Riverstone South Sketch Plan.pdf	LL	Coordinate Bowers Drive access with plans from previous development on Bowers Drive. Provide street access through this area.	07/29/2020	Len Linton
Pearson South Riverdale Realignment.pdf	Chloe	Will this leftover piece be used for ponding? If so we should get under DU easement or outlot so it's not read as a buildable parcel	07/22/2020	Chloe McGuire Brigl
Riverstone South Sketch Plan.pdf	Chloe	Measure width of Bowers Drive lots (average or one or two is fine)	07/22/2020	Chloe McGuire Brigl
Riverstone South Sketch Plan.pdf	Chloe	Indicate lot depth of these parcels for context	07/22/2020	Chloe McGuire Brigl
Riverstone South Sketch Plan.pdf	Chloe	Indicate lot depth of this parcel	07/22/2020	Chloe McGuire Brigl
Riverstone South Sketch Plan.pdf	Chloe	Flag these trees as goal of preservation based on utility plan	07/22/2020	Chloe McGuire Brigl
Riverstone South Sketch Plan.pdf	Chloe	Measure size of backyard so we know how close house pads will be to existing property lines	07/22/2020	Chloe McGuire Brigl
Riverstone South Sketch Plan.pdf	Chloe	Please provide approximate net density across site and per house type	07/22/2020	Chloe McGuire Brigl
Riverstone South Sketch Plan.pdf	Tim Gladhill	Label this as location of future Sanitary Sewer Lift Station	07/21/2020	Tim Gladhill
Riverstone South Sketch Plan.pdf	Tim Gladhill		07/21/2020	Tim Gladhill
Riverstone South Sketch Plan.pdf	Tim Gladhill	Is there space for the Trunk Sanitary Line in these back yards? How do we access if there is a need for repair?	07/21/2020	Tim Gladhill
Riverstone South Sketch Plan.pdf	Tim Gladhill	Update plan set to match new drawing from Pearson/Dobbs.	07/21/2020	Tim Gladhill
Riverstone South Sketch Plan.pdf	Tim Gladhill	Must show connection to Bowers Drive.	07/21/2020	Tim Gladhill

ProjectDox

Current Project - Project Markups Listing

File Name	Markup Name	Markup Text	Markup Date	Created by
Riverstone South Sketch Plan.pdf	Tim Gladhill	The City's support for acquiring this area is contingent upon securing a third-party funding source.	07/21/2020	Tim Gladhill
Riverstone South Sketch Plan.pdf	Tim Gladhill	Please provide a separate exhibit that shows a ghost plat for this area.	07/21/2020	Tim Gladhill
Riverstone South Sketch Plan.pdf	Tim Gladhill	Please provide a natural corridor between these two areas.	07/21/2020	Tim Gladhill
Riverstone South Sketch Plan.pdf	Tim Gladhill	Previous discussion centered around 80 foot wide lots along the back of the Bowers Drive Neighborhood. Perhaps the City is open in exchange for additional open space preservation.	07/21/2020	Tim Gladhill
Riverstone South Sketch Plan.pdf	Tim Gladhill	These lot sizes will require a Zoning Amendment and likely a Comprehensive Plan Amendment.	07/21/2020	Tim Gladhill
Riverstone South Sketch Plan.pdf	Tim Gladhill	Please provide Net Density for the following: Overall (take out tree preservation area) Area of 65 foot wide lots (R-1 Residential District) Area of 55 foot wide lots and 40 foot wide lots (R-2 Residential District)	07/21/2020	Tim Gladhill
Riverstone South Sketch Plan.pdf	Logan Czech	Assuming ~2.5 residents/home this development will house ~600 people. Five parking spaces is not enough for the only park.	07/20/2020	Logan Czech
Riverstone South Sketch Plan.pdf	Logan Czech	Since it is the only shared space, one acre is fairly small considering the size of this development. Is there going to be a playground?	07/20/2020	Logan Czech

ProjectDox

Department Review Status Report

Project Name: Riverstone South (Project No. 19-152)

Workflow Started: 11/30/2020 3:08 PM

Report Generated: 12/31/2020 11:34 AM

Cycle	Department	Reviewer	Email	Status	Reviewer Comments	Applicant Comments
1						
2	Civil Engineer IV	Len Linton	llinton@cityoframsey.com	Corrections Required	!!! Corrections required before preliminary plat approval. !!! The Grading plans are lacking detail required to support deviation from lowest floor separation requirements of LRRWMO and City The Utility plans do not have invert or pipe size information for the storm sewer system. The Stormwater management plan is incomplete. The plans as shown do not meet the LRRWMO or City requirements for volume reduction (Infiltration). The plans meet about 30% of the requirement.	
	Engineering Tech	Logan Czech	lczech@cityoframsey.com	Approved		
	Fire	Carey Schiferli	cschiferli@cityoframsey.com	Approved	Hydrant needs to come out to Bowers Dr.	
	Police	Brad Bluml	bbluml@cityoframsey.com	Approved		
	Public Works - Utilities	John Nelson	jnelson@cityoframsey.com	Corrections Required	there needs to be a hydrant added to the east of the lift station for maintenance purposes	
	Environmental Review	Chris Anderson	canderson@cityoframsey.com	Corrections Required	Add Tree Inventory and Preservation Plan sheets to plan set. Also, see note on page #20 of EAW regarding solid waste.	
	Community Development Director	Tim Gladhill	tgladhill@cityoframsey.com	Corrections Required		
	Civil Engineer II	Joe Feriancek	jferiancek@cityoframsey.com	Approved	Relatively few comments, please address for final plat submittal. Riverdale Drive design could have impacts to grading plan.	
	Public Works - Street	Tim Gladhill	tgladhill@cityoframsey.com	Corrections Required	The median on Pearson Parkway needs to be pulled back from the intersections. Large plows will not be able to make that turn.	
	Lead Engineering Tech	Tim Gladhill	tgladhill@cityoframsey.com	No Review Required		

Metropolitan District
Waters Edge Building
1500 County Road B2 West
Roseville, MN 55113

December 30, 2020

Tim Gladhill
Community Development Director
City of Ramsey
7550 Sunwood Drive NW
Ramsey, MN 55303

SUBJECT: MnDOT Review # **P20-081**
Riverstone South
SE Quad US 10/US 169 & Bowers Drive NW
Ramsey, Anoka County

Dear Mr. Gladhill:

Thank you for the opportunity to review the **Riverstone South** development. MnDOT has reviewed the documents and has the following comments:

Noise:
MnDOT's policy is to assist local governments in promoting compatibility between land use and highways. Residential uses located adjacent to highways often result in complaints about traffic noise. Traffic noise from this highway could exceed noise standards established by the Minnesota Pollution Control Agency (MPCA), the U.S. Department of Housing and Urban Development, and the U.S. Department of Transportation. Minnesota Rule 7030.0030 states that municipalities having the authority to regulate land use shall take all reasonable measures to prevent the establishment of land use activities, listed in the MPCA's Noise Area Classification (NAC), anywhere that the establishment of the land use would result in immediate violations of established State noise standards.

MnDOT policy regarding development adjacent to existing highways prohibits the expenditure of highway funds for noise mitigation measures in such developed areas. The project proposer is required to assess the existing noise situation and take the action deemed necessary to minimize the impact to the proposed development from any highway noise.

If you have any questions regarding MnDOT's noise policy please contact Natalie Ries in Metro District's Noise and Air Quality Unit at Natalie.Ries@state.mn.us or 651-234-7681**.**

An equal opportunity employer

Traffic:
MnDOT recommends a traffic impact study be completed due the final development plan generating close to 2,500 trips per day and the possible impacts to US 10, neighboring roads and accesses. The preferred access for the development to US 10 would be through the new interchange at Armstrong.

If you have any questions regarding this comment please contact Ashley Roup in Metro Traffic Unit at 651-234-7815 or ashley.roup@state.mn.us.

Multimodal:
When pedestrian facilities (i.e. the sidepath along US 10/US 169) are impacted due to maintenance or construction, pedestrian accommodations must be provided to the maximum extent feasible.

These accommodations should be made detectable and must have accessibility features up to the level of the disturbed route. Signage and devices, as necessary, must be provided to direct pedestrians safely through the work zone. Guidance for pedestrian accommodations through work zones can be found here: http://www.dot.state.mn.us/trafficeng/workzone/apr.html. The new street connection should include curb ramps in accordance to MnDOT Standard plan 5-297.250 and should match the width of the existing facility.

Because of the density of homes proposed with this development, constructing sidewalks along both sides of the internal street network should be considered. Also consider constructing a sidepath/trail along the south side of Riverdale Drive for its full length to expand the non-motorized network and connect to the sidepath along US 10/US 169.

For questions regarding these comments, contact Jesse Thornsen, Metro Multimodal, at Jesse.Thornsen@state.mn.usor 651-234-7788.

Water Resources:
When Bowers Drive is constructed as a cul-de-sac, the existing entrance culvert between the south trail and US 169 westbound should be removed and returned to a ditch section. When the connection of the proposed Riverdale Drive with US 169 westbound is made, an entrance culvert should be added between the trail and US 169 westbound; a 15" Reinforced Concrete Pipe (RCP) entrance culvert may be large enough based on the existing entrance culverts located east of the new intersection. The "Lake" identified in Outlot G doesn't show an outlet. Although the High Water Level (HWL) indicates the lake will contain a 100-yr event, an outlet would be prudent for the possibility of back-to-back 100-year events or a super-event. Although Pond 300 in Outlot B is identified as a concept, if incorporated, then hydraulics information will be required to ascertain any impacts to MnDOT right-of-way.

A drainage permit is required. The development will need to maintain or reduce existing drainage flow rates to MnDOT right of way. The submitted information appears to accomplish this, although the most current plan information will need to be reviewed during the permit application process.

Drainage calculations and supporting information related to contributing flow to MnDOT right-of-way may be requested. If requested during that review, existing and proposed drainage area maps and hydraulic calculations for the 10 and 100 year flows would be required.

For questions regards these comments, contact Jason Swenson, Metro Water Resources, at jason.swenson@state.mn.us or 651-234-7539.

Permits:
In addition to the previously mentioned Drainage permit, an Access permit from the City will be required for the new street connection, and a Miscellaneous Work permit will be required for the removal of Bowers Drive. Any other use of, or work within or affecting, MnDOT right of way will also require a permit.

Permits can be applied for at this site: https://olpa.dot.state.mn.us/OLPA/. Please upload a copy of this letter when applying for any permits.

Please direct questions regarding permit requirements to Buck Craig of MnDOT's Metro Permits Section at 651-775-0405 or Buck.Craig@state.mn.us.

Review Submittal Options
MnDOT's goal is to complete reviews within 30 calendar days. Review materials received electronically can be processed more rapidly. Do not submit files via a cloud service or SharePoint link. In order of preference, review materials may be submitted as:

1. Email documents and plans in PDF format to metrodevreviews.dot@state.mn.us. Attachments may not exceed 20 megabytes per email. Documents can be zipped as well. If multiple emails are necessary, number each message.
2. PDF file(s) uploaded to MnDOT's external shared internet workspace site at: https://mft.dot.state.mn.usmetrodevreviews.dot@state.mn.us. Contact MnDOT Planning development review staff at for uploading instructions, and send an email listing the file name(s) after the document(s) has/have been uploaded.

If you have any questions concerning this review, please contact me at (651) 234-7797.

Sincerely,

Cameron Muhic
Senior Planner

Copy sent via E-Mail:
Buck Craig, Permits
Mark Fairbrother, Water Resources
Anthony Wotzka, Area Engineer
Matthew Wernet, Surveys
Lance Schowalter, Design
Jason Swenson, Water Resources
Michael Lynch, Right-of-Way
Ashley Roup, Traffic

Mackenzie Turner Bargen, Multimodal
Natalie Ries, Noise
Russell Owen, Metropolitan Council
Jesse Thornsen, Multimodal
Jason Junge, Transit

CC Regular Session **7. 2.**

Meeting Date: 09/08/2020

By: Tim Gladhill, Community Development

Information

Title:

Review Sketch Plan for Riverstone South; Case of Capstone Homes

Purpose/Background:

The purpose of this case is to review a Sketch Plan for a project known as Riverstone South proposed by Capstone Homes located on the south side of Highway 10/169 east of Bowers Drive. The purpose of Sketch Plan Review is to provide high-level direction prior to the Developer preparing a Preliminary Plat. This is the time to indicate level of overall support and identify any red flags.

The Planning Commission and City Council have been discussing this project in planning stages since the beginning of 2020 along with multiple opportunities for public comment. The previous policy direction of the Planning Commission and City Council are summarized in the attached Planning Framework.

Notification:

Notification for this meeting is not required at has not been provided.

For the August 6 Planning Commission Meeting, notification of the Sketch Plan Review was sent via Standard US Mail for all Property Owners, according to Anoka County Property Records, within 700 feet of the Subject Property. Additional signage has been placed on the Subject Property. Staff also worked with nearby Property Owners prior to a formal application.

Observations/Alternatives:

Comprehensive Plan

The Comprehensive Plan guides this area as LDR - Low Density Residential. This designation guides future development at 3-4 units per acre.

The Net Density of the site as a whole after factoring out the 7 acres preserved for forestry/open space preservation is 3.38 units per acre. Net Density Calculations have be provided for each individual lot type provided (65 foot wide lots, 55 foot wide lots and 40 foot wide lots). It is anticipated that the area for the 40 foot wide lots as detached townhomes will need a Comprehensive Plan Amendment to MDR - Medium Density Residential.

Zoning District

The Subject Property is in the process of a Zoning Amendment for consistency with the 2040 Comprehensive Plan. Primarily as it relates to this scope of review, the following requirements are noted.

Minimum Lot Width	80 feet
Minimum Lot Size	10,800 square feet 1/4 acre

With that in mind, a Zoning Amendment will be required. The following Zoning Districts will be required for this project.

65 Foot Wide Lots	R-1 Residential (Villa) District

PREVIOUS REVIEW
Sketch Plan Review

55 Foot Wide Lots	R-2 Residential (Detached Villa) District
40 Foot Wide Lots	R-2 Residential (Townhome) District

The Subject Property is also located in the Mississippi River Corridor Critical Area (MRCCA), a designation of the State of Minnesota. Said rules were recently updated. The project generally conforms with the updated rules. The City will need to revise its Critical Area Ordinance as part of this project. Due to the fact that the project is located within the MRCCA and includes a quality continuous canopy coverage forest, Staff has asked the Developer to fill out an Environmental Assessment Worksheet (EAW), although it will not need to go through the full EAW Process as it does not meet the minimum threshold for Mandatory EAW (250 units). The City Council does have the discretion to require full EAW review. Additionally, the public could petition for EAW review. This creates a process administered by the State of Minnesota Environmental Quality Board (EQB). In summary, Staff believes the data is important and relevant and should therefore complete the standard worksheet; however, full EQB Review is not required in this instance.

Tree Preservation

A significant amount of discussion has centered on preserving portions of the existing forestry cover. The canopy coverage of this forest is high-quality. While the understory has had some disturbance due to previous grazing by farm animals, the Planning Commission, Environmental Policy Board and City Council have agreed that the quality of the ecological area is worth attempting to protect portions thereof.

Through discussions, the Developer is proposing to convey fee title of approximately 7 acres along the back side of Bowers Drive for purposes of tree preservation. Staff recommends that this is contingent upon the City successfully securing a third-party funding source intended for natural resource protection. This funding and implementation plan will continue to be discussed with Preliminary Plat.

PREVIOUS REVIEW
Sketch Plan Review

Public Park

The proposed project includes a 1 acre public park. The Park and Recreation Commission is supportive of this general approach. There are limited recreation areas in this area including for existing residents in the Bowers Drive Neighborhood and Alpaca Estates Neighborhood closer to Armstrong Boulevard. Eventually, the area of the east of the Subject Property is anticipated to develop as single-family residential as well. The Park and Recreation Commission feel a public park in this area is warranted.

In addition, this park is anticipated to be a nature-based park intended to preserve existing trees on the site with a tree fort theme.

Riverdale Drive

The project will require the extension of Riverdale Drive, a collector road serving multiple neighborhoods and business districts. The Riverdale Drive Extension is part of the long term plans to improve safety and mobility of Highway 10/169 regardless of future development. Additional detail is known since previous review. Staff will continue to work with the Developer on final design with potential construction in 2021. Additional detail on the funding approach is included in the attached Policy Framework.

Staff has been working with multiple residents on refining the final layout. Staff believes that the City, Developer and Property Owner are closer to a compromise with additional refinements to be made.

Access to Highway 10

Part of this project will result in the existing access from Bowers Drive to Highway 10/169 being closed. The new Riverdale Drive will be the new connection to Highway 10/169 as a right-in/right-out only. There will be no center median opening to access from westbound Highway 10. Bowers Drive residents will need to access westbound Highway 10/169 from Armstrong Boulevard.

Several residents have inquired about not allowing Riverdale Drive to connect to Highway 10. This would result in a long single access point to several hundred homes (Bowers Drive plus Riverstone South). This would not be consistent with City Code requirements and require a Variance. Staff is not supportive of this request due to public safety concerns.

Second Bowers Drive Access

Based on Planning Commission Review, this topic is the top concern of Bowers Drive Residents. General consensus is that all other concerns can generally be mitigated.

It has long been discussed providing a second access to Bowers Drive. Bowers Drive represents the longest dead end street in the community and exceeds current City Code requirements. First and foremost, the City acknowledges the unique neighborhood character of Bowers Drive and strives to protect this character. While the City feels strongly that a second connection is necessary and warranted, the City also believes that there is a way to accomplish this without traffic impacts. The connection point and road design can be accomplished in such a way that traffic modeling will demonstrate this this connection point will not result in additional traffic counts. In fact, Staff believes this may prove to be a benefit to Bowers Drive rather than a detriment.

Staff acknowledges that some on Bowers Drive are opposed to this connection, including the two new homes on either side of this connection point (currently an Outlot preserved for future road connection).

There are two general options on the table.

1. Full Road Connection
2. Restricted Public Safety Access

The Planning Commission previously recommended a full road connection. The City Council left both options on the table for further analysis and discussion. Staff generally prefers a public road connection with reduced width, but is open to policy direction.

Following the Planning Commission, Staff issued a survey to Bowers Drive Residents. Results of said survey are attached. Out of approximately 80 homes on Bowers Drive, the City received 30 responses (37% response rate) when factoring out duplicate responses from same household. 21 households responded that they do not support a second connection. 9 households supported some type of connection. The survey noted that non-responses could be considered as a non-objection to the second connection (50 households did not respond).

PREVIOUS REVIEW
Sketch Plan Review

Funding Source:

Processing of this case is the responsibility of the Applicant.

There is a Cost Share Agreement in place for the extension of Riverdale Drive that has the Developer, Property Owner and City contributing to the costs of this Collector Road serving multiple neighborhoods and areas and is part of the Ramsey Gateway Plan (US Highway 10/169).

Recommendation:

Based on discussion. The City has broad policy discretion as the request requires the approval of a Zoning Amendment (and possibly a Comprehensive Plan Amendment) due to lot sizes and densities.

Action:

Based on discussion. Provide feedback to the Developer as part of the plan development for the next stage in the process known as Preliminary Plat. Preliminary Plat is the most crucial stage in the subdivision process.

- Is the City Council comfortable moving into formal design and application based on the attached Sketch Plan and associated assumptions?

Attachments

Planning Framework
REVISED Sketch Plan
Riverdale Drive Plan (clean)
Redlined Plans
Review Comments
Density Exhibit
Bowers Drive Survey Responses

Form Review

Inbox	Reviewed By	Date
Kurt Ulrich	Kurt Ulrich	09/03/2020 01:42 PM
Tim Gladhill (Originator)	Tim Gladhill	09/03/2020 03:16 PM
Form Started By: Tim Gladhill		Started On: 09/01/2020 08:15 AM
Final Approval Date: 09/03/2020		

PREVIOUS REVIEW
Sketch Plan Review

HIGHWAY 10 SOUTH SMALL AREA PLAN
RIVERSTONE SOUTH PLANNING FRAMEWORK

PREVIOUS REVIEW
Sketch Plan Review

June, 2020

Document Purpose

The purpose of this document is to outline high-level land use planning policy for a portion of the Highway 10 South Small Area Plan currently known as Riverstone South by Capstone Homes. This a visionary document to help guide policy discussions. This is not the official land use plan for the area nor carries any legal entitlements. This document would be implemented through amendments to the City's Comprehensive Plan and Zoning Code.

PREVIOUS REVIEW
Sketch Plan Review

City of RAMSEY

Previous Review

February 11, 2020	Joint Meeting City Council and Planning Commission Broad Overview and Riverdale Drive Funding
February 18, 2020	Public Works Committee Riverdale Drive Funding
March 24, 2020	City Council Riverdale Drive Funding
April 7, 2020	Small Group Neighborhood Meeting Southern Public Safety Connection to Bowers Drive
April 14, 2020	Public Webinar Broad Overview and Land Use Planning
April 26, 2020	Small Group Neighborhood Meeting Riverdale Drive Connection to Highway 10 Options

PREVIOUS REVIEW
Sketch Plan Review

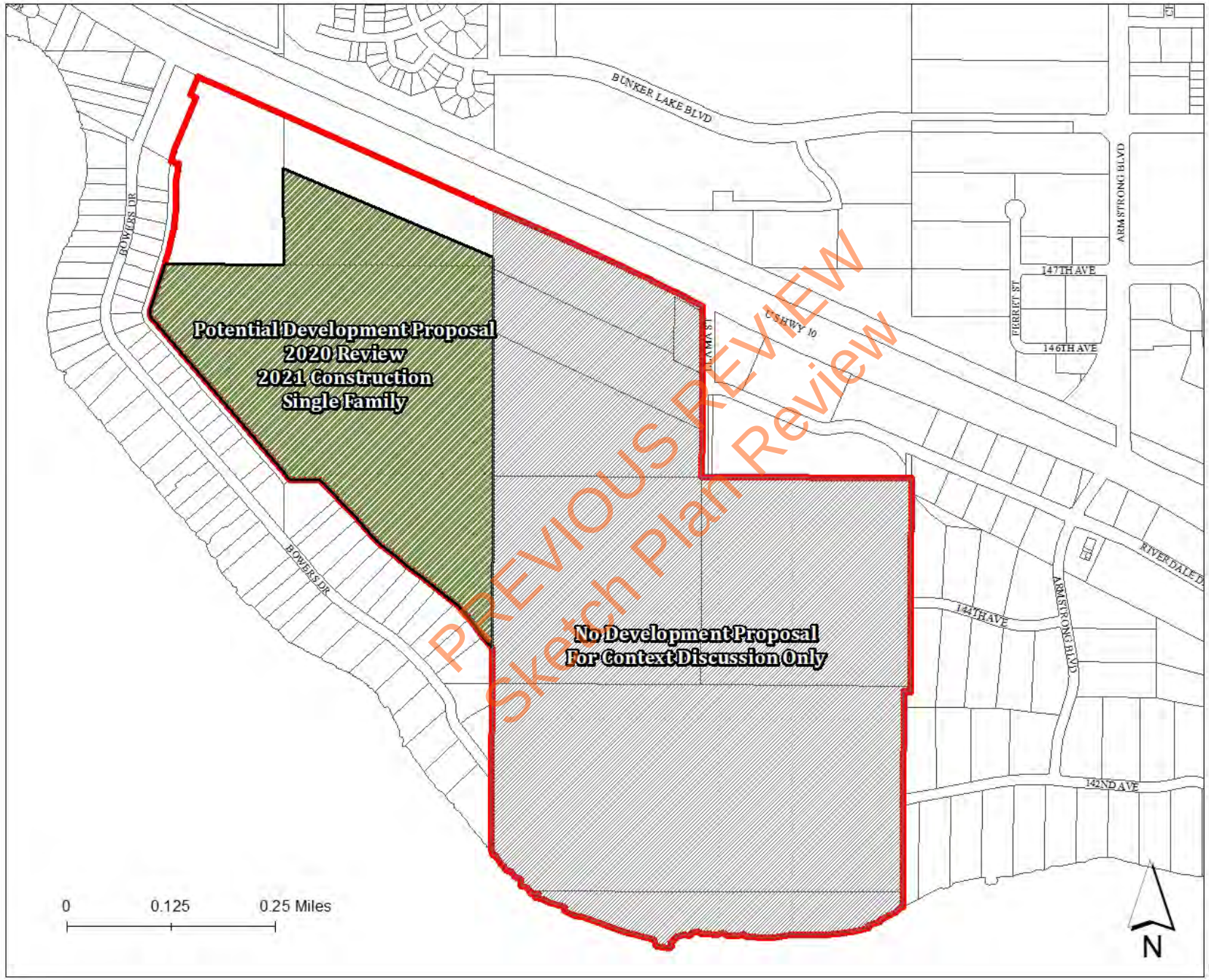
City of RAMSEY

Review of This Document

Planning Commission	Thursday, June 4, 2020	7:00 p.m.
Park and Recreation Commission	Thursday, June 11, 2020	6:30 p.m.
Environmental Policy Board	Monday, June 15, 2020	6:30 p.m.
City Council	Tuesday, June 23, 2020	7:00 p.m.

PREVIOUS REVIEW
Sketch Plan Review

City of RAMSEY



City of RAMSEY

Highway 10 South Planning Area

No Development Proposal

Potential Development

Planning Area

Map Prepared by the City of Ramsey
Data Source: Anoka County, City of Ramsey
April 16, 2020
Lampert Conformal Conic Projection
Project Folder

Existing Conditions

- Riverdale Drive/Highway 10/169
- Connexus Solar Farm (17 acres)
- Significant Ecological Resources
  - Tree Cover
  - Mississippi River Corridor Critical Area
- Adjacent Land Uses
  - Adjacent to Residential to west (Bowers Drive)
  - Adjacent to Agricultural/Future Residential to east (Riverside Farms)

PREVIOUS REVIEW
Sketch Plan Review

City of RAMSEY

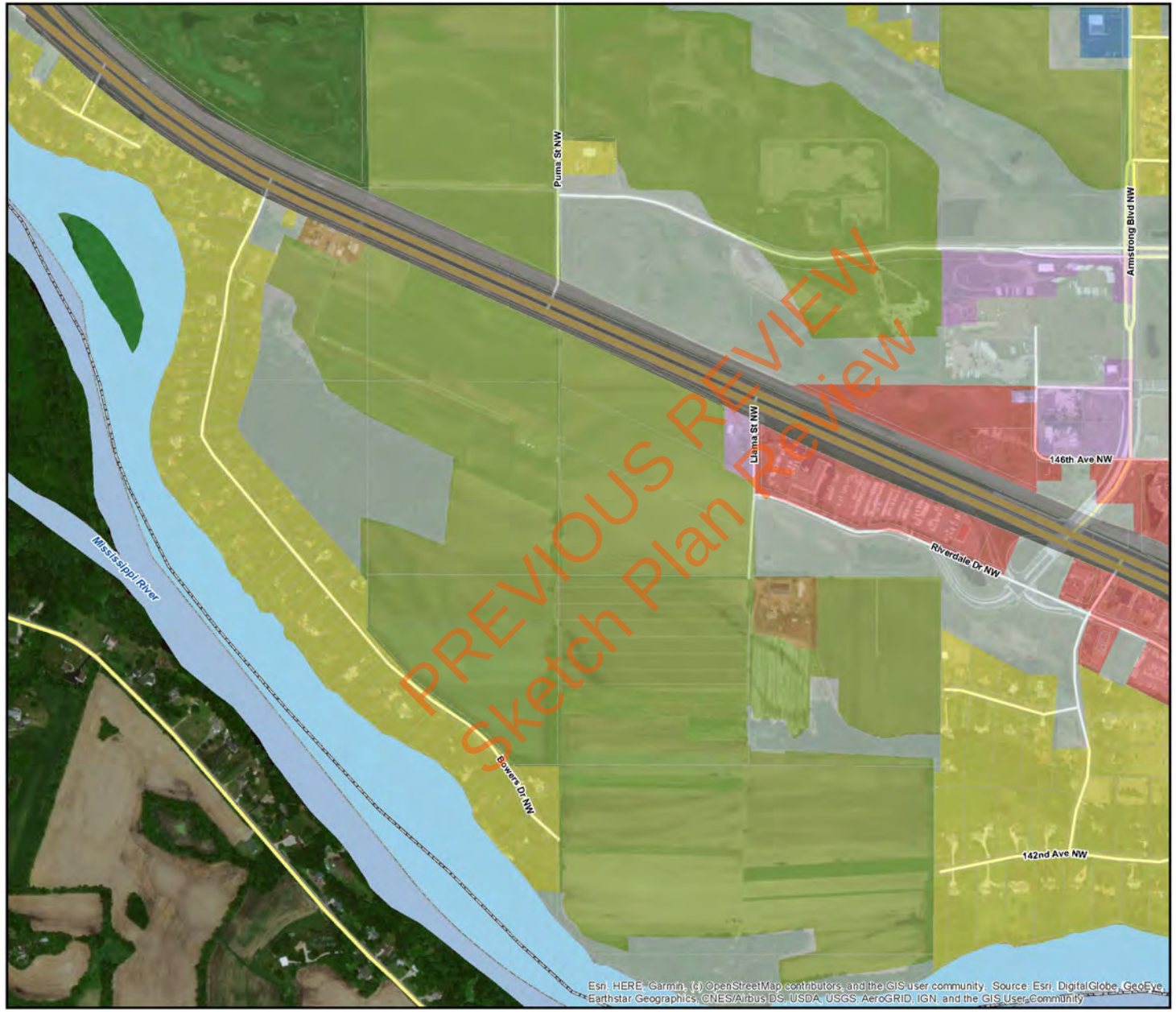
City of RAMSEY

Tree Preservation

Mississippi River Critical Area

Potential Development

Map Prepared by the City of Ramsey
Data Source: Anoka County, City of Ramsey
April 16, 2020
Lampert Conformal Conic Projection
Project Folder



City of RAMSEY

Ramsey Comprehensive Plan
Existing Land Use
Ramsey, MN

Legend

- Municipal Boundary
- Farmstead
- Single Family Detached
- Manufactured Housing Parks
- Single Family Attached
- Multifamily
- Retail and Other Commercial
- Office
- Mixed Use Residential
- Mixed Use Industrial
- Industrial and Utility
- Extractive
- Institutitional
- Park, Recreational, or Preserve
- Golf Course
- Major Highway
- Railway
- Airport
- Agricultural
- Open Water
- Undeveloped

N

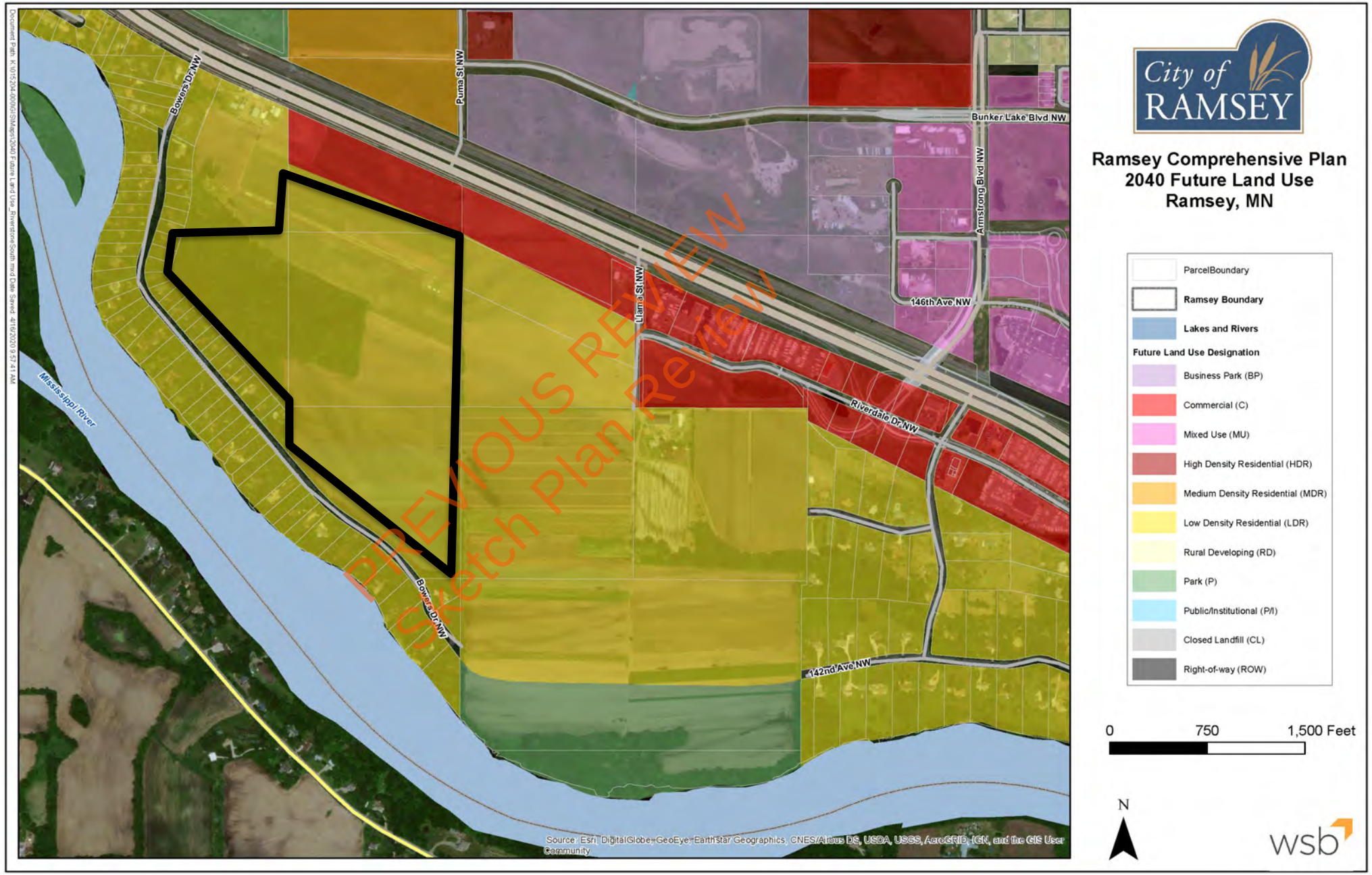
wsb

0 1,125 2,250 Feet

Future Conditions

- Future Commercial/Industrial
  - North side of project
  - Between Highway 10 and future Riverdale Drive Extension
- Public Safety Connection to Bowers Drive
- Tree Preservation Plan
- Density Transition
  - Adjacent to Residential
  - Adjacent to Commercial/Industrial/Highway 10/169

PREVIOUS REVIEW
Sketch Plan Review


Document Path: K:\015204.000\GIS\Maps\2040 Future Land Use_RiverstoneSouth.mxd Date Saved: 4/16/2020 9:57:41 AM
Bowers Dr NW
Puma St NW
Bunker Lake Blvd NW
Armstrong Blvd NW
Llama St NW
146th Ave NW
Riverdale Dr NW
Mississippi River
Bowers Dr NW
142nd Ave NW
PREVIOUS REVIEW
Sketch Plan Review
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community
City of RAMSEY
Ramsey Comprehensive Plan
2040 Future Land Use
Ramsey, MN
ParcelBoundary
Ramsey Boundary
Lakes and Rivers
Future Land Use Designation
Business Park (BP)
Commercial (C)
Mixed Use (MU)
High Density Residential (HDR)
Medium Density Residential (MDR)
Low Density Residential (LDR)
Rural Developing (RD)
Park (P)
Public/Institutional (P/I)
Closed Landfill (CL)
Right-of-way (ROW)
0
750
1,500 Feet
N
wsb

City of RAMSEY

Built Environment

Potential Development

Map Prepared by the City of Ramsey
Data Source: Anoka County, City of Ramsey
April 16, 2020
Lampert Conformal Conic Projection
Project Folder

Future Land Use/ Development Options

PREVIOUS REVIEW
Sketch Plan Review

Connection to Bowers Drive (Public Safety)

Council Direction = No Connection

Connection to Bowers Drive (Public Safety)

Council Direction = No Connection

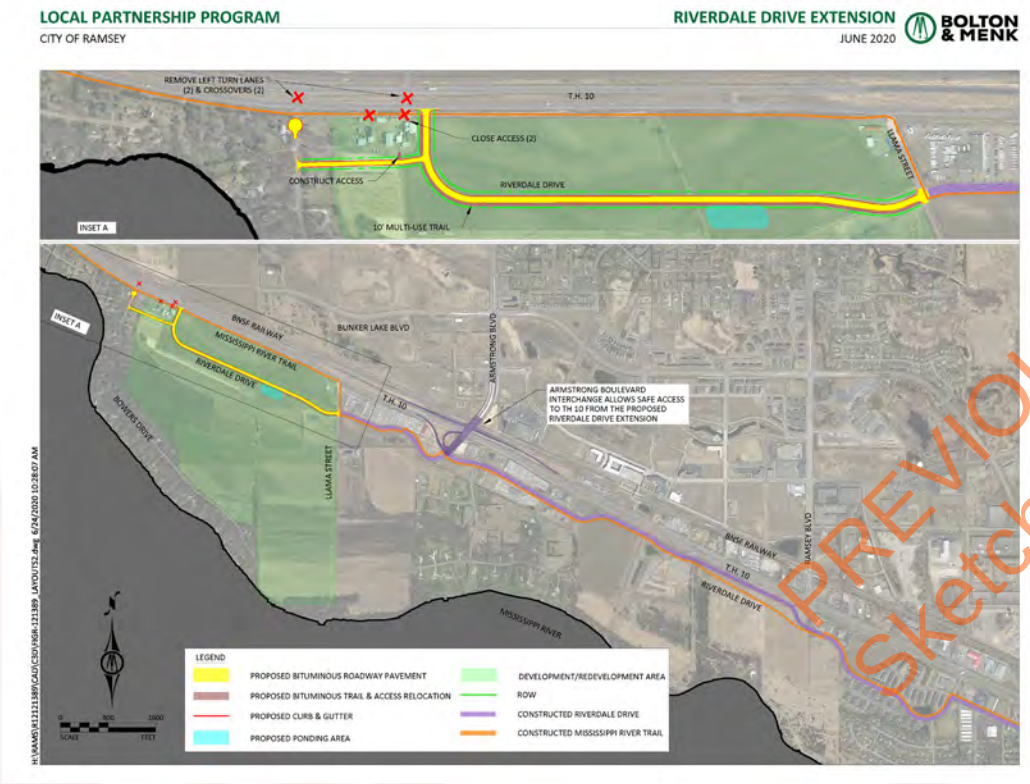
- Alternative #1
  - Full Public Street (28 foot width OK)
- Alternative #2
  - Heavy Duty 'Driveway'
  - Surmountable Curb on Riverstone South Side – Local Road
    - Access itself does not need curb
  - Signage – Public Safety Access
  - 20 Foot Width
  - Landscaping
- Need turning templates

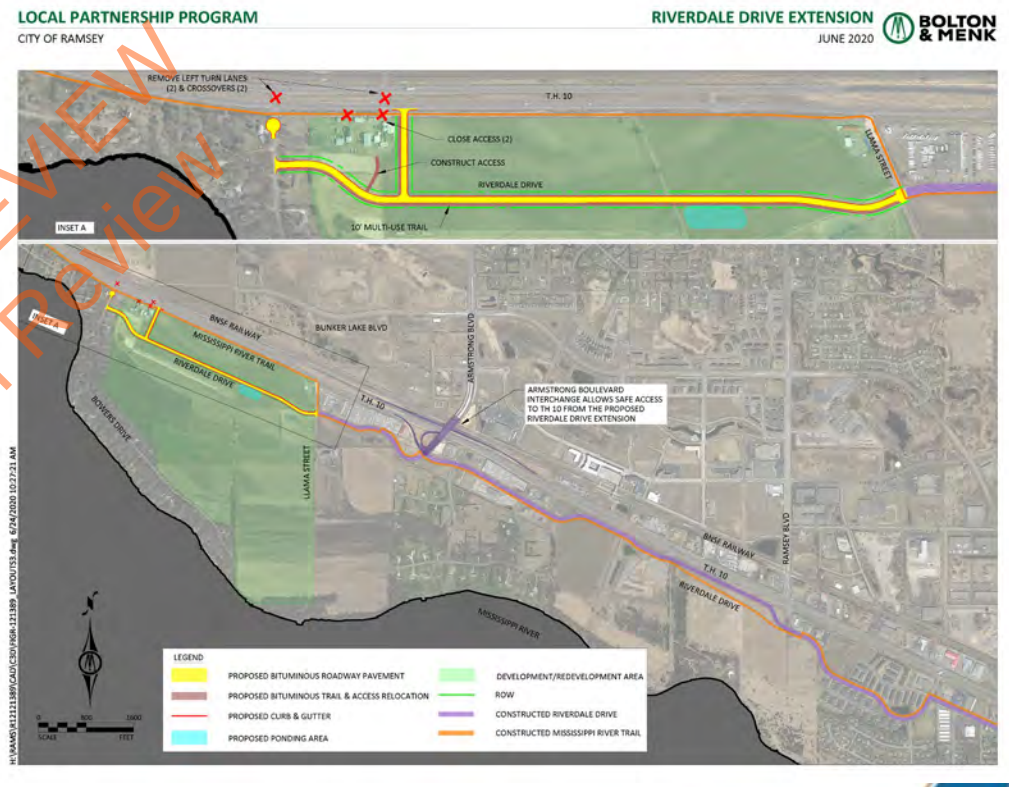
PREVIOUS REVIEW
Sketch Plan Review

Riverdale Drive Alternative #1 Developer/Owner Preference

City of RAMSEY

Riverdale Drive Alternative #2
Request by Neighboring Property





PREVIOUS REVIEW
Sketch Plan Review

City of RAMSEY

Potential Land Use/Future Development Compromise

- Enhance Density Transitioning
  - More than currently required by City Code
- Enhance Tree Preservation
  - More than currently required by City Code
- Transects/Zones
  - Larger lots adjacent to Bowers Drive
  - Medium-sized lots in middle zone
  - Smaller lots to the northeast
    - Intersection of Commercial/Industrial and Solar Farm
- Conservation Subdivision Design
- Similar to Riverstone Neighborhood
  - North of Highway 10

PREVIOUS REVIEW
Sketch Plan Review

City of RAMSEY

City of RAMSEY

Density Transitioning & Tree Preservation

Potential Development

Map Prepared by the City of Ramsey
Data Source: Anoka County, City of Ramsey
April 16, 2020
Lampert Conformal Conic Projection
Project Folder

Enhanced Tree Preservation Plan

PREVIOUS REVIEW
Sketch Plan Review

- Alternative #1
  - 1 Acre Nature Based Park
    - Preservation of existing trees
  - Additional 25 foot buffer adjacent to existing 50 foot buffer
    - 75 foot buffer total
    - NOTE: Parcel C retained by Pearson Properties and not part of development area
- Alternative #2
  - Preserve 10% of Project Site
  - Combo of Park Dedication and Other Open Space Preservation Funding

Previous concept underlay for context only. Actual concept will look different.

Open Space Preservation Funding Options

- Park Dedication Credit
- Trust for Public Land
- Anoka Conservation District
- Minnesota Department of Natural Resources
- Great River Greening

PREVIOUS REVIEW
Sketch Plan Review

Implementation Plan

PREVIOUS REVIEW
Sketch Plan Review

Implementation Plan

1. Allow mix of lot sizes in exchange for the following:
   - Enhanced tree preservation above and beyond minimum code requirements
2. Require a second connection to Bowers Drive in existing City-Owned Corridor
   1. Final design as full public roadway or reduced design for public safety to be evaluated with next steps
3. Require Riverdale Drive Extension
   1. Explore 2 options for connection to Highway 10/169

PREVIOUS REVIEW
Sketch Plan Review

City of RAMSEY

Resolution #20-065: Riverdale Drive Funding

- 1/3 Cost Share of Pearson Frontage
- 1/3 Cost Share of Anoka County Frontage Funding Gap

	Pearson Frontage	Anoka County Frontage	Total
City/Public*	$388,000	$39,250	$427,250
Capstone	$339,125	$39,250	$378,375
Pearson	$339,125	$39,250	$378,375
Total	**$1,066,250**	**$117,750**	**$1,184,000**

*Includes both City Contribution and MnDOT Grant

PREVIOUS REVIEW
Sketch Plan Review

City of RAMSEY

LEGAL DESCRIPTION

PARCEL DESCRIPTION: (Per Schedule A of Title Commitment File No. 2651, with a commitment date of October 17, 2019 at 7:00 am, prepared Twin City Title Company, LLC as issuing agent for Old Republic National Title Insurance Company)

Parcel A: Outlot B, Pearson Place, Anoka County, Minnesota.

Parcel B: That part of the Northwest Quarter of the Northwest Quarter of Section 29, Township 32, Range 25, Anoka County, Minnesota, lying southerly of U.S. Highway 10 and 169.

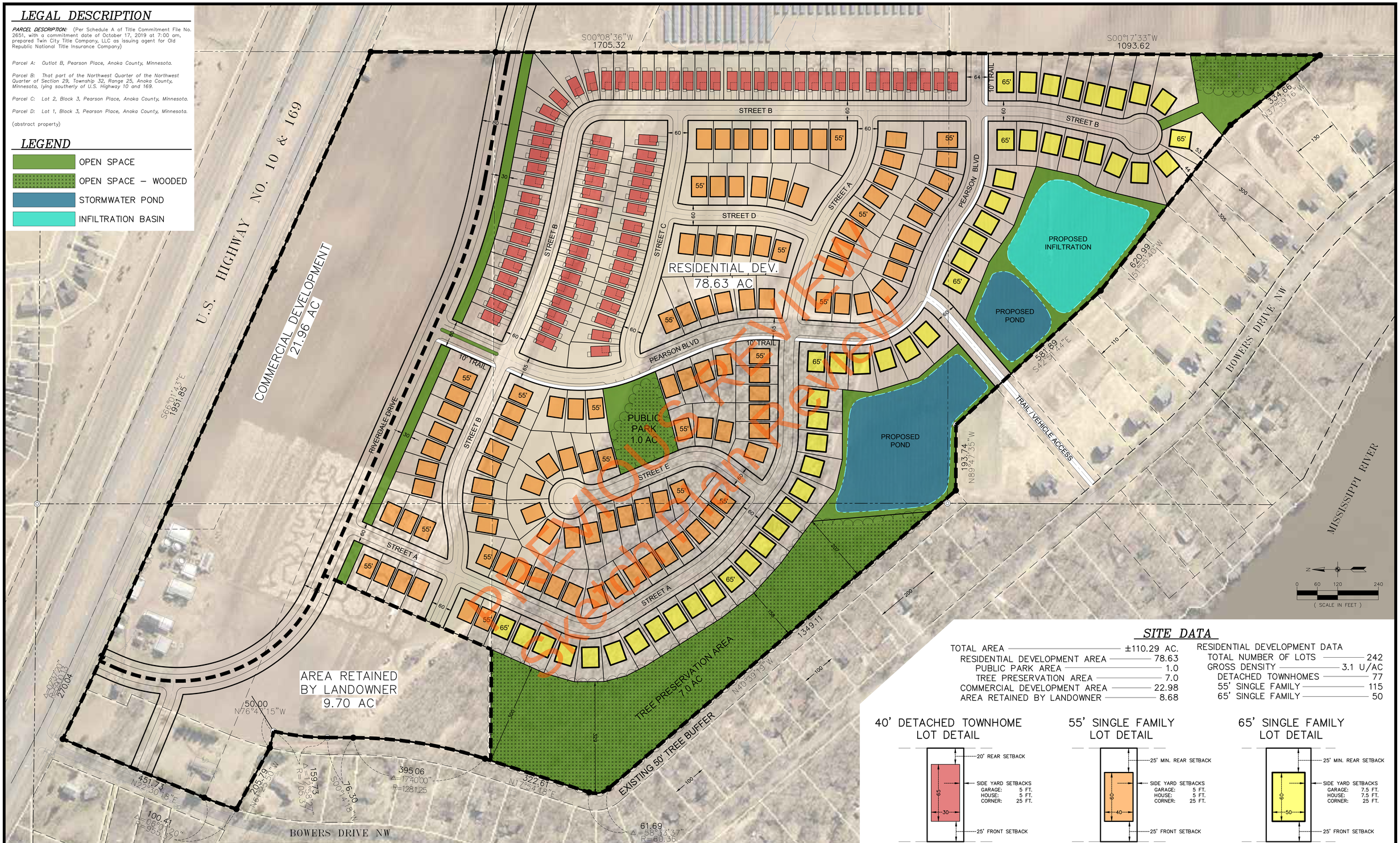
Parcel C: Lot 2, Block 3, Pearson Place, Anoka County, Minnesota.

Parcel D: Lot 1, Block 3, Pearson Place, Anoka County, Minnesota.

(abstract property)

LEGEND

- OPEN SPACE
- OPEN SPACE – WOODED
- STORMWATER POND
- INFILTRATION BASIN



APPROVED
Review

SITE DATA

TOTAL AREA	±110.29 AC.
RESIDENTIAL DEVELOPMENT AREA	78.63
PUBLIC PARK AREA	1.0
TREE PRESERVATION AREA	7.0
COMMERCIAL DEVELOPMENT AREA	22.98
AREA RETAINED BY LANDOWNER	8.68

RESIDENTIAL DEVELOPMENT DATA

TOTAL NUMBER OF LOTS	242
GROSS DENSITY	3.1 U/AC
DETACHED TOWNHOMES	77
55' SINGLE FAMILY	115
65' SINGLE FAMILY	50

40' DETACHED TOWNHOME LOT DETAIL

55' SINGLE FAMILY LOT DETAIL

65' SINGLE FAMILY LOT DETAIL

CARLSON McCAIN
ENGINEERING
SURVEYING
ENVIRONMENTAL
3890 PHEASANT RIDGE DR NE
SUITE 100
BLAINE, MN 55449
TEL 763.489.7900
FAX 763.489.7959
CARLSONMCCAIN.COM

DRAWN BY: C#/RR
ISSUE DATE: 07/17/20
Revisions:

CAPSTONE HOMES, INC.
14015 Sunfish Lake Blvd. NW, Suite 400
Ramsey, MN 55303

RIVERSTONE SOUTH
Ramsey, Minnesota

SKETCH PLAN W/AERIAL

1 of 1

[Save Date: 07/24/20] F:\jobs\8481 - 8500\8494 - pearson place 2nd\cad c3d\survey\layouts\8494_layout 4.dwg

1 of 1

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ISSUE DATE: 07/07/2020
FILE NO: XXX

PEARSON PROPERTIES of RAMSEY LLC
604 Beilenberg Drive
Woodbury, MN 55125

CONCEPT PLAN
RIVERDALE ALIGNMENT DETAIL

PEARSON FARM SOUTH
Ramsey, Minnesota

CARLSON McCAIN ENGINEERING SURVEYING ENVIRONMENTAL
3890 PHEASANT RIDGE DRIVE NE, SUITE 100, BLAINE, MN 55449
TEL 763.489.7900 \ FAX 763.489.7959 \ CARLSONMCCAIN.COM

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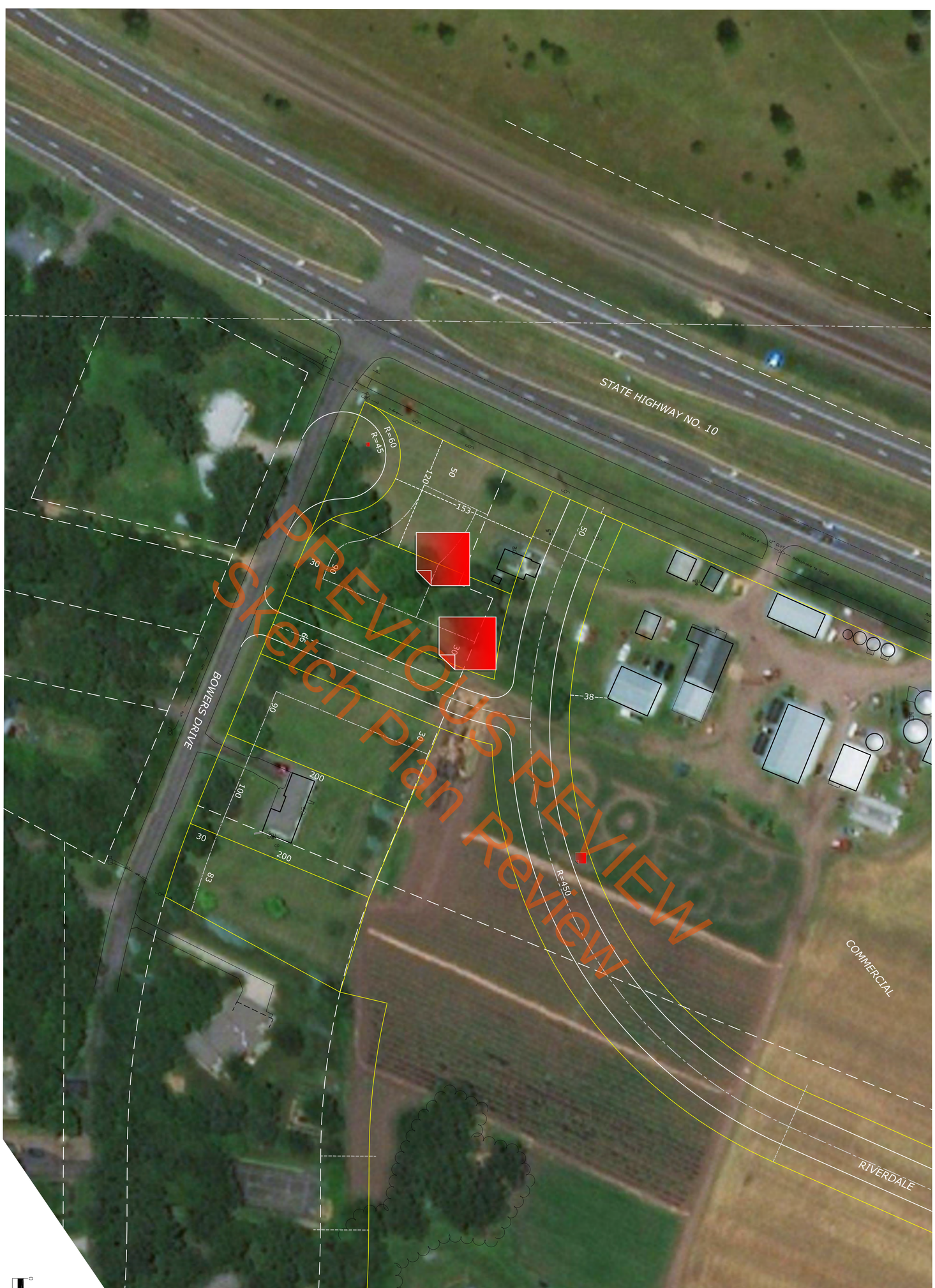

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FILE NO: XXX

PEARSON PROPERTIES of RAMSEY LLC
604 Beilenberg Drive
Woodbury, MN 55125

CONCEPT PLAN
RIVERDALE ALIGNMENT DETAIL

PEARSON FARM SOUTH
Ramsey, Minnesota

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TEL 763.489.7900 \ FAX 763.489.7959 \ CARLSONMCCAIN.COM

Save Date: 07/07/20 I:\jobs\8301 - 8320\8301 - pearson property - ramsey\cad c3d\survey\layouts\layout 3.dwg

Redline Copy for Updates.

Redline Copy for Updates.

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Parcel D: Lot 1, Block 3, Pearson Place, Anoka County, Minnesota.

(abstract property)

U.S. HIGHWAY NO. 10 & 169

COMMERCIAL DEVELOPMENT 22.98 AC

RESIDENTIAL DEV. 78.63 AC

PROPOSED POND

PROPOSED POND

PUBLIC PARK 1.0 AC

TREE PRESERVATION AREA 7.0 AC

AREA RETAINED BY LANDOWNER 8.68 AC

EXISTING 50' TREE BUFFER

STREET A

STREET B

STREET C

STREET D

STREET E

PEARSON BLVD

RIVERDALE DRIVE

BOWERS DRIVE NW

TRAIL / VEHICLE ACCESS

S00°17'33"W 1093.62

S66°21'43"E 1951.85

N76°47'15"W 50.00

N22°30'16"E 451.73

N13°58'27"W 205.79

159.73 Δ=12°55'27" R=706.37

76.30 S30°14'18"W

395.06 Δ=174°00" R=128.25

322.61 N17°54'16"E

61.69 Δ=58°33'37" R=60.36

100.41 Δ=08°07'20" R=955.37

270.04 Δ=09°32'43" R=1620.00

N40°39'19"W 134.

193.74 N89°47'35"W

58.89 S42°51'14"E

N39°15'W 52.99 Δ=5°45'40"

APPROVED Sketch Plan Review

0 60 120 240
(SCALE IN FEET)

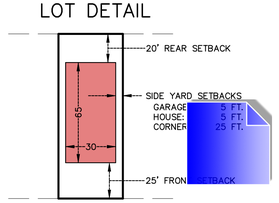
SITE DATA

TOTAL AREA	±110.29 AC.
RESIDENTIAL DEVELOPMENT AREA	78.63
PUBLIC PARK AREA	1.0
TREE PRESERVATION AREA	7.0
COMMERCIAL DEVELOPMENT AREA	22.98
AREA RETAINED BY LANDOWNER	8.68

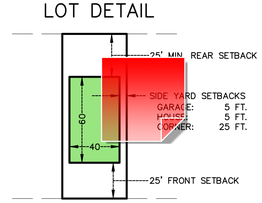
RESIDENTIAL DEVELOPMENT DATA

TOTAL NUMBER OF LOTS	242
GROSS DENSITY	3.1 U/AC
DETACHED TOWNHOMES	77
55' SINGLE FAMILY	115
65' SINGLE FAMILY	50

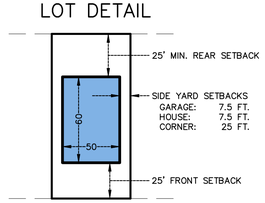
40' DETACHED TOWNHOME LOT DETAIL



55' SINGLE FAMILY LOT DETAIL



65' SINGLE FAMILY LOT DETAIL



CARLSON McCAIN
ENGINEERING SURVEYING ENVIRONMENTAL
3890 PHEASANT RIDGE DR NE
SUITE 100
BLAINE, MN 55449
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FAX 763.489.7959
CARLSONMCCAIN.COM

DRAWN BY: C#/RR
ISSUE DATE: 07/17/20
Revisions:

CAPSTONE HOMES, INC.
14015 Sunfish Lake Blvd. NW, Suite 400
Ramsey, MN 55303

RIVERSTONE SOUTH
Ramsey, Minnesota

SKETCH PLAN W/AERIAL

2 of 2

[Save Date: 07/16/20] F:\jobs\8481 - 8500\8494 - pearson place 2nd\cad c3d\survey\layouts\8494_layout 4.dwg

ProjectDox

Changemarks Report

Project Name: Riverstone South (Project No. 19-152)

Workflow Started: 07/20/2020 11:00 AM

Report Generated: 07/30/2020 01:04 PM

Grouping	Cycle	Ref #	Complete?	Status	Department	Snapshot	File	Markup Name	Changemark Subject	Changemark Details	Markup Date	Updated By	Applicant Response
Main Workflow	1	28	False	Unresolved	Civil Engineer IV		Riverstone South Sketch Plan.pdf	LL	Stormwater Route	The project to the south showed stormwater overflow from their pond onto this site. The overflow route for this site must be called out on the preliminary plat.	07/29/2020 3:23 PM	Len Linton	
		29	False	Unresolved	Civil Engineer IV		Riverstone South Sketch Plan.pdf	LL	Cul-de-sac	This muist be a full cul-de-sac, loosing the lots on either side of the stub until the next phase develops. The proximity of this stub to the south line of the solar farm limits future development until the solar farm is closed and the land redeveloped.	07/29/2020 3:23 PM	Len Linton	
		30	False	Unresolved	Civil Engineer IV		Riverstone South Sketch Plan.pdf	LL	Trunk Sanitary Sewer	Trunk Sanitary Sewer will require deducation of adequate drainage and utility easements. Layout may need to be changed to provide the necessary easements. A forcemain from the lift station will also be required which will require additional easement width.	07/29/2020 3:23 PM	Len Linton	

PREVIOUS REVIEW
Sketch Plan Review

ProjectDox

Changemarks Report

Grouping	Cycle	Ref #	Complete?	Status	Department	Snapshot	File	Markup Name	Changemark Subject	Changemark Details	Markup Date	Updated By	Applicant Response
Main Workflow	1	31	False	Unresolved	Civil Engineer IV		Riverstone South Sketch Plan.pdf	LL	Street Widths	Street widths must be 32 feet or the lot widths must be increased. The 29 foot lots require restriction of parking to one side of the street. The combination of narrow lot widht and driveway width limit the number of available parking spaces even more with parking on one side of the street.	07/29/2020 3:23 PM	Len Linton	
		32	False	Unresolved	Civil Engineer IV		Riverstone South Sketch Plan.pdf	LL	Bowers Drive Access	Coordinate Bowers Drive access with plans from previous development on Bowers Drive. Provide street access through this area.	07/29/2020 3:23 PM	Len Linton	
		27	False	Unresolved	Civil Engineer IV		Pearson South Riverdale Realignment.pdf	LL	Sight Distance at intersection	Consider increasing building setback from Riverdale to provide better site distance from left.	07/29/2020 2:46 PM	Len Linton	
		22	False	Unresolved	Civil Engineer II		Riverstone South Sketch Plan.pdf	JJF	Existing Ponding Combination	Please consider working with the adjacent property owners to possibly combine the ponding for this site with the existing pond put in with the Pearson Place development. This pond is adjacent to the proposed pond as shown.	07/29/2020 2:52 PM	Joe Feriancek	
		23	False	Unresolved	Civil Engineer II		Riverstone South Sketch Plan.pdf	JJF	Bowers Drive Connection	My understanding is this connection was going to be a road connection rather than a trail. A road connection would make the most sense in my opinion.	07/29/2020 2:52 PM	Joe Feriancek	

PREVIOUS REVIEW
Sketch Plan Review

ProjectDox

Changemarks Report

Grouping	Cycle	Ref #	Complete?	Status	Department	Snapshot	File	Markup Name	Changemark Subject	Changemark Details	Markup Date	Updated By	Applicant Response
Main Workflow	1	24	False	Unresolved	Civil Engineer II		Riverstone South Sketch Plan.pdf	JJF	Pearson Blvd/Stub location	The stub location does not appear to leave much buildable area on the north side of the road if the next parcel develops before the Solar Farm site developes.	07/29/2020 2:52 PM	Joe Feriancek	
		25	False	Unresolved	Civil Engineer II		Riverstone South Sketch Plan.pdf	JJF	Trunk Sewer Line	To give more comment to Tim's comment, it is not desirable for the City to have trunk utiliies, or any sanitary or water utilities in green space due to access/maintenance concerns.	07/29/2020 2:52 PM	Joe Feriancek	
		26	False	Unresolved	Civil Engineer II		Riverstone South Sketch Plan.pdf	JJF	home types	Do you have a plan with proposed house types, or not that far along yet? Are the townhomes planned to be slab on grade, spacing wise they appear close together to have a walkout type design.	07/29/2020 2:52 PM	Joe Feriancek	
		20	False	Unresolved	Civil Engineer II		Pearson South Riverdale Realignment.pdf	JJF	Radius of curvature	MSA Rules for 35 MPH with crowned road, 454 minimum radius of curvature, if this becomes a 40 mph Rmin 667 feet. Don't know what the speed limit will be, but may want to give more space incase it becomes 40.	07/29/2020 2:23 PM	Joe Feriancek	
		21	False	Unresolved	Civil Engineer II		Pearson South Riverdale Realignment.pdf	JJF	CDS Radius	Perminant CDS need 50' radius.	07/29/2020 2:23 PM	Joe Feriancek	

PREVIOUS REVIEW
Sketch Plan Review

ProjectDox

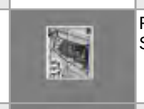
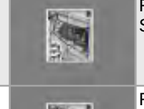
Changemarks Report

Grouping	Cycle	Ref #	Complete?	Status	Department	Snapshot	File	Markup Name	Changemark Subject	Changemark Details	Markup Date	Updated By	Applicant Response
Main Workflow	1	12	False	Unresolved	City Planner		Riverstone South Sketch Plan.pdf	Chloe	Bowers Drive Lots	Measure width of Bowers Drive lots (average or one or two is fine)	07/22/2020 2:48 PM	Chloe McGuire Brigl	
		13	False	Unresolved	City Planner		Riverstone South Sketch Plan.pdf	Chloe	Lot Depth	Indicate lot depth of these parcels for context	07/22/2020 2:48 PM	Chloe McGuire Brigl	
		14	False	Unresolved	City Planner		Riverstone South Sketch Plan.pdf	Chloe	Lot Depth	Indicate lot depth of this parcel	07/22/2020 2:48 PM	Chloe McGuire Brigl	
		15	False	Unresolved	City Planner		Riverstone South Sketch Plan.pdf	Chloe	Tree Preservation	Flag these trees as goal of preservation based on utility plan	07/22/2020 2:48 PM	Chloe McGuire Brigl	
		16	False	Unresolved	City Planner		Riverstone South Sketch Plan.pdf	Chloe	Backyard size	Measure size of backyard so we know how close house pads will be to existing property lines	07/22/2020 2:48 PM	Chloe McGuire Brigl	
		17	False	Unresolved	City Planner		Riverstone South Sketch Plan.pdf	Chloe	Density	Please provide approximate net density across site and per house type	07/22/2020 2:48 PM	Chloe McGuire Brigl	
		11	False	Unresolved	City Planner		Pearson South Riverdale Realignment.pdf	Chloe	Ponding?	Will this leftover piece be used for ponding? If so we should get under DU easement or outlot so it's not read as a buildable parcel	07/22/2020 2:44 PM	Chloe McGuire Brigl	
		1	False	Unresolved	Community Development Director		Riverstone South Sketch Plan.pdf	Tim Gladhill	Label Future Use	Label this as location of future Sanitary Sewer Lift Station	07/21/2020 6:47 PM	Tim Gladhill	

PREVIOUS REVIEW
Sketch Plan Review

ProjectDox

Changemarks Report

Grouping	Cycle	Ref #	Complete?	Status	Department	Snapshot	File	Markup Name	Changemark Subject	Changemark Details	Markup Date	Updated By	Applicant Response
Main Workflow	1	2	False	Unresolved	Community Development Director		Riverstone South Sketch Plan.pdf	Tim Gladhill	Trunk Sanitary Sewer Line	Is there space for the Trunk Sanitary Line in these back yards? How do we access if there is a need for repair?	07/21/2020 6:47 PM	Tim Gladhill	
		3	False	Unresolved	Community Development Director		Riverstone South Sketch Plan.pdf	Tim Gladhill	Revised Connection to Bowers Drive	Update plan set to match new drawing from Pearson/Dobbs.	07/21/2020 6:47 PM	Tim Gladhill	
		4	False	Unresolved	Community Development Director		Riverstone South Sketch Plan.pdf	Tim Gladhill	Connect to Bowers Drive	Must show connection to Bowers Drive.	07/21/2020 6:47 PM	Tim Gladhill	
		5	False	Unresolved	Community Development Director		Riverstone South Sketch Plan.pdf	Tim Gladhill	Contingent Support	The City's support for acquiring this area is contingent upon securing a third-party funding source.	07/21/2020 6:47 PM	Tim Gladhill	
		6	False	Unresolved	Community Development Director		Riverstone South Sketch Plan.pdf	Tim Gladhill	Ghost Plat	Please provide a separate exhibit that shows a ghost plat for this area.	07/21/2020 6:47 PM	Tim Gladhill	
		7	False	Unresolved	Community Development Director		Riverstone South Sketch Plan.pdf	Tim Gladhill	Linnear Connection - Park to Tree Preservation	Please provide a natural corridor between these two areas.	07/21/2020 6:47 PM	Tim Gladhill	
		8	False	Unresolved	Community Development Director		Riverstone South Sketch Plan.pdf	Tim Gladhill	80 Foot Wide Lots	Previous discussion centered around 80 foot wide lots along the back of the Bowers Drive Neighborhood. Perhaps the City is open in exchange for additional open space preservation.	07/21/2020 6:47 PM	Tim Gladhill	
		9	False	Unresolved	Community Development Director		Riverstone South Sketch Plan.pdf	Tim Gladhill	Zoning Amendment Required	These lot sizes will require a Zoning Amendment and likely a Comprehensive Plan Amendment.	07/21/2020 6:47 PM	Tim Gladhill	

PREVIOUS REVIEW
Sketch Plan Review

ProjectDox

Changemarks Report

Grouping	Cycle	Ref #	Complete?	Status	Department	Snapshot	File	Markup Name	Changemark Subject	Changemark Details	Markup Date	Updated By	Applicant Response
Main Workflow	1	10	False	Unresolved	Community Development Director		Riverstone South Sketch Plan.pdf	Tim Gladhill	Net Density Calculations	Please provide Net Density for the following: Overall (take out tree preservation area) Area of 65 foot wide lots (R-1 Residential District) Area of 55 foot wide lots and 40 foot wide lots (R-2 Residential District)	07/21/2020 6:47 PM	Tim Gladhill	
		18	False	Unresolved	Engineering Tech		Riverstone South Sketch Plan.pdf	Logan Czech	Parking Spaces	Assuming ~2.5 residents/home this development will house ~600 people. Five parking spaces is not enough for the only park.	07/20/2020 2:42 PM	Logan Czech	
		19	False	Unresolved	Engineering Tech		Riverstone South Sketch Plan.pdf	Logan Czech	Park Size	Since it is the only shared space, one acre is fairly small considering the size of this development. Is there going to be a playground?	07/20/2020 2:42 PM	Logan Czech	

PREVIOUS REVIEW
Sketch Plan Review

LEGAL DESCRIPTION

PARCEL DESCRIPTION: (Per Schedule A of Title Commitment File No. 2651, with a commitment date of October 17, 2019 at 7:00 am, prepared Twin City Title Company, LLC as issuing agent for Old Republic National Title Insurance Company)

Parcel A: Outlot B, Pearson Place, Anoka County, Minnesota.

Parcel B: That part of the Northwest Quarter of the Northwest Quarter of Section 29, Township 32, Range 25, Anoka County, Minnesota, lying southerly of U.S. Highway 10 and 169.

Parcel C: Lot 2, Block 3, Pearson Place, Anoka County, Minnesota.

Parcel D: Lot 1, Block 3, Pearson Place, Anoka County, Minnesota.

(abstract property)

LEGEND

- OPEN SPACE
- OPEN SPACE – WOODED
- STORMWATER POND
- INFILTRATION BASIN

S00°08'36"W 1705.32

S00°17'33"W 1093.62

U.S. HIGHWAY NO. 10 & 169

COMMERCIAL DEVELOPMENT 21.96 AC

S66°01'43"E 1951.85

40' DETACHED TOWNHOMES

RESIDENTIAL DEV. 78.63 AC

55' SINGLE FAMILY

65' SINGLE FAMILY

PUBLIC PARK 1.0 AC

PROPOSED INFILTRATION

PROPOSED POND

PROPOSED POND

STREET A

STREET B

STREET C

STREET D

STREET E

PEARSON BLVD

RIVERDALE DRIVE

10' TRAIL

TRAIL/VEHICLE ACCESS

BOWERS DRIVE NW

TREE PRESERVATION AREA 7.0 AC.

EXISTING 50' TREE BUFFER

AREA RETAINED BY LANDOWNER 9.70 AC

334.66 S37°59'16"W

620.99 N51°59'40"W

581.89 S42°51'14"E

193.74 N89°47'35"W

1349.11 N40°39'19"W

322.61 N17°54'15"E

451.73 N22°30'18"E

270.04 Δ=93°12'40" R=165.00

50.00 N76°47'15"W

205.79 N67°29'55"W

159.73 Δ=125°58'27" R=726.37

76.30 S00°14'18"W

395.06 Δ=17°40'00" R=1281.25

100.41 Δ=06°01'20" R=955.92

61.69 Δ=58°33'37" R=60.36

0 60 120 240

(SCALE IN FEET)

SITE DATA

TOTAL AREA	±110.29 AC.
RESIDENTIAL DEVELOPMENT AREA	78.63
PUBLIC PARK AREA	1.0
TREE PRESERVATION AREA	7.0
COMMERCIAL DEVELOPMENT AREA	22.98
AREA RETAINED BY LANDOWNER	8.68

RESIDENTIAL DEVELOPMENT DATA

TOTAL NUMBER OF LOTS	242
GROSS DENSITY	3.1 U/AC
DETACHED TOWNHOMES	77
55' SINGLE FAMILY	115
65' SINGLE FAMILY	50

DETACHED TOWNHOME LOTS	77
DETACHED TOWNHOME GROSS AREA	15.05 AC.
(MINUS 30' OUTLOTS)	0.57 AC.
NET AREA	14.48 AC.
NET DENSITY	5.32 UNITS/AC.

55' SINGLE FAMILY LOTS	115
55' SINGLE FAMILY GROSS AREA	32.96 AC.
(MINUS 30' OUTLOTS & PARK)	1.48 AC.
NET AREA	31.48 AC.
NET DENSITY	3.65 UNITS/AC.

65' SINGLE FAMILY LOTS	50
65' SINGLE FAMILY GROSS AREA	14.42 AC.
NET DENSITY	3.47 UNITS/AC.

CARLSON McCAIN ENGINEERING SURVEYING ENVIRONMENTAL
3890 PHEASANT RIDGE DR NE
SUITE 100
BLAINE, MN 55449
TEL 763.489.7900
FAX 763.489.7959
CARLSONMCCAIN.COM

DRAWN BY: C#

ISSUE DATE: 08/05/2020

Revisions:

CAPSTONE HOMES, INC.
14015 Sunfish Lake Blvd. NW, Suite 400
Ramsey, MN 55303

RIVERSTONE SOUTH
Ramsey, Minnesota

PRODUCT DENSITY EXHIBIT

[Save Date: 08/05/20] F:\jobs\8481 - 8500\8494 - pearson place 2nd\cad c3d\survey\layouts\8494_layout 4 product areas.dwg

City of RAMSEY

7550 Sunwood Drive NW • Ramsey, MN 55303
City Hall: 763.427.1410 • Fax: 763.427.5543
www.cityofframsey.com

What Do You Want in Our Backyard?
Riverstone South Planned Residential Neighborhood

BOWERS DRIVE CONNECTION SURVEY

The City is inviting you to participate in a survey regarding a proposed connection to Bowers Drive for public safety purposes.

To complete the survey, visit our page at:
www.cityofframsey.com/development or www.cityofframsey.com/769/Riverstone-South

The City prefers that responses be submitted online, but a paper copy has been provided on the back of this letter for convenience.

PREVIOUS REVIEW
Sketch Plan Review

The City has been discussing a potential detached single-family development on a on a site east of Bowers Drive with Capstone Homes. Many of you may have participated in online webinars and open houses on this topic. The City has now received an official Application from Capstone Homes for the first of three (3) major steps. The project is still in concept stages of planning and review. The City has put up a resource page for the project at www.cityofframsey.com/769/Riverstone-South.

The City strives for a more collaborative public engagement process and involving residents much earlier in the decision making process. Please note that if the project moves forward, there will be additional opportunities for public comment, **including the official public hearing at a future date.** In the meantime, the City Council will be reviewing the attached concept plan at their meeting on Tuesday, September 8 at 7:00 p.m. Please check www.cityofframsey.com/agendas for the most up to date information.

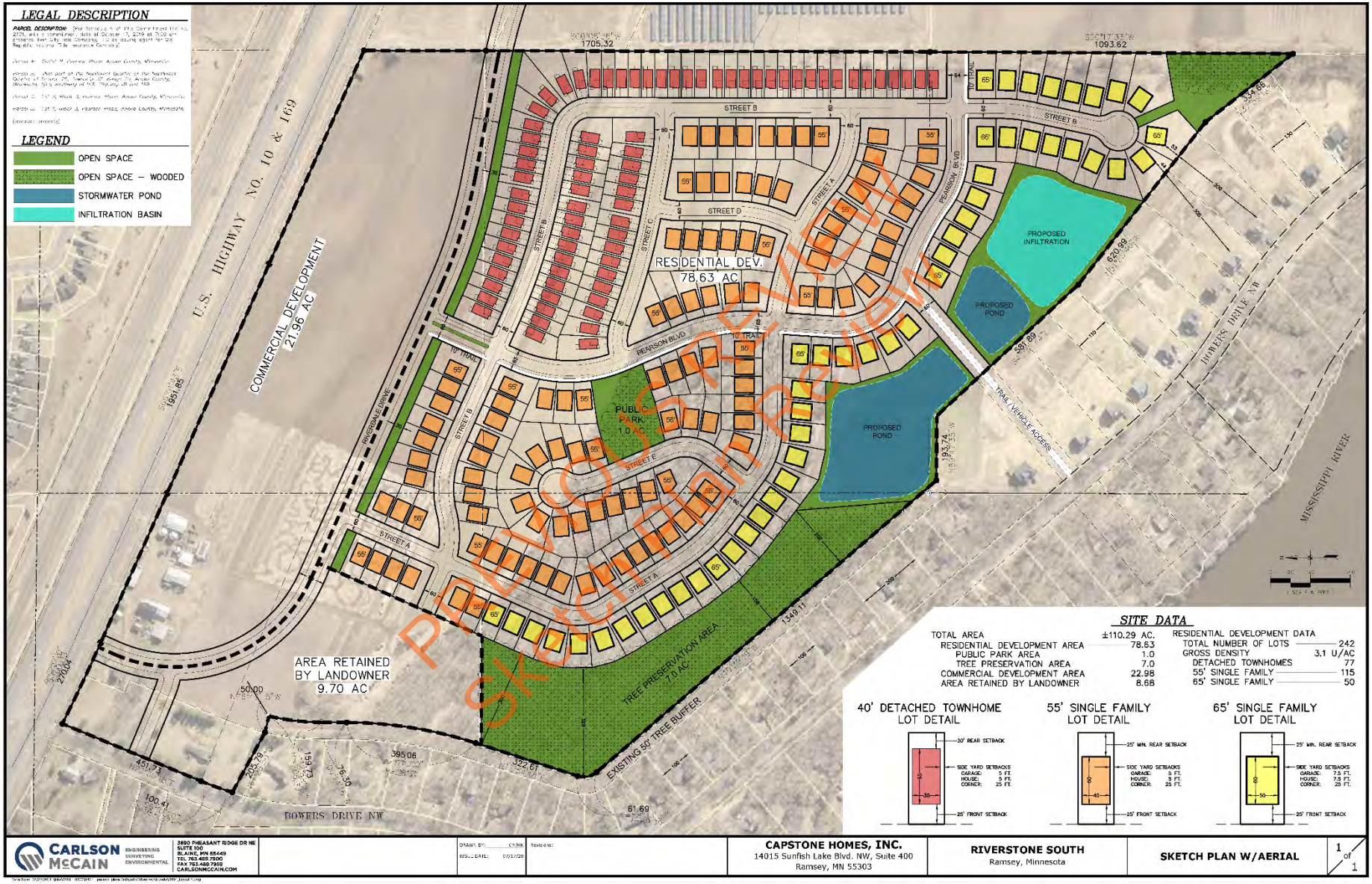
We value your input in this important neighborhood decision. Please let us know if you have any questions. We are available by phone at 763-433-9826 or by email at planning@cityofframsey.com. You can also request hard copies of materials (costs may apply) through this contact as well.

Sincerely,

CITY OF RAMSEY

Tim Gladhill
Deputy City Administrator

Riverstone South Concept Plan



BOWERS DRIVE CONNECTION SURVEY

Description

The City of Ramsey is currently reviewing a proposal for a 242 lot detached single-family development east of Bowers Drive. Bowers Drive is the longest dead-end street in the City with a single access point. For purposes of public safety, the City desires to make a second connection to Bowers Drive through the new Riverstone South Development. The proposed layout of Riverstone South should create minimal traffic impacts on Bowers Drive.

Respondents are encouraged to submit their responses online. This paper copy is provided as background and for those without access to computers and/or internet. https://www.cityoframsey.com/FormCenter/Development-Updates-4/Bowers-Drive-Connection-to-Riverstone-So-99 (or find a friendlier link at www.cityoframsey.com/development).

Background and Disclaimer

By filling out this form, you acknowledge that you have reviewed the materials available on the August 6 Planning Commission first. The City is recommending that a connection be made between Bowers Drive and the future Riverstone South development.

Fire Department Recommendation

The proposed road that would connect Bowers Drive with the new Riverstone South Development is an important and vital roadway connection for Public Safety. The roadway connection will give Public Safety a second access point to the long Bowers Drive dead-end in the event of an emergency. If Bowers Drive were to be blocked for some reason, this road would allow Public Safety a second access to the Bowers Drive Neighborhood. The road needs to be built to the standards to support the weight of a Fire Vehicle and Equipment and not designed as a standard pedestrian trail. Bowers Drive is the longest dead-end cul-de-sac we have in the City. Bowers Drive does not have any fire hydrants to assist in emergencies.

Police Department Recommendation

The Police Department is in support of the proposed roadway which would connect the existing cul-de-sac of Bowers Drive that has existed for a number of years to the new Riverstone South Development. Due to the nature and location of this proposed road, the Police Department believes the positives to public safety outweigh any possible negatives which could result from the change. We believe having a second access would increase our ability to quickly render aid to the Ramsey Residents who live on this existing street, who we serve and protect. As the specifics of this road are discussed further, the Police Department would request it be constructed for year-round access and not have breakaway barriers or gates.

Public Works Maintenance Recommendation

The proposed road that would connect Bowers Drive with the new Riverstone South Development is an important and vital roadway connection for Public Safety. Public Works Staff and equipment are a vital part of every large-scale emergency response effort. Therefore, the Public Works Department recommends the access road be built to a minimum width of 24 feet with B Style Curb and designed to 9 Ton Specifications. This road needs to be designed to handle large emergency equipment, such as Fire Engines, Public Works Vehicles and Electrical Line Repair Vehicles. As also mentioned by Police and Fire, this is a long cul-de-sac road with only a single access point.

PREVIOUS PREVIEW
Sketch Plan Review

[Survey Continues on Next Page]

Contact Information

The City is requesting that names and addresses are being captured as part of the public record. To ensure that those directly and most impacted by the policy decision are recorded and not unduly influenced by those not directly or most impacted by the decision, address verification is important.

Name	**Email Address**
Address	
Phone Number	

Survey Question

For purposes of Public Safety Response, do you support a second access to Bowers Drive?

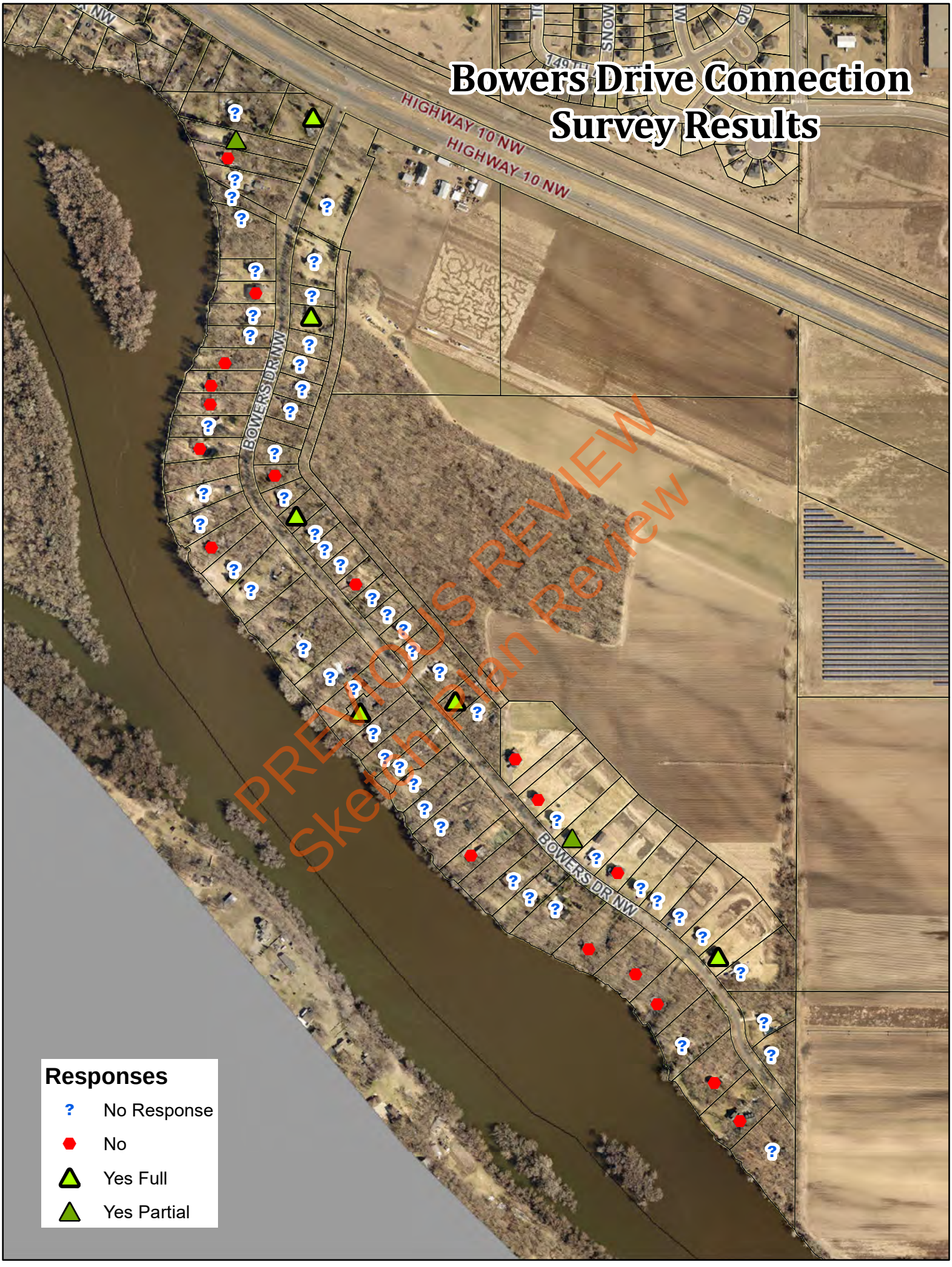
- ☐ Yes, I support a full public road connection
- ☐ Yes, but only if it is used by Public Safety (and Public Works Maintenance)
- ☐ No, I do not support a second connection to Bowers Drive
- ☐ Other (please describe below)

Comments

PREVIOUS REVIEW
Sketch Plan Review

Disclaimer

For purposes of this survey, a non-response will be considered as a non-objection to the connection.


Bowers Drive Connection
Survey Results
HIGHWAY 10 NW
HIGHWAY 10 NW
BOWERS DR NW
BOWERS DR NW
PREVIOUS REVIEW
Sketch Plan Review
Responses
No Response
No
Yes Full
Yes Partial

Name	Address	For purposes of Public Safety Response, do you support a second access to Bowers Drive?	Please comment and explain your response above.
Jim Weidenbach	14230 Bowers Dr NW	No, I do not support a second connection to Bowers Drive	Too much traffic on the road already.
Terry and Jane Luke	14250 Bowers DR NW	No, I do not support a second connection to Bowers Drive	We do not want this connection because it would create more vehicle and pedestrian traffic on Bowers DR. One of the reasons we moved to Bowers DR 43 years ago was for the privacy. Years ago the topic of making Bowers DR part of a scenic river route or trail was brought up. There was a very large turnout of Bowers DR residents at the meeting that were against that proposal. It was decided that in the future when the Pierson property was to be developed a trail would be within the boundary of the new development and would not be at all connected to Bowers DR. I would expect that the City of Ramsey would keep there word on this matter and that it should be on record.
Michael Sutton	14310 Bowers Dr NW	No, I do not support a second connection to Bowers Drive	I see absolutely no value in the connection between Bowers Drive and the new development. The increased pedestrian and auto traffic if the connection would go forward would be unmanageable, potentially leading to assessments of the current residents to support street lighting along with other additions in the name of safety which we up until today have not needed. Also concerns of increased crime due to any additional connection allowing those who would commit crime alternate routes to escape.
Laurie Weber Schwarzenberger	14330 Bowers Dr NW	No, I do not support a second connection to Bowers Drive	We have never had the need for a second access to Bowers Dr. We do not believe it is necessary. There will be other accesses to the new housing development for emergencies. We do mot want additional traffic on Bowers Drive. The value of our house has already decreased because of new houses across our street..We do not want the values to drop further.
Michel Pierce	14330 Bowers Dr. NW	No, I do not support a second connection to Bowers Drive	Do not want a connection to Bowers Dr. as it will increase crime and traffic on a street that we enjoy living on. Also, Please ensure that there is no construction access via Bowers Dr for this proposed development. Finally, Still looking for confirmation of a buffer in the southeastern portion of the proposed development between the newly constructed homes on Bowers and the proposed development.
Bridget George	14350 Bowers Drive NW	No, I do not support a second connection to Bowers Drive	I don't see the benefit or the actual need case, nor any data or history justifying the change. If the potential issue is a tree falling across the road, the city could instead proactively trim trees. As the structure of Bowers Drive is not on the table, it would seem to be of minimal benefit to have a 24 foot wide road with curb and gutter as the public works department is proposing rather than a wide trail, as the rest of the road does not have this structure either. If a road were required, a formal barrier would be important to restrict access and would be minimal hindrance to public safety. Perhaps a better investment would be fire hydrants. My primary concern is that the road would draw additional vehicle traffic from new development residents looking for an alternate route to highway 10. Bowers drive already has a large number of residents who exercise, walk, & and take pets along Bowers Drive. Additional auto traffic would pose a significant danger to residents, outweighing any potential safety benefits from a second access. Additionally, extra walkers from the new development looking to complete a loop between the new development and Bowers Drive would add to the number of pedestrians, bikes or dogs along the road, further exacerbating the new hazard created by the proposed new access road. Finally, I am concerned this is just step one of a larger plan by city developers to change Bowers drive road, widening the access, adding curb & gutter, etc. which would change the character of the neighborhood and negatively impact the current lot structure. If public safety is truly the concern of the city- improving or revising entrance and exit access to Bowers Drive should be the first focus- the current access to/from the neighborhood from Highway 10 is extremely dangerous- not enough distance to accelerate or decelerate, as well hazard of crossing the highway. This hazard would get worse with additional traffic from the new development using the access road as a short cut up Bowers Drive onto Highway 10.
Michael Manning	14365 Bowers Dr NW	No, I do not support a second connection to Bowers Drive	
Jamey McPheeters	14420 Bowers Dr NW	No, I do not support a second connection to Bowers Drive	
Kelly Hudick	14420 Bowers Drive NW	No, I do not support a second connection to Bowers Drive	
Paige Bentley	14435 Bowers Dr NW	No, I do not support a second connection to Bowers Drive	Ours is one of the properties directly adjacent to this proposed road. We are opposed to a second access to Bowers Drive. First off, we were not told of this when we purchased our property and are greatly disappointed by the finger pointing and lack of transparency in addressing this issue. Second, we are concerned about lack of safety to our property directly. Since ours would become a corner lot, we would have an entire side of our house exposed to a new roadway that connects to a neighborhood with 250 new homes and an open invitation for possible criminal activity. We are concerned for the safety of our home and ourselves. Another issue to be addressed would be the change in value of our property and any devaluation because of this new said roadway. Will we be compensated, and how, for any losses incurred? The road overall cannot handle more traffic, be it pedestrian or vehicle. Bowers Drive is an active street and adding any traffic poses more of a safety issue to us and our neighbors. Will there be street lights along this new roadway that will be glaring into our bedroom windows? If you build a full roadway with curbs, does that means curbs for Bowers Drive? Where does this end? It seems youâ€™re creating a means for more problems and a never ending cycle. Disappointing to say the least. Weâ€™ve got a longer list of rising concerns that we cannot wait to voice and look forward to the opportunity to be heard.
James Wadey	14447 Bowers Dr NW	No, I do not support a second connection to Bowers Drive	I feel there is no real need, as in the past 80+ years no issues have happened that has allowed for no access the additional road does not improve the issues beyond the connection so does not offer the correct solution if we are looking to improve safety, I am concerned with increased foot pedestrian traffic on bowers drive as there is no side walk and no lighting down the road as is already popular with residents. reduced security is also a concern as additional exits will exist for criminal a number of independent studies have proven this in Minnesota. i am also concerned that the city and developer have not been transparent of what the use of the out lot has been for, in the initial planning phase (12 new homes) or when i purchased my house.
Carol Larson	14480 Bowers Dr NW	No, I do not support a second connection to Bowers Drive	See attached letter.
NICOLE JOHNSTON	14560 BOWERS Dr NW	No, I do not support a second connection to Bowers Drive	I do NOT want the extra traffic on the road, which leads to crime on the road. We did not move to the neighborhood to have additional traffic and issues. We moved here to have a quite DEAD END STREET!
Joshua J Fuhreck	14573 Bowers Dr NW	No, I do not support a second connection to Bowers Drive	
Katherine Woods	14610 Bowers Dr NW	No, I do not support a second connection to Bowers Drive	
Sam Sjostrom	14623 Bowers Dr Nw	No, I do not support a second connection to Bowers Drive	
Shelli Sjostrom	14623 Bowers Dr NW	No, I do not support a second connection to Bowers Drive	
Steven Perkins	14650 Bowers DR NW	No, I do not support a second connection to Bowers Drive	Bowers DR NW is already a very busy street for both pedestrians and vehicles. There are no sidewalks and the current flow of traffic already presents a huge danger to residents walking, etc. Connecting Bowers DR to the new development by road and/or walking trail will increase traffic and create a more dangerous situation for people on feet and bikes.

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Ron Herst	14670 Bowers Dr. NW	No, I do not support a second connection to Bowers Drive	We have lived on Bowers Drive for 30 years and have been perfectly happy with the level of "Safety" that we've had. We are strongly opposed to the proposal to have a second access to Bowers Drive from Riverstone South. In the 30 years that we've lived here, the road has been perfectly adequate from a safety perspective. The very last thing that we want is any additional access to this road. We actually believe that our road is safer from crime in that it is a "dead end" and there is no other way in or out. Why should residents of 242 homes have access to Bowers Drive??? WE DON'T WANT IT !!!
Katherine Prokosch	14700 Bowers Dr NW	No, I do not support a second connection to Bowers Drive	We retired from farming & chose this house because of the lack of traffic. If the City ignores my opinion then put in posts that can be dropped by remote control. They use in Switzerland - it gets cold there too! I also don't like the density.
Ralph R Nissen	14710 Bowers Dr NW	No, I do not support a second connection to Bowers Drive	
John Fluegel	14740 Bowers Dr NW	No, I do not support a second connection to Bowers Drive	* Concerns that the 2nd access from neighboring high density low income housing will possibly reduce our property values on Bowers Dr. * Concerns this new 2nd access will result in future street lighting, road widening, sidewalks and fire hydrants etc on Bowers Dr. * Concerns of safety with increased foot/bicycle traffic on Bowers Dr. * Overall concerns regarding the dramatic increase in high density housing in Ramsey....we moved to Ramsey from Mpls 40 years ago to live in a peaceful and quiet neighborhood.
John Morris	14820 Bowers Dr	No, I do not support a second connection to Bowers Drive	Both john and I feel that to maintain the privacy and value of our neighborhood this access should not be allowed. There has never been any hard numbers put to incidents on our street that warrant the expenditure by the city or the change to our neighborhood. The new neighborhood is not being modeled after ours so therefore we feel it should be kept seperate.
Gretchen Morris	14820 Bowers Dr. NW	No, I do not support a second connection to Bowers Drive	Both john and I feel that to maintain the privacy and value of our neighborhood this access should not be allowed. There has never been any hard numbers put to incidents on our street that warrant the expenditure by the city or the change to our neighborhood. The new neighborhood is not being modeled after ours so therefore we feel it should be kept seperate.
Tony Durkin	14409 Bowers Dr NW	Yes, but only if it is used by Public Safety (and Public Works Maintenance)	I support public safety and a fire hydrant on the street, I do not support streetlights. My concern is that if a full access road is constructed that it will lead to more traffic which will lead to more wear and tear on the road which will lead to the road re-being redone which will include gutters and streetlights which will lead to a special assessment to my property taxes. I would like to see the signs of emergency vehicles only added to the access road.
Richard Sandeen	14826 Bowers Dr NW	Yes, but only if it is used by Public Safety (and Public Works Maintenance)	Perhaps a little off topic but I would like to see the road connection between Bowers and Riverdale Dr. be moved another 30 or 40 feet to the South locating it completely away from the end of my driveway.
Richard	14826 Bowers Dr NW	Yes, but only if it is used by Public Safety (and Public Works Maintenance)	
Katie Jensen	14331 Bowers Dr NW	Yes, I support a full public road connection	
Stephen J Nash	14500 Bowers Dr NW	Yes, I support a full public road connection	First, we need a second access for Bowers Drive. Second, I believe that the access in question should be a public road which will help disperse traffic on Bowers Dr.
Bert Horton	14510 Bowers Dr NW	Yes, I support a full public road connection	Tim Gladhill, I received your letter asking for input regarding the Capstone project. My major question is safety for Bowers Drive. Our road has a lot of curves and limited visibility when leaving many driveways. My hope was that there would be another entry/exit from Bowers to the east. That would decrease traffic as there would be two ways to enter or exit Bowers. In looking at your concept plan I see a new trail and what appears to be a trail and emergency vehicle road with gate. That would only increase foot traffic but not help the traffic we experience. I have heard there is second option being considered with the east trail/limited vehicle plan to allow full car traffic. I would not be in favor of the version that appears in your letter. I would consider Bowers far more safe with two real entry/exits than the limited emergency option. I am not concerned about the very rare case where emergency vehicles need an additional entry vs the traffic we have every day.
Bryan Olson	14513 Bowers Drive NW	Yes, I support a full public road connection	There should be trees planted on either side of this road. Those residents were not told by builders that there would be a road. They should plant spruce to provide year round privacy. Hopefully the first tier of new home drivers will not cut thru on Bowers to get to Hwy 10.
John LeTourneau	14607 NW Bowers Dr NW	Yes, I support a full public road connection	
Gene. Waldowski	14743 Bowers Dr Nw	Yes, I support a full public road connection	
Luther Olson	14840 Bowers Dr NW	Yes, I support a full public road connection	

PREVIOUS PREVIEW
Sketch Plan Review

From: [redacted]
To: Ramsey Planning
Subject: Bowers Drive Connection Survey
Date: Tuesday, August 18, 2020 4:42:53 PM

Tim Gladhill, I received your letter asking for input regarding the Capstone project. My major question is safety for Bowers Drive. Our road has a lot of curves and limited visibility when leaving many driveways. My hope was that there would be another entry/exit from Bowers to the east. That would decrease traffic as there would be two ways to enter or exit Bowers. In looking at your concept plan I see a new trail and what appears to be a trail and emergency vehicle road with gate. That would only increase foot traffic but not help the traffic we experience. I have heard there is second option being considered with the east trail/limited vehicle plan to allow full car traffic.

I would not be in favor of the version that appears in your letter. I would consider Bowers far more safe with two real entry/exits than the limited emergency option. I am not concerned about the very rare case where emergency vehicles need an additional entry vs the traffic we have every day.

Thanks, Bert Horton
14510 Bowers Drive NW
Ramsey, MN., 55303

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Contact Information

The City is requesting that names and addresses are being captured as part of the public record. To ensure that those directly and most impacted by the policy decision are recorded and not unduly influenced by those not directly or most impacted by the decision, address verification is important.

Name	Email Address
Katherine Prokosch	[redacted]
Address	
14700 Bowers Dr N.W	
Phone Number	
[redacted]	

Survey Question

For purposes of Public Safety Response, do you support a second access to Bowers Drive?

- ☐ Yes, I support a full public road connection
- ☐ Yes, but only if it is used by Public Safety (and Public Works Maintenance)
- ☒ ~~No~~, I do not support a second connection to Bowers Drive — this is a double negative statement
- ☐ Other (please describe below)

Comments

We retired from farming & chose this house because of the lack of traffic.
If the city ignores my opinion then put in posts that can be dropped by remote control. Then use in Switzerland - it gets cold there too!
I also don't like the density.

Disclaimer

For purposes of this survey, a non-response will be considered as a non-objection to the connection.

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Sketch Plan Review

Print

Bowers Drive Connection to Riverstone South - Submission #2149

Date Submitted: 8/13/2020

Riverstone South Background

Riverstone South Background

By filling out this form, you acknowledge that you have reviewed the materials on this link first. The City of Ramsey is recommending that a connection be made between Bowers Drive and the future Riverstone South Development.

Fire Department Recommendation

The proposed road that would connect Bowers Drive with the new Riverstone South Development is an important and vital roadway connection for Public Safety. The roadway connection will give Public Safety a second access point to the long Bowers Drive dead-end in the event of an emergency. If Bowers Drive were to be blocked for some reason, this road would allow Public Safety a second access to the Bowers Drive Neighborhood. The road needs to be built to the standards to support the weight of a Fire Vehicle and Equipment and not designed as a standard pedestrian trail. Bowers Drive is the longest dead-end cul-de-sac we have in the City. Bowers Drive does not have any fire hydrants to assist in emergencies.

Police Department Recommendation

The Police Department is in support of the proposed roadway which would connect the existing cul-de-sac of Bowers Drive that has existed for a number of years to the new Riverstone South Development. Due to the nature and location of this proposed road, the Police Department believes the positives to public safety outweigh any possible negatives which could result from the change. We believe having a second access would increase our ability to quickly render aid to the Ramsey Residents who live on this existing street, who we serve and protect. As the specifics of this road are discussed further, the Police Department would request it be constructed for year-round access and not have breakaway barriers or gates.

Public Works Maintenance Recommendation

The proposed road that would connect Bowers Drive with the new Riverstone South Development is an important and vital roadway connection for Public Safety. Public Works Staff and equipment are a vital part of every large-scale emergency response effort. Therefore, the Public Works Department recommends the access road be built to a minimum width of 24 feet with B Style Curb and designed to 9 Ton Specifications. This road needs to be designed to handle large emergency equipment, such as Fire Engines, Public Works Vehicles and Electrical Line Repair Vehicles. As also mentioned by Police and Fire, this is a long cul-de-sac road with only a single access point.

PREVIOUS REVIEW
Sketch Plan Review

I acknowledge that I have read the information above before responding to this survey.*

☑ Yes

Purpose of Contact Information

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Name*

Bridget George

Email Address

[redacted]

Address*

14350 Bowers Drive NW

City

Ramsey

State

MN

Zip Code

55303

Phone Number

[redacted]

For purposes of Public Safety Response, do you support a second access to Bowers Drive?*

- ( ) Yes, I support a full public road connection
- ( ) Yes, but only if it is used by Public Safety (and Public Works Maintenance)
- (•) No, I do not support a second connection to Bowers Drive
- ( ) Other (please describe below)

Disclaimer

For purposes of this survey, a non-response will be considered as a non-objection to the connection.

Please comment and explain your response above.

I don't see the benefit or the actual need case, nor any data or history justifying the change. If the potential issue is a tree falling across the road, the city could instead proactively trim trees. As the structure of Bowers Drive is not on the table, it would seem to be of minimal benefit to have a 24 foot wide road with curb and gutter as the public works department is proposing rather than a wide trail, as the rest of the road does not have this structure either. If a road were required, a formal barrier would be important to restrict access and would be minimal hindrance to public safety. Perhaps a better investment would be fire hydrants. My primary concern is that the road would draw additional vehicle traffic from new development residents looking for an alternate route to highway 10. Bowers drive already has a large number of residents who exercise, walk, & and take pets along Bowers Drive. Additional auto traffic would pose a significant danger to residents, outweighing any potential safety benefits from a second access. Additionally, extra walkers from the new development looking to complete a loop between the new development and Bowers Drive would add to the number of pedestrians, bikes or dogs along the road, further exacerbating the new hazard created by the proposed new access road. Finally, I am concerned this is just step one of a larger plan by city developers to change Bowers drive road, widening the access, adding curb & gutter, etc. which would change the character of the neighborhood and negatively impact the current lot structure. If public safety is truly the concern of the city- improving or revising entrance and exit access to Bowers Drive should be the first focus- the current access to/from the neighborhood from Highway 10 is extremely dangerous- not enough distance to accelerate or decelerate, as well hazard of crossing the highway. This hazard would get worse with additional traffic from the new development using the access road as a short cut up Bowers Drive onto Highway 10.

PREVIOUS REVIEW
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Bowers Drive Connection to Riverstone South - Submission #2150

Date Submitted: 8/13/2020

Riverstone South Background

Riverstone South Background

By filling out this form, you acknowledge that you have reviewed the materials on this link first. The City of Ramsey is recommending that a connection be made between Bowers Drive and the future Riverstone South Development.

Fire Department Recommendation

The proposed road that would connect Bowers Drive with the new Riverstone South Development is an important and vital roadway connection for Public Safety. The roadway connection will give Public Safety a second access point to the long Bowers Drive dead-end in the event of an emergency. If Bowers Drive were to be blocked for some reason, this road would allow Public Safety a second access to the Bowers Drive Neighborhood. The road needs to be built to the standards to support the weight of a Fire Vehicle and Equipment and not designed as a standard pedestrian trail. Bowers Drive is the longest dead-end cul-de-sac we have in the City. Bowers Drive does not have any fire hydrants to assist in emergencies.

Police Department Recommendation

The Police Department is in support of the proposed roadway which would connect the existing cul-de-sac of Bowers Drive that has existed for a number of years to the new Riverstone South Development. Due to the nature and location of this proposed road, the Police Department believes the positives to public safety outweigh any possible negatives which could result from the change. We believe having a second access would increase our ability to quickly render aid to the Ramsey Residents who live on this existing street, who we serve and protect. As the specifics of this road are discussed further, the Police Department would request it be constructed for year-round access and not have breakaway barriers or gates.

Public Works Maintenance Recommendation

The proposed road that would connect Bowers Drive with the new Riverstone South Development is an important and vital roadway connection for Public Safety. Public Works Staff and equipment are a vital part of every large-scale emergency response effort. Therefore, the Public Works Department recommends the access road be built to a minimum width of 24 feet with B Style Curb and designed to 9 Ton Specifications. This road needs to be designed to handle large emergency equipment, such as Fire Engines, Public Works Vehicles and Electrical Line Repair Vehicles. As also mentioned by Police and Fire, this is a long cul-de-sac road with only a single access point.

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☑ Yes

Purpose of Contact Information

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Name*

James Wadey

Email Address

[redacted]

Address*

14447 Bowers Dr NW

City

Ramsey

State

MN

Zip Code

55303

Phone Number

[redacted]

For purposes of Public Safety Response, do you support a second access to Bowers Drive?*

- ( ) Yes, I support a full public road connection
- ( ) Yes, but only if it is used by Public Safety (and Public Works Maintenance)
- (•) No, I do not support a second connection to Bowers Drive
- ( ) Other (please describe below)

Disclaimer

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Please comment and explain your response above.

I feel there is no real need, as in the past 80+ years no issues have happened that has allowed for no access the additional road does not improve the issues beyond the connection so does not offer the correct solution if we are looking to improve safety, I am concerned with increased foot pedestrian traffic on bowers drive as there is no side walk and no lighting down the road as is already popular with residents. reduced security is also a concern as additional exits will exist for criminal a number of independent studies have proven this in Minnesota. i am also concerned that the city and developer have not been transparent of what the use of the out lot has been for, in the initial planning phase (12 new homes) or when i purchased my house.

PREVIOUS REVIEW
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Bowers Drive Connection to Riverstone South - Submission #2151

Date Submitted: 8/13/2020

Riverstone South Background

Riverstone South Background

By filling out this form, you acknowledge that you have reviewed the materials on this link first. The City of Ramsey is recommending that a connection be made between Bowers Drive and the future Riverstone South Development.

Fire Department Recommendation

The proposed road that would connect Bowers Drive with the new Riverstone South Development is an important and vital roadway connection for Public Safety. The roadway connection will give Public Safety a second access point to the long Bowers Drive dead-end in the event of an emergency. If Bowers Drive were to be blocked for some reason, this road would allow Public Safety a second access to the Bowers Drive Neighborhood. The road needs to be built to the standards to support the weight of a Fire Vehicle and Equipment and not designed as a standard pedestrian trail. Bowers Drive is the longest dead-end cul-de-sac we have in the City. Bowers Drive does not have any fire hydrants to assist in emergencies.

Police Department Recommendation

The Police Department is in support of the proposed roadway which would connect the existing cul-de-sac of Bowers Drive that has existed for a number of years to the new Riverstone South Development. Due to the nature and location of this proposed road, the Police Department believes the positives to public safety outweigh any possible negatives which could result from the change. We believe having a second access would increase our ability to quickly render aid to the Ramsey Residents who live on this existing street, who we serve and protect. As the specifics of this road are discussed further, the Police Department would request it be constructed for year-round access and not have breakaway barriers or gates.

Public Works Maintenance Recommendation

The proposed road that would connect Bowers Drive with the new Riverstone South Development is an important and vital roadway connection for Public Safety. Public Works Staff and equipment are a vital part of every large-scale emergency response effort. Therefore, the Public Works Department recommends the access road be built to a minimum width of 24 feet with B Style Curb and designed to 9 Ton Specifications. This road needs to be designed to handle large emergency equipment, such as Fire Engines, Public Works Vehicles and Electrical Line Repair Vehicles. As also mentioned by Police and Fire, this is a long cul-de-sac road with only a single access point.

PREVIOUS REVIEW
Sketch Plan Review

I acknowledge that I have read the information above before responding to this survey.*

☑ Yes

Purpose of Contact Information

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Name*

Laurie Weber Schwarzenberger

Email Address

[redacted]

Address*

14330 Bowers Dr

City

Anoka

State

Mn

Zip Code

55303

Phone Number

[redacted]

For purposes of Public Safety Response, do you support a second access to Bowers Drive?*

- ( ) Yes, I support a full public road connection
- ( ) Yes, but only if it is used by Public Safety (and Public Works Maintenance)
- (•) No, I do not support a second connection to Bowers Drive
- ( ) Other (please describe below)

Disclaimer

For purposes of this survey, a non-response will be considered as a non-objection to the connection.

Please comment and explain your response above.

We have never had the need for a second access to Bowers Dr. We do not believe it is necessary. There will be other accesses to the new housing development for emergencies. We do mot want additional traffic on Bowers Drive. The value of our house has already decreased because of new houses across our street..We do not want the values to drop further.

PREVIOUS REVIEW
Sketch Plan Review

Print

Bowers Drive Connection to Riverstone South - Submission #2152

Date Submitted: 8/13/2020

Riverstone South Background

Riverstone South Background

By filling out this form, you acknowledge that you have reviewed the materials on this link first. The City of Ramsey is recommending that a connection be made between Bowers Drive and the future Riverstone South Development.

Fire Department Recommendation

The proposed road that would connect Bowers Drive with the new Riverstone South Development is an important and vital roadway connection for Public Safety. The roadway connection will give Public Safety a second access point to the long Bowers Drive dead-end in the event of an emergency. If Bowers Drive were to be blocked for some reason, this road would allow Public Safety a second access to the Bowers Drive Neighborhood. The road needs to be built to the standards to support the weight of a Fire Vehicle and Equipment and not designed as a standard pedestrian trail. Bowers Drive is the longest dead-end cul-de-sac we have in the City. Bowers Drive does not have any fire hydrants to assist in emergencies.

Police Department Recommendation

The Police Department is in support of the proposed roadway which would connect the existing cul-de-sac of Bowers Drive that has existed for a number of years to the new Riverstone South Development. Due to the nature and location of this proposed road, the Police Department believes the positives to public safety outweigh any possible negatives which could result from the change. We believe having a second access would increase our ability to quickly render aid to the Ramsey Residents who live on this existing street, who we serve and protect. As the specifics of this road are discussed further, the Police Department would request it be constructed for year-round access and not have breakaway barriers or gates.

Public Works Maintenance Recommendation

The proposed road that would connect Bowers Drive with the new Riverstone South Development is an important and vital roadway connection for Public Safety. Public Works Staff and equipment are a vital part of every large-scale emergency response effort. Therefore, the Public Works Department recommends the access road be built to a minimum width of 24 feet with B Style Curb and designed to 9 Ton Specifications. This road needs to be designed to handle large emergency equipment, such as Fire Engines, Public Works Vehicles and Electrical Line Repair Vehicles. As also mentioned by Police and Fire, this is a long cul-de-sac road with only a single access point.

PREVIOUS REVIEW
Sketch Plan Review

I acknowledge that I have read the information above before responding to this survey.*

☑ Yes

Purpose of Contact Information

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Name*

Paige Bentley

Email Address

[redacted]

Address*

14435 Bowers Dr NW

City

Ramsey

State

Minnesota

Zip Code

55303

Phone Number

[redacted]

For purposes of Public Safety Response, do you support a second access to Bowers Drive?*

- ( ) Yes, I support a full public road connection
- ( ) Yes, but only if it is used by Public Safety (and Public Works Maintenance)
- (•) No, I do not support a second connection to Bowers Drive
- ( ) Other (please describe below)

Disclaimer

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Please comment and explain your response above.

Ours is one of the properties directly adjacent to this proposed road. We are opposed to a second access to Bowers Drive. First off, we were not told of this when we purchased our property and are greatly disappointed by the finger pointing and lack of transparency in addressing this issue. Second, we are concerned about lack of safety to our property directly. Since ours would become a corner lot, we would have an entire side of our house exposed to a new roadway that connects to a neighborhood with 250 new homes and an open invitation for possible criminal activity. We are concerned for the safety of our home and ourselves. Another issue to be addressed would be the change in value of our property and any devaluation because of this new said roadway. Will we be compensated, and how, for any losses incurred? The road overall cannot handle more traffic, be it pedestrian or vehicle. Bowers Drive is an active street and adding any traffic poses more of a safety issue to us and our neighbors. Will there be street lights along this new roadway that will be glaring into our bedroom windows? If you build a full roadway with curbs, does that means curbs for Bowers Drive? Where does this end? It seems youâ€™re creating a means for more problems and a never ending cycle. Disappointing to say the least. Weâ€™ve got a longer list of rising concerns that we cannot wait to voice and look forward to the opportunity to be heard.

PREVIOUS PREVIEW
Sketch Plan Review

Print

Bowers Drive Connection to Riverstone South - Submission #2153

Date Submitted: 8/14/2020

Riverstone South Background

Riverstone South Background

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Fire Department Recommendation

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Police Department Recommendation

The Police Department is in support of the proposed roadway which would connect the existing cul-de-sac of Bowers Drive that has existed for a number of years to the new Riverstone South Development. Due to the nature and location of this proposed road, the Police Department believes the positives to public safety outweigh any possible negatives which could result from the change. We believe having a second access would increase our ability to quickly render aid to the Ramsey Residents who live on this existing street, who we serve and protect. As the specifics of this road are discussed further, the Police Department would request it be constructed for year-round access and not have breakaway barriers or gates.

Public Works Maintenance Recommendation

The proposed road that would connect Bowers Drive with the new Riverstone South Development is an important and vital roadway connection for Public Safety. Public Works Staff and equipment are a vital part of every large-scale emergency response effort. Therefore, the Public Works Department recommends the access road be built to a minimum width of 24 feet with B Style Curb and designed to 9 Ton Specifications. This road needs to be designed to handle large emergency equipment, such as Fire Engines, Public Works Vehicles and Electrical Line Repair Vehicles. As also mentioned by Police and Fire, this is a long cul-de-sac road with only a single access point.

PREVIOUS REVIEW
Sketch Plan Review

I acknowledge that I have read the information above before responding to this survey.*

☑ Yes

Purpose of Contact Information

The City is requesting that names and addresses are being captured as part of the public record. To ensure that those directly and most impacted by the policy decision are recorded and not unduly influenced by those not directly or most impacted by the decision, address verification is important.

Name*

Sam Sjostrom

Email Address

[redacted]

Address*

14623 Bowers Dr Nw

City

Ramsey

State

MN

Zip Code

55303

Phone Number

[redacted]

For purposes of Public Safety Response, do you support a second access to Bowers Drive?*

- ( ) Yes, I support a full public road connection
- ( ) Yes, but only if it is used by Public Safety (and Public Works Maintenance)
- (•) No, I do not support a second connection to Bowers Drive
- ( ) Other (please describe below)

Disclaimer

For purposes of this survey, a non-response will be considered as a non-objection to the connection.

Please comment and explain your response above.

PREVIOUS REVIEW
Sketch Plan Review

Print

Bowers Drive Connection to Riverstone South - Submission #2154

Date Submitted: 8/14/2020

Riverstone South Background

Riverstone South Background

By filling out this form, you acknowledge that you have reviewed the materials on this link first. The City of Ramsey is recommending that a connection be made between Bowers Drive and the future Riverstone South Development.

Fire Department Recommendation

The proposed road that would connect Bowers Drive with the new Riverstone South Development is an important and vital roadway connection for Public Safety. The roadway connection will give Public Safety a second access point to the long Bowers Drive dead-end in the event of an emergency. If Bowers Drive were to be blocked for some reason, this road would allow Public Safety a second access to the Bowers Drive Neighborhood. The road needs to be built to the standards to support the weight of a Fire Vehicle and Equipment and not designed as a standard pedestrian trail. Bowers Drive is the longest dead-end cul-de-sac we have in the City. Bowers Drive does not have any fire hydrants to assist in emergencies.

Police Department Recommendation

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Public Works Maintenance Recommendation

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PREVIOUS REVIEW
Sketch Plan Review

I acknowledge that I have read the information above before responding to this survey.*

☑ Yes

Purpose of Contact Information

The City is requesting that names and addresses are being captured as part of the public record. To ensure that those directly and most impacted by the policy decision are recorded and not unduly influenced by those not directly or most impacted by the decision, address verification is important.

Name*

Gene. Waldowski

Email Address

[redacted]

Address*

14743 Bowers Dr Nw

City

Ramsey

State

Mn

Zip Code

55303

Phone Number

[redacted]

For purposes of Public Safety Response, do you support a second access to Bowers Drive?*

- (●) Yes, I support a full public road connection
- ( ) Yes, but only if it is used by Public Safety (and Public Works Maintenance)
- ( ) No, I do not support a second connection to Bowers Drive
- ( ) Other (please describe below)

Disclaimer

For purposes of this survey, a non-response will be considered as a non-objection to the connection.

Please comment and explain your response above.

PREVIOUS REVIEW
Sketch Plan Review

Print

Bowers Drive Connection to Riverstone South - Submission #2155

Date Submitted: 8/14/2020

Riverstone South Background

Riverstone South Background

By filling out this form, you acknowledge that you have reviewed the materials on this link first. The City of Ramsey is recommending that a connection be made between Bowers Drive and the future Riverstone South Development.

Fire Department Recommendation

The proposed road that would connect Bowers Drive with the new Riverstone South Development is an important and vital roadway connection for Public Safety. The roadway connection will give Public Safety a second access point to the long Bowers Drive dead-end in the event of an emergency. If Bowers Drive were to be blocked for some reason, this road would allow Public Safety a second access to the Bowers Drive Neighborhood. The road needs to be built to the standards to support the weight of a Fire Vehicle and Equipment and not designed as a standard pedestrian trail. Bowers Drive is the longest dead-end cul-de-sac we have in the City. Bowers Drive does not have any fire hydrants to assist in emergencies.

Police Department Recommendation

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Public Works Maintenance Recommendation

The proposed road that would connect Bowers Drive with the new Riverstone South Development is an important and vital roadway connection for Public Safety. Public Works Staff and equipment are a vital part of every large-scale emergency response effort. Therefore, the Public Works Department recommends the access road be built to a minimum width of 24 feet with B Style Curb and designed to 9 Ton Specifications. This road needs to be designed to handle large emergency equipment, such as Fire Engines, Public Works Vehicles and Electrical Line Repair Vehicles. As also mentioned by Police and Fire, this is a long cul-de-sac road with only a single access point.

PREVIOUS REVIEW
Sketch Plan Review

I acknowledge that I have read the information above before responding to this survey.*

☑ Yes

Purpose of Contact Information

The City is requesting that names and addresses are being captured as part of the public record. To ensure that those directly and most impacted by the policy decision are recorded and not unduly influenced by those not directly or most impacted by the decision, address verification is important.

Name*

Shelli Sjostrom

Email Address

Address*

14623 Bowers Dr NW

City

Ramsey

State

MN

Zip Code

55303

Phone Number

For purposes of Public Safety Response, do you support a second access to Bowers Drive?*

- ( ) Yes, I support a full public road connection
- ( ) Yes, but only if it is used by Public Safety (and Public Works Maintenance)
- (•) No, I do not support a second connection to Bowers Drive
- ( ) Other (please describe below)

Disclaimer

For purposes of this survey, a non-response will be considered as a non-objection to the connection.

Please comment and explain your response above.

PREVIOUS REVIEW
Sketch Plan Review

Print

Bowers Drive Connection to Riverstone South - Submission #2156

Date Submitted: 8/15/2020

Riverstone South Background

Riverstone South Background

By filling out this form, you acknowledge that you have reviewed the materials on this link first. The City of Ramsey is recommending that a connection be made between Bowers Drive and the future Riverstone South Development.

Fire Department Recommendation

The proposed road that would connect Bowers Drive with the new Riverstone South Development is an important and vital roadway connection for Public Safety. The roadway connection will give Public Safety a second access point to the long Bowers Drive dead-end in the event of an emergency. If Bowers Drive were to be blocked for some reason, this road would allow Public Safety a second access to the Bowers Drive Neighborhood. The road needs to be built to the standards to support the weight of a Fire Vehicle and Equipment and not designed as a standard pedestrian trail. Bowers Drive is the longest dead-end cul-de-sac we have in the City. Bowers Drive does not have any fire hydrants to assist in emergencies.

Police Department Recommendation

The Police Department is in support of the proposed roadway which would connect the existing cul-de-sac of Bowers Drive that has existed for a number of years to the new Riverstone South Development. Due to the nature and location of this proposed road, the Police Department believes the positives to public safety outweigh any possible negatives which could result from the change. We believe having a second access would increase our ability to quickly render aid to the Ramsey Residents who live on this existing street, who we serve and protect. As the specifics of this road are discussed further, the Police Department would request it be constructed for year-round access and not have breakaway barriers or gates.

Public Works Maintenance Recommendation

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PREVIOUS REVIEW
Sketch Plan Review

I acknowledge that I have read the information above before responding to this survey.*

☑ Yes

Purpose of Contact Information

The City is requesting that names and addresses are being captured as part of the public record. To ensure that those directly and most impacted by the policy decision are recorded and not unduly influenced by those not directly or most impacted by the decision, address verification is important.

Name*

Richard Sandeen

Email Address

[redacted]

Address*

14826 Bowers Dr NW

City

Ramsey

State

MN

Zip Code

55303

Phone Number

[redacted]

For purposes of Public Safety Response, do you support a second access to Bowers Drive?*

- ( ) Yes, I support a full public road connection
- (•) Yes, but only if it is used by Public Safety (and Public Works Maintenance)
- ( ) No, I do not support a second connection to Bowers Drive
- ( ) Other (please describe below)

Disclaimer

For purposes of this survey, a non-response will be considered as a non-objection to the connection.

Please comment and explain your response above.

Perhaps a little off topic but I would like to see the road connection between Bowers and Riverdale Dr. be moved another 30 or 40 feet to the South locating it completely away from the end of my driveway.

PREVIOUS REVIEW
Sketch Plan Review

Print

Bowers Drive Connection to Riverstone South - Submission #2158

Date Submitted: 8/15/2020

Riverstone South Background

Riverstone South Background

By filling out this form, you acknowledge that you have reviewed the materials on this link first. The City of Ramsey is recommending that a connection be made between Bowers Drive and the future Riverstone South Development.

Fire Department Recommendation

The proposed road that would connect Bowers Drive with the new Riverstone South Development is an important and vital roadway connection for Public Safety. The roadway connection will give Public Safety a second access point to the long Bowers Drive dead-end in the event of an emergency. If Bowers Drive were to be blocked for some reason, this road would allow Public Safety a second access to the Bowers Drive Neighborhood. The road needs to be built to the standards to support the weight of a Fire Vehicle and Equipment and not designed as a standard pedestrian trail. Bowers Drive is the longest dead-end cul-de-sac we have in the City. Bowers Drive does not have any fire hydrants to assist in emergencies.

Police Department Recommendation

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Public Works Maintenance Recommendation

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PREVIOUS REVIEW
Sketch Plan Review

I acknowledge that I have read the information above before responding to this survey.*

☑ Yes

Purpose of Contact Information

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Name*

Bryan Olson

Email Address

[redacted]

Address*

14513 Bowers Drive

City

Ramsey

State

MN

Zip Code

55303

Phone Number

[redacted]

For purposes of Public Safety Response, do you support a second access to Bowers Drive?*

- (●) Yes, I support a full public road connection
- ( ) Yes, but only if it is used by Public Safety (and Public Works Maintenance)
- ( ) No, I do not support a second connection to Bowers Drive
- ( ) Other (please describe below)

Disclaimer

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Please comment and explain your response above.

There should be trees planted on either side of this road. Those residents were not told by builders that there would be a road. They should plant spruce to provide year round privacy. Hopefully the first tier of new home drivers will not cut thru on Bowers to get to Hwy 10.

PREVIOUS REVIEW
Sketch Plan Review

Print

Bowers Drive Connection to Riverstone South - Submission #2159

Date Submitted: 8/15/2020

Riverstone South Background

Riverstone South Background

By filling out this form, you acknowledge that you have reviewed the materials on this link first. The City of Ramsey is recommending that a connection be made between Bowers Drive and the future Riverstone South Development.

Fire Department Recommendation

The proposed road that would connect Bowers Drive with the new Riverstone South Development is an important and vital roadway connection for Public Safety. The roadway connection will give Public Safety a second access point to the long Bowers Drive dead-end in the event of an emergency. If Bowers Drive were to be blocked for some reason, this road would allow Public Safety a second access to the Bowers Drive Neighborhood. The road needs to be built to the standards to support the weight of a Fire Vehicle and Equipment and not designed as a standard pedestrian trail. Bowers Drive is the longest dead-end cul-de-sac we have in the City. Bowers Drive does not have any fire hydrants to assist in emergencies.

Police Department Recommendation

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Public Works Maintenance Recommendation

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PREVIOUS REVIEW
Sketch Plan Review

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Purpose of Contact Information

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Name*

Richard

Email Address

Sandeen

Address*

14826 Bowers Dr NW

City

Ramsey

State

MN

Zip Code

55303

Phone Number

[redacted]

For purposes of Public Safety Response, do you support a second access to Bowers Drive?*

- ( ) Yes, I support a full public road connection
- (•) Yes, but only if it is used by Public Safety (and Public Works Maintenance)
- ( ) No, I do not support a second connection to Bowers Drive
- ( ) Other (please describe below)

Disclaimer

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Please comment and explain your response above.

PREVIOUS REVIEW
Sketch Plan Review

Print

Bowers Drive Connection to Riverstone South - Submission #2160

Date Submitted: 8/15/2020

Riverstone South Background

Riverstone South Background

By filling out this form, you acknowledge that you have reviewed the materials on this link first. The City of Ramsey is recommending that a connection be made between Bowers Drive and the future Riverstone South Development.

Fire Department Recommendation

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Police Department Recommendation

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Public Works Maintenance Recommendation

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PREVIOUS REVIEW
Sketch Plan Review

I acknowledge that I have read the information above before responding to this survey.*

☑ Yes

Purpose of Contact Information

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Name*

John LeTourneau

Email Address

[redacted]

Address*

14607 NW Bowers Drive

City

Ramsey

State

Minnesota

Zip Code

55303

Phone Number

[redacted]

For purposes of Public Safety Response, do you support a second access to Bowers Drive?*

- (●) Yes, I support a full public road connection
- ( ) Yes, but only if it is used by Public Safety (and Public Works Maintenance)
- ( ) No, I do not support a second connection to Bowers Drive
- ( ) Other (please describe below)

Disclaimer

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Please comment and explain your response above.

PREVIOUS REVIEW
Sketch Plan Review

Print

Bowers Drive Connection to Riverstone South - Submission #2161

Date Submitted: 8/16/2020

Riverstone South Background

Riverstone South Background

By filling out this form, you acknowledge that you have reviewed the materials on this link first. The City of Ramsey is recommending that a connection be made between Bowers Drive and the future Riverstone South Development.

Fire Department Recommendation

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Police Department Recommendation

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Public Works Maintenance Recommendation

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PREVIOUS REVIEW
Sketch Plan Review

I acknowledge that I have read the information above before responding to this survey.*

☑ Yes

Purpose of Contact Information

The City is requesting that names and addresses are being captured as part of the public record. To ensure that those directly and most impacted by the policy decision are recorded and not unduly influenced by those not directly or most impacted by the decision, address verification is important.

Name*

Jim Weidenbach

Email Address

[redacted]

Address*

14230 bowers drive nw, anoka mn 55303

City

ramsey

State

mn

Zip Code

55303

Phone Number

[redacted]

For purposes of Public Safety Response, do you support a second access to Bowers Drive?*

- ( ) Yes, I support a full public road connection
- ( ) Yes, but only if it is used by Public Safety (and Public Works Maintenance)
- (•) No, I do not support a second connection to Bowers Drive
- ( ) Other (please describe below)

Disclaimer

For purposes of this survey, a non-response will be considered as a non-objection to the connection.

Please comment and explain your response above.

Too much traffic on the road already.

PREVIOUS REVIEW
Sketch Plan Review

Print

Bowers Drive Connection to Riverstone South - Submission #2162

Date Submitted: 8/16/2020

Riverstone South Background

Riverstone South Background

By filling out this form, you acknowledge that you have reviewed the materials on this link first. The City of Ramsey is recommending that a connection be made between Bowers Drive and the future Riverstone South Development.

Fire Department Recommendation

The proposed road that would connect Bowers Drive with the new Riverstone South Development is an important and vital roadway connection for Public Safety. The roadway connection will give Public Safety a second access point to the long Bowers Drive dead-end in the event of an emergency. If Bowers Drive were to be blocked for some reason, this road would allow Public Safety a second access to the Bowers Drive Neighborhood. The road needs to be built to the standards to support the weight of a Fire Vehicle and Equipment and not designed as a standard pedestrian trail. Bowers Drive is the longest dead-end cul-de-sac we have in the City. Bowers Drive does not have any fire hydrants to assist in emergencies.

Police Department Recommendation

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Public Works Maintenance Recommendation

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PREVIOUS REVIEW
Sketch Plan Review

I acknowledge that I have read the information above before responding to this survey.*

☑ Yes

Purpose of Contact Information

The City is requesting that names and addresses are being captured as part of the public record. To ensure that those directly and most impacted by the policy decision are recorded and not unduly influenced by those not directly or most impacted by the decision, address verification is important.

Name*

Steven Perkins

Email Address

[redacted]

Address*

14650 Bowers DR NW

City

Ramsey

State

MN

Zip Code

55303

Phone Number

[redacted]

For purposes of Public Safety Response, do you support a second access to Bowers Drive?*

- ( ) Yes, I support a full public road connection
- ( ) Yes, but only if it is used by Public Safety (and Public Works Maintenance)
- (•) No, I do not support a second connection to Bowers Drive
- ( ) Other (please describe below)

Disclaimer

For purposes of this survey, a non-response will be considered as a non-objection to the connection.

Please comment and explain your response above.

Bowers DR NW is already a very busy street for both pedestrians and vehicles. There are no sidewalks and the current flow of traffic already presents a huge danger to residents walking, etc. Connecting Bowers DR to the new development by road and/or walking trail will increase traffic and create a more dangerous situation for people on feet and bikes.

PREVIOUS REVIEW
Sketch Plan Review

Print

Bowers Drive Connection to Riverstone South - Submission #2163

Date Submitted: 8/16/2020

Riverstone South Background

Riverstone South Background

By filling out this form, you acknowledge that you have reviewed the materials on this link first. The City of Ramsey is recommending that a connection be made between Bowers Drive and the future Riverstone South Development.

Fire Department Recommendation

The proposed road that would connect Bowers Drive with the new Riverstone South Development is an important and vital roadway connection for Public Safety. The roadway connection will give Public Safety a second access point to the long Bowers Drive dead-end in the event of an emergency. If Bowers Drive were to be blocked for some reason, this road would allow Public Safety a second access to the Bowers Drive Neighborhood. The road needs to be built to the standards to support the weight of a Fire Vehicle and Equipment and not designed as a standard pedestrian trail. Bowers Drive is the longest dead-end cul-de-sac we have in the City. Bowers Drive does not have any fire hydrants to assist in emergencies.

Police Department Recommendation

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Public Works Maintenance Recommendation

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PREVIOUS REVIEW
Sketch Plan Review

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☑ Yes

Purpose of Contact Information

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Name*

Tony Durkin

Email Address

[redacted]

Address*

14409 Bowers drive

City

Ramsey

State

Mn

Zip Code

55303

Phone Number

[redacted]

For purposes of Public Safety Response, do you support a second access to Bowers Drive?*

- ( ) Yes, I support a full public road connection
- (•) Yes, but only if it is used by Public Safety (and Public Works Maintenance)
- ( ) No, I do not support a second connection to Bowers Drive
- ( ) Other (please describe below)

Disclaimer

For purposes of this survey, a non-response will be considered as a non-objection to the connection.

Please comment and explain your response above.

I support public safety and a fire hydrant on the street, I do not support streetlights. My concern is that if a full access road is constructed that it will lead to more traffic which will lead to more wear and tear on the road which will lead to the road re-being redone which will include gutters and streetlights which will lead to a special assessment to my property taxes. I would like to see the signs of emergency vehicles only added to the access road.

PREVIOUS REVIEW
Sketch Plan Review

Print

Bowers Drive Connection to Riverstone South - Submission #2165

Date Submitted: 8/16/2020

Riverstone South Background

Riverstone South Background

By filling out this form, you acknowledge that you have reviewed the materials on this link first. The City of Ramsey is recommending that a connection be made between Bowers Drive and the future Riverstone South Development.

Fire Department Recommendation

The proposed road that would connect Bowers Drive with the new Riverstone South Development is an important and vital roadway connection for Public Safety. The roadway connection will give Public Safety a second access point to the long Bowers Drive dead-end in the event of an emergency. If Bowers Drive were to be blocked for some reason, this road would allow Public Safety a second access to the Bowers Drive Neighborhood. The road needs to be built to the standards to support the weight of a Fire Vehicle and Equipment and not designed as a standard pedestrian trail. Bowers Drive is the longest dead-end cul-de-sac we have in the City. Bowers Drive does not have any fire hydrants to assist in emergencies.

Police Department Recommendation

The Police Department is in support of the proposed roadway which would connect the existing cul-de-sac of Bowers Drive that has existed for a number of years to the new Riverstone South Development. Due to the nature and location of this proposed road, the Police Department believes the positives to public safety outweigh any possible negatives which could result from the change. We believe having a second access would increase our ability to quickly render aid to the Ramsey Residents who live on this existing street, who we serve and protect. As the specifics of this road are discussed further, the Police Department would request it be constructed for year-round access and not have breakaway barriers or gates.

Public Works Maintenance Recommendation

The proposed road that would connect Bowers Drive with the new Riverstone South Development is an important and vital roadway connection for Public Safety. Public Works Staff and equipment are a vital part of every large-scale emergency response effort. Therefore, the Public Works Department recommends the access road be built to a minimum width of 24 feet with B Style Curb and designed to 9 Ton Specifications. This road needs to be designed to handle large emergency equipment, such as Fire Engines, Public Works Vehicles and Electrical Line Repair Vehicles. As also mentioned by Police and Fire, this is a long cul-de-sac road with only a single access point.

PREVIOUS REVIEW
Sketch Plan Review

I acknowledge that I have read the information above before responding to this survey.*

☑ Yes

Purpose of Contact Information

The City is requesting that names and addresses are being captured as part of the public record. To ensure that those directly and most impacted by the policy decision are recorded and not unduly influenced by those not directly or most impacted by the decision, address verification is important.

Name*

Kelly Hudick

Email Address

[redacted]

Address*

14420 Bowers Drive NW

City

Ramsey

State

MN

Zip Code

55303

Phone Number

[redacted]

For purposes of Public Safety Response, do you support a second access to Bowers Drive?*

- ( ) Yes, I support a full public road connection
- ( ) Yes, but only if it is used by Public Safety (and Public Works Maintenance)
- (•) No, I do not support a second connection to Bowers Drive
- ( ) Other (please describe below)

Disclaimer

For purposes of this survey, a non-response will be considered as a non-objection to the connection.

Please comment and explain your response above.

PREVIOUS REVIEW
Sketch Plan Review

Print

Bowers Drive Connection to Riverstone South - Submission #2166

Date Submitted: 8/16/2020

Riverstone South Background

Riverstone South Background

By filling out this form, you acknowledge that you have reviewed the materials on this link first. The City of Ramsey is recommending that a connection be made between Bowers Drive and the future Riverstone South Development.

Fire Department Recommendation

The proposed road that would connect Bowers Drive with the new Riverstone South Development is an important and vital roadway connection for Public Safety. The roadway connection will give Public Safety a second access point to the long Bowers Drive dead-end in the event of an emergency. If Bowers Drive were to be blocked for some reason, this road would allow Public Safety a second access to the Bowers Drive Neighborhood. The road needs to be built to the standards to support the weight of a Fire Vehicle and Equipment and not designed as a standard pedestrian trail. Bowers Drive is the longest dead-end cul-de-sac we have in the City. Bowers Drive does not have any fire hydrants to assist in emergencies.

Police Department Recommendation

The Police Department is in support of the proposed roadway which would connect the existing cul-de-sac of Bowers Drive that has existed for a number of years to the new Riverstone South Development. Due to the nature and location of this proposed road, the Police Department believes the positives to public safety outweigh any possible negatives which could result from the change. We believe having a second access would increase our ability to quickly render aid to the Ramsey Residents who live on this existing street, who we serve and protect. As the specifics of this road are discussed further, the Police Department would request it be constructed for year-round access and not have breakaway barriers or gates.

Public Works Maintenance Recommendation

The proposed road that would connect Bowers Drive with the new Riverstone South Development is an important and vital roadway connection for Public Safety. Public Works Staff and equipment are a vital part of every large-scale emergency response effort. Therefore, the Public Works Department recommends the access road be built to a minimum width of 24 feet with B Style Curb and designed to 9 Ton Specifications. This road needs to be designed to handle large emergency equipment, such as Fire Engines, Public Works Vehicles and Electrical Line Repair Vehicles. As also mentioned by Police and Fire, this is a long cul-de-sac road with only a single access point.

PREVIOUS REVIEW
Sketch Plan Review

I acknowledge that I have read the information above before responding to this survey.*

☑ Yes

Purpose of Contact Information

The City is requesting that names and addresses are being captured as part of the public record. To ensure that those directly and most impacted by the policy decision are recorded and not unduly influenced by those not directly or most impacted by the decision, address verification is important.

Name*

Jamey McPheeters

Email Address

[redacted]

Address*

14420 Bowers Dr NW

City

Ramsey

State

MN

Zip Code

55303

Phone Number

For purposes of Public Safety Response, do you support a second access to Bowers Drive?*

- ( ) Yes, I support a full public road connection
- ( ) Yes, but only if it is used by Public Safety (and Public Works Maintenance)
- (•) No, I do not support a second connection to Bowers Drive
- ( ) Other (please describe below)

Disclaimer

For purposes of this survey, a non-response will be considered as a non-objection to the connection.

Please comment and explain your response above.

PREVIOUS REVIEW
Sketch Plan Review

Print

Bowers Drive Connection to Riverstone South - Submission #2167

Date Submitted: 8/17/2020

Riverstone South Background

Riverstone South Background

By filling out this form, you acknowledge that you have reviewed the materials on this link first. The City of Ramsey is recommending that a connection be made between Bowers Drive and the future Riverstone South Development.

Fire Department Recommendation

The proposed road that would connect Bowers Drive with the new Riverstone South Development is an important and vital roadway connection for Public Safety. The roadway connection will give Public Safety a second access point to the long Bowers Drive dead-end in the event of an emergency. If Bowers Drive were to be blocked for some reason, this road would allow Public Safety a second access to the Bowers Drive Neighborhood. The road needs to be built to the standards to support the weight of a Fire Vehicle and Equipment and not designed as a standard pedestrian trail. Bowers Drive is the longest dead-end cul-de-sac we have in the City. Bowers Drive does not have any fire hydrants to assist in emergencies.

Police Department Recommendation

The Police Department is in support of the proposed roadway which would connect the existing cul-de-sac of Bowers Drive that has existed for a number of years to the new Riverstone South Development. Due to the nature and location of this proposed road, the Police Department believes the positives to public safety outweigh any possible negatives which could result from the change. We believe having a second access would increase our ability to quickly render aid to the Ramsey Residents who live on this existing street, who we serve and protect. As the specifics of this road are discussed further, the Police Department would request it be constructed for year-round access and not have breakaway barriers or gates.

Public Works Maintenance Recommendation

The proposed road that would connect Bowers Drive with the new Riverstone South Development is an important and vital roadway connection for Public Safety. Public Works Staff and equipment are a vital part of every large-scale emergency response effort. Therefore, the Public Works Department recommends the access road be built to a minimum width of 24 feet with B Style Curb and designed to 9 Ton Specifications. This road needs to be designed to handle large emergency equipment, such as Fire Engines, Public Works Vehicles and Electrical Line Repair Vehicles. As also mentioned by Police and Fire, this is a long cul-de-sac road with only a single access point.

PREVIOUS REVIEW
Sketch Plan Review

I acknowledge that I have read the information above before responding to this survey.*

☑ Yes

Purpose of Contact Information

The City is requesting that names and addresses are being captured as part of the public record. To ensure that those directly and most impacted by the policy decision are recorded and not unduly influenced by those not directly or most impacted by the decision, address verification is important.

Name*

Katie Jensen

Email Address

[redacted]

Address*

14331 Bowers Dr NW

City

Ramsey

State

MN

Zip Code

55303

Phone Number

[redacted]

For purposes of Public Safety Response, do you support a second access to Bowers Drive?*

- (●) Yes, I support a full public road connection
- ( ) Yes, but only if it is used by Public Safety (and Public Works Maintenance)
- ( ) No, I do not support a second connection to Bowers Drive
- ( ) Other (please describe below)

Disclaimer

For purposes of this survey, a non-response will be considered as a non-objection to the connection.

Please comment and explain your response above.

PREVIOUS REVIEW
Sketch Plan Review

Print

Bowers Drive Connection to Riverstone South - Submission #2168

Date Submitted: 8/17/2020

Riverstone South Background

Riverstone South Background

By filling out this form, you acknowledge that you have reviewed the materials on this link first. The City of Ramsey is recommending that a connection be made between Bowers Drive and the future Riverstone South Development.

Fire Department Recommendation

The proposed road that would connect Bowers Drive with the new Riverstone South Development is an important and vital roadway connection for Public Safety. The roadway connection will give Public Safety a second access point to the long Bowers Drive dead-end in the event of an emergency. If Bowers Drive were to be blocked for some reason, this road would allow Public Safety a second access to the Bowers Drive Neighborhood. The road needs to be built to the standards to support the weight of a Fire Vehicle and Equipment and not designed as a standard pedestrian trail. Bowers Drive is the longest dead-end cul-de-sac we have in the City. Bowers Drive does not have any fire hydrants to assist in emergencies.

Police Department Recommendation

The Police Department is in support of the proposed roadway which would connect the existing cul-de-sac of Bowers Drive that has existed for a number of years to the new Riverstone South Development. Due to the nature and location of this proposed road, the Police Department believes the positives to public safety outweigh any possible negatives which could result from the change. We believe having a second access would increase our ability to quickly render aid to the Ramsey Residents who live on this existing street, who we serve and protect. As the specifics of this road are discussed further, the Police Department would request it be constructed for year-round access and not have breakaway barriers or gates.

Public Works Maintenance Recommendation

The proposed road that would connect Bowers Drive with the new Riverstone South Development is an important and vital roadway connection for Public Safety. Public Works Staff and equipment are a vital part of every large-scale emergency response effort. Therefore, the Public Works Department recommends the access road be built to a minimum width of 24 feet with B Style Curb and designed to 9 Ton Specifications. This road needs to be designed to handle large emergency equipment, such as Fire Engines, Public Works Vehicles and Electrical Line Repair Vehicles. As also mentioned by Police and Fire, this is a long cul-de-sac road with only a single access point.

PREVIOUS REVIEW
Sketch Plan Review

I acknowledge that I have read the information above before responding to this survey.*

☑ Yes

Purpose of Contact Information

The City is requesting that names and addresses are being captured as part of the public record. To ensure that those directly and most impacted by the policy decision are recorded and not unduly influenced by those not directly or most impacted by the decision, address verification is important.

Name*

Stephen J Nash

Email Address

[redacted]

Address*

14500 Bowers Dr NW

City

ANOKA

State

MN

Zip Code

55303

Phone Number

[redacted]

For purposes of Public Safety Response, do you support a second access to Bowers Drive?*

- (●) Yes, I support a full public road connection
- ( ) Yes, but only if it is used by Public Safety (and Public Works Maintenance)
- ( ) No, I do not support a second connection to Bowers Drive
- ( ) Other (please describe below)

Disclaimer

For purposes of this survey, a non-response will be considered as a non-objection to the connection.

Please comment and explain your response above.

First, we need a second access for Bowers Drive. Second, I believe that the access in question should be a public road which will help disperse traffic on Bowers Dr.

PREVIOUS REVIEW
Sketch Plan Review

Print

Bowers Drive Connection to Riverstone South - Submission #2169

Date Submitted: 8/17/2020

Riverstone South Background

Riverstone South Background

By filling out this form, you acknowledge that you have reviewed the materials on this link first. The City of Ramsey is recommending that a connection be made between Bowers Drive and the future Riverstone South Development.

Fire Department Recommendation

The proposed road that would connect Bowers Drive with the new Riverstone South Development is an important and vital roadway connection for Public Safety. The roadway connection will give Public Safety a second access point to the long Bowers Drive dead-end in the event of an emergency. If Bowers Drive were to be blocked for some reason, this road would allow Public Safety a second access to the Bowers Drive Neighborhood. The road needs to be built to the standards to support the weight of a Fire Vehicle and Equipment and not designed as a standard pedestrian trail. Bowers Drive is the longest dead-end cul-de-sac we have in the City. Bowers Drive does not have any fire hydrants to assist in emergencies.

Police Department Recommendation

The Police Department is in support of the proposed roadway which would connect the existing cul-de-sac of Bowers Drive that has existed for a number of years to the new Riverstone South Development. Due to the nature and location of this proposed road, the Police Department believes the positives to public safety outweigh any possible negatives which could result from the change. We believe having a second access would increase our ability to quickly render aid to the Ramsey Residents who live on this existing street, who we serve and protect. As the specifics of this road are discussed further, the Police Department would request it be constructed for year-round access and not have breakaway barriers or gates.

Public Works Maintenance Recommendation

The proposed road that would connect Bowers Drive with the new Riverstone South Development is an important and vital roadway connection for Public Safety. Public Works Staff and equipment are a vital part of every large-scale emergency response effort. Therefore, the Public Works Department recommends the access road be built to a minimum width of 24 feet with B Style Curb and designed to 9 Ton Specifications. This road needs to be designed to handle large emergency equipment, such as Fire Engines, Public Works Vehicles and Electrical Line Repair Vehicles. As also mentioned by Police and Fire, this is a long cul-de-sac road with only a single access point.

PREVIOUS REVIEW
Sketch Plan Review

I acknowledge that I have read the information above before responding to this survey.*

☑ Yes

Purpose of Contact Information

The City is requesting that names and addresses are being captured as part of the public record. To ensure that those directly and most impacted by the policy decision are recorded and not unduly influenced by those not directly or most impacted by the decision, address verification is important.

Name*

Ralph R Nissen

Email Address

[redacted]

Address*

14710 Bowers Drive NW

City

Ramsey

State

MN

Zip Code

55303

Phone Number

[redacted]

For purposes of Public Safety Response, do you support a second access to Bowers Drive?*

- ( ) Yes, I support a full public road connection
- ( ) Yes, but only if it is used by Public Safety (and Public Works Maintenance)
- (•) No, I do not support a second connection to Bowers Drive
- ( ) Other (please describe below)

Disclaimer

For purposes of this survey, a non-response will be considered as a non-objection to the connection.

Please comment and explain your response above.

PREVIOUS REVIEW
Sketch Plan Review

Print

Bowers Drive Connection to Riverstone South - Submission #2170

Date Submitted: 8/17/2020

Riverstone South Background

Riverstone South Background

By filling out this form, you acknowledge that you have reviewed the materials on this link first. The City of Ramsey is recommending that a connection be made between Bowers Drive and the future Riverstone South Development.

Fire Department Recommendation

The proposed road that would connect Bowers Drive with the new Riverstone South Development is an important and vital roadway connection for Public Safety. The roadway connection will give Public Safety a second access point to the long Bowers Drive dead-end in the event of an emergency. If Bowers Drive were to be blocked for some reason, this road would allow Public Safety a second access to the Bowers Drive Neighborhood. The road needs to be built to the standards to support the weight of a Fire Vehicle and Equipment and not designed as a standard pedestrian trail. Bowers Drive is the longest dead-end cul-de-sac we have in the City. Bowers Drive does not have any fire hydrants to assist in emergencies.

Police Department Recommendation

The Police Department is in support of the proposed roadway which would connect the existing cul-de-sac of Bowers Drive that has existed for a number of years to the new Riverstone South Development. Due to the nature and location of this proposed road, the Police Department believes the positives to public safety outweigh any possible negatives which could result from the change. We believe having a second access would increase our ability to quickly render aid to the Ramsey Residents who live on this existing street, who we serve and protect. As the specifics of this road are discussed further, the Police Department would request it be constructed for year-round access and not have breakaway barriers or gates.

Public Works Maintenance Recommendation

The proposed road that would connect Bowers Drive with the new Riverstone South Development is an important and vital roadway connection for Public Safety. Public Works Staff and equipment are a vital part of every large-scale emergency response effort. Therefore, the Public Works Department recommends the access road be built to a minimum width of 24 feet with B Style Curb and designed to 9 Ton Specifications. This road needs to be designed to handle large emergency equipment, such as Fire Engines, Public Works Vehicles and Electrical Line Repair Vehicles. As also mentioned by Police and Fire, this is a long cul-de-sac road with only a single access point.

PREVIOUS REVIEW
Sketch Plan Review

I acknowledge that I have read the information above before responding to this survey.*

☑ Yes

Purpose of Contact Information

The City is requesting that names and addresses are being captured as part of the public record. To ensure that those directly and most impacted by the policy decision are recorded and not unduly influenced by those not directly or most impacted by the decision, address verification is important.

Name*

Luther Olson

Email Address

[redacted]

Address*

14840 Bowers Dr NW

City

Anoka

State

MN

Zip Code

55303

Phone Number

[redacted]

For purposes of Public Safety Response, do you support a second access to Bowers Drive?*

- (●) Yes, I support a full public road connection
- ( ) Yes, but only if it is used by Public Safety (and Public Works Maintenance)
- ( ) No, I do not support a second connection to Bowers Drive
- ( ) Other (please describe below)

Disclaimer

For purposes of this survey, a non-response will be considered as a non-objection to the connection.

Please comment and explain your response above.

PREVIOUS REVIEW
Sketch Plan Review

Print

Bowers Drive Connection to Riverstone South - Submission #2171

Date Submitted: 8/18/2020

Riverstone South Background

Riverstone South Background

By filling out this form, you acknowledge that you have reviewed the materials on this link first. The City of Ramsey is recommending that a connection be made between Bowers Drive and the future Riverstone South Development.

Fire Department Recommendation

The proposed road that would connect Bowers Drive with the new Riverstone South Development is an important and vital roadway connection for Public Safety. The roadway connection will give Public Safety a second access point to the long Bowers Drive dead-end in the event of an emergency. If Bowers Drive were to be blocked for some reason, this road would allow Public Safety a second access to the Bowers Drive Neighborhood. The road needs to be built to the standards to support the weight of a Fire Vehicle and Equipment and not designed as a standard pedestrian trail. Bowers Drive is the longest dead-end cul-de-sac we have in the City. Bowers Drive does not have any fire hydrants to assist in emergencies.

Police Department Recommendation

The Police Department is in support of the proposed roadway which would connect the existing cul-de-sac of Bowers Drive that has existed for a number of years to the new Riverstone South Development. Due to the nature and location of this proposed road, the Police Department believes the positives to public safety outweigh any possible negatives which could result from the change. We believe having a second access would increase our ability to quickly render aid to the Ramsey Residents who live on this existing street, who we serve and protect. As the specifics of this road are discussed further, the Police Department would request it be constructed for year-round access and not have breakaway barriers or gates.

Public Works Maintenance Recommendation

The proposed road that would connect Bowers Drive with the new Riverstone South Development is an important and vital roadway connection for Public Safety. Public Works Staff and equipment are a vital part of every large-scale emergency response effort. Therefore, the Public Works Department recommends the access road be built to a minimum width of 24 feet with B Style Curb and designed to 9 Ton Specifications. This road needs to be designed to handle large emergency equipment, such as Fire Engines, Public Works Vehicles and Electrical Line Repair Vehicles. As also mentioned by Police and Fire, this is a long cul-de-sac road with only a single access point.

PREVIOUS REVIEW
Sketch Plan Review

I acknowledge that I have read the information above before responding to this survey.*

☑ Yes

Purpose of Contact Information

The City is requesting that names and addresses are being captured as part of the public record. To ensure that those directly and most impacted by the policy decision are recorded and not unduly influenced by those not directly or most impacted by the decision, address verification is important.

Name*

Ron Herst

Email Address

[redacted]

Address*

14670 Bowers Dr. NW

City

Ramsey

State

MN

Zip Code

55303

Phone Number

[redacted]

For purposes of Public Safety Response, do you support a second access to Bowers Drive?*

- ( ) Yes, I support a full public road connection
- ( ) Yes, but only if it is used by Public Safety (and Public Works Maintenance)
- (•) No, I do not support a second connection to Bowers Drive
- ( ) Other (please describe below)

Disclaimer

For purposes of this survey, a non-response will be considered as a non-objection to the connection.

Please comment and explain your response above.

We have lived on Bowers Drive for 30 years and have been perfectly happy with the level of "Safety" that we've had. We are strongly opposed to the proposal to have a second access to Bowers Drive from Riverstone South. In the 30 years that we've lived here, the road has been perfectly adequate from a safety perspective. The very last thing that we want is any additional access to this road. We actually believe that our road is safer from crime in that it is a "dead end" and there is no other way in or out. Why should residents of 242 homes have access to Bowers Drive??? WE DON'T WANT IT !!!

PREVIOUS REVIEW
Sketch Plan Review

Print

Bowers Drive Connection to Riverstone South - Submission #2172

Date Submitted: 8/18/2020

Riverstone South Background

Riverstone South Background

By filling out this form, you acknowledge that you have reviewed the materials on this link first. The City of Ramsey is recommending that a connection be made between Bowers Drive and the future Riverstone South Development.

Fire Department Recommendation

The proposed road that would connect Bowers Drive with the new Riverstone South Development is an important and vital roadway connection for Public Safety. The roadway connection will give Public Safety a second access point to the long Bowers Drive dead-end in the event of an emergency. If Bowers Drive were to be blocked for some reason, this road would allow Public Safety a second access to the Bowers Drive Neighborhood. The road needs to be built to the standards to support the weight of a Fire Vehicle and Equipment and not designed as a standard pedestrian trail. Bowers Drive is the longest dead-end cul-de-sac we have in the City. Bowers Drive does not have any fire hydrants to assist in emergencies.

Police Department Recommendation

The Police Department is in support of the proposed roadway which would connect the existing cul-de-sac of Bowers Drive that has existed for a number of years to the new Riverstone South Development. Due to the nature and location of this proposed road, the Police Department believes the positives to public safety outweigh any possible negatives which could result from the change. We believe having a second access would increase our ability to quickly render aid to the Ramsey Residents who live on this existing street, who we serve and protect. As the specifics of this road are discussed further, the Police Department would request it be constructed for year-round access and not have breakaway barriers or gates.

Public Works Maintenance Recommendation

The proposed road that would connect Bowers Drive with the new Riverstone South Development is an important and vital roadway connection for Public Safety. Public Works Staff and equipment are a vital part of every large-scale emergency response effort. Therefore, the Public Works Department recommends the access road be built to a minimum width of 24 feet with B Style Curb and designed to 9 Ton Specifications. This road needs to be designed to handle large emergency equipment, such as Fire Engines, Public Works Vehicles and Electrical Line Repair Vehicles. As also mentioned by Police and Fire, this is a long cul-de-sac road with only a single access point.

PREVIOUS REVIEW
Sketch Plan Review

I acknowledge that I have read the information above before responding to this survey.*

☑ Yes

Purpose of Contact Information

The City is requesting that names and addresses are being captured as part of the public record. To ensure that those directly and most impacted by the policy decision are recorded and not unduly influenced by those not directly or most impacted by the decision, address verification is important.

Name*

Gretchen Morris

Email Address

[redacted]

Address*

14820 Bowers Dr. NW

City

Ramsey

State

MN

Zip Code

55303

Phone Number

[redacted]

For purposes of Public Safety Response, do you support a second access to Bowers Drive?*

- ( ) Yes, I support a full public road connection
- ( ) Yes, but only if it is used by Public Safety (and Public Works Maintenance)
- (•) No, I do not support a second connection to Bowers Drive
- ( ) Other (please describe below)

Disclaimer

For purposes of this survey, a non-response will be considered as a non-objection to the connection.

Please comment and explain your response above.

Both john and I feel that to maintain the privacy and value of our neighborhood this access should not be allowed. There has never been any hard numbers put to incidents on our street that warrant the expenditure by the city or the change to our neighborhood. The new neighborhood is not being modeled after ours so therefore we feel it should be kept seperate.

PREVIOUS REVIEW
Sketch Plan Review

Print

Bowers Drive Connection to Riverstone South - Submission #2173

Date Submitted: 8/18/2020

Riverstone South Background

Riverstone South Background

By filling out this form, you acknowledge that you have reviewed the materials on this link first. The City of Ramsey is recommending that a connection be made between Bowers Drive and the future Riverstone South Development.

Fire Department Recommendation

The proposed road that would connect Bowers Drive with the new Riverstone South Development is an important and vital roadway connection for Public Safety. The roadway connection will give Public Safety a second access point to the long Bowers Drive dead-end in the event of an emergency. If Bowers Drive were to be blocked for some reason, this road would allow Public Safety a second access to the Bowers Drive Neighborhood. The road needs to be built to the standards to support the weight of a Fire Vehicle and Equipment and not designed as a standard pedestrian trail. Bowers Drive is the longest dead-end cul-de-sac we have in the City. Bowers Drive does not have any fire hydrants to assist in emergencies.

Police Department Recommendation

The Police Department is in support of the proposed roadway which would connect the existing cul-de-sac of Bowers Drive that has existed for a number of years to the new Riverstone South Development. Due to the nature and location of this proposed road, the Police Department believes the positives to public safety outweigh any possible negatives which could result from the change. We believe having a second access would increase our ability to quickly render aid to the Ramsey Residents who live on this existing street, who we serve and protect. As the specifics of this road are discussed further, the Police Department would request it be constructed for year-round access and not have breakaway barriers or gates.

Public Works Maintenance Recommendation

The proposed road that would connect Bowers Drive with the new Riverstone South Development is an important and vital roadway connection for Public Safety. Public Works Staff and equipment are a vital part of every large-scale emergency response effort. Therefore, the Public Works Department recommends the access road be built to a minimum width of 24 feet with B Style Curb and designed to 9 Ton Specifications. This road needs to be designed to handle large emergency equipment, such as Fire Engines, Public Works Vehicles and Electrical Line Repair Vehicles. As also mentioned by Police and Fire, this is a long cul-de-sac road with only a single access point.

PREVIOUS REVIEW
Sketch Plan Review

I acknowledge that I have read the information above before responding to this survey.*

☑ Yes

Purpose of Contact Information

The City is requesting that names and addresses are being captured as part of the public record. To ensure that those directly and most impacted by the policy decision are recorded and not unduly influenced by those not directly or most impacted by the decision, address verification is important.

Name*

John Morris

Email Address

[redacted]

Address*

14820 Bowers Dr

City

Ramsey

State

Minnesota

Zip Code

55303

Phone Number

[redacted]

For purposes of Public Safety Response, do you support a second access to Bowers Drive?*

- ( ) Yes, I support a full public road connection
- ( ) Yes, but only if it is used by Public Safety (and Public Works Maintenance)
- (•) No, I do not support a second connection to Bowers Drive
- ( ) Other (please describe below)

Disclaimer

For purposes of this survey, a non-response will be considered as a non-objection to the connection.

Please comment and explain your response above.

Both john and I feel that to maintain the privacy and value of our neighborhood this access should not be allowed. There has never been any hard numbers put to incidents on our street that warrant the expenditure by the city or the change to our neighborhood. The new neighborhood is not being modeled after ours so therefore we feel it should be kept seperate.

PREVIOUS REVIEW
Sketch Plan Review

Print

Bowers Drive Connection to Riverstone South - Submission #2175

Date Submitted: 8/19/2020

Riverstone South Background

Riverstone South Background

By filling out this form, you acknowledge that you have reviewed the materials on this link first. The City of Ramsey is recommending that a connection be made between Bowers Drive and the future Riverstone South Development.

Fire Department Recommendation

The proposed road that would connect Bowers Drive with the new Riverstone South Development is an important and vital roadway connection for Public Safety. The roadway connection will give Public Safety a second access point to the long Bowers Drive dead-end in the event of an emergency. If Bowers Drive were to be blocked for some reason, this road would allow Public Safety a second access to the Bowers Drive Neighborhood. The road needs to be built to the standards to support the weight of a Fire Vehicle and Equipment and not designed as a standard pedestrian trail. Bowers Drive is the longest dead-end cul-de-sac we have in the City. Bowers Drive does not have any fire hydrants to assist in emergencies.

Police Department Recommendation

The Police Department is in support of the proposed roadway which would connect the existing cul-de-sac of Bowers Drive that has existed for a number of years to the new Riverstone South Development. Due to the nature and location of this proposed road, the Police Department believes the positives to public safety outweigh any possible negatives which could result from the change. We believe having a second access would increase our ability to quickly render aid to the Ramsey Residents who live on this existing street, who we serve and protect. As the specifics of this road are discussed further, the Police Department would request it be constructed for year-round access and not have breakaway barriers or gates.

Public Works Maintenance Recommendation

The proposed road that would connect Bowers Drive with the new Riverstone South Development is an important and vital roadway connection for Public Safety. Public Works Staff and equipment are a vital part of every large-scale emergency response effort. Therefore, the Public Works Department recommends the access road be built to a minimum width of 24 feet with B Style Curb and designed to 9 Ton Specifications. This road needs to be designed to handle large emergency equipment, such as Fire Engines, Public Works Vehicles and Electrical Line Repair Vehicles. As also mentioned by Police and Fire, this is a long cul-de-sac road with only a single access point.

PREVIOUS REVIEW
Sketch Plan Review

I acknowledge that I have read the information above before responding to this survey.*

☑ Yes

Purpose of Contact Information

The City is requesting that names and addresses are being captured as part of the public record. To ensure that those directly and most impacted by the policy decision are recorded and not unduly influenced by those not directly or most impacted by the decision, address verification is important.

Name*

NICOLE JOHNSTON

Email Address

[redacted]

Address*

14560 BOWERS DRIVE NW

City

RAMSEY

State

MN

Zip Code

55303

Phone Number

[redacted]

For purposes of Public Safety Response, do you support a second access to Bowers Drive?*

- ( ) Yes, I support a full public road connection
- ( ) Yes, but only if it is used by Public Safety (and Public Works Maintenance)
- (•) No, I do not support a second connection to Bowers Drive
- ( ) Other (please describe below)

Disclaimer

For purposes of this survey, a non-response will be considered as a non-objection to the connection.

Please comment and explain your response above.

I do NOT want the extra traffic on the road, which leads to crime on the road. We did not move to the neighborhood to have additional traffic and issues. We moved here to have a quite DEAD END STREET!

PREVIOUS REVIEW
Sketch Plan Review

Print

Bowers Drive Connection to Riverstone South - Submission #2177

Date Submitted: 8/19/2020

Riverstone South Background

Riverstone South Background

By filling out this form, you acknowledge that you have reviewed the materials on this link first. The City of Ramsey is recommending that a connection be made between Bowers Drive and the future Riverstone South Development.

Fire Department Recommendation

The proposed road that would connect Bowers Drive with the new Riverstone South Development is an important and vital roadway connection for Public Safety. The roadway connection will give Public Safety a second access point to the long Bowers Drive dead-end in the event of an emergency. If Bowers Drive were to be blocked for some reason, this road would allow Public Safety a second access to the Bowers Drive Neighborhood. The road needs to be built to the standards to support the weight of a Fire Vehicle and Equipment and not designed as a standard pedestrian trail. Bowers Drive is the longest dead-end cul-de-sac we have in the City. Bowers Drive does not have any fire hydrants to assist in emergencies.

Police Department Recommendation

The Police Department is in support of the proposed roadway which would connect the existing cul-de-sac of Bowers Drive that has existed for a number of years to the new Riverstone South Development. Due to the nature and location of this proposed road, the Police Department believes the positives to public safety outweigh any possible negatives which could result from the change. We believe having a second access would increase our ability to quickly render aid to the Ramsey Residents who live on this existing street, who we serve and protect. As the specifics of this road are discussed further, the Police Department would request it be constructed for year-round access and not have breakaway barriers or gates.

Public Works Maintenance Recommendation

The proposed road that would connect Bowers Drive with the new Riverstone South Development is an important and vital roadway connection for Public Safety. Public Works Staff and equipment are a vital part of every large-scale emergency response effort. Therefore, the Public Works Department recommends the access road be built to a minimum width of 24 feet with B Style Curb and designed to 9 Ton Specifications. This road needs to be designed to handle large emergency equipment, such as Fire Engines, Public Works Vehicles and Electrical Line Repair Vehicles. As also mentioned by Police and Fire, this is a long cul-de-sac road with only a single access point.

PREVIOUS REVIEW
Sketch Plan Review

I acknowledge that I have read the information above before responding to this survey.*

☑ Yes

Purpose of Contact Information

The City is requesting that names and addresses are being captured as part of the public record. To ensure that those directly and most impacted by the policy decision are recorded and not unduly influenced by those not directly or most impacted by the decision, address verification is important.

Name*

Katherine Woods

Email Address

[redacted]

Address*

14610 Bowers Drive NW

City

Ramsey

State

MN

Zip Code

55303

Phone Number

[redacted]

For purposes of Public Safety Response, do you support a second access to Bowers Drive?*

- ( ) Yes, I support a full public road connection
- ( ) Yes, but only if it is used by Public Safety (and Public Works Maintenance)
- (•) No, I do not support a second connection to Bowers Drive
- ( ) Other (please describe below)

Disclaimer

For purposes of this survey, a non-response will be considered as a non-objection to the connection.

Please comment and explain your response above.

PREVIOUS REVIEW
Sketch Plan Review

Print

Bowers Drive Connection to Riverstone South - Submission #2180

Date Submitted: 8/21/2020

Riverstone South Background

Riverstone South Background

By filling out this form, you acknowledge that you have reviewed the materials on this link first. The City of Ramsey is recommending that a connection be made between Bowers Drive and the future Riverstone South Development.

Fire Department Recommendation

The proposed road that would connect Bowers Drive with the new Riverstone South Development is an important and vital roadway connection for Public Safety. The roadway connection will give Public Safety a second access point to the long Bowers Drive dead-end in the event of an emergency. If Bowers Drive were to be blocked for some reason, this road would allow Public Safety a second access to the Bowers Drive Neighborhood. The road needs to be built to the standards to support the weight of a Fire Vehicle and Equipment and not designed as a standard pedestrian trail. Bowers Drive is the longest dead-end cul-de-sac we have in the City. Bowers Drive does not have any fire hydrants to assist in emergencies.

Police Department Recommendation

The Police Department is in support of the proposed roadway which would connect the existing cul-de-sac of Bowers Drive that has existed for a number of years to the new Riverstone South Development. Due to the nature and location of this proposed road, the Police Department believes the positives to public safety outweigh any possible negatives which could result from the change. We believe having a second access would increase our ability to quickly render aid to the Ramsey Residents who live on this existing street, who we serve and protect. As the specifics of this road are discussed further, the Police Department would request it be constructed for year-round access and not have breakaway barriers or gates.

Public Works Maintenance Recommendation

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PREVIOUS REVIEW
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I acknowledge that I have read the information above before responding to this survey.*

☑ Yes

Purpose of Contact Information

The City is requesting that names and addresses are being captured as part of the public record. To ensure that those directly and most impacted by the policy decision are recorded and not unduly influenced by those not directly or most impacted by the decision, address verification is important.

Name*

Michel Pierce

Email Address

[redacted]

Address*

14330 Bowers Dr. NW

City

Ramsey

State

MN

Zip Code

55303

Phone Number

[redacted]

For purposes of Public Safety Response, do you support a second access to Bowers Drive?*

- ( ) Yes, I support a full public road connection
- ( ) Yes, but only if it is used by Public Safety (and Public Works Maintenance)
- (•) No, I do not support a second connection to Bowers Drive
- ( ) Other (please describe below)

Disclaimer

For purposes of this survey, a non-response will be considered as a non-objection to the connection.

Please comment and explain your response above.

Do not want a connection to Bowers Dr. as it will increase crime and traffic on a street that we enjoy living on. Also, Please ensure that there is no construction access via Bowers Dr for this proposed development. Finally, Still looking for confirmation of a buffer in the southeastern portion of the proposed development between the newly constructed homes on Bowers and the proposed development.

PREVIOUS REVIEW
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Print

Bowers Drive Connection to Riverstone South - Submission #2182

Date Submitted: 8/22/2020

Riverstone South Background

Riverstone South Background

By filling out this form, you acknowledge that you have reviewed the materials on this link first. The City of Ramsey is recommending that a connection be made between Bowers Drive and the future Riverstone South Development.

Fire Department Recommendation

The proposed road that would connect Bowers Drive with the new Riverstone South Development is an important and vital roadway connection for Public Safety. The roadway connection will give Public Safety a second access point to the long Bowers Drive dead-end in the event of an emergency. If Bowers Drive were to be blocked for some reason, this road would allow Public Safety a second access to the Bowers Drive Neighborhood. The road needs to be built to the standards to support the weight of a Fire Vehicle and Equipment and not designed as a standard pedestrian trail. Bowers Drive is the longest dead-end cul-de-sac we have in the City. Bowers Drive does not have any fire hydrants to assist in emergencies.

Police Department Recommendation

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Public Works Maintenance Recommendation

The proposed road that would connect Bowers Drive with the new Riverstone South Development is an important and vital roadway connection for Public Safety. Public Works Staff and equipment are a vital part of every large-scale emergency response effort. Therefore, the Public Works Department recommends the access road be built to a minimum width of 24 feet with B Style Curb and designed to 9 Ton Specifications. This road needs to be designed to handle large emergency equipment, such as Fire Engines, Public Works Vehicles and Electrical Line Repair Vehicles. As also mentioned by Police and Fire, this is a long cul-de-sac road with only a single access point.

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I acknowledge that I have read the information above before responding to this survey.*

☑ Yes

Purpose of Contact Information

The City is requesting that names and addresses are being captured as part of the public record. To ensure that those directly and most impacted by the policy decision are recorded and not unduly influenced by those not directly or most impacted by the decision, address verification is important.

Name*

Terry and Jane Luke

Email Address

[redacted]

Address*

14250 Bowers DR NW

City

Ramsey

State

MN

Zip Code

55303

Phone Number

[redacted]

For purposes of Public Safety Response, do you support a second access to Bowers Drive?*

- ( ) Yes, I support a full public road connection
- ( ) Yes, but only if it is used by Public Safety (and Public Works Maintenance)
- (•) No, I do not support a second connection to Bowers Drive
- ( ) Other (please describe below)

Disclaimer

For purposes of this survey, a non-response will be considered as a non-objection to the connection.

Please comment and explain your response above.

We do not want this connection because it would create more vehicle and pedestrian traffic on Bowers DR. One of the reasons we moved to Bowers DR 43 years ago was for the privacy. Years ago the topic of making Bowers DR part of a scenic river route or trail was brought up. There was a very large turnout of Bowers DR residents at the meeting that were against that proposal. It was decided that in the future when the Pierson property was to be developed a trail would be within the boundary of the new development and would not be at all connected to Bowers DR. I would expect that the City of Ramsey would keep there word on this matter and that it should be on record.

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Print

Bowers Drive Connection to Riverstone South - Submission #2183

Date Submitted: 8/22/2020

Riverstone South Background

Riverstone South Background

By filling out this form, you acknowledge that you have reviewed the materials on this link first. The City of Ramsey is recommending that a connection be made between Bowers Drive and the future Riverstone South Development.

Fire Department Recommendation

The proposed road that would connect Bowers Drive with the new Riverstone South Development is an important and vital roadway connection for Public Safety. The roadway connection will give Public Safety a second access point to the long Bowers Drive dead-end in the event of an emergency. If Bowers Drive were to be blocked for some reason, this road would allow Public Safety a second access to the Bowers Drive Neighborhood. The road needs to be built to the standards to support the weight of a Fire Vehicle and Equipment and not designed as a standard pedestrian trail. Bowers Drive is the longest dead-end cul-de-sac we have in the City. Bowers Drive does not have any fire hydrants to assist in emergencies.

Police Department Recommendation

The Police Department is in support of the proposed roadway which would connect the existing cul-de-sac of Bowers Drive that has existed for a number of years to the new Riverstone South Development. Due to the nature and location of this proposed road, the Police Department believes the positives to public safety outweigh any possible negatives which could result from the change. We believe having a second access would increase our ability to quickly render aid to the Ramsey Residents who live on this existing street, who we serve and protect. As the specifics of this road are discussed further, the Police Department would request it be constructed for year-round access and not have breakaway barriers or gates.

Public Works Maintenance Recommendation

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I acknowledge that I have read the information above before responding to this survey.*

☑ Yes

Purpose of Contact Information

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Name*

Michael Manning

Email Address

[redacted]

Address*

14365 Bowers Dr NW

City

Ramsey

State

Minnesota

Zip Code

55303-7264

Phone Number

[redacted]

For purposes of Public Safety Response, do you support a second access to Bowers Drive?*

- ( ) Yes, I support a full public road connection
- ( ) Yes, but only if it is used by Public Safety (and Public Works Maintenance)
- (•) No, I do not support a second connection to Bowers Drive
- ( ) Other (please describe below)

Disclaimer

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Please comment and explain your response above.

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Bowers Drive Connection to Riverstone South - Submission #2184

Date Submitted: 8/23/2020

Riverstone South Background

Riverstone South Background

By filling out this form, you acknowledge that you have reviewed the materials on this link first. The City of Ramsey is recommending that a connection be made between Bowers Drive and the future Riverstone South Development.

Fire Department Recommendation

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Police Department Recommendation

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Public Works Maintenance Recommendation

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☑ Yes

Purpose of Contact Information

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Name*

Michael Sutton

Email Address

[redacted]

Address*

14310 Bowers Drive NW

City

Ramsey

State

MN

Zip Code

55303

Phone Number

For purposes of Public Safety Response, do you support a second access to Bowers Drive?*

- ( ) Yes, I support a full public road connection
- ( ) Yes, but only if it is used by Public Safety (and Public Works Maintenance)
- (•) No, I do not support a second connection to Bowers Drive
- ( ) Other (please describe below)

Disclaimer

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Please comment and explain your response above.

I see absolutely no value in the connection between Bowers Drive and the new development. The increased pedestrian and auto traffic if the connection would go forward would be unmanageable, potentially leading to assessments of the current residents to support street lighting along with other additions in the name of safety which we up until today have not needed. Also concerns of increased crime due to any additional connection allowing those who would commit crime alternate routes to escape.

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Bowers Drive Connection to Riverstone South - Submission #2210

Date Submitted: 8/26/2020

Riverstone South Background

Riverstone South Background

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Fire Department Recommendation

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Police Department Recommendation

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Public Works Maintenance Recommendation

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I acknowledge that I have read the information above before responding to this survey.*

☑ Yes

Purpose of Contact Information

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Name*

John Fluegel

Email Address

Address*

14740 Bowers Dr NW

City

Ramsey

State

MN

Zip Code

55303

Phone Number

For purposes of Public Safety Response, do you support a second access to Bowers Drive?*

- Yes, I support a full public road connection
- Yes, but only if it is used by Public Safety (and Public Works Maintenance)
- (selected) No, I do not support a second connection to Bowers Drive
- Other (please describe below)

Disclaimer

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Please comment and explain your response above.

* Concerns that the 2nd access from neighboring high density low income housing will possibly reduce our property values on Bowers Dr. * Concerns this new 2nd access will result in future street lighting, road widening, sidewalks and fire hydrants etc on Bowers Dr. * Concerns of safety with increased foot/bicycle traffic on Bowers Dr. * Overall concerns regarding the dramatic increase in high density housing in Ramsey....we moved to Ramsey from Mpls 40 years ago to live in a peaceful and quiet neighborhood.

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Bowers Drive Connection to Riverstone South - Submission #2243

Date Submitted: 9/2/2020

Riverstone South Background

Riverstone South Background

By filling out this form, you acknowledge that you have reviewed the materials on this link first. The City of Ramsey is recommending that a connection be made between Bowers Drive and the future Riverstone South Development.

Fire Department Recommendation

The proposed road that would connect Bowers Drive with the new Riverstone South Development is an important and vital roadway connection for Public Safety. The roadway connection will give Public Safety a second access point to the long Bowers Drive dead-end in the event of an emergency. If Bowers Drive were to be blocked for some reason, this road would allow Public Safety a second access to the Bowers Drive Neighborhood. The road needs to be built to the standards to support the weight of a Fire Vehicle and Equipment and not designed as a standard pedestrian trail. Bowers Drive is the longest dead-end cul-de-sac we have in the City. Bowers Drive does not have any fire hydrants to assist in emergencies.

Police Department Recommendation

The Police Department is in support of the proposed roadway which would connect the existing cul-de-sac of Bowers Drive that has existed for a number of years to the new Riverstone South Development. Due to the nature and location of this proposed road, the Police Department believes the positives to public safety outweigh any possible negatives which could result from the change. We believe having a second access would increase our ability to quickly render aid to the Ramsey Residents who live on this existing street, who we serve and protect. As the specifics of this road are discussed further, the Police Department would request it be constructed for year-round access and not have breakaway barriers or gates.

Public Works Maintenance Recommendation

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I acknowledge that I have read the information above before responding to this survey.*

☑ Yes

Purpose of Contact Information

The City is requesting that names and addresses are being captured as part of the public record. To ensure that those directly and most impacted by the policy decision are recorded and not unduly influenced by those not directly or most impacted by the decision, address verification is important.

Name*

Joshua J Fuhreck

Email Address

[redacted]

Address*

14573 Bowers Dr NW

City

Ramsey

State

MN

Zip Code

55303

Phone Number

[redacted]

For purposes of Public Safety Response, do you support a second access to Bowers Drive?*

- ( ) Yes, I support a full public road connection
- ( ) Yes, but only if it is used by Public Safety (and Public Works Maintenance)
- (•) No, I do not support a second connection to Bowers Drive
- ( ) Other (please describe below)

Disclaimer

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Please comment and explain your response above.

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Contact Information

The City is requesting that names and addresses are being captured as part of the public record. To ensure that those directly and most impacted by the policy decision are recorded and not unduly influenced by those not directly or most impacted by the decision, address verification is important.

Name	Email Address
Carol Larsen	[redacted]
Address	
14480 Bowers Dr. NW, Ramsey, MN 55303	
Phone Number	
[redacted]	

Survey Question

For purposes of Public Safety Response, do you support a second access to Bowers Drive?

- ☐ Yes, I support a full public road connection
- ☐ Yes, but only if it is used by Public Safety (and Public Works Maintenance)
- ☒ No, I do not support a second connection to Bowers Drive
- ☐ Other (please describe below)

Comments

On separate pages
Please share with Council & mayor.
I have questions about exit & entrance on Bowers from Hwy 10.

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Disclaimer

For purposes of this survey, a non-response will be considered as a non-objection to the connection.

Tim Gladhill, Deputy City Administrator

Ramsey City Hall,7550 Sunwood Dr. NW

Ramsey, MN. 55303

Dear Mr. Gladhill,

In response to your notification that I have the opportunity to respond to your mailing regarding what I want in my backyard...Riverstone South. I do not support a second connection to Bowers Drive.

1. Believing that the people who bought lots and built homes without knowing that there was a possibility the city would put a road between their homes to access Bowers Drive, seems unfair to the residents in the two homes on either side of the "emergency entrance" proposed to Bowers Drive.
2. Headlights aimed at the homes directly across Bowers Drive from that entrance invades the privacy of those residences.
3. Opening up the entrance to 243 residences will create more traffic on our street which has already been the case because of the Capstone addition making it less safe for residents of Bowers to walk because of the speed of many of those vehicles. Monday is garbage pick up on Bowers Drive and there are already many garbage trucks speeding back out of Bowers Drive which I assume would increase even more if that access were open to Riverstone South.
4. None of the agencies who are promoting the emergency entrance live on Bowers Drive. I do, and I've lived here for 56 years. We've had very few emergencies on Bowers Drive during that time and I don't believe the length of the street has ever been hazardous for emergency vehicles.
5. One of the advantages to those of us who reside on Bowers Drive is that we know the neighborhood and our residents. Either those using Bowers Drive know where they are or are lost. Please don't give in to the myth that an expensive road connecting the proposed addition to Bowers Drive would benefit the residents of Bowers Drive. I don't believe it would. In the event of an emergency, not having any in probably over 60 years, if a tree blocked the road, nearly every household owns a chain saw. That speaks for itself. I've always felt safe here, basically because of the dead -end road. If anyone or anything looks suspicious, someone notices and will report it.
6. Bowers Drive owners use the street to walk their dogs and exercise themselves. Opening it up with free access to 240 more households will bring more dogs and people using the street for exercise. Visit Bowers Drive in the winter when you see how yellow the snow is in our entrance to our driveways and along the road let alone the leavings of the dogs by our plowed out mail boxes. Not everyone carries a bag to pick up after their pets. And you want to give access to 240 more households to access our street for the purpose of relieving their animals. No Thanks!!!!
7. If you would, please consider how opening up this entrance to benefit 240 more households, and how it would affect those who are residents who bought or built here were influenced by

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the beauty and not overly crowded lots or streets. We were here first and consideration for us should be primary. There has to be a way that an emergency entrance could be restricted to emergency vehicles only...find out how emergency vehicles can activate signals on traffic lights when they need to get through... instead of leaving an emergency entrance open to all through traffic. Doing that would negatively impact us should you approve it...more traffic, too many people, many who are just curious and perhaps more chance for crime with an easier exit and entrance to our neighborhood.

8. Thank you for your consideration of my thoughts and those of many of my neighbors. Having lived here for over half a century, I would implore you to consider these thoughts and desires regarding this important issue.

Sincerely,

Carol Larsen
14480 Bowers Dr NW
Ramsey, MN 55303
[redacted]

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CITY COUNCIL
CITY OF RAMSEY
ANOKA COUNTY
STATE OF MINNESOTA

The Ramsey City Council conducted a regular meeting on Tuesday, September 8, 2020, at the Ramsey Municipal Center, 7550 Sunwood Drive NW, Ramsey, Minnesota.

Members Present: Mayor John LeTourneau
Councilmember Mark Kuzma
Councilmember Jeff Menth
Councilmember Debra Musgrove
Councilmember Chris Riley
Councilmember Dan Specht

Members Absent: None

Also Present: City Administrator Kurtis Ulrich
Police Chief Jeff Katers
Parks and Assistant Public Works Superintendent Mark Riverblood – attended remotely
Public Works Superintendent Grant Riemer
Deputy City Administrator Timothy Gladhill
City Engineer Bruce Westby

1. CALL TO ORDER

Mayor LeTourneau called the regular meeting of the Ramsey City Council to order at 7:00 p.m., followed by the Pledge of Allegiance led by Mayor LeTourneau.

2. PRESENTATION

2.01: Presentation Proclaiming September 17-23, 2020 as Constitution Week

Mayor LeTourneau read the proclamation declaring September 17-23, 2020 as Constitution Week.

3. CITIZEN INPUT

None.

4. APPROVE AGENDA

Motion by Councilmember Menth, seconded by Councilmember Musgrove, to approve the agenda as presented.

Motion carried. Voting Yes: Mayor LeTourneau, Councilmembers Menth, Musgrove, Kuzma, Riley, and Specht. Voting No: None.

5. CONSENT AGENDA

Motion by Councilmember Riley, seconded by Councilmember Kuzma, to approve the following items on the Consent Agenda:

5.01: Approve the following Meeting Minutes:
1) City Council Work Session dated August 25, 2020
2) City Council Regular dated August 25, 2020

5.02: Approve Rental Licenses

5.03: Adopt Resolution #20-193 Approving Cash Disbursements Made and Authorizing Payment of Accounts Payable Invoicing Received During the Period of August 20, 2020 through September 3, 2020

5.04: Adopt Resolution #20-185 Proclaiming September 17-23, 2020 as Constitution Week

5.05: Adopt Resolution #20-191 Declaring Costs to be Assessed and Calling for Public Hearing on Proposed Assessment for Past-Due Charges on Municipal Utility Bills (which may include water, sewer, street lighting, recycling, stormwater charges, and penalties incurred) and Current Services Rendered

5.06: Adopt Resolution #20-192 Approving Snow Storage Agreement on City Owned Land

5.07: Adopt Resolution #20-194 Approving Underwriting Service Agreement for Small Business Relief Grant Program

5.08: Adopt Resolution #20-195 Ordering Assessment Roll and Calling Assessment Hearing for Improvement Project #20-04, Puma Street Improvements

5.09: Adopt Resolution #20-196 Approving Letter of Support for Metropolitan Council Clean Water Fund Request for State Fiscal Year 2022-2023

5.10: Adopt Resolution #20-197 Approving Amended Petition and Waiver Agreement for Municipal Water and Sanitary Sewer Connection to 7600 163rd Lane NW

Motion carried. Voting Yes: Mayor LeTourneau, Councilmembers Riley, Kuzma, Menth, Musgrove, and Specht. Voting No: None.

6. PUBLIC HEARING

None.

7. COUNCIL BUSINESS

7.01: Adopt Resolution #20-171 Accepting Bids and Awarding Contracts for Bid Package #1 and Alternate #1 for the New Public Works Facility

Public Works Superintendent Riemer reviewed the staff report and recommendation to adopt Resolution #20-171 accepting bids and awarding contracts for Bid Package #1 with a base bid amount of $6,138,361 and including Alternate Bid #1 in the amount of $441,938 for a total of $6,580,299.

Councilmember Musgrove asked if it is unusual to have this type of bidding competition and low bidders.

Public Works Superintendent Riemer replied that he believes that COVID has slowed down the commercial side of construction and therefore there is more interest from those contractors.

Motion by Councilmember Menth, seconded by Councilmember Riley, to Adopt Resolution #20-171 Accepting Bids and Awarding Contract for Bid Package #1 for the New Ramsey Public Works Facility, Improvement Project #20-07.

Further discussion: Councilmember Kuzma asked RJM to come forward and discuss why it is a good time to go forward with alternate bid #1. Curtis Sell, RJM, stated that there would be cost efficiencies in completing the alternate bid into the original build, as the cost to complete an expansion in the future adds additional costs. He noted that there would also be a schedule efficiency in completing both of those elements at once. Councilmember Musgrove asked when the Council will see updated sketches for the building. Mr. Sell stated that bid package #1 contains the larger denser portions of the project and the architect is working to complete bid package #2, which contains more of the design details.

Motion carried. Voting Yes: Mayor LeTourneau, Councilmembers Menth, Riley, Kuzma, Musgrove, and Specht. Voting No: None.

7.02: Review Sketch Plan for Riverstone South; Case of Capstone Homes

Assistant City Administrator Gladhill reviewed the staff report and asked the Council to provide feedback to the developer as part of the plan development for the next stage in the process known as Preliminary Plat. Preliminary Plat is the most crucial stage in the subdivision process. It was noted that the City has broad policy discretion as the request requires the approval of a Zoning Amendment and possibly a Comprehensive Plan Amendment due to lot sizes and densities.

Councilmember Specht asked if the Comprehensive Plan identifies a trail connection to the end of Bowers Drive.

Assistant City Administrator Gladhill stated that there has been some discussion on the MRT trail and where it will connect. He noted that the discussion is focused more on Riverdale Drive rather than running that trail through the Bowers Drive properties. He stated that staff will continue to work with new developments in order to secure segments near the river.

Mayor LeTourneau noted that the MRT extends past Bowers Drive to the west and is not proposed to go down Bowers Drive at this point. He noted that there is a full access onto the trail from Bowers Drive. He asked if the Council is required to make any decisions about the secondary road access tonight.

Assistant City Administrator Gladhill stated that tonight they are looking at whether there is general consensus to move forward with the plan development as proposed. He stated that they

would like direction on the Bowers Drive connection but noted that the decision could be changed prior to adoption of the Preliminary Plat.

Councilmember Riley asked if these would be the same lot sizes as Riverstone North.

Assistant City Administrator Gladhill confirmed that these would be the same lot sizes and would be very much a mirror image of the development, with the exception of the removal of one of the product types.

Councilmember Musgrove asked for details on Riverdale Drive and the history of the layout on the sketch.

Assistant City Administrator Gladhill provided background information on the access planning study that was completed in 2014 by the City and MnDOT, noting that study showed Riverdale Drive consuming some of the first few lots. He provided additional details on the proposed layout for Riverdale Drive which was developed by the developer working with the input of the Bowers Drive residents to find an alignment that worked well for everyone involved.

Mayor LeTourneau provided an opportunity for members of the public to provide input.

Jeff Johnson, 14540 Bowers Drive, referenced the Bowers Drive survey and asked at what point the Council would automatically move ahead. He asked if the decision has already been made on Bowers Drive. He stated that the residents have not been given any data from public safety on how much safer the neighborhood would be with the additional access. He stated that when you open up a cul-de-sac that increases opportunity for crime as that creates another way for people to access and exit the neighborhood. He stated that this road has been around for about 80 years and noted that there has not been one time since he has lived at his home where EMS has not been able to access the homes on Bowers Drive. He stated that there is a difference between a need and a desire. He stated that connecting Bowers Drive to Capstone would substantially increase the pedestrian traffic on Bowers Drive, which is a narrow road that is not lit by streetlights. He stated that providing this connection is attempting to solve a problem that does not exist and would instead create more problems that need to be solved, which would destroy the reason people purchased homes on that road. He stated that people that purchased property on Bowers Drive chose to live there and do not need the City to calculate their risk levels. He stated that if the residents on Bowers Drive felt threatened, they would not have purchased their properties. He commented that residents do not leave Bowers Drive, they seek property on Bowers Drive. He did not think it appropriate to include or make assumptions about the people that did not respond to the survey. He commented that the residents of Bowers Drive do not want the connection and did not believe there is anything wrong with keeping those neighborhoods isolated rather than connecting them. He did not think that putting a secondary access onto Bowers Drive would solve any problems and instead would create additional problems.

Mayor LeTourneau thanked Mr. Johnson for his input.

Mr. Johnson stated that at the last planning meeting he asked for information as to what would be required for the Bowers Drive residents to stop this process and he has not received that information.

Mayor LeTourneau stated that staff is still determining that but recognized that the voices of Bowers Drive have a high impact.

Councilmember Musgrove stated that it is clear that Mr. Johnson does not want a road and asked if he would support a narrow trail with breakaway barriers that could be used by emergency vehicles.

Mr. Johnson stated that once that is developed, people will use that as a trail and the pedestrian traffic will come from Capstone onto Bowers Drive. He confirmed that his concern is related to the increased pedestrian traffic and safety concerns with that activity.

Councilmember Musgrove asked what Mr. Johnson would believe to be a workable option.

Mr. Johnson stated that he would like to see the data that proves this would make that neighborhood safer as the data currently shows that the secondary access and increased pedestrian traffic would make the area more unsafe.

Councilmember Musgrove referenced the mention of 50 foot and 100-foot setbacks.

Mr. Johnson noted that the original planning meetings for Capstone referenced a 100-foot setback, but those original 12 homes were setback 50 feet instead.

Police Chief Katers appreciated Mr. Johnson's position. He stated that his comments related to public safety remain the same for any neighborhood noting that he prefers two points of access for all neighborhoods although he recognizes the uniqueness of Bowers Drive. He stated that he cannot provide statistical information of what may happen in the future and can only provide input on what could happen. He stated that there could be multiple situations that could cause the current access to be closed, therefore public safety prefers to have two points of access in order to get people in and out of a neighborhood.

Mr. Johnson stated that everyone that lives on Bowers Drive is aware of the risk they took in purchasing their property and they are not asking for that secondary access. He stated that cul-de-sacs are safer than any other road in terms of crime. He stated that he has not been provided with any information that has proven that two accesses would make the residents safer.

Police Chief Katers stated that his standard response for a development is to have two accesses. He stated that he is familiar with the cul-de-sac studies, noting that those were small areas in Minneapolis and therefore that is an urban area versus a rural environment and that study only took into account burglary and not the other crimes or situations that could exist.

Councilmember Specht thanked Mr. Johnson for his input and recognition of property rights. He stated that he has heard of informal surveys that have been completed with more response.

Josh Fuhreck, 14573 Bowers Drive, thanked Capstone for their efforts on this project. He stated that overall, this is a good project and the developer has given consideration to the unique forestry environment that exists on the property. He stated that overall, he supports the project, but he does not support the Bowers Drive connection. He stated that the public safety concerns mentioned have an extremely remote possibility of occurring. He noted that if the connection is provided to allow the additional pedestrian traffic on the narrow roadway of Bowers Drive, that would create a much more likely and real safety concern. He stated that it would be very unlikely that a tree would fall, and an emergency situation would occur at the same time, noting that has not happened once in 80 years. He stated that the City's survey was extremely slanted, mentioning only the City points and a statement that said if you do not respond we will assume you favor the connection. He presented a survey of 85 homes, noting that 60 residents responded in opposition of the connection to Bowers Drive. He asked the Council to consider the survey he presented rather than the survey completed by the City.

Councilmember Musgrove asked what the area between the homes is right now.

Mr. Fuhreck stated that currently it is a strip of land between two homes and one would assume that the land belongs to one of the two adjacent homes. He confirmed that the area is not mowed or maintained.

James Wadey, 14447 Bowers Drive, stated that he is one of the homes adjacent to the proposed access connection. He echoed the comments of the previous two speakers. He stated that when he purchased his home two years ago there was no indication that there would be a road and it was shown as an outlot. He stated that they asked Capstone the plans for the outlot and there was never a mention of a road connection. He stated that they signed the survey in opposition of the road. He agreed that the pedestrian traffic is already heavy with Bowers Drive residents and opening the secondary access would bring additional security concerns. He stated that there are a number of studies that show opening up a cul-de-sac has a detrimental impact on burglary. He commented that the City was never transparent through the channels he had available when he purchased his home about a potential road connection.

Carol Larson, 14480 Bowers Drive, stated that she has lived on Bowers Drive for 56 years and has seen a lot of changes. She stated that she appreciates that they have been isolated from a lot of the changes in Ramsey. She noted that she anticipated that there would be development on the Capstone property and Riverstone South and therefore does not object to that development. She stated that she does object to placing a roadway between two homes that were not alerted to that possibility. She stated that those homes would lose all privacy and they would have chosen other lots would they have known that. She stated that she has submitted several things to the Council in written form. She explained that if you go down Bowers Drive in the winter the driveways are plowed but the snow is yellow and brown because of the dogs in the area and did not want to see additional dogs being walked on the road. She commented that vehicles travel on Bowers Drive and adding additional pedestrian traffic would seem to be the opposite of increasing public safety. She believed that the one access should be provided from Highway 10.

Councilmember Specht asked if the City gets involved when there is sale of property next to a City owned property.

Assistant City Administrator Gladhill stated that the City cannot control the information shared by a realtor when selling a property. He explained that the City obtained that outlot in order to reserve that corridor for the future, therefore the area was not signed as a future road. He stated that perhaps the people that purchased those homes were not alerted to the possibility of a roadway connection in that location.

Mayor LeTourneau stated that he feels there are two separate issues in this case, the development plan, and the road connection to Bowers Drive.

Assistant City Administrator Gladhill stated that this is the opportunity for the Council to provide direction to the developer on the plan development for preliminary plat. He stated that perhaps the decision is not ready to be made on the road connection. He noted that this is the first time the petition has been presented to the City and the Council could direct staff to work towards a compromise or could take that option off the table all together. He confirmed that there is time to explore the Bowers Drive connection further at a future point.

Councilmember Kuzma stated that it sounds like the City owns the outlot currently and asked if there would be a possibility to provide the connection in the future.

Assistant City Administrator Gladhill confirmed that the decision could be made in the future if desired, noting that the intent has always been to reserve the corridor.

Councilmember Kuzma stated that he would recommend that the lot be reserved, and he would not support a road connection at this time because of the large opposition to the issue. He noted that the City would always have the ability to pursue that in the future.

Mayor LeTourneau confirmed the standpoint of Councilmember Kuzma to table the road connection at this time but still reserve the outlot and an outlot from Capstone in order to preserve that ability in the future.

Councilmember Specht stated that he likes the overall plan and additional tree preservation. He also agreed that the connection to Bowers Drive should be removed at this point.

Councilmember Musgrove asked if the cul-de-sacs proposed in the development would meet the standards of public safety.

Assistant City Administrator Gladhill stated that every development project goes through a development committee that includes representation from all City departments and noted that as designed staff is not concerned with the cul-de-sac sizes proposed.

Councilmember Musgrove asked if there has been discussion to having a third access to Riverdale near the 40-foot lots.

Assistant City Administrator Gladhill stated that there is an undetermined development area in the future that is identified with a stub road. He stated that staff feels that the two access points is sufficient and adding additional access points would cause conflicts on the access road.

Councilmember Musgrove asked if there would be any special easements on the property, such as a conservation easement.

Assistant City Administrator Gladhill stated that the protected area would be conveyed to the City and the City would own that property in fee title to prevent confusion and conflicts that have occurred in other neighborhoods that used conservation easements.

Councilmember Musgrove agreed that she would like to see the development move forward and would also support removing the road connection to Bowers Drive.

Councilmember Riley stated that right now they are focusing on the process of listening to residents. He stated that there is also a process of listening to the Planning Commission, public works and public safety who have all said that connection is necessary. He stated that one of the goals of the City is to have a connected community. He stated that he would support this development moving forward without the connection but would want to circle back to that potential connection in the future.

Councilmember Menth stated that if the Bowers Drive connection is eliminated that would leave two access points into the proposed development and asked if that would be considered sufficient.

Assistant City Administrator Gladhill confirmed that would be deemed sufficient for the new development.

Councilmember Menth commented that the statement is often made that a decision is made before they walk into the room and noted that tonight the residents that spoke changed his mind on this issue. He stated that he listened to the four residents tonight and they persuaded him. He stated that he would like to hold onto the right-of-way but keep Bowers Drive the way it is. He stated that the residents of Bowers Drive do not want that connection and the Council is supposed to represent the residents.

Councilmember Kuzma stated that perhaps when the curbs are installed there be a curb cut in that location, which would allow public safety to go through that area.

Assistant City Administrator Gladhill stated that even if there is not a road connection, staff would still like to use that corridor to place a hydrant in that location. He stated that the decision does not need to occur today, but staff will continue those discussions.

Councilmember Specht stated that he likes that a consensus was reached. He noted that if it were his decision completely, he would even favor selling that land to an adjacent landowner that may be interested.

Mayor LeTourneau stated that he was fond of hearing the statement from Councilmember Menth related to the fact that residents often believe that the Council has made up its mind before entering the room. He stated that many times in his years on the Council he has thought that the Council was in agreement on a topic because of the information from staff but that has changed on multiple occasions because of the input from the public. He stated that he also supports the consensus of the Council tonight to support this development moving forward as proposed without the connection to Bowers Drive at this time. He thanked Capstone for continuing to work with residents and listening to their input throughout this process. He commended Capstone for preserving additional trees and bringing forward a solid project to the community.

Mr. Johnson thanked Capstone and the members of the Council and City staff for hearing the residents tonight.

8. MAYOR, COUNCIL AND STAFF INPUT

City Administrator Ulrich announced upcoming meetings and events.

9. ADJOURNMENT

Motion by Councilmember Riley, seconded by Councilmember Musgrove, to adjourn the meeting.

Motion carried.

The regular meeting of the City Council adjourned at 8:32 p.m.

Respectfully submitted,

Kurtis G. Ulrich
City Administrator

ATTEST:

Katie M. Schmidt
Administrative Assistant

Drafted by Amanda Staple
TimeSaver Off Site Secretarial, Inc.

A recording of this meeting is available for viewing online at www.qctv.org <http://www.qctv.org>. Recordings are available for 36 months after the date of the meeting.

JOINT CITY COUNCIL AND PLANNING COMMISSION WORK SESSION
CITY OF RAMSEY
ANOKA COUNTY
STATE OF MINNESOTA

The Ramsey City Council conducted a City Council Work Session on Tuesday, February 11, 2020, at the Ramsey Municipal Center, 7550 Sunwood Drive NW, Ramsey, Minnesota.

Members Present: Mayor John LeTourneau (attending remotely)
Acting Mayor Chris Riley
Councilmember Nadine Heinrich
Councilmember Mark Kuzma
Councilmember Jeff Menth
Councilmember Debra Musgrove
Councilmember Dan Specht

Planning Commission
Members Present: Chairperson Randy Bauer
Commissioner Bruce Anderson (attending remotely)
Commissioner Cheri Gengler
Commissioner Torrey Johnson
Commissioner Gary VanScoy
Commissioner Matt Woestehoff

Also Present: City Administrator Kurtis Ulrich
Fire Marshal Carey Schiferli
Police Captain Brad Bluml
Public Works Superintendent Grant Riemer
Administrative Services Director Colleen Lasher
Deputy City Administrator Timothy Gladhill
City Engineer Bruce Westby
Senior Planner Chloe McGuire Brigl

1. CALL TO ORDER

Acting Mayor Riley called the City Council Work Session to order at 5:30 p.m.

2. TOPICS FOR DISCUSSION

2.01: Receive Update on Riverstone Preliminary Plat (Master Plan) and Discuss Puma Street Reconstruction Options

Deputy City Administrator Gladhill provided a broad overview of the purpose of the discussion tonight.

Senior Planner McGuire Brigl reviewed the staff report and details related to the proposed land use changes to the plat.

Acting Mayor Riley asked the number and location of 40-foot lots.

Heather Lorch, Capstone, identified 38 proposed detached townhomes, which would replace the 48 proposed quad homes, and pointed out the location for those homes.

Councilmember Kuzma asked the price range and size of the homes.

Ms. Lorch replied that the price range would be between $265,000 and $295,000 with square footage ranging between 1,800 and 2,400 square feet.

Acting Mayor Riley asked for details on the discussion that occurred related to the potential connector street between this development and the neighboring development.

Ms. Lorch replied that they did receive the suggestion from the comments but both developers believed that it would be better to have standalone developments. She stated that Capstone is willing to provide a pedestrian connection that could connect the two developments.

Councilmember Kuzma asked for input related to the sewer and water connection to the adjacent development that was previously discussed.

Stephen Bona, Capstone, replied that Capstone came to an agreement with AKM following the last discussion, that has since expired, and they are awaiting a new agreement to be signed.

Councilmember Musgrove stated that she likes that Capstone heard the comments from the residents to eliminate the quad homes and adjust the plan in this manner. She commented that she also does not like the idea of a connecting the road between the developments and appreciated the willingness of Capstone to put in the pedestrian connection between neighborhoods.

Planning Commissioner Chair Bauer disclosed that he lives in the Riverstone development and does not believe that a connecting road with the adjacent parcel would provide a benefit.

Deputy City Administrator Gladhill reviewed the remainder of the staff report related to the Puma Street reconstruction. He noted that Paxmar submitted an email in opposition of the proposed assessment.

Acting Mayor Riley asked if there is a reason that the roadway would not be improved to the City's street standards.

Mayor LeTourneau asked how the new alignment would lay with the density of the housing.

Deputy City Administrator Gladhill identified the proposed realignment, which has always been contemplated following the Preliminary Plat approval of Paxmar.

Planning Commission Chair Bauer stated that Puma Street might be utilized by more than just the residents, with the industrial park in that area. He stated that the employees and possibly trucks accessing the industrial park will increase traffic on Puma Street and therefore believed the City should contribute to the project.

Councilmember Kuzma asked if this is an MSA street.

Deputy City Administrator Gladhill stated that this roadway is included in the MSA system, and would be eligible for MSA funds, but the City would need to decide if this is the correct project to use MSA funds on, as there is a large demand on the limited MSA funding. He noted that the Public Works Committee will continue that discussion.

Councilmember Specht agreed that the City should financially contribute towards the project.

Councilmember Musgrove asked for background information on the temporary construction of Puma Street.

Deputy City Administrator Gladhill provided background information on the creation of Puma Street.

Councilmember Heinrich asked if there have been similar projects in years past.

Deputy City Administrator Gladhill replied that there have been a variety of similar projects. He stated that some projects in The COR have been funded by the City at a rate of 60 percent that could be reimbursed through TIF.

Councilmember Specht asked if the cost-share is lesser in this case because these are residential developments rather than commercial.

Deputy City Administrator Gladhill stated that looking holistically at the City's transportation needs; this is not the same setup as the Bunker Lake industrial park scenario. He noted that the Bunker Lake industrial park scenario was more linked through economically development and the City funded its portion through the County HRA funds.

Councilmember Specht asked for details on the position of Paxmar in its email.

Deputy City Administrator Gladhill stated that Paxmar stated that he is unsure of the exact amount Paxmar feels would be fair but believes that one third is too much for their development to be assessed. He noted that the Paxmar parcel is still awaiting rezoning to support its proposed development.

Mayor LeTourneau asked if the City is still the owner of the parcel east of Puma Street.

Deputy City Administrator Gladhill stated that the City largely owns the four-acre parcel where the road alignment would occur.

Councilmember Kuzma suggested that the City proceed with the benefit analysis study to support any potential assessment.

Deputy City Administrator Gladhill stated that Capstone does have an aggressive schedule for the next phase of development, and they would not be able to build on those lots within the realignment area until the Puma Street agreement is finalized.

Planning Commissioner Anderson asked what would happen in the case that the third party does not move forward, specifically whether the City and Capstone would be then stuck with a 50/50 split.

Deputy City Administrator Gladhill stated that as long as the City follows the proper metrics, appraisals show the increase in value is equal to the assessment amount; the City would be fully protected.

Councilmember Heinrich asked for input from Capstone or their thoughts on the potential cost-share split.

Ms. Lorch stated that Capstone was aware that there was a need for an assessment on this part of the parcel and was under the impression that it would be a similar cost-share to the previous. She stated that they hoped that the cost-share would be less with another developer. She stated that Capstone did fund 18 percent of the improvement cost for Bunker Lake Boulevard because it felt that improvement would provide a benefit to its residents. She stated that Capstone would agree to the third split, with the caveat that the City and other developer equally contribute.

Planning Commissioner Woestehoff asked if there are safety concerns with Alpine in that area.

Police Captain Bluml stated that this would correct the safety concern with the Alpine walking trail that previously existed.

Planning Commissioner Woestehoff suggested that the City take a larger share in this from a safety standpoint and contribute at a rate of 50/25/25.

Deputy City Administrator Gladhill noted that the Public Works Committee can discuss that option.

Councilmember Menth asked if Paxmar is on board with this proposal.

Deputy City Administrator Gladhill confirmed that Paxmar does not agree with this proposal. He noted that Paxmar was invited to attend tonight but chose not to be a part of the discussion.

Councilmember Musgrove asked if Paxmar would perhaps accept the cost-share of 50/25/25 in order to allow this project to proceed at a quicker pace and without the need for the additional study.

Councilmember Heinrich stated that while she supports the safety aspect, she does support the third split scenario and would support moving forward on that.

Councilmember Kuzma stated that it would be difficult to determine what would be assessed until the benefit analysis study is completed. He stated that if supported, he would support the third split scenario.

Deputy City Administrator Gladhill stated that staff can bring forward the two cost-share scenarios (the third scenario and 50/25/25) to the Public Works Committee for further discussion.

Mr. Bona stated that the schedule is moving fast, and they would like to begin grading in March, with roads paved by June. He appreciated any assistance the City could provide in the Puma Street agreement moving forward to allow their schedule to continue to move at that pace.

2.02: Discuss Policy Direction on Pearson South/Riverstone South Subdivision; Case of Capstone Homes

Deputy City Administrator Gladhill reviewed the staff report related to land use.

Acting Mayor Riley commented that he would like to see less 40-foot wide lots.

Planning Commissioner Woestehoff asked if this property is zoned R-1 MUSA.

Deputy City Administrator Gladhill confirmed that to be true and noted that a Comprehensive Plan amendment and zoning amendment would be needed.

Councilmember Menth referenced the surrounding area and asked how that land is planned to be developed.

Deputy City Administrator Gladhill identified the landowners and land use guiding of the surrounding properties.

Councilmember Menth stated that in the past he has heard discussion of connecting Bowers Drive to another roadway.

Deputy City Administrator Gladhill noted that would be a separate discussion that would involve the development of a different parcel.

Councilmember Kuzma asked the reasoning for the smaller lots.

Tom Bakritges, Capstone, stated that their goal is to have spring construction in 2021. He stated that this is a good opportunity to move to the south with development. He stated that this piece of ground is contained and is unique as they will be faced with challenges from the adjacent uses (solar farm, industrial/commercial, and residential). He stated that they would like to mirror what they have done to the north, noting that they attempt to provide housing to all the different

markets. He stated that the smaller lots would be bordered by the future commercial/industrial area and the solar farm, he noted that the site would transition as you move south in order to match the existing residential development.

Mr. Bakritges stated that the solar farm and commercial/industrial is not very attractive to be adjacent to residential and therefore that is why they are proposing a lesser price point residential product in that area.

Councilmember Specht commented that he believes that this is a good mix of housing products and supports the plan moving forward. He stated that residents on Bowers Drive have commented that it would be nice to have another method to connect rather than only having access onto Highway 10.

Mayor LeTourneau stated that the plan as presented is a great place to start. He stated that as a resident of Bowers Drive, there has been a discussion by those residents. He stated he is appreciative of the 50-foot buffer and prefers this use to additional commercial/industrial. He appreciated that this product would mirror the existing residential that it would border.

Planning Commissioner VanScoy stated that he supports the suggestion of staff to connect this to Bowers Drive. He commented that from a safety perspective he would imagine that this would be an issue.

Police Captain Bluml stated that the Police would like access to Bowers Drive as it would provide additional opportunity in emergencies.

Fire Marshal Schiferli commented that it is important to have two accesses for many reasons. He stated that this is the longest cul-de-sac in the City, and this is a non-hydrant area, therefore the Fire Department needs to bring in water. He commented that if a tree goes down, or a power line, that could block the only entrance to Bowers Drive as it currently exists. He noted that the new development would also be connected to City water and therefore would have hydrants and the road connection would only improve the element of safety.

Deputy City Administrator Gladhill advised that an Environmental Assessment Worksheet (EAW) would be required as this moves forward and would include a traffic study.

Public Works Superintendent Riemer stated that if a connection is going to be made, Public Works would like to have a full road connection.

Mayor LeTourneau stated that as a homeowner on Bowers Drive, he can comment that the resistance that the City would have to the homes is less resistant now but there would be quite a bit of resistance in regards to a second access point.

Councilmember Heinrich appreciated the input from Mayor LeTourneau. She commented that while residents enjoy their privacy, public safety is of utmost importance for the residents and therefore supports a full road connection.

Councilmember Menth asked if the Bowers Drive connection would occur through this design proposal or whether it would connect across Armstrong.

Deputy City Administrator Gladhill stated that currently the plan includes an oversized road connection with breakaway barriers for Public Safety, but Public Safety would like that to be a full road connection at that point. He stated that conceptually it is not difficult to add that road at this step in the plan and noted that is the purpose of tonight's discussion.

Councilmember Musgrove commented that she would support the full road connection.

Mayor LeTourneau stated that the residents are all in favor of having the access to Highway 10 changed and would support the connection to Riverdale Drive.

Acting Mayor Riley confirmed the consensus of the Council to provide direction for a full road connection.

Deputy City Administrator Gladhill reviewed the Riverdale Drive extension element and potential cost-share elements. He noted that the City could attempt to compete for MnDOT funds. He noted that staff could bring forward the discussion to the Public Works Committee.

Councilmember Specht stated that because the roadway is part of the Highway 10 plan, he would support the City having a higher share of the cost.

Deputy City Administrator Gladhill confirmed that staff would prioritize Riverdale over Puma Street and that is why the third/third/third cost-share scenario was proposed on Puma Street.

2.03: Discuss Policy Direction on Outlot C, Northfork Development Proposal; Case of BK Land Development

Deputy City Administrator Gladhill provided a broad overview of the purpose of the discussion tonight.

Senior Planner McGuire Brigl reviewed the staff report.

Councilmember Heinrich asked if a gate or fence would be around the entire development.

Luke Konewko, BK Land Development, commented that would go along Alpine as a form of a buffer. He stated that they would be open to suggestions from the City and noted that the fence could also be berming or landscaping.

Deputy City Administrator Gladhill asked for input on the appropriate/desired mix between the housing products.

Councilmember Kuzma stated that he supported this plan when it was previously presented, primarily because the demand for the smaller product is high and those homes sell quickly. He stated that he continues to support the plan as presented.

Councilmember Menth asked public safety to comment on the road width.

Fire Marshal Schiferli stated that the parking would need to be restricted on one side. He noted that the aerial truck would take up the entire road width. He stated that the narrow roads can work but would need to be posted for no parking on one side. He commented that he would like to see wider roads.

Police Captain Bluml stated that he would defer to fire, as fire trucks are much larger than police vehicles. He stated that a narrower road provides less time for driver reaction for pedestrians. He noted that parking could occur on one side during the day, but overnight parking is not allowed on any City road.

Councilmember Kuzma commented that the neighboring development already has roads of this width.

Public Works Superintendent commented that Public Works can live with the 29-foot road, but no parking has to be enforced in order to support snowplows.

Councilmember Musgrove asked, and received confirmation that the road would be signed and designated as no parking on one side.

Acting Mayor Riley stated that this would match the adjacent development and therefore would be a good use. He commented that he would like to see the overall number of the smaller lots reduced.

Planning Commissioner Woestehoff stated that he has received resident comments that the housing prices are too expensive, noting that the smaller homes have a lesser cost and therefore he will support this proposal.

Councilmember Specht commented that he will also support the plan as proposed.

Councilmember Musgrove asked if the villa product would be part of an HOA.

Mr. Konewko confirmed that the villas would have a full HOA, while the single-family product would have an HOA that only maintains common areas.

Councilmember Musgrove commented that she supports this proposal.

Planning Commission Chair Bauer commented that he lives in a villa in Riverstone and there is a high demand for that product. He commented that he and his neighbors are very satisfied, noting that the villa is a great product for snowbirds. He believed that it would not make sense to increase the number of single-family lots, as there is high demand for the villa product.

Mayor LeTourneau commented that he would welcome the mix of house styles and has a greater concern with the tax base that will be generated through this project. He noted that the growth in

the housing community will also support the desire of the overall community to attract additional retailers.

Councilmember Menth stated that during the previous review he expressed a desire for less villas and more single-family homes. He stated that he has since driven through the adjacent development and has no problem with the mix proposed. He stated that he spoke with residents that live in the villas and are very satisfied with the product.

Councilmember Heinrich stated that she originally had concern with the number of smaller lots but noted that she could support the smaller lots if the road width were increased.

Mr. Konewko stated that they could look into increasing the road width but would want to ensure that the mix of products would not be impacted and the separation between products could continue to be provided.

Deputy City Administrator Gladhill noted that the input has been received by the developer and it will be their choice whether to move forward on the project.

2.04: Note Additional Policy Projects and Development Proposals of Interest

No discussion.

3. TOPICS FOR FUTURE DISCUSSION

3.01: Review Future Topics/ Calendar

Noted.

4. MAYOR / COUNCIL / STAFF INPUT

None.

5. ADJOURNMENT

The Work Session of the City Council was adjourned at 6:58 p.m.

Respectfully submitted,

Kurtis G. Ulrich
City Administrator

ATTEST:

Katie M. Schmidt
Administrative Assistant

Drafted by Amanda Staple
TimeSaver Off Site Secretarial, Inc.

Motion by Councilmember Riley, seconded by Councilmember Menth, to recommend that the City Council confirm direction to continue funding discussions with the City offering to pay up to one third of the project costs on the Pearson Properties Frontage.

Motion carried. Voting Yes: Chairperson Kuzma, Councilmembers Riley and Menth. Voting No: None.

5.02: Center Street Area Capital Improvement Planning

Parks and Assistant Public Works Superintendent Riverblood reviewed the staff report and recommendation to proceed and approve the planning activity outlined in the case.

Chairperson Kuzma asked if the design cost would cover both the park and pump house areas.

Parks and Assistant Public Works Superintendent Riverblood provided additional details on the elements that are included in the design, including the pump house elements and Center Street improvements.

Chairperson Kuzma asked if the pump house elements would include filters that may be necessary for water treatment.

Parks and Assistant Public Works Superintendent Riverblood noted that would be a separate activity, and they would ensure not to plan anything in areas that would perhaps need to be disturbed in the future for water treatment improvements.

Councilmember Menth asked for additional details on how the improvements would be added.

Parks and Assistant Public Works Superintendent Riverblood replied that the pump house material is meant to have material clad onto it, explaining that the new materials would be added to the existing structure. He provided additional details on the location of the temporary section of road and trail that would be improved.

Councilmember Riley agreed that this is the right time to improve the pump house as the area around it continues to develop.

Councilmember Menth noted that the last Council meeting included a discussion on the desire to hold apartment buildings to certain standards and agreed that the City should hold itself to the same standard.

Motion by Councilmember Menth, seconded by Councilmember Riley, to recommend to the City Council to approve $11,800 for Center Street area capital improvement planning.

Motion carried. Voting Yes: Chairperson Kuzma, Councilmembers Menth and Riley. Voting No: None.

City Planner Anderson replied that he assumes that the plan was developed based on comments from the previous iteration. He stated that if this has morphed into small lot single family, or something similar to COR 3, planting requirements would be based on street frontage. He stated that the landscaping plan could then be modified and some of this confusion might be eliminated. He agreed that it does not appear density transitioning would be required as part of this initial phase.

Mr. Lazan stated that he would be more than happy to work with staff to better reflect the requirements of small lot single family. He noted that they would also be willing to work to allow more diversity in building materials as well. He agreed that perhaps the staff comments from the previous concept were carried through in the development of this plat.

6.02: Approve Planning Framework for Highway 10 South Planning Area – Riverstone South

Presentation

Deputy City Administrator Gladhill presented the Staff Report stating that staff would like clear policy direction on the points raised in the staff report.

Commission Business

Commissioner Gengler asked to see the alternative road layouts and which is being proposed.

Deputy City Administrator Gladhill stated that this was developed later in the process because of input from residents on Bowers Drive. He provided additional details on the road alignment and connection to Bowers Drive. He noted that the connection to Bowers would be a public road but would not be Riverdale Drive.

Commissioner VanScoy referenced the public safety connection to Bowers Drive and noted that under any other circumstance he would not understand why a minimum access for safety is being considered as it seems inadequate. He stated that there are a lot of residents on Bowers Drive and asked why a connection to the new development is not proposed.

Deputy City Administrator Gladhill noted that has been discussed at length. He stated that there has been opposition from those on Bowers Drive. He noted that the existing situation was not created by the developer. He stated that City can choose to make the road a full road, but the residents on Bowers Drive do not want that. He stated that public safety feels that it would be adequate as proposed. He stated that the two neighbors in Pearson Place seemed unaware that the plan would be to connect the area, even though the 60-foot corridor was collected. He stated that the Commission could make the recommendation for a full road, but this seemed to be an adequate compromise.

Commissioner VanScoy commented that he does not understand why this is an issue for those folks. He commented that there is a mile-long cul-de-sac which is unacceptable from a safety aspect.

Commissioner Anderson agreed with the comments of Commissioner VanScoy. He did not believe this could move forward unless a road goes through. He stated that in his opinion he would not support a plan that did not provide a connection. He commented that there needs to be a way out.

Commissioner Woestehoff stated that he would agree with those comments, noting that the 20-foot extension would be a minimum. He stated that people will appreciate the cut through more than they would oppose it after constructed. He stated that the new road seems like a good idea.

Commissioner Anderson stated that he wants a road in there and does not think it should be constructed to bare minimums and should instead stick to the standards for a City street.

The applicant, stated that they appreciate continuing to work with the staff as they want to make this a nice neighborhood. He stated that staff did a good job describing the constraints and conditions around the property. He stated that they are trying to achieve sustainability of the neighborhood and the concept plan is key. He stated that multiple housing types bring in multiple age groups and buyers which helps to make the development sustainable over time. He stated that they knew that tree preservation would be important. He noted that the deeded parcel was provided by the adjacent property and they would provide additional property that would be used for screening. He stated that they support the current layout that has been developed, versus having the access on the east side. He explained that they want people coming into the site to first see the park and preserved tree area. He stated that once the input is gathered in the next few meetings, they will present a concept plan that provides a transition from the existing neighborhood with a variety of housing products and fits with the other adjacent uses.

Motion by Commissioner Anderson, seconded by Commissioner VanScoy, to recommend that the City Council adopt the document as an official, yet nonbinding policy document to guide future conversations pertaining to Riverstone South with the added condition of the public road.

A roll call vote was performed:

Commissioner Peters	aye
Commissioner Woestehoff	aye
Chairperson Bauer	aye
Commissioner Johnson	aye
Commissioner Gengler	aye
Commissioner Anderson	aye
Commissioner VanScoy	aye

Motion Carried.

Parks & Assistant Public Works Superintendent Riverblood stated that he was unsure if the park element was discussed as the focus seemed to be on density transitioning, tree preservation and the connection road. He stated that there will be more opportunities for public comment as this moves forward.

Chair Bennett noted that some elements will be dependent upon the goals of the developer, as empty nesters would have different desires in a park.

Councilmember Heinrich commented that it seemed the developer desired to place high density units near the solar array with the larger lots adjacent to Bowers Drive.

Chair Bennett agreed that would be a logical layout.

Commissioner Sis referenced the 50-foot buffer and asked if that would remain wooded.

Parks & Assistant Public Works Superintendent Riverblood stated that the 50-foot area is owned by the City and the City would maintain control rather than an HOA, so that area would remain wooded.

Motion by Commissioner Sis, seconded by Commissioner Barten, to recommend that the City Council adopt the document as an official, yet nonbinding policy document, together with park and trail recommendations to guide future conversations pertaining to Riverstone South as discussed by the Commission.

Motion carried. Voting Yes: Chair Bennett; Commissioners Sis, Bayer, Barnes, Barten, Guck, Leistico, and Loss. Voting No: None. Absent: None.

6. COMMISSION/STAFF INPUT

Parks & Assistant Public Works Superintendent Riverblood highlighted upcoming recreation programing and modified summer events.

Commissioner Bayer commented on the dog park and stated that it would be helpful to have tables in the shade for residents.

Parks & Assistant Public Works Superintendent Riverblood commented that he will look into it to determine if there would be a seating option within the proposed new addition to the off-leash area.

7. ADJOURNMENT

Motion by Commissioner Bayer, seconded by Commissioner Loss, to adjourn the meeting.

Motion carried. Voting Yes: Chair Bennett; Commissioners Barnes, Sis, Barten, Bayer, Guck, Leistico, and Loss. Voting No: None. Absent: None.

ENVIRONMENTAL POLICY BOARD
CITY OF RAMSEY
ANOKA COUNTY
STATE OF MINNESOTA

On Monday, June 15, 2020, the Environmental Policy Board (EPB) met in the Council Chambers at the Ramsey Municipal Center, 7550 Sunwood Drive N.W., Ramsey, Minnesota.

Members Present:	Chairperson Michael Valentine Board Member Reid Bernard Board Member Jane Covart Board Member Melissa Fetterley (joined remotely) Board Member Michael Hiatt (joined remotely) Board Member Jared Little Board Member Laura Moore (joined remotely)
Members Absent:	None
Also Present:	City Planner Chris Anderson City Council Liaison Jeff Menth

1. CALL TO ORDER

Chairperson Valentine called the meeting to order at 6:30 p.m.

2. CITIZEN INPUT

None.

3. APPROVE AGENDA

Motion by Board Member Covart and seconded by Board Member Little to approve the agenda as submitted.

A roll call vote was performed:

Board Member Moore	aye
Board Member Little	aye
Board Member Fetterley	aye
Board Member Bernard	aye
Board Member Hiatt	aye
Board Member Covart	aye
Chairperson Valentine	aye

Motion carried.

4. APPROVE MINUTES

4.01: Approve Meeting Minutes Dated May 20, 2020

Motion by Board Member Little and seconded by Board Member Covart to approve the regular meeting minutes dated May 20, 2020.

A roll call vote was performed:

Board Member Little	aye
Board Member Bernard	aye
Board Member Moore	aye
Board Member Fetterley	aye
Board Member Hiatt	aye
Chairperson Valentine	aye
Board Member Covart	aye

Motion carried.

5. POLICY BOARD BUSINESS

5.01: Approve Planning Framework for Highway 10 South Planning Area – Riverstone Area

City Planner Anderson presented the staff report. He stated that the purpose of the case is to provide very high-level policy direction pertaining to a potential development project south of Highway 10 and east of Bowers Drive (portions of the Pearson Farm). This is not a formal application nor official development review. The intent is to provide staff with direction on key policy points to assist staff in reviewing concepts with Capstone Homes, the potential developer. As is commonplace, there will be significant opportunities for ongoing public engagement throughout this process moving forward.

Board Member Moore stated that her main concern would be the preservation of the trees. She asked the type of park that would be proposed, whether it would be a preserve area or whether it would remove trees to install a play park.

City Planner Anderson replied that the parks staff has referred to this as a tree fort park, working with what is out there to create an area for play.

Board Member Hiatt stated that in previous discussions it had been mentioned that Bowers Drive is the longest cul-de-sac in Ramsey and asked if there would be a potential to provide a connection through this neighborhood to improve public safety.

City Planner Anderson replied that there was a virtual workshop to receive high level public input related to tree preservation and density transitioning along with traffic and safety connections. He confirmed that there will be a second access provided for Bowers Drive, noting that the details are still being worked out.

Chairperson Valentine asked the status of the river crossing that was under discussion for some time.

City Planner Anderson replied that Ramsey continues to work with Dayton on that potential opportunity, although that area is not part of this discussion.

Board Member Fetterley commented that it would be nice to have a larger transition buffer, noting that would also help to preserve additional trees. She stated that the goal is to preserve the largest number of native trees possible and would encourage the developer to keep that in mind.

Board Member Hiatt asked if preserving trees above the required amount in code can be mandated or whether that would be a decision of the developer.

City Planner Anderson explained that it would depend upon the request from the applicant. He stated that if the developer requests something, such as rezoning, the City could then negotiate for items such as additional tree preservation. He explained that if a developer came forward with a request that meets all the standards, the City would not have the ability to mandate any additional requirements. He stated that the intent tonight is to provide high level input that the developer can use when further designing their proposal. He stated that the Board could consider encouraging the developer to look at conservation design and how that could be incorporated into plans going forward.

Board Member Covart referenced the buffer and noted that it stops at the larger lots and asked if that would be extended.

City Planner Anderson replied that the buffer is a wooded stand that is owned by the City. He provided background information and noted that there is no intention to extend the buffer past that area. He further clarified that the lots in Pearson Place were purposefully designed to be larger and deeper than the previously existing lots along Bowers Drive to provide more separation between those newer homes and future development of the remainder of the Pearson Family Farm.

Councilmember Menth stated that he likes the buffer and recognized the need for a second connection to Bowers Drive for public safety. He stated that it would be great to preserve some of the wooded area and add a park as well.

Motion by Board Member Covart and seconded by Chairperson Valentine to recommend that the City Council adopt the document as an official, yet nonbinding policy document, and provide support for enhanced tree preservation efforts and other natural resources related guidance to shape future conversations pertaining to Riverstone South, encouraging the developer to preserve as much of the tree stand as possible, encouraging the second connection for Bowers Drive, encouraging incorporation of conservation design principles, to keeping the park as natural/rustic as possible.

A roll call vote was performed:

Board Member Bernard	aye
Board Member Covart	aye
Board Member Moore	aye
Board Member Fetterley	aye
Board Member Little	aye

Board Member Hiatt aye
Board Member Valentine aye

Motion carried.

5.02: Consider Draft Landscaping Ordinance Amendment

City Planner Anderson presented the staff report. He stated that the purpose of this case is to check in with the EPB on the draft ordinance amendment for landscaping standards in the Employment Districts. As a result of the Comprehensive Plan Update, there will be a number of City Code amendments in the coming year and as part of that, staff is looking at overhauling much of the Zoning Code. As can be seen from the draft ordinance, more than just the Employment Districts are being addressed. A new section entitled Landscaping is being proposed and all landscaping standards are being removed from individual zoning districts and moved here. There is a lot of repetition between many of the districts and this will help reduce the overall size of the Zoning Chapter.

Chairperson Valentine stated that he is happy with the progress, noting that it appears the discussion of the Board has been incorporated thus far.

Board Member Hiatt commented that he likes the idea to consolidate landscaping into its own section where it also makes it clear as to the difference in requirements per zoning section.

City Planner Anderson stated that he will continue to work on this and bring it back to the Board in the future, noting that it is not time sensitive.

6. BOARD / STAFF INPUT

City Planner Anderson reported that the timeframe for filings has closed and there is not a need for a primary to be held in August for the City Council elections.

7. ADJOURNMENT

Motion by Board Member Little and seconded by Board Member Covart to adjourn the meeting.

A roll call vote was performed:

Board Member Little aye
Board Member Covart aye
Chairperson Valentine aye
Board Member Bernard aye
Board Member Moore aye
Board Member Hiatt aye
Board Member Fetterley aye

Motion carried.

The meeting adjourned at 7:20 p.m.

Respectfully submitted,

_____
Chris Anderson
City Planner

ATTEST:

_____
JoAnn Shaw
Community Development Assistant

Drafted by Amanda Staple
TimeSaver Off Site Secretarial, Inc.

Senior Planner McGuire Brigl stated that she reached out to Anoka County about the possibility of a four way stop and the County did not view a four way stop or traffic light as an option at that intersection because of spacing. She stated that the County stated that adding a four way stop at that location could actually make traffic worse down the road.

City Engineer Westby stated that volumes of traffic and pedestrians, along with site constraints have to be reviewed along with a number of warrants. He stated that with these traffic volumes a four-way stop would not be warranted. He stated that a four-way stop could also create a false sense of security for pedestrians.

Senior Planner McGuire Brigl clarified that the trail along Nowthen is in the plan sheets, although she did not present that element tonight.

Councilmember Specht stated that he has been contacted by residents about this proposed project. He stated that he would need to see turn lanes, traffic studies and noise studies included in order to support this project.

Councilmember Heinrich asked for details on the plan review comments and staff letter mentioned in the staff report recommendation.

Deputy City Administrator Gladhill explained that staff provides comments to the developer in multiple sources and provided clarification.

Motion by Councilmember Riley, seconded by Mayor LeTourneau, to Adopt Resolution #20-114 Approving Preliminary Plat for Hampton Homes with the incorporation of one turn lane.

Further discussion: Councilmember Menth asked why only one turn lane is wanted. Councilmember Riley stated that staff suggested only a northbound turn lane. Deputy City Administrator Gladhill stated that the priority of residents is the northbound turn lane. He stated that the southbound turn lane could be addressed during the CR 5 corridor study. Councilmember Musgrove stated that she would have difficulty supporting this because of the proximity to CR 5 and the issues with traffic. She stated that she would prefer to have two turn lanes funded by the developer and therefore would not support this motion.

Motion carried. Voting Yes: Mayor LeTourneau, Councilmembers Riley, Kuzma, and Menth. Voting No: Councilmembers Heinrich, Musgrove, and Specht.

7.09: Adopt Resolution #20-136 Approving Planning Framework for Highway 10 South Planning Area – Riverstone South

Deputy City Administrator Gladhill reviewed the staff report and recommendations of the Planning Commission, Park and Recreation Commission and Environmental Policy Board.

Mayor LeTourneau commented that he appreciates Capstone Homes and the landowner for their willingness to come forward with a project like this and the process that they have allowed the existing neighborhood to participate in. He welcomed comments from residents.

Matt Guck, 14583 Bowers Drive, stated that he is a Forestry Technician and spends time both cutting and planting trees. He stated that a piece of forest like this is very valuable. He stated that he chose his home deliberately to live next to old growth woods. He stated that the wooded area really is a remarkable ecosystem and recognized how valuable it is in an intangible way. He stated that wooded ecosystems are easy to destroy but take a long time to build. He commented that there are so few of these wooded ecosystems left and they are exceedingly rare and should be preserved. He stated that this area has already been manipulated to a significant degree and hoped that the remaining ecosystem could be preserved. He stated that he hopes that the City also places value on that as well.

Councilmember Heinrich stated that the Park and Recreation Commission recently reviewed a consideration for a park in the area and asked Mr. Guck's preference on whether he would like the wooded area preserved or whether a park would be preferable.

Mr. Guck stated that he supports an active use park in the woods, as it would establish a place for children to connect to nature. He stated that he also recognizes value of non-active use land and the benefits that it provides. He did not believe the entire wood lot should be made accessible.

Councilmember Heinrich stated that at the Park and Recreation Commission the question was not asked on whether the tree canopy should be preserved rather than an active use playground.

Councilmember Menth referenced a wooded area in San Francisco that is world renowned and stated that Mr. Guck's comments remind him of that.

Sam Sjostrom, 14623 Bowers Drive, echoed the comments of Mr. Guck related to the motivation behind moving to this area. He stated that the tree coverage was a motivating factor as it is not common to suburban residential areas. He stated that if some of trees were lost to the east that would be unfortunate. He appreciated the open discussion and bringing the options to the table as he felt that was encouraging. He stated that he would prefer option two. He asked if the data could be shared related to the precedent for Bowers Drive to have a second access.

Police Captain Frankfurth stated that they always desire a second access into a neighborhood. He commented that there is a good chance that trees could come down in a storm and if there is only one access, it would take longer for emergency services to access the properties. He also provided input on fire safety and circulation of those vehicles. He stated that police can get through trails while fire trucks are larger and have larger turning radius requirements.

Deputy City Administrator Gladhill stated that some complaint data was pulled over the past ten years.

Mayor LeTourneau commented that he lives on Bowers Drive and has enjoyed the tree canopy and unique characteristics of the neighborhood. He stated that he always thought that there would

be development at some point and therefore is not struggling as much as some residents may. He stated that across the neighborhood people are resistant of change but accepting that this is going to happen and are working collaboratively through this process. He stated that everyone loves the tree canopy and would like that characteristic to remain. He stated that the neighborhood has embraced the 12 homes that Capstone brought through the last development. He stated that the existing residents would like the characteristic to remain to the extent possible. He stated that related to the second access, the general consensus is that if the second access has to be there, they would accept it, but no one really wants it. He stated that the overwhelming resistance is against a full access road as they would like Bowers Drive to remain secluded. He stated that the two versions presented today seem to be acceptable. He stated that the most favorable orientation for Riverdale Drive would be to have the eastern most option. He stated that the residents do not want Riverdale Drive to come into Bowers Drive and change addresses. He appreciated Mr. Guck's comments related to tree preservation. He noted that 30 years ago that forest looked much different and continued to change. He commented that the inventory that was completed yielded some great information with very old growth trees that are a valuable amenity for the community. He stated that he would like to see as much of the tree canopy protected as possible, beyond a one-acre park.

Councilmember Specht stated that this is a beautiful area of Ramsey and wants people to be able to enjoy that in a way that respects the residents and the forested area there. He agreed that the forest should be preserved to the extent possible and believed a play area would also be nice.

Councilmember Heinrich stated that she supports the higher density being located near the solar farm as that is not the most desirable view. She stated that she supports the full connection, although she understands the sensitivities to the residents. She commented that public safety is the most important to her. She stated that if the City is going to ask the developer to preserve more trees, would the City then still ask them to build a park. She stated that she would lean towards leaving it as a natural area. She referenced the plan which has a change to the Highway 10 access point and asked if there is concern with the right-in/right-out option if the full connection is provided on the other end.

Police Captain Frankfurth stated that there would be some concerns with a right-in/right-out option depending where it is on Highway 10. He stated that they would at least want a right in for public safety.

City Engineer Westby commented that any time you can remove a median crossover would be a good thing and would be supported by MnDOT. He stated that a right-in/right-out typically does not prove to be a safety issue if there are not accesses in close proximity.

Councilmember Riley stated that he favors larger lots, especially around the edge of existing homes. He commented that this would seem to be a good fit for smaller lots as well. He stated that in terms of street connection, a full street connection is preferable. He stated that whenever there is a discussion related to long cul-de-sacs, Bowers Drive is always mentioned. He stated that creating the second access would be an important connection and did not believe it would open up Bowers Drive as a cut through for the new neighborhood. He stated that there is already a 75-foot buffer discussed, which is larger than many of the lots that would be created. He stated that he is supportive of the direction that this is moving.

Councilmember Kuzma stated that he would support the tiered lot sizes as discussed. He stated that he also agrees with the issue of safety and would support a full connection that could support a fire truck. He stated that he would also be open to exploring preservation of additional wooded acres as that is a great asset to the community.

Mayor LeTourneau stated that the residents of Bowers Drive accept that a second access will most likely be required and are now focusing on how that could be designed to not infringe upon the existing neighborhood but still provide access to fire trucks and emergency vehicles.

Councilmember Musgrove asked if any changes are being made to the land use.

Deputy City Administrator Gladhill explained that this framework would guide those conversations, noting that at some point a rezoning would be necessary. He stated that this is a nonbinding document that provided policy direction that would be implemented in future steps.

Councilmember Musgrove stated that she would like to see what could be done to preserve the tree canopy area but also understands that this is private land and has the ability to develop. She stated that she also likes option two.

Steve Bona, Capstone, stated that the Pearsons own the trees on the property. He stated that Capstone has had success in Ramsey and appreciates working with City staff. He stated that the Riverdale connection to Highway 10 needs to be more known so that they can design their concept with the knowledge of how it connects to Highway 10. He stated that they would propose full park fees and dedication of two acres of trees to be preserved through the park and buffer. He stated that there have been a lot of comments related to tree preservation. He noted that another option would be heavy on park dedication land and lighter on the park fees. He stated that there are 79 acres and they could dedicate eight acres of park that could be all-natural trees. He stated that Capstone also suggested a bonus for the smaller lots which could equate to another two acres, which would be a total of ten acres of park land. He noted that option would not involve park fees but would provide the opportunity to preserve those trees. He stated that if they preserve that ten acres, they lose development area which loses economy of scale to make the development work. He noted that the total tree canopy area is 23 acres. He stated that if they go beyond that ten acres, they cannot make the development work financially because they could not pay for Riverdale Drive and could not pay for landscaping and common areas. He asked for feedback on that tonight so that they could work that into the concept plan and continue to move forward. He stated that they provided the first alignment for Riverdale with access to the west of the buildings.

John Dobbs stated that he has helped the Pearsons for some time and was the developer of Pearson Place. He stated that when Pearson Place was developed there was a joint effort between the neighborhood, planning staff, property owner and developer to finish off Bowers Drive. He explained that the 50-foot buffer was provided as a buffer and acknowledgement that there would be density on the other side of the trees compared to the unique Bowers Drive neighborhood. He stated that he understands the desire to save trees but noted that this is not a new dialogue. He stated that this is about the Pearsons property and their tenure in the City. He stated that the Pearsons are fond of the existing residents and have provided that buffer. He stated that when he

first got involved, they were given an alignment from the City. He commented that Ms. Pearson commented that she did not want Riverdale Drive to go through her living room and staff was great with providing alternative ideas for the alignment that do not go through the Pearson's home or Bowers Drive. He stated that there were neighborhood meetings for Pearson Place which brought forward Riverdale Drive alternative one. He stated that the road alignment could be moved to the east, which would be almost a football field from Bowers Drive. He explained that the Pearsons prefer that alignment because the road impacts the Pearsons and their home along with their businesses. He stated that the Pearsons do not want to have a service road.

Mayor LeTourneau stated that the additional feedback is important as it tells the City there are many things still on the table. He stated that there is flexibility in those topics.

Councilmember Riley noted that each member of the Council had different ideas on some elements and asked for input from staff, as he was unsure the draft motion captures those ideas.

Mayor LeTourneau commented that the framework allows for all of those discussion points to come forward. He stated that the framework was not very clear about the idea of extended tree preservation and suggested that be added.

Deputy City Administrator Gladhill stated that everyone agrees that Riverdale Drive is important and both alternatives should be explored deeper. He commented that the second connection between Riverdale Drive and Bowers Drive needs to happen, whether that is a public road or just for public safety. He provided details on the possible tree preservation options as well. He noted that the framework would provide direction and limit some options compared to the things that have been on the table thus far.

Motion by Councilmember Menth, seconded by Councilmember Kuzma, to Adopt Resolution #20-136 Approving Planning Framework Document for Riverstone South, including the discussion related to tree preservation.

Further discussion: Councilmember Heinrich asked what the language would be related to tree preservation. Councilmember Menth confirmed that he would suggest the language as proposed by staff. Councilmember Specht stated that he likes the idea of no park fees with the higher acreage of preserved trees. Councilmember Heinrich stated that she struggles because one of the options is continuing to explore 20 plus acres of tree preservation. She stated that she would like to work with the developer on a tree preservation plan but was unsure that acquisition of 20 plus acres would be feasible. She commented that there are a lot of variables included in the language provided by staff. Mayor LeTourneau stated that the intent is to provide direction and to let staff and the developer work out those details. He stated that full acquisition of the trees would most likely fall off the discussion pretty quickly as this moves forward. Councilmember Heinrich stated that she cannot support the motion as drafted which includes the full acquisition of the 20 plus acres of wooded area. Councilmember Menth stated that he understands that this would provide direction to the staff to negotiate and work with the developer. He commented that anything between one acre and 23 acres would be on the table for discussion and simply provides flexibility. Deputy City Administrator Gladhill offered an amendment to move this along. He stated that unless the Council is willing to bring cash, the full acquisition would not happen and therefore

suggested that be left off. He stated that the language could be the option shown now and anything more than that. Councilmember Riley stated that he would feel more comfortable removing the full acquisition option. It was the consensus of the Council to remove the full acquisition option of 20 plus acres. The last option should be corrected to reduce park dedication fees in return for additional preserved acres of trees.

Motion carried. Voting Yes: Mayor LeTourneau, Councilmembers Menth, Kuzma, Heinrich, Musgrove, Riley, and Specht. Voting No: None.

7.10: Adopt Resolution #20-134 Accepting Resignation of the Ward 1 Council Member, Declaring a Vacancy in the Office of Council Member Ward 1 and Calling for a Special Election to Fill the Vacancy

City Administrator Ulrich reviewed the staff report and recommendation to adopt Resolution #20-134 to proceed with the Special Election Process.

Councilmember Heinrich stated that she has enjoyed serving the community, meeting residents, and having them express their comments to the Council. She highlighted some of the projects and activities that she participated in during her time on the Council. She thanked the residents for the opportunity to serve on the Council, which has been a rewarding experience. She stated that she will be resigning her position effective July 14th, which is difficult. She explained that her husband's new job will take them out of the state and therefore she will not be able to serve Ramsey. She thanked the other members of the Council for their continued service to the community.

Mayor LeTourneau extended his gratitude for Councilmember Heinrich's service and everything she has done for the City.

Councilmember Specht stated that it has been an honor to work with Councilmember Heinrich and noted that she has been a great role model on how to serve the residents.

Councilmember Riley commented that he will miss Councilmember Heinrich and Ward 1 will lose an advocate.

Councilmember Musgrove stated that Councilmember Heinrich has been an inspiration and it has been awesome to see her creative thinking.

Motion by Councilmember Heinrich, seconded by Mayor LeTourneau, to Adopt Resolution #20-134 Accepting Resignation of the Ward 1 Councilmember, Declaring a Vacancy in the Office of the Ward 1 Councilmember and Calling for a Special Election to Fill the Vacancy.

Further discussion: Councilmember Menth commented that Councilmember Heinrich is a class act and it has been great working with her. Councilmember Kuzma wished Councilmember Heinrich good luck in her future.

Commissioner Anderson	aye
Commissioner Gengler	aye
Commissioner VanScoy	aye
Chairperson Bauer	aye

Motion Carried.

7. COMMISSION BUSINESS

7.01: Review Sketch Plan for Riverstone South; Case of Capstone Homes

Presentation

Deputy City Administrator Gladhill presented the Staff Report stating that the City has broad policy discretion as the request requires the approval of a Zoning Amendment (and possibly Comprehensive Plan amendment) due to lot sizes and densities. She encouraged the Commission to provide feedback to the developer as part of the plan development for the next stage in the process known as Preliminary Plat.

Commission Business

Councilmember Musgrove asked if there would be buffering on the east, adjacent to the solar farm.

Deputy City Administrator Gladhill replied that additional density transitioning buffering is not proposed as it is not required.

Councilmember Musgrove asked if there would be a connection to the ponds under the proposed road.

Deputy City Administrator Gladhill stated that he is unsure if there would be a connection point. He stated that there may be connections between one of the proposed ponds and the infiltration basin. He noted that additional details will be developed as this moves forward.

Commissioner Anderson asked if there are hydrants on Bowers Drive.

Deputy City Administrator Gladhill replied that the closest sewer and water is currently at Lazydays RV, therefore there is not a hydrant on Bowers Drive currently. He stated that this project would bring water to the development site and would bring in hydrants. He noted that a water line would be brought through this corridor and connected to Bowers Drive. He stated that there are no plans to extend sewer and water down Bowers Drive.

Commissioner Anderson asked how wide the streets will be in the development.

Deputy City Administrator Gladhill replied that the at minimum, Pearson Boulevard or Drive should be a typical standard size while the rest of the internal streets would be 29 feet wide, similar to Riverstone North, with parking allowed only on one side.

Commissioner Anderson asked if the entire project would be connected to sewer and water.

Deputy City Administrator Gladhill confirmed that the entire development would be connected to those utilities.

Commissioner Anderson asked if the townhome product would be similar to other homes in Ramsey.

Deputy City Administrator Gladhill stated that this would be similar to the Centra Homes project. He stated that Capstone is currently building this product in the current phase of its existing development.

Commissioner Anderson asked if sidewalks would be required.

Deputy City Administrator Gladhill confirmed that there would be sidewalks on one side of the street.

Chairperson Bauer commented that he lives in Riverstone North and has for two years. He stated that this is the first step in a three-step process, noting that they attempt to address questions and concerns at this step before additional time and funds are invested in the Preliminary Plat step. He noted that a public hearing would be held when the Commission reviews the Preliminary Plat.

Commissioner VanScoy referenced the access, noting that there was a concern for safety and connection. He stated that a full connection was discussed, and he believed was agreed upon. He stated that he sees a trail/vehicle access that is reduced in width and asked for details.

Deputy City Administrator stated that staff acknowledges that it is a sensitive topic and there is concern from the existing residents on Bowers Drive. He stated that the City allowed this situation to occur in years past and is trying to work through that. He stated that they are open to allowing something that accommodates the largest fire department vehicle but would not be open for full traffic.

Commissioner Anderson stated that he agrees that connection should be a public street. He stated that people from the development would not go down that to exit from Bowers Drive. He commented that Bowers Drive is not a private development and is a City street. He stated that he respects those properties and their properties but believes that a secondary access should be provided for emergency vehicles. He commented that should be a City street connection. He stated that the 65-foot-wide lots should be 80-foot lots to meet the R-1 standard.

Chairperson Bauer commented that although this is not a public hearing, he would still provide an opportunity for the developer to come forward to address concerns that were expressed at the open house prior to tonight's meeting.

Tom Bakritges, Capstone, thanked the Pearson family who has entrusted this team to create a special development on their farm homestead. He also expressed appreciation to the staff, advisory

Boards and City Council for their input and cooperation. He identified the existing uses and future guiding on the adjacent properties. He commented that Riverstone South is to mirror Riverstone North. He commented that there will be larger lots would be adjacent the exiting residential with the lot sizes reduced on the other side of the development, adjacent the solar farm. He stated that they will continue to work with the City and Pearson family on the design and connectivity to Highway 10 and the extension of Riverdale Drive. He stated that they will provide a 30-foot buffer area along Riverdale Drive that will be landscaped. He stated that there will be a one-acre neighborhood park with open space and a stand of existing Oak trees. He stated that there will be seven acres of trees preserved and dedicated to the City which will combine with the existing tree buffer. He stated that there will be an additional nine acres of open space, ponding, and basin area. He stated that the Bowers Drive connection is still be discussed and they will support the option agreed upon by the City and residents. He stated that the Capstone customer is typically a first- or second-time home buyer and there is a high demand of this type of product in the market. He stated that this Concept Plan is a result of much communication and coordination between Capstone, City Staff and input from residents, advisory Boards, and the City Council.

Chairperson Bauer asked for a comparison between Riverstone North and South on the mix of housing products and also for input on the demand from homebuyers at this time.

Mr. Bakritges stated that the sales this year within Riverstone North have exceeded their expectations, especially during the pandemic. He commented that interest rates are low and the variety of products within the development provides options for many different homebuyers. He stated that the difference between North and South would be that in Riverstone South, the lots against the preserved trees would be a premium style but would otherwise be similar in product. He stated that the only product that exists in the North that would not be included in the South would be the villas.

Chairperson Bauer commented that the older residents typically live in the villas and young families tend to choose the larger lot homes.

Mr. Bakritges stated that the Capstone developments thrive because they have a mix of buyers and residents. He stated that the design their developments to have people walking around, using the sidewalks and trails.

Commissioner Anderson asked if the 55 foot lots would be detached villas.

Mr. Bakritges clarified that those would be single-family homes as the villa product will not be included in the South.

Josh Fuerick, 14573 Bowers Drive, stated that the tree preservation area is an extremely ecologically unique area and feels that the developer has done a great job of considering that. He believed that it made sense to have the 65 foot lots in that area. He stated that he manages HOAs for townhomes and believed that the Commission should be asking where snow storage would occur. He commented that should be a consideration for all developments that are HOA maintained which would prevent snow from having to be hauled offsite.

Chairperson Bauer asked if these streets would be publicly maintained.

Deputy City Administrator Gladhill commented that as of now all the streets are proposed to be public, but that could change for the detached townhome section of the development as this moves forward.

Mr. Fuerick explained that his comment was related to driveway snow removal and storage for that snow. He encouraged the Commission to think about that element in all development projects.

Chairperson Bauer stated that in his development the snow from his driveway is piled into his yard.

Commissioner Anderson asked if Mr. Fuerick would support the 65-foot lots instead of the 80-foot lots.

Mr. Fuerick confirmed that he supports the 65-foot lots as he believes it makes sense and that the developer has taken the tree preservation into consideration. He believed that additional preserved trees are a sufficient tradeoff for the 65-foot lots.

Jeff Johnson, 4540 Bowers Drive, stated that when there was first discussion about Capstone building the 12 additional homes, there was never a mention of the piece of City owned land. He stated that there was never discussion of a roadway connection and believed that is fixing a problem that does not exist. He stated that he does not need the Commission or the City to review his calculated risk. He stated that he lives in the floodplain and pays higher insurance rate for that and because of the distance from a fire hydrant. He stated that everyone that purchased on Bowers Drive took that risk willingly and to be isolated from other development. He stated that Bowers Drive was able to support the 12 additional homes and did not want to see the City attempting to fix a problem that does not exist. He stated that there is not one incident where an emergency situation occurred, and the City services were not able to access. He stated that 95 percent of the residents on Bowers Drive reject the road connection and asked the City to take that off the table.

Chairperson Bauer commented that the decision to obtain the property for a roadway connection was obtained when the 12 homes were constructed. He stated that they are now discussing whether that connection is necessary.

Deputy City Administrator Gladhill stated that in 2016 they were attempting to be flexible with the design and should have been more specific in the plan set as to the potential future street connection. He noted that the information was disclosed in the 2016 presentation.

Mr. Fuerick stated that the concern of the Bowers Drive residents is not with traffic from the new development. He invited the Commissioners to come down Bowers Drive and see the pedestrian activity from the Bowers Drive residents. He stated that the entire road is tree lined and therefore if there is a storm that causes a tree to go down, they will deal with it as many residents have chainsaws. He stated that if the developments are connected, that will significantly increase the pedestrian traffic, which will impede the enjoyment of the Bowers Drive residents and their ability to drive down the road safely.

Mr. Johnson stated that there are no streetlights on Bowers Drive and therefore if the pedestrian traffic is increased that will cause a safety issue. He stated that one thing will lead to another, beginning with fixing a problem that does not exist that will cause other problems.

James Wadey, 14447 Bowers Drive, stated that there have been many studies that show crime rates increase when a cul-de-sac is opened as it provides criminals with increased opportunity to leave the neighborhood. He stated that he would be concerned with having a road that comes along the side of his property that would allow others to access his property.

Chairperson Bauer urged the residents to continue to raise their concerns over the roadway connection with City staff, as the decision will be made prior to the Preliminary Plat step. He stated that there should be additional input from public safety staff as to why they pushed for that connection.

Senior Planner McGuire Brigl stated that a written comment was provided from the property owner at 14435 Bowers Drive, noting that the property owner was not made aware of the potential road when they purchased their property.

Councilmember Musgrove asked the plans for Bowers Drive and whether there would be a connection planned to 142nd Ave NW.

Deputy City Administrator Gladhill stated that there is another dead-end road and therefore it would seem a logical solution to connection those roads, but City staff is aware that would cause more objection. He stated that City staff has heard loud and clear of the unique character of Bowers Drive and therefore public safety felt that this connection would be a good compromise.

Mr. Bakritges explained that at the June meetings it was agreed upon to preserve about 10 percent of the wooded area, which they did, by switching out the 80 foot lots with 65-foot lots. He noted that has been supported by the Bowers Drive residents and the Council because of the additional tree preservation that would be provided.

7.02: Consider Resolution #20-164 Granting a Conditional Use Permit (CUP) for Team Packaging at 14799 Jackal St Suite 400 in Bunker Lake Industrial Park (Project No. 20-123)

Presentation

Chairperson Bauer noted that there was not sufficient time to provide notice for a public hearing and therefore the Planning Commission was asked to review and provide input with the public hearing to be held at the City Council meeting.

Senior Planner McGuire Brigl presented the Staff Report stating that staff recommends that the Commission recommend approval of the Conditional Use Permit for Team Packaging for outdoor storage with a public hearing at the next City Council meeting.

Riverstone South

Environmental Assessment Worksheet

Draft December 8, 2020

Responsible Governmental Unit (RGU)

City of Ramsey
Community Development
7550 Sunwood Drive NW
Ramsey, Minnesota 55303
http://www.cityoframsey.com/

7550 Sunwood Drive NW • Ramsey, MN 55303
City Hall: 763.427.1410 • Fax: 763.427.5543
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Memorandum

To: Minnesota Environmental Quality Board
Environmental Review Distribution List

From: Tim Gladhill, Community Development Director

Date: December X, 2020

Subject: Riverstone South EAW

As the Responsible Governmental Unit (RGU), the City of Ramsey is issuing this Environmental Assessment Worksheet (EAW) for Riverstone South. The public comment period on this EAW begins when the public notice is published in the Minnesota Environmental Quality Board (EQB) Monitor on December X, 2020. A press release and public notice has been submitted for publication in the Anoka County Union Herald. Public comments on this EAW will be accepted by the City of Ramsey until 4:30pm on January X, 2021.

Environmental Assessment Worksheet (EAW)

Riverstone South

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Environmental Assessment Worksheet (EAW)

Riverstone South

This Environmental Assessment Worksheet (EAW) form and EAW Guidelines are available at the Environmental Quality Board's website at: http://www.eqb.state.mn.us/EnvRevGuidanceDocuments.htm. The EAW form provides information about a project that may have the potential for significant environmental effects. The EAW Guidelines provide additional detail and resources for completing the EAW form.

Cumulative potential effects can either be addressed under each applicable EAW Item, or can be addresses collectively under EAW Item 19.

Note to reviewers: Comments must be submitted to the RGU during the 30-day comment period following notice of the EAW in the *EQB Monitor*. Comments should address the accuracy and completeness of information, potential impacts that warrant further investigation and the need for an EIS.

1. Project Title: **Riverstone South**

2. Proposer:	Riverstone Development, LLC	**RGU:**	City of Ramsey
Contact person:	Tom Bakritges	Contact person:	Tim Gladhill
Title:	Land Project Manager	Title:	Community Development Dir.
Address:	14015 Sunfish Lake Blvd.	Address:	7550 Sunwood Drive NW
	Ramsey, MN 55303		Ramsey, MN 55303
Phone:	(763) 450-1213	Phone:	(763) 433-9826
Fax:	(763) 712-9060	Fax:	(763) 433-9848
Email	tbakritges@capstonehomes-mn.com	Email	tgladhill@cityoframsey.com

4. Reason for EAW Preparation

Required:
- ☐ EIS Scoping
- ☐ Mandatory EAW

Discretionary:
- ☐ Citizen petition
- ☑ RGU discretion
- ☐ Proposer initiated

If EAW or EIS is mandatory give EQB rule category subpart number(s) and name(s):
The EAW is Not Mandatory, MN Rules Part 4410.4300, Subp. 19.D. (Residential development)

5. Project Location

County: Anoka County, Minnesota
City/Township: City of Ramsey
PLS Location (¼, ¼, Section, Township, Range): part of W ½ of Section 29 and part of the E ½ of Section 30, T32N, R25W
Watershed (81 major watershed scale): Mississippi River Twin Cities (20)
GPS Coordinates: 45.236147, -93.489185
Tax Parcel Number(s): part of 30-32-25-11-0032, part of 29-32-25-22-0003, and all of 29-32-25-23-0004

At a minimum attach each of the following to the EAW:

- *County map showing the general location of the project;*
- *U.S. Geological Survey 7.5 minute, 1:24,000 scale map indicating project boundaries (photocopy acceptable); and*
- *Site plans showing all significant project and natural features. Pre-construction site plan and post-construction site plan.*

6. Project Description

a. Provide the brief project summary to be published in the EQB Monitor, (approximately 50 words).

Riverstone South is proposed on 78.63 acres of land in southwestern Anoka County. The project will include 165 detached single-family homes, 78 detached townhomes, and parkland with tree preservation. Site development will include installation of municipal sewer and water, mass grading, and stormwater management practices.

b. Give a complete description of the proposed project and related new construction, including infrastructure needs. If the project is an expansion include a description of the existing facility. Emphasize: 1) construction, operation methods and features that will cause physical manipulation of the environment or will produce wastes, 2) modifications to existing equipment or industrial processes, 3) significant demolition, removal or remodeling of existing structures, and 4) timing and duration of construction activities.

Riverstone South is proposed on 78.63 acres of land in the southwestern part of the City of Ramsey, Anoka County, Minnesota (**Figure 1**). The project area is about 70% cropland and 30% woodland. The site is located in the West ½ of Section 29 and part of the E ½ of Section 30, Township 32 North, Range 25 West (**Figure 2**). The project area is bordered on the south and west by residential lots and Bowers Drive NW, on north by cropland, and on the east by cropland and a Connexus Energy solar farm. The Mississippi River is located 650 to 780 feet southwest of the site and the U.S. Highway 10 is located 530 feet north of the site. The cropland immediately north of the site is planned for extension of Riverdale Drive and commercial development.

The project will include 165 detached single-family homes, 78 detached townhomes, installation of municipal sewer and water, mass grading, and stormwater management practices. The proposed Site Plan is shown in **Figure 3**. The Site Plan and Grading Plan are shown in **Appendix A**. The project will convert about 54.14 acres of cropland and 16.17 acres of woodland to streets, homes, lawns, landscaping, and stormwater features. The balance of the site will include about 7.73 acres of tree preservation and about 0.59 acre of grassland preservation. The project will include about 17.46 acres of open space consisting of tree preservation, stormwater features, parks, and buffers. The project area does not include wetlands, but 42% of the site (33.30 acres) falls within the Mississippi River Corridor Critical Area (**Figure 4**).

The site includes sandy soils, 22 feet of topographic relief, and mostly flat to gradual slopes. The steepest slopes on the site, at 12-14%, cover only about an acre in the northwestern part of the site (**Figure 5**). This sloping area will be graded and recontoured during project construction. The development area will be mass graded to install utilities, streets, residential building pads, and stormwater basins. A 30-foot landscape buffer will be provided along the northern edge of the site

next to Riverdale Drive and the project will not affect the existing 50-foot wooded buffer behind residential lots located southwest of the site.

Single-family lots will generally range from 40 to 65 feet wide and will typically be at least 11 feet deep. Most public streets are expected to be 29 feet wide and located within 60-foot rights-of-ways. Pearson Boulevard, which will be routed through the approximate center of the site, will be slightly wider at 32 feet. A 60-foot-wide open grass strip will provide an informal and emergency access to Bowers Drive, which is located 400 feet southwest of the site. The development will operate under a homeowners' association.

Development of the project area will involve installation of public and private infrastructure, including streets, municipal water and sanitary sewer, stormwater systems, electrical lines, and telephone lines. The project area will be served by City of Ramsey fire and police services and by the Anoka-Hennepin School District.

It is anticipated that construction of the development will start in spring or summer of 2021 or 2022 and be phased over 3 to 5 years, depending on market conditions. Construction will generally be phased from the north to the south based on the extension of municipal water and sewer, which will be extended with Riverdale Drive, to be constructed along the north edge of the site. The number of phases will be determined by market demand and absorption. Infrastructure will be installed at the initiation of each construction phase. In most cases, streets, water main, and sanitary sewer will only be installed to serve the upcoming phase of construction. It may be necessary to initiate stormwater basin construction at the start of each construction phase to properly treat stormwater and minimize potential effects of stormwater runoff.

c. Project magnitude:

Table 1. Project Magnitude

Characteristic	Number of Units
Total Project Acreage	78.63
Linear project length	NA
Number and type of residential units	165 single-family detached 78 detached townhomes 243 total detached units
Number and type of residential units	0
Commercial building area (square feet)	0
Industrial building area (square feet)	0
Institutional building area (square feet)	0
Other uses – specify (acres)	NA
Structure height(s) (feet)	20-35

d. Explain the project purpose; if the project will be carried out by a governmental unit, explain the need for the project and identify its beneficiaries.

The purpose of the Riverstone South is to provide a residential development with a variety of housing types in proximity to transportation corridors and open spaces. The project will be carried out by a private entity.

e. Are future stages of this development including development on any other property planned or likely to happen? ☐ Yes ☑ No
If yes, briefly describe future stages, relationship to present project, timeline and plans for environmental review.

Future stages are not planned or likely.

f. Is this project a subsequent stage of an earlier project? ☐ Yes ☑ No
If yes, briefly describe the past development, timeline and any past environmental review.

The project is not a subsequent stage of an earlier project.

7. Cover Types

Estimate the acreage of the site with each of the following cover types before and after development:

Table 2. Cover Types

Land Cover	Before (acres)[1]	After (acres)[2]
Cropland	54.14	0.00
Woodland	23.90	7.73
Grassland	0.59	0.95
Lawn and landscaping	0.00	39.51
Impervious surface (developed)	0.00	25.62
Stormwater basins	0.00	4.82
Totals	78.63	78.63

Existing cover types are shown on **Figure 6**.

8. Permits and Approvals Required

List all known local, state and federal permits, approvals, certifications and financial assistance for the project. Include modifications of any existing permits, governmental review of plans and all direct and indirect forms of public financial assistance including bond guarantees, Tax Increment Financing and infrastructure. All of these final decisions are prohibited until all appropriate environmental review has been completed. See Minnesota Rules, Chapter 4410.3100.

Table 3. Permits and Approvals Required

Unit of Government	Type of Application	Status
City of Ramsey	Discretionary EAW Decision	To be applied for
City of Ramsey	Comprehensive Plan Amendment	Submitted
City of Ramsey	Zoning Amendment	Submitted
City of Ramsey	Concept Plan Approval	Submitted
City of Ramsey	Preliminary and Final Plat Approval	Submitted
City of Ramsey	Grading Permit	To be applied for
City of Ramsey	Building Permit	To be applied for
City of Ramsey	Stormwater Management and Erosion Control Approval	To be applied for
City of Ramsey	Municipal Water Connection Permit	To be applied for
City of Ramsey	Sanitary Sewer Connection Permit	To be applied for
Lower Rum River WMO	Concurrence with No Wetland Determination	Approved
Lower Rum River WMO	Watershed Permit	To be applied for
Metropolitan Council	Comprehensive Plan Amendment	Submitted
Minnesota Department of Health	Water Main Extension Approval	To be applied for
Minnesota Department of Natural Resources	Water Appropriation Permit	To be applied for if needed
Minnesota Pollution Control Agency	NPDES/SDS General Permit	To be applied for
Minnesota Pollution Control Agency	Sanitary Sewer Extension Approval	To be applied for
U. S. Army Corps of Engineers	Concurrence with No Wetlands/Waters Delineation	Approved

Cumulative potential effects may be considered and addressed in response to individual EAW Item Nos. 9-18, or the RGU can address all cumulative potential effects in response to EAW Item No. 19. If addressing cumulative effect under individual items, make sure to include information requested in EAW Item No. 19

9. Land Use

a. Describe:

i. Existing land use of the site as well as areas adjacent to and near the site, including parks, trails, prime or unique farmlands.

About 70% of the project area has been in agricultural use since at least the 1930s and the remaining 30% has been in woodland and grassland. Surrounding land use is residential to the south and west, agricultural (future commercial) to the north, and agricultural (future residential) and solar to the east (**Figure 4**).

Farmland ratings for soils mapped in the project area are listed in **Table 4** under **Item 10b** of this EAW. Of the seven soil map units present in the project area, one soil type covering 9.5% of the site is prime farmland, two soils covering 50% of the site are farmland of statewide importance, and four soils covering 40.5% of the site are not prime farmland.

ii. Plans. Describe planned land use as identified in comprehensive plan (if available) and any other applicable plan for land use, water, or resources management by a local, regional, state, or federal agency.

The City of Ramsey 2040 Comprehensive Plan guides the site for Low Density Residential (LDR, generally 3-4 lots/net acre). The net density of the site, after factoring out open space, is 3.95 lots/acre. The part of the site planned for 40-foot-wide lots will exceed a net density of 4 lots/acre and will require a Comprehensive Plan Amendment to Medium Density Residential (MDR, average of 7 units/acre). The City of Ramsey Comprehensive Parks and Recreation Plan shows the Mississippi Regional Trail, to be constructed on property north of the site near the U.S. Highway 10 corridor. Mapping prepared by the Minnesota DNR shows Metro Conservation Corridors in the vicinity of the project.

iii. Zoning, including special districts or overlays such as shoreland, floodplain, wild and scenic rivers, critical area, agricultural preserves, etc.

Zoning Overview

The City of Ramsey Zoning Map shows the project area zoned for R-1 (Low-Density Residential [MUSA]). The City of Ramsey is in the process of a Zoning Amendment for consistency with the 2040 Comprehensive Plan. The proposed 65- to 40-foot-wide residential lots will be allowed under the Zoning Amendment.

The project area does not fall in or near a wild and scenic river or an agricultural preserve.

Floodplains

The site is outside the floodplain of the Mississippi River (**Figure 5**). The site falls in FEMA (Federal Emergency Management Agency) FIRM (Flood Insurance Rate Map) Panel 27003C0280E, which shows that the floodway elevation of the Mississippi River, Flood Zone AE (1% annual

chance flood), ranges from 855 feet at the upstream end of the site to 853 feet at the downstream end of the site. The lowest elevation onsite (at the southeast corner of the site) is 858 feet. The site is outside the floodplain because the lowest part of the site is 5 feet higher than the corresponding flood elevation. The project will avoid floodplain impacts and comply with Lower Rum River Watershed Management Organization (LRRWMO) Stormwater Standards that require lowest floor elevations to be at least 3 feet above the highest anticipated groundwater table and 2 feet above the 100-year flood elevation, or 1 foot above the emergency overflow, whichever is greater.

Shorelands

The site is outside the shoreland overlay district of the Mississippi River (**Figure 5**). The shoreland overlay district extends 300 feet from the edge of the bank of the river channel, or to the landward extent of the floodplain, whichever is greater. The site is setback about 666 feet from the Mississippi River and is located entirely outside the floodplain, so the shoreland overlay district does not affect the proposed project.

Mississippi River Corridor Critical Area (MRCCA)

About 42% of the site (33.30 acres) falls in the Mississippi River Corridor Critical Area (MRCCA) (**Figure 4**) and the Mississippi National River and Recreation Area (MNRRA). The MRCCA is administered by the City of Ramsey, with oversight by the Minnesota DNR, and sets standards for land development. The MNRRA is overseen by the National Park Service and does not regulate development on private lands. Land use in the MRCCA is regulated under three documents:

1. Section 117-144 to 117-148 (Environmental Protection Overlay Districts) of the City of Ramsey City Code;
2. Chapter 6 Mississippi River Corridor Critical Area Plan, of the City of Ramsey 2040 Comprehensive Plan; and
3. Minnesota Rules Chapter 6106 (Mississippi River Corridor Critical Area).

Minnesota Rules Part 6106 and the City of Ramsey Comprehensive Plan designate the MRCCA within the project area as CA-SR (Critical Area, Separated from River). Land in this district is not readily visible from the river and therefore the district provides flexibility in managing development. Maximum structure height is 35 feet. Lot area and width standards must comply with requirements of the underlying zoning district. Primary conservation areas must be set aside as open areas, and the required set-aside is 10% of the parcel if the parcel includes native plant communities.

The proposed Site Plan (**Figure 3**) will preserve woodland open space over 10% of the project area and about 24% of the MRCCA area within the site (roughly 8 acres). In addition, the project design transitions from larger lots near in the southwestern part of the site within the MRCCA and near existing residential lots, to smaller lots in the northeastern part of the site near the existing solar farm and future commercial development area. The MRCCA area includes additional open space allocated to stormwater management and a grassed public safety connection to Bowers Drive.

b. Discuss the project's compatibility with nearby land uses, zoning, and plans listed in Item 9a above, concentrating on implications for environmental effects.

The project is compatible with surrounding land uses, which include residential, agricultural, and solar energy. The City of Ramsey 2040 Comprehensive Plan guides the site for Low Density Residential (LDR, generally 3-4 lots/net acre). The net density of the site, after factoring out open space, is 3.97 lots/acre.

c. Identify measures incorporated into the proposed project to mitigate any potential incompatibility as discussed in Item 9b above.

The project will require a Comprehensive Plan Amendment to guide the part of the site planned for 40-foot-wide lots for Medium Density Residential (MDR, average of 7 units/acre). The project area will also fall under a rezoning amendment to allow 40-foot-wide lots. The project is designed to balance smaller lots with public open space. The project will include about 17.46 acres of open space consisting of tree preservation, stormwater basins, parks, and buffers strips that will separate the project from adjacent residential and commercial areas. The proposed project is compatible with the proposed zoning, and the surrounding land uses. Land use conflicts are not anticipated.

10. Geology, Soils and Topography / Land Forms

a. Geology - Describe the geology underlying the project area and identify and map any susceptible geologic features such as sinkholes, shallow limestone formations, unconfined/shallow aquifers, or karst conditions. Discuss any limitations of these features for the project and any effects the project could have on these features. Identify any project designs or mitigation measures to address effects to geologic features.

The Geologic Atlas of Anoka County, Minnesota (Minnesota Geological Survey 2013) indicates the surficial geology of the area is characterized by terrace sand and gravel. The bedrock geology of the site falls in the Tunnel City Group and consists of fine-grained sandstone, siltstone, and shale. s dominantly quartz sandstone.

The estimated depth to bedrock in the project area, based on the Geologic Atlas, generally ranges between 100 and 200 feet. As indicated under **Item 11.a.ii**, the depth to bedrock in nearby groundwater wells ranges from 95 to 180 feet and the depth to static groundwater ranges from 10 to 50 feet.

Sinkholes and karst lands are not known to occur in western Anoka County where the project is located. Minnesota Karst Lands and Sinkhole Mapping prepared by Calvin Alexander and others (2006) does not shows karst lands or sinkholes in or near the project area.

b. Soils and topography - Describe the soils on the site, giving NRCS (SCS) classifications and descriptions, including limitations of soils. Describe topography, any special site conditions relating to erosion potential, soil stability or other soils limitations, such as steep slopes, highly permeable soils. Provide estimated volume and acreage of soil excavation and/or grading. Discuss impacts from project activities (distinguish between construction and operational activities) related to soils and topography. Identify measures during and after project construction to address soil limitations including stabilization, soil corrections or other measures. Erosion/sedimentation control related to stormwater runoff should be addressed in response to Item 11.b.ii.

The Web Soil Survey indicates the project area includes seven soil mapping units that consist of mostly loamy sands (**Table 4** and **Figure 7**).

Table 4. Soil Classifications

Symbol	Soil Name	% of Area	% Hydric	Hydric Category	Farmland Category
Ba	Becker very fine sandy loam	9.5	7	Predominantly non-hydric	Prime farmland
D67A	Hubbard loamy sand, 0-2% slopes	20.0	1	Predominantly non-hydric	Not prime farmland
D67B	Hubbard loamy sand, 1-6% slopes	16.0	3	Predominantly non-hydric	Not prime farmland
D67C	Hubbard loamy sand, 2-12% slopes	2.8	0	Non-hydric	Not prime farmland
DnA	Dickman sandy loam, 0-2% slopes	37.6	0	Non-hydric	Farmland of statewide importance
DnB	Dickman sandy loam, 2-6% slopes	12.5	0	Non-hydric	Farmland of statewide importance
NrD	Nymore loamy coarse sand, 12-25% slopes	1.7	0	Non-hydric	Not prime farmland

Five of the seven soils do not have limitations for dwelling units and local streets. Two of the soils (Ba and NrD) have limitations due to factors such as flooding, depth to saturated zone, frost action, and slope. Soils in the project area are generally considered slightly to moderately susceptible to the sheet and rill erosion by water, as indicated by slopes and K factors that range between 0.02 and 0.37.

Grading operations for residential development construction are expected to affect about 68.0 acres and involve movement of about 350,000 cubic yards of soil to construct streets, residential building pads, and stormwater features. Grading is expected to avoid disturbance of trees that will be preserved, which cover about 7.73 acres.

Elevations in the project area range from 880 feet above mean sea level at the highest point in the northwestern part of the site to 858 feet at the lowest point in the southeastern part of the site. Review of two-foot contour mapping indicates the northwestern part of the site includes about one acre of 12-14% slopes and the site does not include any bluffs (**Figure 5**). Soils mapping classifies the steepest part of the site, about 1.33 acre, as 12-25% slopes (**Table 4, Figure 7**). As shown on the

Site Plan (**Figure 3, Appendix A**), these slopes are proposed to be developed into residential lots and a street. The area of 12-14% slopes will be graded and recontoured as part of project construction.

Development of the project area will disturb more than one acre of land and therefore will require application for coverage under the National Pollutant Discharge Elimination System/State Disposal System (NPDES/SDS) General Permit administered by the Minnesota Pollution Control Agency (MPCA) prior to initiation of earthwork. In compliance with the General NPDES Permit for construction activities, the project proponent and construction contractor will need to implement Best Management Practices (BMPs) to reduce erosion and sedimentation and stabilize exposed soils after construction. Erosion and sedimentation control BMPs related to stormwater runoff are discussed in greater detail within **Item 11.b.ii**.

NOTE: For silica sand projects, the EAW must include a hydrogeologic investigation assessing the potential groundwater and surface water effects and geologic conditions that could create an increased risk of potentially significant effects on groundwater and surface water. Descriptions of water resources and potential effects from the project in EAW Item 11 must be consistent with the geology, soils *and topography/land forms and potential effects described in EAW Item 10.*

11. Water Resources

a. Describe surface water and groundwater features on or near the site in a.i. and a.ii. below.

i. Surface water - lakes, streams, wetlands, intermittent channels, and county/judicial ditches. Include any special designations such as public waters, trout stream/lake, wildlife lakes, migratory waterfowl feeding/resting lake, and outstanding resource value water. Include water quality impairments or special designations listed on the current MPCA 303d Impaired Waters List that are within 1 mile of the project. Include DNR Public Waters Inventory number(s), if any.

The project area does not include any surface waters, wetlands, streams, or channels. The site has sandy soils and drains overland toward the Mississippi River. The National Wetlands Inventory shows one PFO1A wetland onsite (**Figure 8**) and soils mapping shows the entire site mapped as non-hydric and predominantly non-hydric soils (**Table 4, Figure 7**). Kjolhaug Environmental Services (KES) reviewed the site in the field for wetlands on October 19, 2019 and determined that the site include no wetland. At that time, the site consisted mostly of cornfield and woodland. The woodland was dominated by oak and elm trees and did not contain any depressions dominated by hydrophytic plants. Aerial photographs of the cropland were reviewed for wetland signatures using guidance from the Minnesota Board of Water and Soil Resources (BWSR) and the U.S. Army Corps of Engineers (USACE). The aerial photograph review found the cropland did not have any areas with enough wetland signatures to warrant a field review. Nevertheless, soils were sampled in two locations that showed some wetland signatures. Non-hydric sandy soils were found at both sample points and KES concluded that the site does not include any wetlands.

The Lower Rum River Watershed Management Organization (LRRWMO) concurred with the no wetland determination on November 21, 2019 and the U.S. Army Corps of Engineers (USACE) sent a letter concurring that the site does not include aquatic resources on June 15, 2020. **Appendix B** includes the site assessment for wetlands and concurrence with the no wetland determination from wetland agencies. The Mississippi River is a MN DNR public watercourse and is located about 666

feet southwest of the project area. Land use within the Mississippi River Corridor Critical Area is discussed under **Item 9**.

Impaired waters listed by the Minnesota Pollution Control Agency (MPCA) and located within 1 mile of the site include only the Mississippi River (07010206-805), which is impaired for aquatic consumption (AQC), aquatic life (AQL), and aquatic recreation (AQR) from the Crow River to Upper St. Anthony Falls.

ii. Groundwater – aquifers, springs, seeps. Include: 1) depth to groundwater; 2) if project is within a MDH wellhead protection area; 3) identification of any onsite and/or nearby wells, including unique numbers and well logs if available. If there are no wells known on site or nearby, explain the methodology used to determine this.

Depth to groundwater varies across the project area. Depth to static groundwater levels in 41 groundwater wells located near the project area ranged from 10 to 50 feet (**Table 5** and **Appendix C**). The project area does not fall within a Minnesota Department of Health (MDH) wellhead protection area. The nearest Source Water Protection area is the Ramsey West Drinking Water Supply Management Area, located 0.5 mile east of the project area. Although several groundwater wells are located in the general vicinity of the site, the Minnesota County Well Index does not identify any wells located onsite. One unregistered well was found in the southeastern corner of the site during the land survey for the property. The project proponent is determining whether this well has been abandoned and will ensure it is abandoned prior to construction as noted under **Item 11.b.iii**.

Table 5. Nearby Field Verified Groundwater Wells

Well No.	Surface Elevation (feet)	Depth (feet)	Cased Depth (feet)	Depth to		Location (Direction from Site)	Aquifer
				Static Water Level (feet)	Bedrock (feet)		
503721	882	221	156	35	118	Northwest	St. Lawrence-Tunnel City
430232	883	338	294	30	116	Northeast	Wonewoc
511952	860	170	134	28	122	West	Tunnel City
486181	858	145	135	13	-	West	Quat. buried
227345	883	75	71	30	-	Northwest	Quat. buried
256060	863	186	130	40	112	West	St. Lawrence-Tunnel City
114352	877	176	134	40	95	Northwest	Tunnel City
124137	861	246	161	20	149	West	Tunnel City
711529	863	155	142	30	-	West	Quat. buried
516054	864	190	146	30	145	South	Tunnel City
133390	875	190	162	39	138	Northwest	Tunnel City
193778	880	186	155	18	155	Northwest	Tunnel City
672386	849	70	65	14	-	West	Quat. buried
124138	862	246	170	20	151	South	Tunnel City
242411	871	178	null	14	149	West	Tunnel City
416682	861	186	133	18	103	Northwest	Tunnel City

Table 5. Nearby Field Verified Groundwater Wells

Well No.	Surface Elevation (feet)	Depth (feet)	Cased Depth (feet)	Depth to		Location (Direction from Site)	Aquifer
				Static Water Level (feet)	Bedrock (feet)		
179361	878	210	170	35	114	Northwest	Tunnel City
541778	883	66	63	28	-	Northwest	Quat. buried
160047	865	260	215	18	143	South	Tunnel City
169236	870	82	78	40	-	Northwest	Quat. buried
155281	866	248	186	30	150	South	Tunnel City
417963	850	170	124	10	96	West	Tunnel City
162802	855	130	125	20	-	West	Quat. buried
149458	865	211	200	50	180	South	Tunnel City
431401	852	127	123	15	108	West	Tunnel City
656433	865	175	147	25	137	South	Tunnel City
126498	865	201	188	15	146	South	Tunnel City
409591	881	213	168	32	119	Northwest	Tunnel City
146087	865	160	155	20	150	South	Tunnel City
634427	862	120	110	25	120	south	Quat. buried
418904	881	170	148	45	110	Northwest	Tunnel City
425746	860	135	120	12	-	West	Quat. buried
494213	878	211	151	33	130	Northwest	Tunnel City
722207	860	200	135	23	111	West	Tunnel City
656104	853	73	68	25	-	West	Quat. buried
104707	863	225	194	26	160	South	Tunnel City
454349	850	92	87	30	-	West	Quat. buried
768697	867	185	145	21	130	South	St. Lawrence-Tunnel City
680275	853	186	149	30	125	West	Tunnel City
490097	866	250	201	22	121	West	Tunnel City
146160	863	156	151	20	-	South	Quat. buried

The project will be served by the City of Ramsey municipal water supply. The City has eight water supply wells that are all located at least one mile east of the project area.

b. Describe effects from project activities on water resources and measures to minimize or mitigate the effects in Item b.i. through Item b.iv. below.

i. Wastewater - For each of the following, describe the sources, quantities and composition of all sanitary, municipal/domestic and industrial wastewater produced or treated at the site.

1) If the wastewater discharge is to a publicly owned treatment facility, identify any pretreatment measures and the ability of the facility to handle the added water and waste loadings, including any effects on, or required expansion of, municipal wastewater infrastructure.

The project is expected to produce normal domestic wastewater that is typical of residential developments. The project will not include industrial wastewater production or onsite wastewater treatment.

Sanitary wastewater production for the project was estimated using methods described in the Sewer Availability Charge (SAC) Procedure Manual (Metropolitan Council 2017). Metropolitan Council has established 274 gallons per day (GPD) as the average daily wastewater production from a typical residential unit. Based on this residential equivalent, the project is expected to generate a maximum of 66,582 gallons of wastewater per day. Sanitary sewer will be extended from Riverdale Drive to serve the development area. The project will be served by a sanitary sewer lift station that will be installed along Pearson Boulevard in the southeastern part of the site. This lift station will also serve future residential development east of the site and future commercial development north of the site.

Domestic wastewater from the project will be routed through the City of Ramsey sanitary sewer system and ultimately to the Metropolitan Wastewater Treatment Plant (MWWTP) located on the Mississippi River near Pig's Eye Lake in St. Paul. With the capacity to treat 251 million gallons of wastewater per day (MGD), this is the largest wastewater treatment facility in Minnesota. The MWWTP is owned and operated by Metropolitan Council. The Metropolitan Council's 2040 Water Resources Policy Plan includes a specific plan to serve the region's projected growth through 2040 and a general plan to serve the region's growth far beyond 2040. The City of Ramsey and Metropolitan Council have planned for increased capacity to convey and treat sanitary wastewater. The proposed project is not expected to require expansion of wastewater treatment infrastructure or raise wastewater treatment capacity concerns.

2) *If the wastewater discharge is to a subsurface sewage treatment systems (SSTS), describe the system used, the design flow, and suitability of site conditions for such a system.*

Wastewater will not be discharged to subsurface sewage treatment systems.

3) *If the wastewater discharge is to surface water, identify the wastewater treatment methods and identify discharge points and proposed effluent limitations to mitigate impacts. Discuss any effects to surface or groundwater from wastewater discharges.*

Wastewater will be treated in the MWWTP described above and then discharged to the Mississippi River. The MWWTP is an advanced secondary wastewater treatment plant located on the east bank of the Mississippi River, approximately three miles south of downtown St. Paul. Treatment capability is maintained during times of flood by a levee and floodwall that protect the plant treatment area.

The plant uses an activated sludge process to remove phosphorus and ammonia nitrogen from wastewater prior to discharge to the Mississippi River. Sludge is processed by thickening, centrifugal dewatering, and fluidbed incineration with energy recovery (steam and electricity). These processing facilities were completed in 2004 as part of a major rehabilitation and upgrade program at the plant, which included state-of-the-art air pollution control systems and an alkaline stabilization system that produces biosolids for agricultural utilization. Ash from incineration is disposed of in a landfill.

ii. Stormwater - Describe the quantity and quality of stormwater runoff at the site prior to and post construction. Include the routes and receiving water bodies for runoff from the site (major downstream water bodies as well as the immediate receiving waters). Discuss any environmental effects from stormwater discharges. Describe stormwater pollution prevention plans including temporary and permanent runoff controls and potential BMP site locations to manage or treat stormwater runoff. Identify specific erosion control, sedimentation control or stabilization measures to address soil limitations during and after project construction.

Pre-Construction Site Runoff

Soils in the project area are quite sandy and most precipitation likely infiltrates into the ground, resulting in little surface runoff. Surface runoff from the project area under existing conditions likely contains some sediment, pesticides, fertilizers, and other nutrients. Existing runoff drains overland from the north end of the site, south toward the Mississippi River. Although the area contains highly permeable soils, some surface runoff from the site may reach the Mississippi River during runoff events.

Post-Construction Site Runoff

Compliance with LRRWMO, City of Ramsey, and NPDES requirements will minimize and mitigate potential adverse effects on receiving waters. Project development will change the land use from agricultural and woodland to residential with streets and parks. This land use change is expected to have mixed effects on runoff water volume and quality. Post-development runoff water quality will be typical of suburban developments, and will likely be slightly degraded by pollutants carried in runoff from streets, roofs, and driveways. Residential development may reduce concentrations of agricultural chemicals, but may increase the loading of suspended solids during construction. Other typical components of impervious surface runoff, such as hydrocarbons and heavy metals, may also increase.

Residential project construction will add about 25.62 acres of impervious surface, consisting of streets, homes, and driveways. The increased impervious surface area is expected to increase runoff volume and urban pollutants locally during significant storm events. However, stormwater rate and volume controls that comply with City of Ramsey and LRRWMO requirements will limit increases in runoff volume and associated pollutant transport. Much of the increased runoff and pollution is expected to be associated with large infrequent storm events. The creation of stormwater ponds and infiltration basins is expected to mitigate potential adverse effects from the increased impervious surface area.

The project will include approximately 4.82 acres of stormwater and infiltration basins in compliance City of Ramsey and LRRWMO requirements (**Figure 3, Appendix A**). Potential adverse effects of runoff volume and quality will be mitigated by the construction of stormwater basins designed to manage peak runoff rates, runoff volume, and water quality.

Impervious surface runoff from storm events will be retained in two stormwater ponds and two infiltration basins. These basins will include a 3.5-acre pond or 'lake' that will be excavated to a depth of about 26 feet. This deep pond will not have an outlet, but will be designed to serve as the

end receiving water for stormwater from the site, with a water level that bounces about 6.6 feet in response to a 1% frequency storm event. The deep pond will also serve some infiltration functions.

Surface water runoff from the project will mostly infiltrate into the ground. Runoff from large storm events may also flow overland to the southeast of the project and the Mississippi River. Proposed discharge flow rates are expected to be equal to or less than the existing flow rates. Requirements for stormwater management and erosion and sediment control are expected to minimize cumulative effects of post-development runoff on downstream waters. Project construction will include other water quality BMPs such as temporary sediment basins to comply with the MPCA General Stormwater Permit for Construction Activity.

Section 117-392 of the of Ramsey City Code requires permanent stormwater pollution controls, including: (1) infiltrating or retaining the first inch of precipitation over the impervious surface of the site; (2) retaining the post-construction runoff volume onsite for the 95th percentile storm; and (3) no increase in the post-construction rate, volume, and duration of runoff over existing conditions for the one- and two-year storms. LRRWMO Stormwater Standards require stormwater basins designed to store the volume of the 100-year storm; stormwater treatment to NURP standards prior to discharge to a lake, stream, wetland, or offsite; and infiltration of a runoff volume equal to 1 inch from all impervious surfaces onsite.

Stormwater ponds designed to NURP criteria are considered effective in removing sediment, pollutants, and nutrients, as discussed in Protecting Water Quality in Urban Areas: Best Management Practices for Dealing with Storm Water Runoff from Urban, Suburban and Developing Areas of Minnesota (MPCA 2000). The NURP research projects conducted by the U.S. EPA concluded that 90% removal of total suspended solids was an attainable goal, and that significant removal of other pollutants, such as phosphorus, was also achievable. Although nutrient removal efficiency varies with site conditions, well-designed wet ponds and constructed wetland treatment systems are effective in removing sediment and associated pollutants, such as trace metals, nutrients and hydrocarbons. Stormwater basins also remove or treat oxygen-demanding substances, bacteria and dissolved nutrients.

Stormwater and Erosion Control BMPs

Because project construction will disturb more than one acre of land, the project proponent will be required to apply to the MPCA for coverage under the National Pollutant Discharge Elimination System/State Disposal System (NPDES/SDS) General Permit prior to initiating earthwork on the site. BMPs will be employed during construction to reduce erosion and sediment loading of stormwater runoff. Inspection of BMPs will be required after each rainfall exceeding 0.5 inches in 24 hours, and on a routine basis every 7 days. The NPDES permit will also require perimeter sediment control maintenance and sediment removal. BMPs to be implemented during construction include:

1. Construction of temporary sediment basins in the locations proposed for stormwater ponding, and development of these basins for permanent use following construction.
2. Installation of silt fence and other perimeter erosion controls prior to initiation of earthwork and maintenance of these controls until viable turf or ground cover is established on exposed areas.

3. Periodic street cleaning and installation of a rock construction entrance to reduce tracking of dirt onto public streets.
4. Stabilization of exposed soils within the time limits specified in the General NPDES permit.
5. Energy dissipation, such as riprap, installed at storm sewer outfalls.
6. Use of cover crops, native seed mixes, sod, and landscaping to stabilize exposed surface soils after final grading.

Erosion control plans will be reviewed and accepted by the City of Ramsey and the LRRWMO prior to project construction. Potential adverse effects from construction-related sediment and erosion on water quality will be minimized by implementation of the above BMPs during and after construction.

iii. Water Appropriation. Describe if the project proposes to appropriate surface or groundwater (including dewatering). Describe the source, quantity, duration, use and purpose of the water use and if a DNR water appropriation permit is required. Describe any well abandonment. If connecting to an existing municipal water supply, identify the wells to be used as a water source and any effects on, or required expansion of, municipal water infrastructure. Discuss environmental effects from water appropriation, including an assessment of the water resources available for appropriation. Identify any measures to avoid, minimize, or mitigate environmental effects from the water appropriation.

Surface/Groundwater Appropriations and Dewatering

Project construction may require temporary dewatering and groundwater appropriation to facilitate installation of sanitary sewer and excavation to construct the 3.5-acre deep pond. The project will not involve installation of new water wells. Project construction will require a MN DNR water appropriation permit if dewatering required for installation of utilities exceeds 10,000 gallons/day or 1 million gallons/year. If construction dewatering does not exceed a total of 50 million gallons and one year in duration, the project proponent will be eligible for coverage under the amended MN DNR General Permit 1997-0005 for temporary water appropriations. The extent and duration of temporary construction dewatering needed is currently unknown. Construction dewatering may be unnecessary. Groundwater appropriated for construction dewatering will be discharged to temporary sediment basins within the project area. It is not anticipated that construction dewatering will be extensive or continue long enough to affect nearby domestic water wells.

Well Abandonment

The project area does not include any existing registered wells according to the Minnesota Well Index (**Table 5, Appendix C**). However, one unregistered well was found in the southeastern corner of the site during the land survey for the property. The project proponent is determining whether this well has been abandoned, and will ensure the well is abandoned in compliance with MDH requirements prior to project construction as noted under **Item 11.a.ii**.

Connection to a Public Water Supply

The project will be connected to the City of Ramsey municipal water supply. The City of Ramsey draws its public water supply from the Tunnel City-Wonewoc aquifer. The City currently maintains eight municipal wells that are all located at least one mile east of the project area. These existing

wells have a combined permitted capacity to pump 6,800 million gallons of water per year (MGY) based on Minnesota DNR water use data (**Table 6**).

Table 6. City of Ramsey Municipal Water Appropriation Permits

Permit No.	Well No.	Permitted Volume (MGY)	Average Use 2013-2018 (MGY)	Maximum Use 2013-2018 (MGY)
1985-6005	161441	850	113.8	144.3
1985-6005	416183	850	0.9	5.5
1985-6005	580303	850	88.2	164.9
1985-6005	580313	850	124.2	194.0
1985-6005	593672	850	56.3	82.3
1985-6005	706840	850	122.9	138.1
1985-6005	743832	850	89.1	161.6
1985-6005	743833	850	51.5	129.9
Total		6,800	646.9	1,020.6

During 2013-2018, these wells used a combined average of 646.9 MGY, indicating an available unused permitted volume of over 5,000 MGY. Based on past use and permitted capacity, the existing municipal wells have sufficient surplus capacity to serve the proposed project. A trunk water main will be extended from Riverdale Drive to serve the development area. Water flow, pressure, and storage will be adequate to serve the development area. As indicated under **Item 11.a.ii**, the project is not located in or near a wellhead protection area.

iv. Surface Waters

a) Wetlands. Describe any anticipated physical effects or alterations to wetland features such as draining, filling, permanent inundation, dredging and vegetative removal. Discuss direct and indirect environmental effects from physical modification of wetlands, including the anticipated effects that any proposed wetland alterations may have to the host watershed. Identify measures to avoid (e.g., available alternatives that were considered), minimize, or mitigate environmental effects to wetlands. Discuss whether any required compensatory wetland mitigation for unavoidable wetland impacts will occur in the same minor or major watershed, and identify those probable locations.

As discussed under **Item 11.a.i.**, the project area does not include any surface waters, wetlands, streams, or channels.

Wetlands and waters near the project area are generally regulated by the Lower Rum River Watershed Management Organization (LRRWMO), which administers the Minnesota Wetland Conservation Act (WCA) in the project area; the U.S. Army Corps of Engineers (USACE), which administers Section 404 of the Federal Clean Water Act (CWA); and the MPCA, which administers Minnesota water quality standards and Section 401 of CWA.

The project will not involve physical effects on or alterations of any surface waters, wetlands, streams, or channels.

b) Other Surface Waters. Describe any anticipated physical effects or alterations to surface water features (lakes, streams, ponds, intermittent channels, county/judicial ditches) such as draining, filling, permanent inundation, dredging, diking, stream diversion, impoundment, aquatic plant removal and riparian alteration. Discuss direct and indirect environmental effects from physical modification of water features. Identify measures to avoid, minimize, or mitigate environmental effects to surface water features, including in-water Best Management Practices that are proposed to avoid or minimize turbidity/sedimentation while physically altering the water features. Discuss how the project will change the number or type of watercraft on any water body, including current and projected watercraft usage.

The proposed project is not expected to affect other surface water features such as lakes, streams, ponds, intermittent channels, or county/judicial ditches. The Mississippi River is located 650 to 780 feet southwest of the site. The project will not have physical effects on the Mississippi River, will not directly affect the number of watercraft on the river, and will treat stormwater runoff prior to discharge to the river.

12. Contamination / Hazardous Materials / Wastes

a. Pre-project site conditions - Describe existing contamination or potential environmental hazards on or in close proximity to the project site such as soil or ground water contamination, abandoned dumps, closed landfills, existing or abandoned storage tanks, and hazardous liquid or gas pipelines. Discuss any potential environmental effects from pre-project site conditions that would be caused or exacerbated by project construction and operation. Identify measures to avoid, minimize or mitigate adverse effects from existing contamination or potential environmental hazards. Include development of a Contingency Plan or Response Action Plan.

About 70% of the project area has been in agricultural use since at least the 1930s and the remaining 30% has been in woodland and grassland. The project area does not include any known pipelines, transmission lines, or registered storage tanks. The site is not known to include environmental hazards and the agricultural land use history suggests a low potential for environmental contamination. The project area is not known to include previous building sites, disposal areas, storage tanks, pipelines, or utility corridors.

Carlson McCain completed a Phase I Environmental Site Assessment (Phase I ESA) for the property in August 2020, and did not identify evidence of recognized environmental conditions or historical recognized environmental conditions in their assessment.

The Phase I ESA reported that the site contained no buildings, and recognized that the past agricultural land use generally involved use of pesticides and herbicides, some of which can persist in the environment. However, no evidence of bulk storage or improper application of agricultural chemicals was identified. The conclusions and summary from the Phase I ESA are included in **Appendix D**.

<u>What's in My Neighborhood</u>

Review of MPCA and Minnesota Department of Agriculture (MDA) "What's in My Neighborhood" (WIMN) interactive websites did not identify any potential contamination sites, environmental

permits, or registrations located within the project area. However, within an 0.25-mile radius of the project area, the MPCA WIMN website identified 10 sites, including six construction stormwater permit sites, two hazardous waste sites, one petroleum brownfield site, and one petroleum leak site (**Table 7**). The MDA website did not identify any spills, incidents, or contingency areas within 0.25 mile of the project area.

The construction stormwater permit sites relate to recent or ongoing construction projects approved in the vicinity of the proposed project. The MPCA file on the brownfield site has been closed since 2007. One of the hazardous waste sites is a very small quantity generator and the MPCA file on this other is hazardous waste site is inactive. None of these sites are known to pose an environmental contamination threat to the project area.

The MPCA's WIMN database identified the Dave Nathe Farm as a nearby petroleum Leak Site. This Leak Site is located about 320 feet north of the northwest corner of the project area (**Figure 7**). The MPCA lists it as Leak Site 6487. The Leak Site is described in the Phase I ESA (**Appendix D**) and listed in **Table 7**. The site was discovered on June 28, 1993, reported to the MPCA on June 30, 1993. The leak site file was listed as closed by the MPCA on April 24, 1996. Contaminated soils remaining are listed as unknown, offsite contamination is listed as unknown, groundwater contamination is listed as not reported and product released is listed as diesel. The Phase I ESA did not consider the site to be a recognized environmental condition because the site is separated from the project area by distance and a hydraulic side-gradient.

Table 7. What's in My Neighborhood MPCA Sites near Project Area

Site ID	Type	Name	Status[1]	Direction from Project
196399	Petroleum Remediation, Leak Site LS0006487	Dave Nathe Farm	Inactive	North
217523	Construction Stormwater	Riverstone	Active	North
225576	Construction Stormwater	Bunker Lake Blvd and Puma Str. Improv	Active	North
217643	Construction Stormwater	Bunker Lake Blvd Utilities Extension	Active	North
190937	Brownfields, Petroleum Brownfield PB3473	Hi-Ten Sports Center	Inactive	East
19731	Hazardous Waste, very small quantity generator MNR000054841	Lazydays of Minneapolis	Active	East
20905	Hazardous Waste MNR000059618	Shorewood Rv Center	Inactive	East
223243	Construction Stormwater	Anoka Solar	Active	East
217605	Construction Stormwater	Bunker Lake Industrial Park	Active	East
221392	Construction Stormwater	Pearson Place	Active	South

[1]Status is according to information available on the MPCA website.

b. Project related generation/storage of solid wastes - Describe solid wastes generated/stored during construction and/or operation of the project. Indicate method of disposal. Discuss potential environmental effects from solid waste handling, storage and disposal. Identify measures to avoid, minimize or mitigate adverse effects from the generation/storage of solid waste including source reduction and recycling.

Project construction will generate wastes typical of residential development operations. Most solid waste is expected to include organics, paper, other waste, and plastic (**Table 8**).

Neither the construction process nor the proposed residential development is expected to generate substantial solid or hazardous wastes, solid animal manure, sludge, or ash. Construction contractors will be required to dispose of wastes generated at the site during construction using approved methods and facilities. Contractor will be expected to minimize and mitigate adverse effects from solid waste generation and storage by recycling construction waste to the degree practicable. Brush and tree waste generated by construction will likely be chipped or otherwise recycled rather than burned on site.

Residents of the Riverstone South will contract individually with waste haulers for solid waste collection and recycling services under the City's open trash and recycling collection system, which uses eight licensed waste haulers. Curbside recycling, including paper, plastics, glass, and metals is available to City of Ramsey residents through solid waste collectors. Participation in the recycling program by future residents of the project area is expected to reduce the volume of solid waste generated by the project.

Table 8. Estimated Solid Waste Composition

Waste Type	Estimated %
Organic	31.0
Paper	24.5
Other	18.3
Plastic	17.9
Hazardous	0.4
Metal	4.5
Glass	2.2
Electronics	1.2
Total	100.0

Source: 2013 Statewide Waste Characterization
(Burns & McDonnell for MPCA 2013).

Solid waste generated in the City of Ramsey that is not recycled or hazardous is trucked to a nearby landfill such as the Elk River Landfill.

c. Project related use/storage of hazardous materials - Describe chemicals/hazardous materials used/stored during construction and/or operation of the project including method of storage. Indicate the number, location and size of any above or below ground tanks to store petroleum or other materials. Discuss potential environmental effects from accidental spill or release of hazardous materials. Identify measures to avoid, minimize or mitigate adverse effects from the use/storage of chemicals/hazardous materials including source reduction and recycling. Include development of a spill prevention plan.

Development of the project area is not expected to generate or require storage of substantial amounts of hazardous wastes or materials. Future residential development is expected to result in the storage or generation of small amounts of typical household cleaners, paints, lubricants, and small engine fuels over time. Petroleum storage tanks and commercial petroleum-based businesses are not proposed in the project area.

d. Project related generation/storage of hazardous wastes - Describe hazardous wastes generated/stored during construction and/or operation of the project. Indicate method of disposal. Discuss potential environmental effects from hazardous waste handling, storage, and disposal. Identify measures to avoid, minimize or mitigate adverse effects from the generation/storage of hazardous waste including source reduction and recycling.

Normal construction and household hazardous wastes are anticipated. Toxic or hazardous materials such as fuel for construction equipment and materials used in the construction of homes (paint, adhesives, stains, contaminated rags, acids, bases, herbicides, and pesticides) will likely be used during site preparation and home construction. Spills of these materials are not likely to occur, but a substantial spill could require notification of the Minnesota Duty Officer. Contractors and builders will be responsible for proper management and disposal of wastes generated during construction. Homeowners will be responsible for management and disposal of hazardous waste thereafter. Homeowners will be able to dispose of household hazardous waste at the Anoka County Household Hazardous Waste Facility.

13. Fish, Wildlife, Plant Communities and Sensitive Ecological Resources (Rare Features)

a. Describe fish and wildlife resources as well as habitats and vegetation on or in near the site.

Fish and wildlife resources on and near the site are related to the composition, quality, size, and connectivity of plant communities such as cultivated cropland, wetlands, woodlands, and grasslands. Vegetative cover types on the project area were mapped based on aerial photography, the wetland delineation, and field reviews (**Figure 6**). The project area is about 70% cropland and 30% woodland, with less than one acre of grassland. Habitats in the project area are likely used by wildlife adapted to agricultural and suburban environments, such as white-tailed deer, songbirds, small mammals, and amphibians.

The project area falls in the Anoka Sandplain Ecological Subsection of the MN DNR Ecological Classification System and the Anoka Sand Plain and Mississippi Valley Outwash of the Level IV Ecoregion of the U.S. EPA. This area consists of a flat, sandy lake plain and terraces along the

Mississippi River. Land use in the area includes row crops, small grains, suburban development, wetlands, woodlands.

Much of the project area has limited wildlife habitat value because it has been occupied by annually tilled agricultural crops for years. Cropland consisted of corn, soybeans, wheat, pumpkins, and cabbage during field surveys in 2020. Kjolhaug Environmental Services completed a survey of significant trees on the site during April 13-16, 2020. Significant trees included oaks and evergreens measuring at least 4 inches DBH (diameter breast height) and all other tree species measuring at least 8 inches DBH. The tree survey identified 2,305 significant trees of 28 species. The Tree Survey Memorandum is included in **Appendix E**. Elm and oak trees accounted for 72% of the significant trees, and hackberry trees were subdominant, with 12% of the trees. Together, all other tree species accounted for 16% of the significant trees. Dominant shrubs in the woodland included honeysuckle, prickly ash, gooseberry, and raspberry. Grassy field edges were dominated by smooth brome, and Kentucky bluegrass.

*b. Describe rare features such as state-listed (endangered, threatened or special concern) species, native plant communities, Minnesota County Biological Survey Sites of Biodiversity Significance, and other sensitive ecological resources on or within close proximity to the site. Provide the license agreement number (**LA-989**) and/or correspondence number (**ERDB [none assigned]**) from which the data were obtained and attach the Natural Heritage letter from the DNR. Indicate if any additional habitat or species survey work has been conducted within the site and describe the results.*

State

A Natural Heritage Inventory System (NHIS) data request was submitted to the MN DNR to assess whether known locations of rare plant or animal species or other significant natural features are known to occur within an approximate 1-mile radius of the project area. A response had not yet been obtained from the MN DNR at the time this EAW was approved for distribution. In lieu of an MN DNR NHIS database search, Kjolhaug Environmental Services queried a licensed copy of the NHIS database to assess rare species and natural features.

The NHIS review identified records of one state special concern species and one state threatened species recorded within a 1-mile radius of the project area. Neither of these species is on the Federal threatened and endangered species list.

Observations of Blanding's turtles (*Emydoidea blandingii*), a state threatened reptile, were recorded about 1 mile north and northeast of the project area. These observations occurred in areas near Itasca Park, cropland, suburban development, and wetland. Blanding's turtles prefer calm shallow water, rich aquatic vegetation, and select open grassy uplands with sandy soils for nesting. The project area includes potential Blanding's turtle nesting habitat, but Blanding's turtles do not typically lay eggs under forest cover. The site does not include any wetlands. The best Blanding's turtle habitat includes wetland complexes larger than 10 acres surrounded by open sandy uplands.

Other rare features within a 1-mile radius of the site include records of the black sandshell mussel (*Ligumia recta*), and a silver maple floodplain forest. These features were found in and near the Mississippi River, outside of the project area. The black sandshell is a state-listed special concern species.

Federal

Online information on rare species information maintained by the U.S. Fish and Wildlife Service (USFWS) was also reviewed for the project area. The U.S. Fish and Wildlife Service (USFWS) listed the northern long-eared bat (*Myotis septentrionalis*) as federally threatened on May 4, 2015. On February 2, 2017, the USFWS listed the rusty patched bumble bee (*Bombus affinis*) as federally endangered.

Review of the USFWS Information for Planning and Consultation (IPaC) website with a polygon encompassing the project area identified the northern long-eared bat as the only threatened or endangered species that may potentially be affected by activities at the project location. The IPaC website also noted that there are no critical habitats at this location.

The northern long-eared bat hibernates in caves during winter and establishes maternity roosting colonies under the loose bark of trees during the summer. The project area is not known to include caves and includes limited tree cover. As of June 3, 2020, MN DNR data showed no documented maternity roost trees or hibernacula entrances of the northern long-eared bat in the project vicinity.

Review of the USFWS Rusty Patched Bumble Bee Map indicates the project area falls within a Low Potential Zone. This means that the rusty patched bumble bee is not likely to be present in the project area. The nearest High Potential Zone, where rusty patched bumble bees are likely to occupy suitable habitat, is located about 3.5 miles southeast of the project and is associated with the Elm Creek Park Reserve in Hennepin County. Most habitats suitable for rusty patched bumble bees in the Upper Midwest have been converted by agriculture or other land uses. Bumble bees need areas that provide nectar and pollen from flowers, nesting sites (underground and abandoned rodent cavities or clumps of grasses), and overwintering sites for hibernating queens (undisturbed soil). Site reviews have not identified native prairie plantings or diverse areas of native wildflowers in the project area, indicating a lack of highly suitable bumble bee habitat.

c. Discuss how the identified fish, wildlife, plant communities, rare features and ecosystems may be affected by the project. Include a discussion on introduction and spread of invasive species from the project construction and operation. Separately discuss effects to known threatened and endangered species.

Project development is expected to convert about 54.14 acres of cropland and 16.17 acres of woodland to streets, homes, lawns, landscaping, and stormwater features. The balance of the site will include about 7.73 acres of tree preservation and about 0.59 acre of grassland preservation. The project will include about 17.46 acres of open space consisting of tree preservation, stormwater features, parks, and buffers. Of the 23.90 acres of woodland, the project will remove about 16.17 acres and preserve about 7.73 acres (**Figure 9**).

The project may affect the number and type of wildlife species in the area, but changes in wildlife abundance are not expected to be regionally significant. The existing croplands provide wildlife food, but have limited value as wildlife cover. Wildlife species that depend on agricultural cropland will be displaced by the project. The project will likely have short-term negative effects and long-

term positive effects on species adapted to suburban habitats. Non-migratory species with small home ranges such as small mammals may experience adverse effects such as mortality during project construction.

The project is not expected to adversely affect the black sandshell mussel and the silver maple floodplain forest because they were located outside the project area. The project will implement stormwater and erosion control practices to minimized potential indirect effects on the Mississippi River and species like the black sandshell mussel.

The project may have effects on Blanding's turtles that may occur in the area. To minimize potential adverse effects on turtles and their mobility, the project will avoid wetlands, implement sediment and erosion controls, consider use of surmountable curbs on roadways, and consider using erosion control materials constructed of organic fibers rather than plastic.

The project involves removal of woodland that may be suitable for northern long-eared bat roosting, but the federally threatened bat has not been documented on the site and the over half the construction area is cropland devoid of potential roost trees. To the extent practicable, potential effects on northern long-eared bats can be further minimized by clearing trees during October to April when bats roost in hibernaculum rather than woodlands, and by avoiding tree clearing during June 1 to August 15 when bats are rearing young.

Although project construction could be expected to slightly increase the potential for spread of invasive and weedy species, much of the project area has been disturbed by agricultural use for decades. BMPs may include the cleaning of construction equipment before transport, which might reduce the potential spread of invasive species.

d. Identify measures that will be taken to avoid, minimize, or mitigate adverse effects to fish, wildlife, plant communities, and sensitive ecological resources.

Measures to minimize and mitigate adverse effects on wildlife include the preservation of 8.43 acres of woodland, creation of 4.82 acres of stormwater basins, and setting aside a total of 17.46 acres of open space, including parks and buffers. Specific measures to minimize potential effects on Blanding's turtles are listed above.

14. Historic Properties

Describe any historic structures, archeological sites, and/or traditional cultural properties on or in close proximity to the site. Include: 1) historic designations, 2) known artifact areas, and 3) architectural features. Attach letter received from the State Historic Preservation Office (SHPO). Discuss any anticipated effects to historic properties during project construction and operation. Identify measures that will be taken to avoid, minimize, or mitigate adverse effects to historic properties.

The project area includes cropland and woodland that slopes gradually toward the south and the Mississippi River, which is located 650 to 780 feet from the site. In light of the site's proximity to the Mississippi River, Nienow Cultural Consultants was retained to complete a Phase I Archaeological Survey of the project area.

Field work was conducted during October 14-15, 2020, under the direction of Principal Investigator Jeremy Nienow, PhD., RPA, and licensed archaeological surveyor. Fieldwork consisted of surface surveying corn fields, a cabbage, and pumpkin patch, and shovel testing the wooded area. Surface visibility in the agricultural fields ranged between 0 and 80%. Surface survey transects were spaced on four to five-meter intervals. Fifty-two shovel tests were excavated. Shovel tests were typically 35-40 centimeters (cm) wide and at least 80cm deep.

No prehistoric cultural material or archaeological features were identified during the field survey. Shovel test profiles documented consistent ancient floodplain soils. Based on these results, no additional archaeological work was recommended. The Phase I Archaeological Survey Report is included in **Appendix F**.

15. Visual

Describe any scenic views or vistas on or near the project site. Describe any project related visual effects such as vapor plumes or glare from intense lights. Discuss the potential visual effects from the project. Identify any measures to avoid, minimize, or mitigate visual effects.

There are no scenic views or vistas located on or adjacent to the project area. The project area is near the Mississippi River, but the site has relatively gradual topography and does provide any views that overlook the river. Substantial effects on visual resources are not anticipated in conjunction with project development. Project development is expected to result in routine effects on visual resources. The main visual effect will be the transition of views of the project area from mostly open agricultural land to residential development. The project will not involve installation of intense lights that would cause glare, nor will it include industries that would emit vapor plumes.

16. Air

a. Stationary source emissions. Describe the type, sources, quantities and compositions of any emissions from stationary sources such as boilers or exhaust stacks. Include any hazardous air pollutants, criteria pollutants, and any greenhouse gases. Discuss effects to air quality including any sensitive receptors, human health or applicable regulatory criteria. Include a discussion of any methods used assess the project's effect on air quality and the results of that assessment. Identify pollution control equipment and other measures that will be taken to avoid, minimize, or mitigate adverse effects from stationary source emissions.

The proposed project does not include heavy industrial facilities, but the project will still involve some stationary source air emissions. New residences and commercial buildings are expected to include heating and cooling systems operated by natural gas and electricity, which will result in direct or indirect sources of stationary greenhouse gas (GHG) emissions. Emissions from heating and cooling systems are expected to be similar to those from other homes in the surrounding area.

The Minnesota Environmental Quality Board is working on a framework for integrating greenhouse gas (GHG) quantification and assessment requirements into the Environmental Review Program. However, standard requirements and assessment methods are not yet complete. In light of this constraint and in the absence of official guidance, the GHG assessment presented here is qualitative.

Common GHG greenhouse gas emissions include CO2, CH4, N2O. GHG emissions are customarily converted to carbon dioxide equivalents (CO2e) using global warming conversion factors to represent the global warming potential over 100 years, equivalent to one ton of CO2 derived from fossil fuel.

GHG emissions are expected to result from:

1. Operation of petroleum fueled equipment during project construction;
2. Use of natural gas and other fossil fuels used for heating homes;
3. Fossil fuels burned to generate electricity used at the project during construction and operation;
4. Vehicle and air transportation related to project construction and operation;
5. Transport, treatment, and storage of solid waste and wastewater produced onsite;
6. Loss of carbon sequestration due to conversion of natural vegetation to developed and paved surfaces; and
7. Refrigeration, air conditioning, and the related manufacturing, service, and leakage of equipment.

GHG emissions from this project, while unquantified, are not expected to cause potential for significant environmental effects because this is a discretionary EAW, the project does not trip any other mandatory EAW thresholds, and there are no available GHG emission estimates that show a comparably sized Minnesota project with potential to exceed the mandatory EAW threshold of 100,000 tons of CO2e per year (Minnesota Rules Part 4410.4300, Subp. 15.B.).

Mitigation and adaption measures could help the project lessen the impacts of climate change and GHG emissions. Such measures may include:

1. Use energy efficient building materials that reduce needs for home heating and cooling.
2. Install energy star appliances and programable thermostats (already assumed).
3. Install smart irrigation, or no irrigation at all, to reduce outdoor water use (many Minnesota lawns now stay green all summer long without irrigation).
4. Encourage residents to sign up for utility-sponsored renewable energy programs, such as renewable connect or windsource.
5. Install high-albedo (reflective) roofing materials that reflect the sun’s UV rays and save energy needed to cool buildings.
6. Plant some turf to no-mow fine fescue mixes or native prairie/pollinator gardens to decrease mowing and increase carbon sequestration.
7. Encourage residents to sign up for utility-sponsored renewable energy programs, such as renewable connect or windsource.

8. Consider rooftop solar, electric vehicle charging stations, and/or battery storage in new homes to make them more energy autonomous and EV-ready.
9. Consider a community compost program for organic solid waste to reduce the burden on and future methane emissions from local solid waste landfills.
10. Consider a microgrid for efficient, automated distribution of energy among participants.
11. Install ground-source or air-source geothermal heat pumps during initial construction when most cost-effective.

b. Vehicle emissions. Describe the effect of the project's traffic generation on air emissions. Discuss the project's vehicle-related emissions effect on air quality. Identify measures (e.g. traffic operational improvements, diesel idling minimization plan) that will be taken to minimize or mitigate vehicle-related emissions.

The proposed project will generate increased traffic, which will result in a relatively small corresponding increase in carbon monoxide, carbon dioxide and other vehicle-related air emissions. Project development is expected to have a minor effect on air quality. GHG emissions related to traffic and transportation are listed under **Item 16.a** above. The project does not include air quality monitoring or modeling.

c. Dust and odors - Describe sources, characteristics, duration, quantities, and intensity of dust and odors generated during project construction and operation. (Fugitive dust may be discussed under item 16a). Discuss the effect of dust and odors in the vicinity of the project including nearby sensitive receptors and quality of life. Identify measures that will be taken to minimize or mitigate the effects of dust and odors.

The project is not expected to generate dust or odors at levels considered unusual for suburban development construction practices. Dust and odors produced during construction is expected to be consistent with applicable regulations of the MPCA and local governments. Dust and odor levels are expected to be slightly higher during project construction than project operation.

The construction process is expected to generate some fugitive dust, but dust is not expected to be generated in objectionable quantities. The dust receptors near the project area include the single-family homes along Bowers Drive, west and south of the site. Odors routinely generated during construction will be typical of those associated with construction activity, such as exhaust from diesel and gasoline powered construction equipment.

Consideration will be given to suppression of airborne dust by application of water if fugitive dust generation during site grading exceeds levels typically expected during normal construction practices.

17. Noise

Describe sources, characteristics, duration, quantities, and intensity of noise generated during project construction and operation. Discuss the effect of noise in the vicinity of the project including 1) existing noise levels/sources in the area, 2) nearby sensitive receptors, 3) conformance to state noise standards, and 4) quality of life. Identify measures that will be taken to minimize or mitigate the effects of noise.

It is anticipated that local noise levels will temporarily increase during project construction, but noise levels are expected to be at or near existing levels after construction is complete. Noise levels on and adjacent to the project area will vary considerably during construction, depending on the amount of construction that occurs simultaneously, the time of operation, and the distance between construction equipment and receptors.

Noise receptors near the project area include the single-family homes along Bowers Drive, west and south of the site. Residences near the project site will experience elevated noise levels at various times during construction compared to existing noise levels. Grading and excavation will require heavy equipment, such as scrapers, bulldozers, and other excavating equipment.

The project is expected to minimize disturbances caused by construction noise and conform to Minnesota noise rules and standards. These rules require noise to stay within specified levels depending on the land use and the time of day or night.

Noise generated by construction equipment and building construction will be limited primarily to daylight hours when noise levels are commonly higher than at night. Contractors will be required to minimize noise impacts by maintaining equipment properly, including the use of mufflers and other noise controls as specified by manufacturers.

18. Transportation

a. Describe traffic-related aspects of project construction and operation. Include: 1) existing and proposed additional parking spaces, 2) estimated total average daily traffic generated, 3) estimated maximum peak hour traffic generated and time of occurrence, 4) indicate source of trip generation rates used in the estimates, and 5) availability of transit and/or other alternative transportation modes.

Spack Solutions completed a Traffic Impact Study to estimate the trips generated by the proposed residential development and evaluate the potential need for transportation or roadway improvements. The complete Traffic Impact Study is included in **Appendix G**.

Existing and Proposed Parking Spaces

The project area does not include any parking stalls under existing conditions. The proposed 165 detached single-family homes and 78 detached townhomes will include off-street parking and garages to accommodate parking for the residential units.

Estimated Traffic Generation

Trip generation was estimated using the methodology outlined in the Institute of Transportation Engineers (ITE) Trip Generation Manual, 10th Edition. Spack Solutions used locally collected data to estimate trip generation for this project as it is more representative of the specific traffic patterns of the development area and presented similar trip generation results when compared to ITE.

As the project area is vacant under existing conditions, there are no existing trips to or from the development area and the existing trip generation is zero. The residential development is expected to generate a total of 1,912 estimated daily trips. A breakdown of the expected trip generation is shown in **Table 9**. Peak hour traffic generation was estimated at 140 trips during the existing AM peak hour and 186 trips during the PM peak hour under future conditions. The AM peak hour is estimated to occur between 7:00 and 8:00 AM, and the PM peak hour is estimated to occur between 4:00 and 5:00 PM. The Traffic Impact Study included in **Appendix G** provides a full description and analysis of the peak hour traffic and traffic recommendations.

Table 9. Project Trip Generation Estimates

Land Use	Source	No. of Units	Daily Trips	AM Peak Hour Trips			PM Peak Hour Trips		
				In	Out	Total	In	Out	Total
Single-family detached housing	Local	165	1,488	29	75	104	83	62	145
Detached townhomes	Local	78	424	9	27	36	26	15	41
Total		243	1,912	38	102	140	109	77	186

Availability of Transit and Alternative Transportation

The Ramsey Metro Transit Station is located about 1.25 miles east of the project area on the north side of Highway 10/169. The station includes a park and ride lot and access to the Northstar Commuter Rail Line. The Northstar Line offers service between Big Lake and downtown Minneapolis, stopping at stations in Elk River, Ramsey, Anoka, Coon Rapids and Fridley.

b. Discuss the effect on traffic congestion on affected roads and describe any traffic improvements necessary. The analysis must discuss the project's impact on the regional transportation system. If the peak hour traffic generated exceeds 250 vehicles or the total daily trips exceeds 2,500, a traffic impact study must be prepared as part of the EAW. Use the format and procedures described in the Minnesota Department of Transportation's Access Management Manual, Chapter 5 (available at: http://www.dot.state.mn.us/accessmanagement/resources.html) or a similar local guidance.

Effects on Traffic and Roadways

The Traffic Impact Study concluded that the proposed project will have minimal effects on adjacent public roads and that nearby intersections will continue to operate at acceptable levels, except for the future Highway 10/Riverdale Drive intersection, which will be relocated and reconstructed to replace the existing Highway 10/Bowers Drive intersection.

The northbound left-turning movement at the new Highway 10/Riverdale Drive intersection will experience future delays with and without the traffic generated by the proposed project. The cross-street traffic volumes predicted at this location do not meet signal warrants, so an at-grade, ¾-access intersection is recommended. All other intersections are predicted to continue to operate acceptably through the 2040 build scenario.

The Highway 10/Riverdale Drive intersection experiences excessive delays and queueing under the proposed side-street stop control operations during both AM and PM peak hours. All other intersections operate within acceptable bounds with no delays or queueing concerns arising through the 2040 build scenario. Additionally, all site corridors operate with volumes within their planning level capacities through the 2040 build scenario.

c. Identify measures that will be taken to minimize or mitigate project related transportation effects.

The Traffic Impact Study recommends construction of the Highway 10/Riverdale Drive intersection to a ¾-access (**Appendix G**). This configuration removes the cross-street left turning movement (northbound left) from the intersection and improves the traffic operations to acceptable timing. This reduction in queueing and delay is a result of rerouting the highest delayed movement (northbound left turning movement) away from the Highway 10/Riverdale Drive intersection to alternative routes.

Vehicles that would normally navigate northbound to westbound at this intersection would instead travel east on Riverdale Drive to the Armstrong Boulevard/Northern Highway 10 Ramps, where they would take a northbound left to proceed westbound. In total, roughly 2.25 miles would be added to their commute with this change. Very few trips are affected by the northbound left turning movement at this location. Existing traffic counts estimate that fewer than 60 vehicles complete this movement each day.

Additionally, pedestrian and bicycle infrastructure upgrades are recommended with trail connections to existing facilities along Riverdale Drive east of Llama Street and the existing trail south of Highway 10 by Bowers Drive.

19. Cumulative Potential Effects

Preparers can leave this item blank if cumulative potential effects are addressed under the applicable EAW Items.

a. Describe the geographic scales and timeframes of the project related environmental effects that could combine with other environmental effects resulting in cumulative potential effects.

It is anticipated that the project area will develop over the next 3 to 5 years, but the actual timing of development could vary depending on the demand for housing and market conditions. Seven other projects proposed in the City of Ramsey are expected to develop during this time period. These projects and their geographic locations are described under **Item 19.b** below.

b. Describe any reasonably foreseeable future projects (for which a basis of expectation has been laid) that may interact with environmental effects of the proposed project within the geographic scales and timeframes identified above.

The City of Ramsey is reviewing and has recently approved other development projects that are located 0.2 to 3.8 miles from the Riverstone South development site (**Table 10**). These projects are all residential developments. Projects in close proximity to Riverstone South could potentially interact to result in cumulative effects.

Table 10. Other Projects in the City of Ramsey

Name	Description	Status	Distance/Direction from Riverstone South
Garden View Villas	18 single-family homes	Under review	1.5 miles east-northeast
Hunt Property	76 single-family homes	Under review	3.8 miles northeast
Hampton Townhomes	26 townhomes	Under review	3.8 miles east
River Walk Village	14 single-family homes	Under construction	3.1 miles east-southeast
The Preserve at Northfork	73 single-family homes	Under review	0.5 mile north
Lennar Subdivision	57 single-family homes	Under review	3.4 miles northeast
Riverstone Addition	246 single-family homes and 98 detached townhomes	Under construction	0.2 mile north

c. Discuss the nature of the cumulative potential effects and summarize any other available information relevant to determining whether there is potential for significant environmental effects due to these cumulative effects.

Reasonably foreseeable future projects may combine with the proposed project to result in cumulative effects on municipal infrastructure and natural resources. The potential for cumulative effects varies with the type of resource affected and the geographic area of impact. Geographic separation between projects serves to reduce the potential for cumulative effects. The six projects listed in **Table 10** are an average of 2.5 miles from the Riverstone South.

Potential cumulative effects on public infrastructure relate to municipal water supply systems, sanitary sewer conveyance and treatment systems, stormwater management systems, and traffic and transportation systems. The City of Ramsey has planned for continued growth and expanded infrastructure system capacity to address these effects and serve anticipated future projects. The City of Ramsey will consider the timing and staging of other development proposals within the context of the Comprehensive Plan and related growth management tools. Cumulative effects on public infrastructure are not expected to be significant.

Potential cumulative effects of anticipated future projects on natural resources depend on the type, density, and location of future developments. Effects on natural resources such as wetlands and wildlife habitat vary with project location and biological diversity. Project effects on natural resources may combine with effects of nearby concurrent projects to result in subtle local cumulative effects, such as habitat fragmentation. Surface water runoff from the project will mostly infiltrate into the ground. Runoff from large storm events may also flow overland to the southeast and the Mississippi River. Requirements for stormwater management and erosion and sediment control are expected to minimize cumulative effects of post-development runoff on downstream waters. Policies and regulations of the City of Ramsey, the Lower Rum River Watershed Management Organization, and other government agencies require the stormwater mitigation measures discussed in this EAW. These mitigation measures will help ensure minimization of cumulative effects on the environment.

The project will contribute to and be affected by cumulative effects related to climate change. In Minnesota, climate change has already caused increased extreme heat, large precipitation events, flooding, annual precipitation, and growing season days. These trends will continue and increase until climate change is reversed. Effects of climate change on future project area residents could include flooding; increased maintenance of roadways, storm sewers, and drainage routes; increased human heat stress and health issues, high pollen counts; and decreased need for irrigation. Increased heat could also affect construction practices such as roofing and outdoor activities such as summer and winter sports. Snow skiing and snowmobiling could be impacted due to lack of snow and warmer temperatures. Undesirable pests such as deer ticks and fungal infections could increase as a result of climate change. Some climate change impacts, such as extreme drought, coastal flooding, and shortages of food and water, are expected to affect other parts of the planet more severely than the project area.

Climate change impacts are incremental and cumulative in nature. Just as the project will be impacted by climate change, the project will also make an incremental contribution to climate change impacts through the emission of greenhouse gases.

20. Other Potential Environmental Effects

If the project may cause any additional environmental effects not addressed by items 1 to 19, describe the effects here, discuss the how the environment will be affected, and identify measures that will be taken to minimize and mitigate these effects.

No other additional environmental effects are anticipated as a result of development of the project area. Potential environmental effects have been addressed in **Items 1** through **19**.

RGU CERTIFICATION.

(The Environmental Quality Board will only accept SIGNED Environmental Assessment Worksheets for public notice in the EQB Monitor.)

I hereby certify that:

- *The information contained in this document is accurate and complete to the best of my knowledge.*
- *The EAW describes the complete project; there are no other projects, stages or components other than those described in this document, which are related to the project as connected actions or phased actions, as defined at Minnesota Rules, parts 4410.0200, subparts 9c and 60, respectively.*
- *Copies of this EAW are being sent to the entire EQB distribution list.*

Signature _____ Date _____

Title _____

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Figures 1 – 9

Riverstone South EAW

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Figure 1 - Site Location

N

0 665 Feet

KJOLHAUG ENVIRONMENTAL SERVICES COMPANY

Source: ESRI Streets and NatGeo Basemaps, Carlson McCain

Riverstone South (KES 2020-162)
Ramsey, Minnesota

Note: Boundaries indicated on this figure are approximate and do not constitute an official survey product.

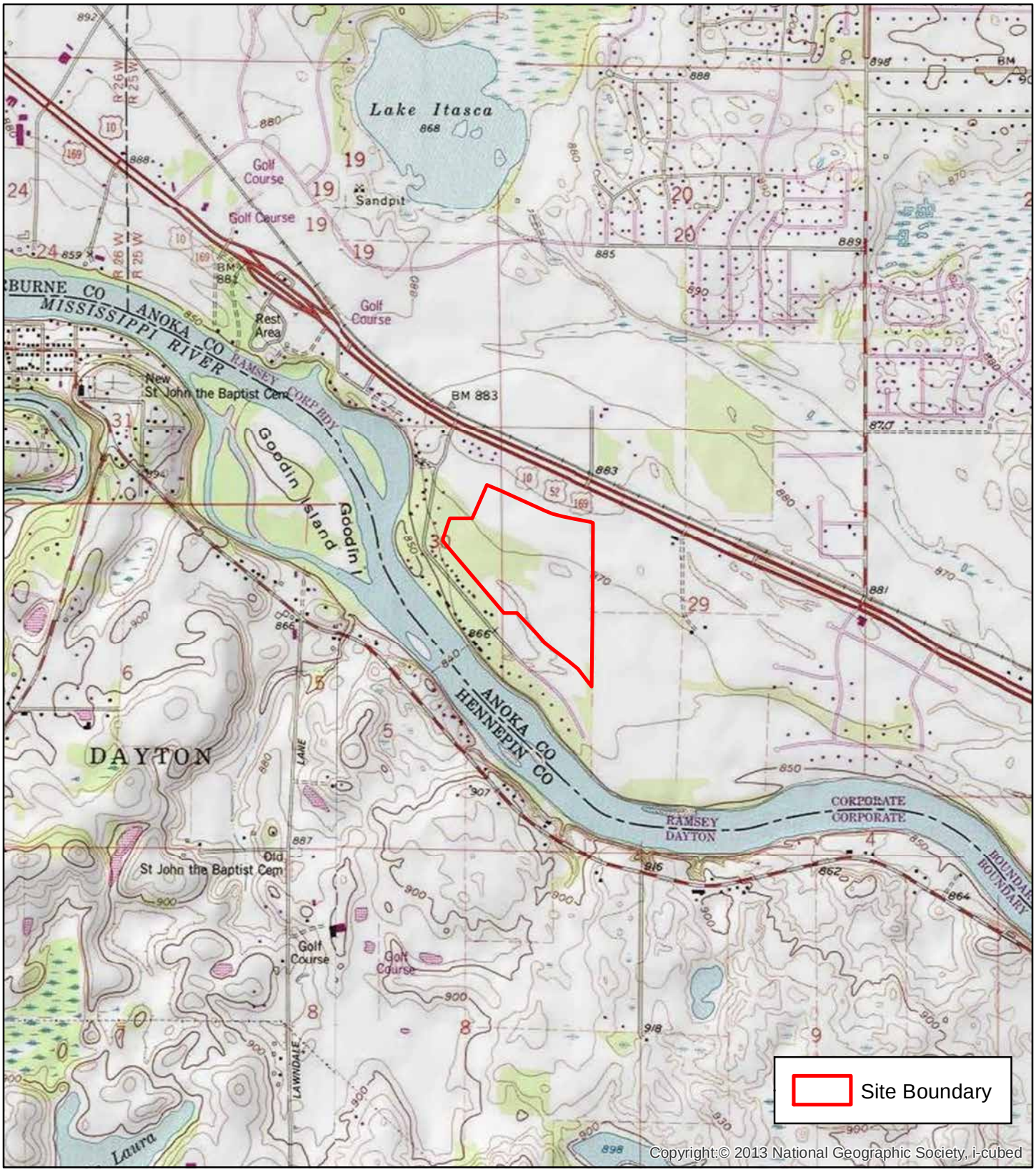

Figure 2 - USGS Topography

N

0 2,000 Feet

KJOLHAUG ENVIRONMENTAL SERVICES COMPANY

Source: USGS

Riverstone South (KES 2020-162)
Ramsey, Minnesota

Note: Boundaries indicated on this figure are approximate and do not constitute an official survey product.

Figure 3 - Proposed Site Plan

N

0 500 Feet

KJOLHAUG ENVIRONMENTAL SERVICES COMPANY

Source: MNGEO Spatial Commons, Carlson McCain

Riverstone South (KES 2020-162)
Ramsey, Minnesota

Note: Boundaries indicated on this figure are approximate and do not constitute an official survey product.

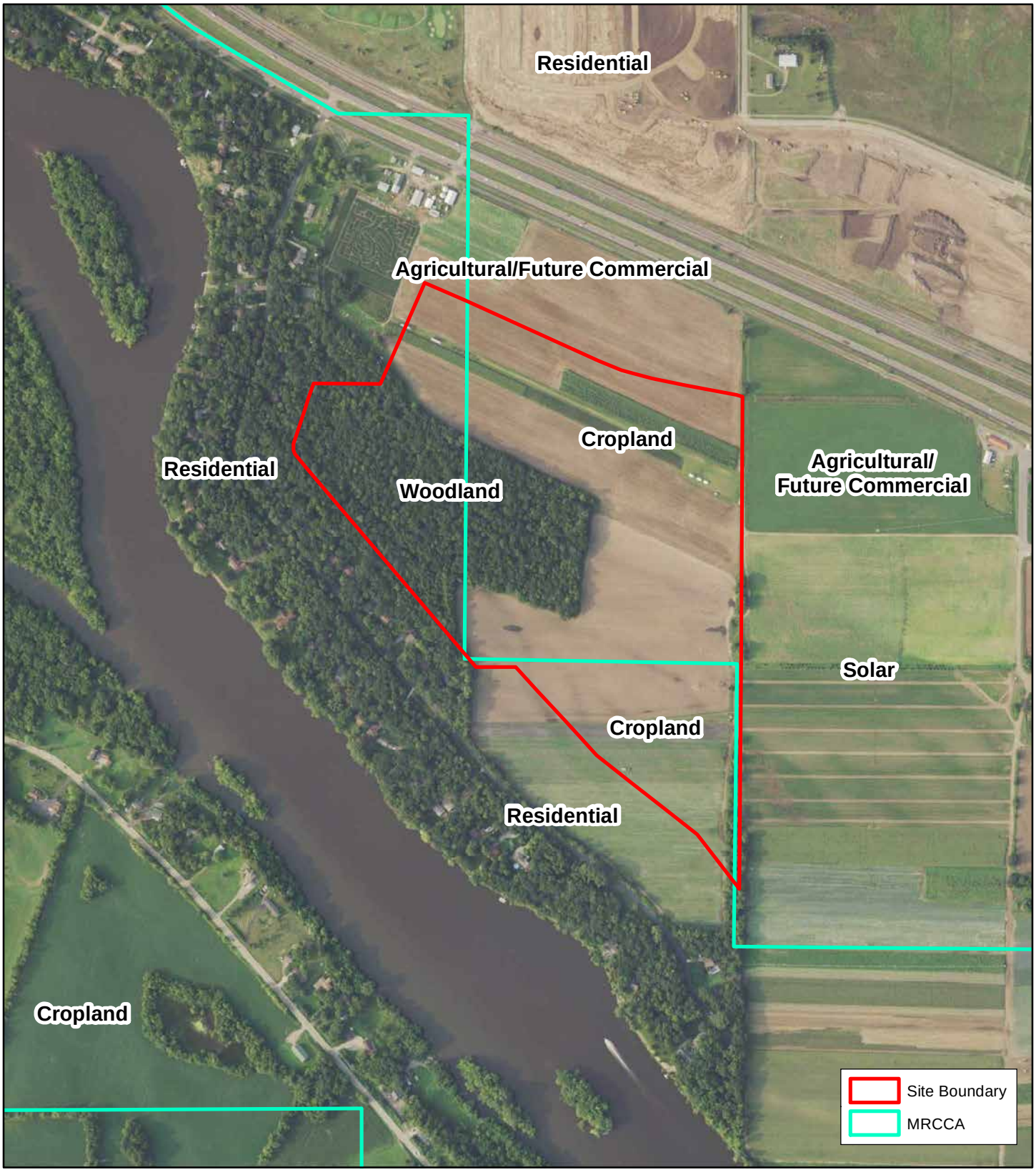

Figure 4 - Existing Land Use and Mississippi River Critical Corridor Area

N

0 665 Feet

KJOLHAUG ENVIRONMENTAL SERVICES COMPANY

Source: MNGEO Spatial Commons

Riverstone South (KES 2020-162)
Ramsey, Minnesota

Note: Boundaries indicated on this figure are approximate and do not constitute an official survey product.

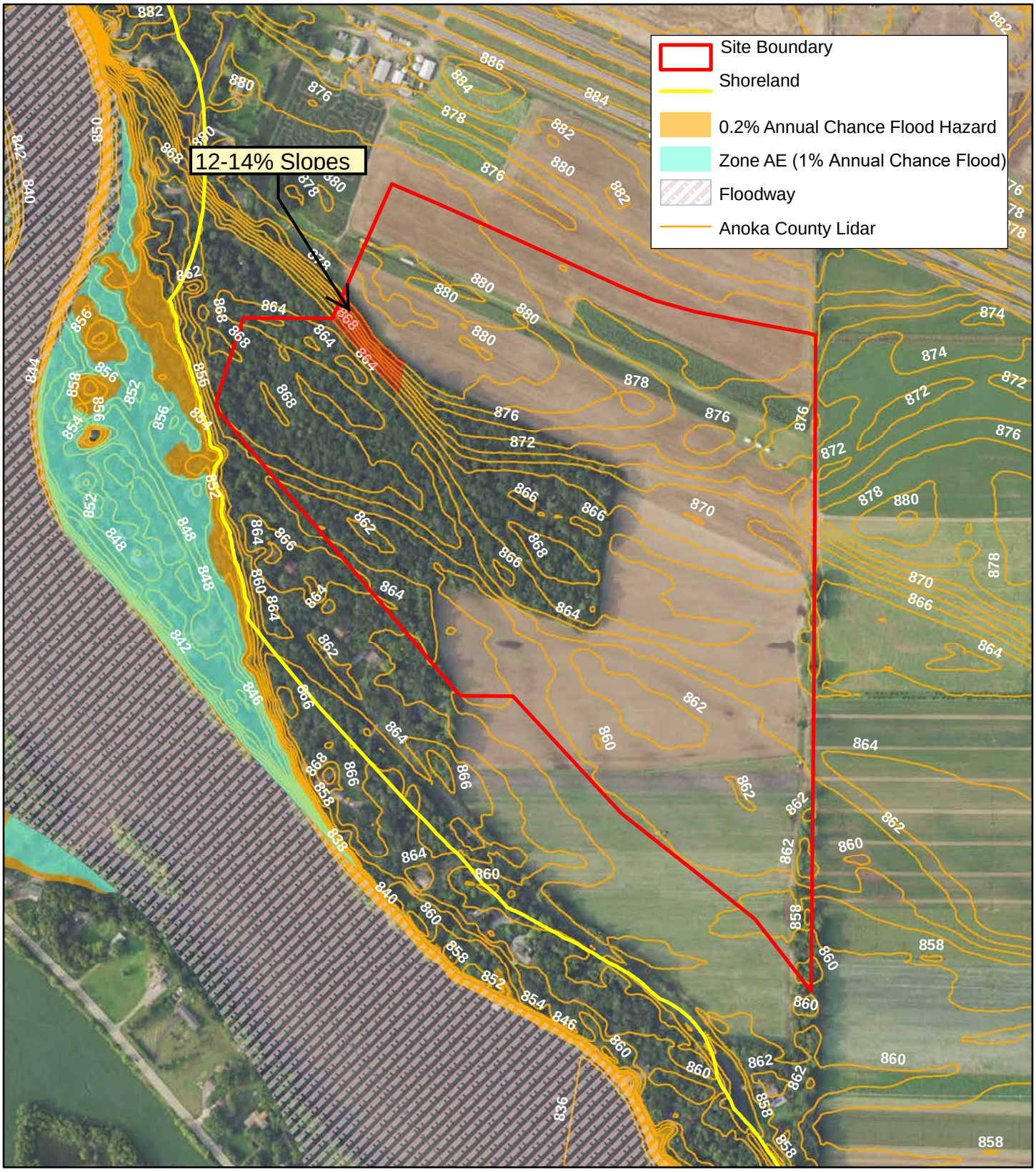

Figure 5 - Floodplains, Shorelands, and Slopes

N

0 500 Feet

KJOLHAUG ENVIRONMENTAL SERVICES COMPANY

Source: MNGEO Spatial Commons, FEMA

Riverstone South (KES 2020-162)
Ramsey, Minnesota

Note: Boundaries indicated on this figure are approximate and do not constitute an official survey product.

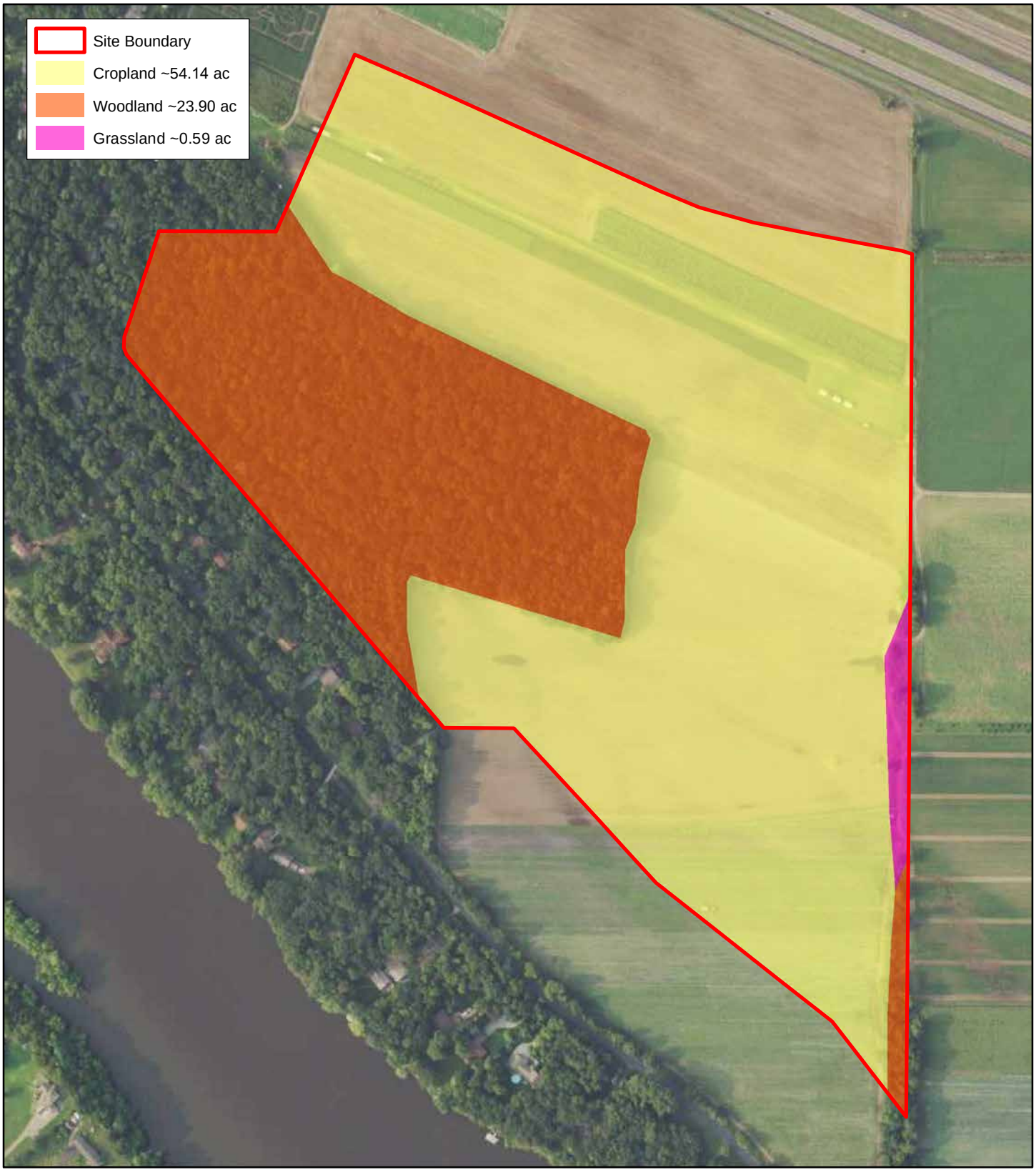

Figure 6 - Existing Cover Types

N

0 380 Feet

KJOLHAUG ENVIRONMENTAL SERVICES COMPANY

Source: MNGEO Spatial Commons

Riverstone South (KES 2020-162)
Ramsey, Minnesota

Note: Boundaries indicated on this figure are approximate and do not constitute an official survey product.

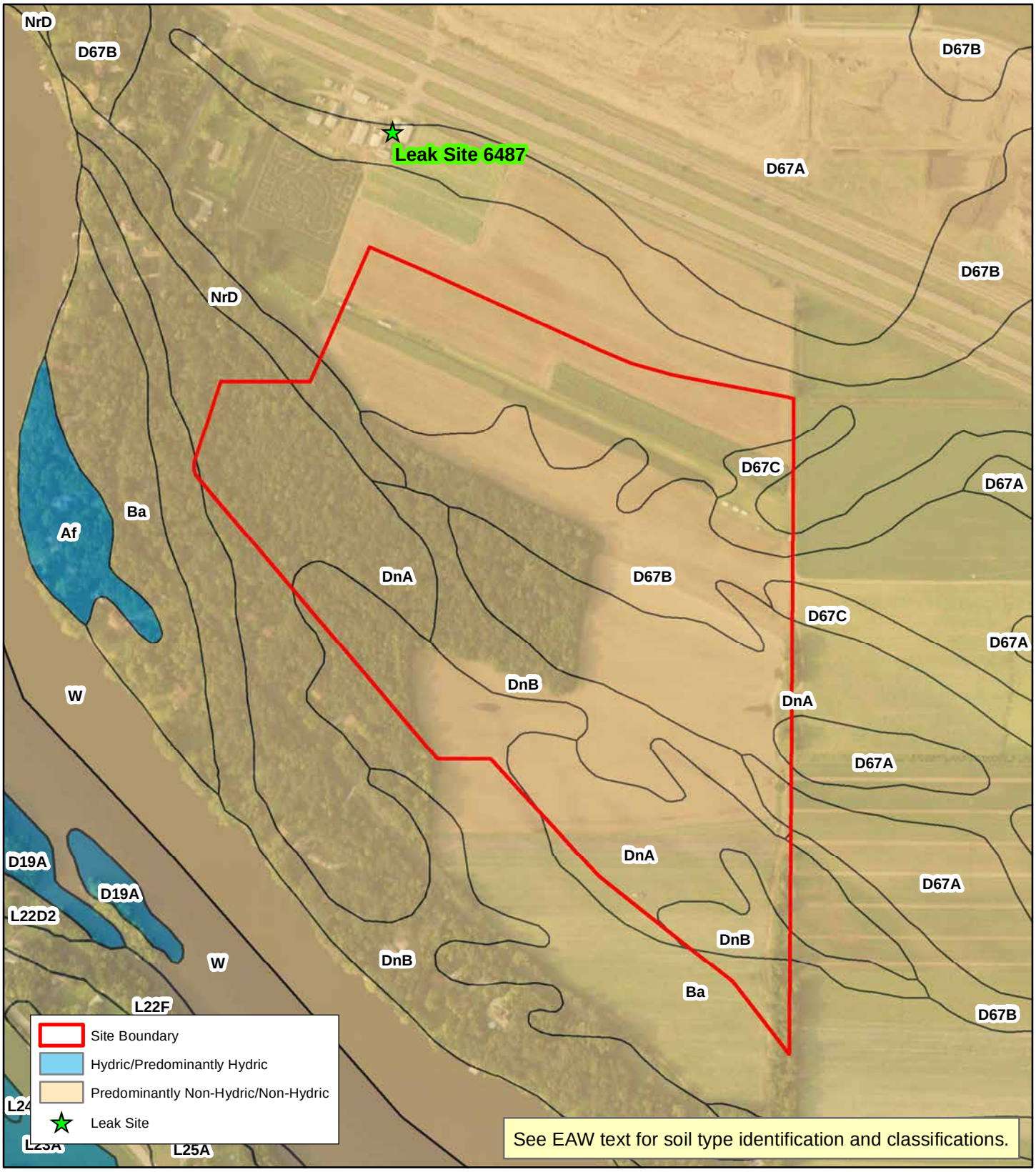

Figure 7 - Soil Types and Location of Leak Site

N

0 500 Feet

KJOLHAUG ENVIRONMENTAL SERVICES COMPANY

Source: MNGEO Spatial Commons, MPCA

Riverstone South (KES 2020-162)
Ramsey, Minnesota

Note: Boundaries indicated on this figure are approximate and do not constitute an official survey product.

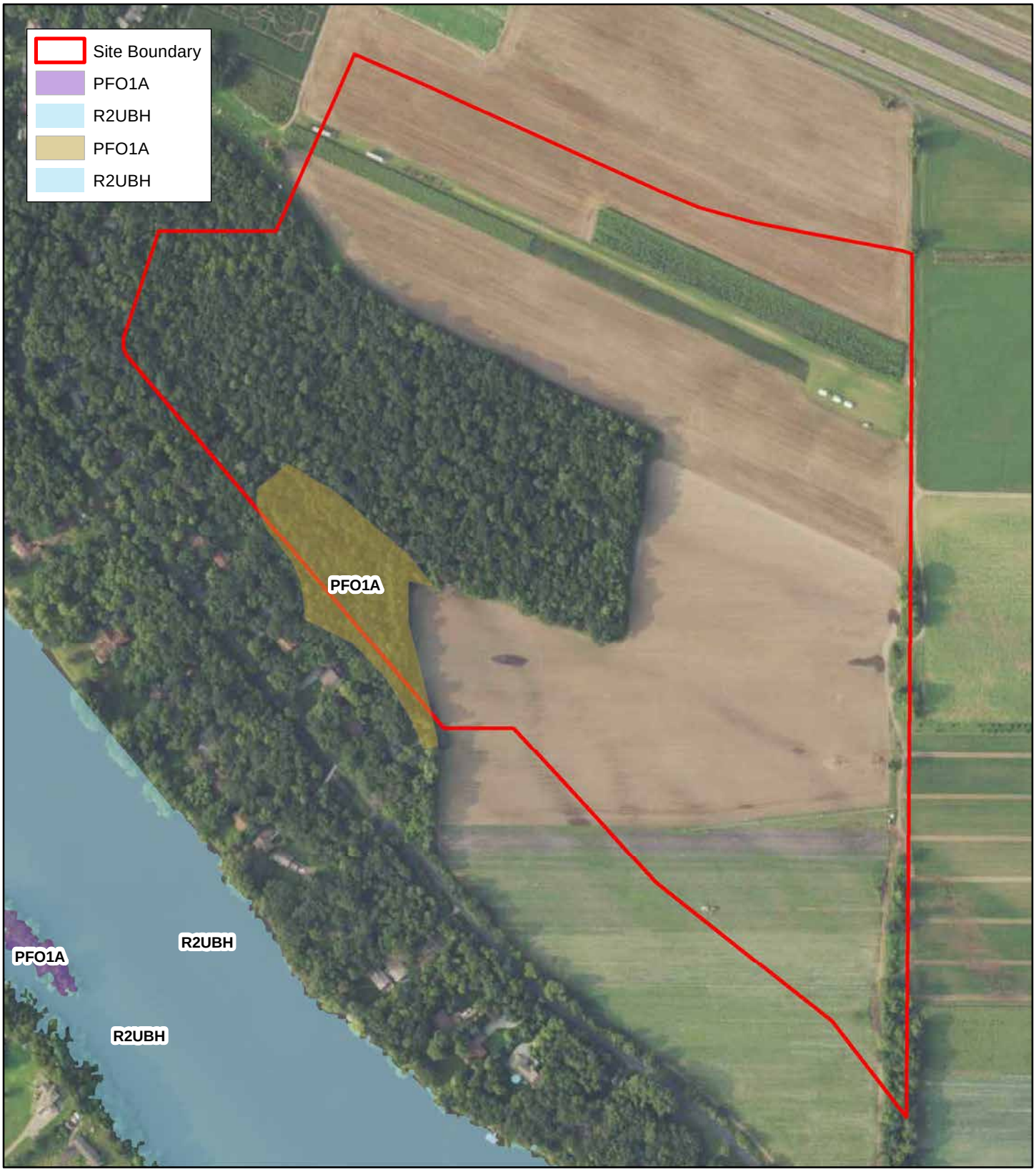

Figure 8 - National Wetlands Inventory

N

0 380 Feet

KJOLHAUG ENVIRONMENTAL SERVICES COMPANY

Source: MNGEO Spatial Commons, USFWS

Riverstone South (KES 2020-162)
Ramsey, Minnesota

Note: Boundaries indicated on this figure are approximate and do not constitute an official survey product.

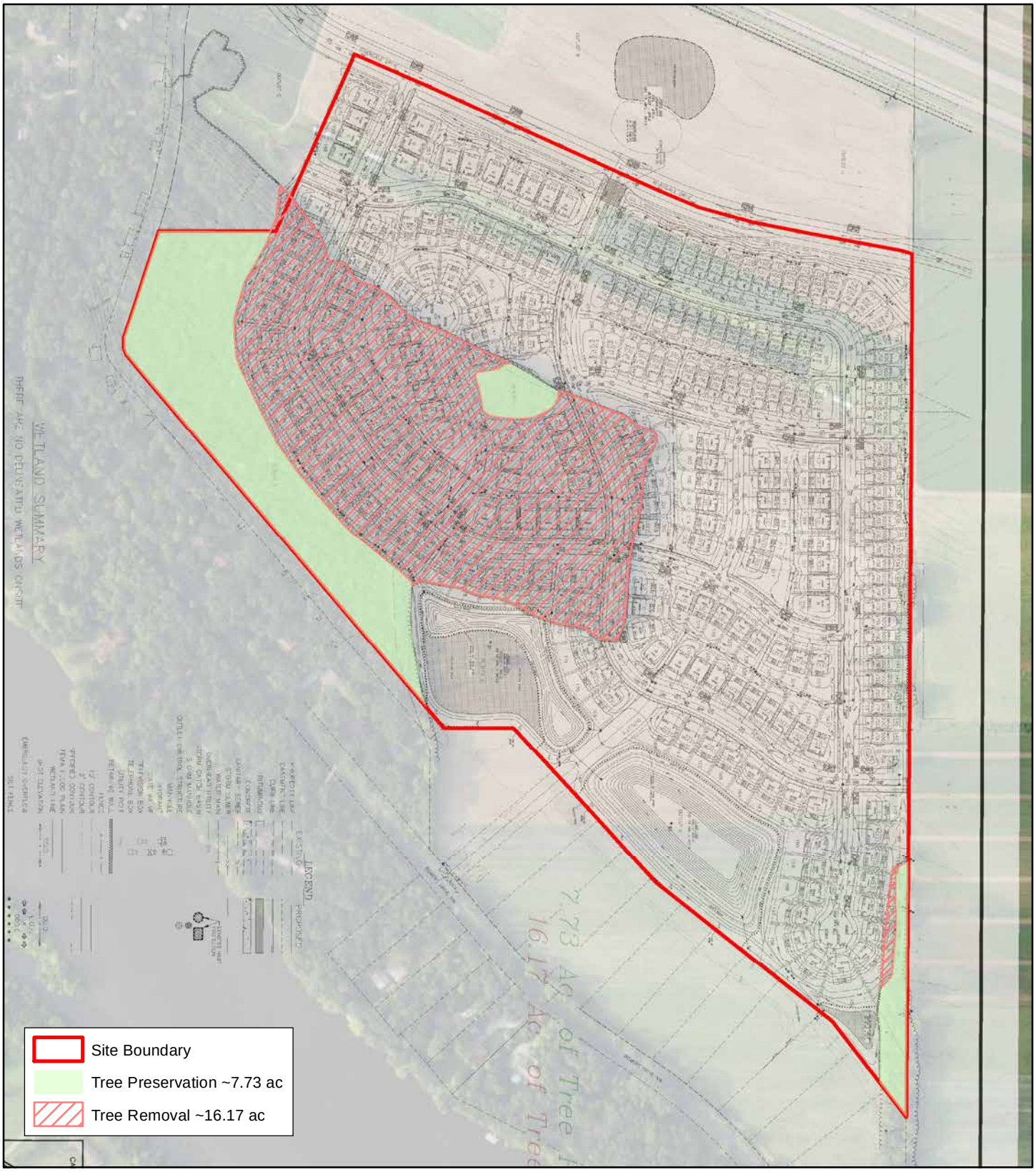

Figure 9 - Tree Removal and Preservation

N

0 380 Feet

KJOLHAUG ENVIRONMENTAL SERVICES COMPANY

Source: MNGEO Spatial Commons, Carlson McCain

Riverstone South (KES 2020-162)
Ramsey, Minnesota

Note: Boundaries indicated on this figure are approximate and do not constitute an official survey product.

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Appendix A
Site Plan and Grading Plan

Riverstone South EAW

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LEGAL DESCRIPTION

PARCEL DESCRIPTION: (Per Schedule A of Title Commitment File No. 2651, with a commitment date of October 17, 2019 at 7:00 am, prepared Twin City Title Company, LLC as issuing agent for Old Republic National Title Insurance Company)

Parcel A: Outlot B, Pearson Place, Anoka County, Minnesota.

Parcel B: That part of the Northwest Quarter of the Northwest Quarter of Section 29, Township 32, Range 25, Anoka County, Minnesota, lying southerly of U.S. Highway 10 and 169.

Parcel C: Lot 2, Block 3, Pearson Place, Anoka County, Minnesota.

Parcel D: Lot 1, Block 3, Pearson Place, Anoka County, Minnesota.

(abstract property)

LEGEND

- OPEN SPACE
- OPEN SPACE – WOODED
- STORMWATER POND
- INFILTRATION BASIN

U.S. HIGHWAY NO. 10 & 169

COMMERCIAL DEVELOPMENT 21.96 AC

S66°01'47"E 1951.85

S00°08'36"W 1705.32

LIFT STATION AREA 0.22 AC

S00°17'33"W 1093.62

LIFT STATION

STREET A

STREET B

STREET C

STREET D

STREET E

PEARSON BLVD

RESIDENTIAL DEV. 78.63 AC

8' TRAIL

PUBLIC PARK 1.0 AC

RIVERDALE DRIVE

BUFFER AREA 1.05 AC

LAKE

POND

INFILTRATION BENCH

OPEN SPACE / PONDING AREA - 8.08 AC

INF. BASIN

S34.66°37'59"W

S81.89 S42°51'14"E

620.99 N51°55'40"W

193.74 N89°47'35"W

BOWERS DRIVE NW

MISSISSIPPI RIVER

AREA RETAINED BY LANDOWNER 9.70 AC

TREE PRESERVATION AREA 7.0 AC

EXISTING 50 TREE BUFFER

50.00 N76°47'15"W

270.04 Δ=077°12'00" R=200.00

451.73 N22°50'16"E

205.79 N67°09'59"W

159.73 Δ=12°58'27" R=706.37

76.30 S00°14'16"W

395.06 Δ=17°40'00" R=1281.25

322.61 N17°54'18"E

1349.11 N40°39'13"W

100.41 Δ=06°01'20" R=955.37

61.69 Δ=58°33'37" R=60.36

SITE DATA

TOTAL AREA	±110.29 AC.
RESIDENTIAL DEVELOPMENT AREA	78.63
PUBLIC PARK AREA	1.0
TREE PRESERVATION AREA	7.0
OPEN SPACE / PONDING AREA	8.08
RIVERDALE BUFFER AREA	1.05
ROW AREA	15.37
LIFT STATION AREA	0.22
COMMERCIAL DEVELOPMENT AREA	21.96
AREA RETAINED BY LANDOWNER	9.70

N

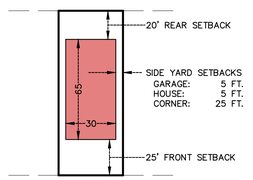
0 60 120 240

(SCALE IN FEET)

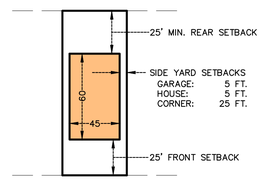
RESIDENTIAL DEVELOPMENT DATA

TOTAL NUMBER OF LOTS	243
GROSS DENSITY	3.1 U/AC
DETACHED TOWNHOMES	78
55' SINGLE FAMILY	116
65' SINGLE FAMILY	49

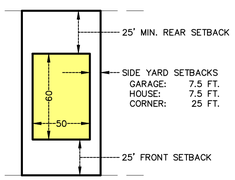
40' DETACHED TOWNHOME LOT DETAIL



55' SINGLE FAMILY LOT DETAIL



65' SINGLE FAMILY LOT DETAIL



CARLSON McCAIN
ENGINEERING SURVEYING ENVIRONMENTAL
3890 PHEASANT RIDGE DR NE
SUITE 100
BLAINE, MN 55449
TEL 763.489.7900
FAX 763.489.7959
CARLSONMCCAIN.COM

DRAWN BY: C#/RR
ISSUE DATE: 12/3/20
Revisions:

CAPSTONE HOMES, INC.
14015 Sunfish Lake Blvd. NW, Suite 400
Ramsey, MN 55303

RIVERSTONE SOUTH
Ramsey, Minnesota

SKETCH PLAN W/AERIAL

1 of 1

[Save Date: 12/03/20] F:\jobs\8481 - 8500\8494 - pearson place 2nd\cad c3d\survey\layouts\8494_sketch plan.dwg

WETLAND SUMMARY

THERE ARE NO DELINEATED WETLANDS ONSITE.

LEGEND

	EXISTING	PROPOSED
PROPERTY LINE		
EASEMENT LINE		
CURB LINE		
BITUMINOUS		
CONCRETE		
SANITARY SEWER		
STORM SEWER		
WATER MAIN		
OVERHEAD UTILITY	ohe	
STORM CATCH BASIN		
STORM MANHOLE		
OUTLET CONTROL STRUCTURE		
MANHOLE	MH SAN	
HYDRANT		
GATE VALVE	GV	
TELEVISION BOX	TV	
TELEPHONE BOX	TB	
UTILITY POLE		
RETAINING WALL		
FENCE	x x	
10' CONTOUR		
2' CONTOUR		
SPECIFIED CONTOUR		
FEMA FLOOD PLAIN		
WETLAND LINE		
SPOT ELEVATION	00.0 x	00.0 x
EMERGENCY OVERFLOW		E.O.F. x 000.0
SILT FENCE		
TREE FENCE		
GRADING LIMITS		
TREELINE		
SOIL BORING		TP

DENOTES INLET PROTECTION

N

0 75 150 300

(IN FEET)

BENCHMARKS

1. Minnesota Department of Transportation GSID Station #66054 (Name: PUMA MNDT RM 1). Elev.= 884.89 ft.
2. Minnesota Department of Transportation GSID Station #802 (Name: H 257). Elev.= 882.78 ft.

CALL BEFORE YOU DIG

811 Know what's below. Call before you dig.

The subsurface utility information shown on this plan is utility Quality Level D. This quality level was determined according to the guidelines of CI/ASCE 38-02, entitled "Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data."

CARLSON McCAIN ENGINEERING SURVEYING ENVIRONMENTAL
3880 PHEASANT RIDGE DR NE
SUITE 100
BLAINE, MN 55449
TEL 763.488.7800
FAX 763.488.7888
CARLSONMCCAIN.COM

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota

Print Name: Brian J. Krystofiak, P.E.
Signature:
Date: 11/25/20 License #: 25063

Drawn: ADB
Designed: BJK
Date: 11/25/20

Revisions:
1.

RIVERSTONE DEVELOPMENT, LLC
14015 Sunfish Lake B, Suite 400
Ramsey, MN 55303

RIVERSTONE SOUTH
Ramsey, MN

GRADING INDEX

14 of 25

Save Date: 11/24/20 F:\jobs\8481 - 8500\8494 - pearson place 2nd\cad c3d\engineering\prelim plans\8494_ind.dwg

#8494

Appendix B

No Wetlands Determination and Agency Concurrence

Riverstone South EAW

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KJOLHAUG ENVIRONMENTAL SERVICES COMPANY

Providing Sound, Balanced, Comprehensive Natural Resource Solutions

Memorandum

Date: October 14, 2019

To: Karen Wold, Barr Engineering
Project Manager, U.S. Army Corps of Engineers (USACE)

CC: Steve Bona, Capstone Homes

From: Melissa Barrett, Kjolhaug Environmental Services Company (KES)

Re: Site Assessment for Wetlands – Pearson Farm South, Ramsey, MN
KES#2019-154

The Pearson Farm South site was examined on October 9, 2019 for the presence and extent of wetland. The site was located in Sections 29 & 30, Township 32N, Range 25W, City of Ramsey, Anoka County, Minnesota. More specifically, the site was located approximately three-fourths mile to the west of the intersection of Highway 10 and County Road 83 (Armstrong BLVD NW) (**Figure 1**). The site boundaries corresponded to Anoka County PIDs 30-32-25-11-0032 (8846 Highway 10 NW; 16.69-ac), 29-32-25-22-0003 (no address; 20.16-ac), and 29-32-25-23-0004 (no address; 70.87-ac).

The 107.72-acre site was comprised primarily of cornfield and woodland, with a pumpkin patch in the northwest portion of the site. A grass airstrip bisected the north half of the site, and a farm/business with numerous outbuildings was located in the very northwest corner of the site (**Figure 2**).

Attachment A of this memo includes a Joint Application Form for Activities Affecting Water Resources in Minnesota, which is submitted in request for: (1) concurrence with the no wetland determination from the Lower Rum River Watershed Management Organization under the Minnesota Wetland Conservation Act (WCA), and (2) concurrence from the U.S. Army Corps of Engineers (USACE) that the site lacks waters of the U.S. for Section 404 of the Federal Clean Water Act.

Review of NWI, Soils, DNR, and NHD Information

The National Wetlands Inventory (NWI) (Minnesota Geospatial Commons 2009-2014 and U.S. Fish and Wildlife Service) showed one PFO1A wetland in the south portion of the onsite woodland (**Figure 3**).

The Soil Survey (USDA NRCS 2015) did not show any mapped hydric soil types within or near site boundaries. Soil types mapped on the property are listed in **Table 1** and a map showing soil types is included in **Figure 4**.

Table 1. Soil types mapped on the Pearson Farm South site.

Symbol	Soil Name	Approx. Acres AOI	Approx. % of AOI	% Hydric	Hydric Category
Ba	Becker very fine sandy loam	23.7	16.60%	7	Predominantly Non-Hydric
D67A	Hubbard loamy sand, 0 to 2 percent slopes	42	29.30%	1	Predominantly Non-Hydric
D67B	Hubbard loamy sand, 1 to 6 percent slopes	21.2	14.80%	3	Predominantly Non-Hydric
D67C	Hubbard loamy sand, 2 to 12 percent slopes	2.3	1.60%	0	Non-Hydric
DnA	Dickman sandy loam, 0 to 2 percent slopes	36.7	25.60%	0	Non-Hydric
DnB	Dickman sandy loam, 2 to 6 percent slopes	14.2	9.90%	0	Non-Hydric
NrD	Nymore loamy coarse sand, 12 to 25 percent slopes	3	2.10%	0	Non-Hydric

The Minnesota DNR Public Waters Inventory (Minnesota Department of Natural Resources 2015) showed a DNR Public Watercourse (Mississippi River) more than 300-feet from the south and west site boundaries (**Figure 5**).

The National Hydrography Dataset (U.S. Geological Survey 2015) showed one Stream/River more than 300-feet from the south and west site boundaries (**Figure 6**).

No Wetland Determination

The site was examined on October 9, 2019 for the presence and extent of wetlands. At the time of the site visit, select corn crop fields had already been harvested and climatic conditions were wet (atypical) based on the gridded database method. Additionally, climatic conditions were wetter than the normal range for most of the 2019 growing season based on 30-day rolling precipitation totals (**Attachment B**).

Woodland Investigation

The entire woodland was investigated for depressional areas with hydrophytic vegetation, including the area identified as PFO1A wetland on the NWI map. No depressional areas with a dominant hydrophytic plant community or drowned out vegetation/no vegetation were observed. Woodland (which was formerly used as cattle pasture according to the landowner) was comprised of the following species:

Woodland Species Observed

Common Name	Latin Name	Ind Status	Common Name	Latin Name	Ind Status
Bur oak (trees, seedlings)	*Quercus macrocarpa*	FACU	Sweet cicely	*Osmorhiza claytonii*	FACU
Boxelder	*Acer negundo*	FACU	Avens	*Geum canadense*	FAC
American elm (trees, saplings, seedlings)	*Ulmus americana*	FACW	Wood aster	*Symphyotrichum cordifolium*	none
Hackberry	*Celtis occidentalis*	FAC	Prickley ash (shrubs)	*Zanthoxylum americanum*	FACU
Honeysuckle	*Lonicera tatarica*	FACU	Virginia creeper	*Parthenocissus quinquefolia*	FACU
Gooseberry	*Ribes cynosbati*	FACU	Violet	*Viola sororia*	FAC
Raspberry	*Rubus idaeus*	FAC	Wood sedge	*Carex blanda*	FAC
White snakeroot	*Ageratina altissima*	FACU	Pennsylvania sedge	*Viola sororia*	none
Clearweed	*Pilea pumila*	FACW	Stickseed	*Hackelia virginiana*	FACU
Creeping Charlie	*Glechoma hederacea*	FACU	American plum (seedling)	*Prunus americana*	UPL
Canada moonseed	*Menispermum canadense*	FAC	Stinging nettle	*Urtica dioica*	FAC
Motherwort	*Leonurus cardiaca*	none			

Due to the absence of depressional areas and the lack of dominant hydrophytic plant communities, no wetlands were delineated within the woodland area including that area identified as PFO1A wetland on the NWI map.

Cropland Investigation - Aerial Review for Offsite Hydrology Determinations

Method

Areas in agricultural cropland that exhibited potential wetland signatures on aerial photography and with low or depressional topography were reviewed generally following methods described in Using Aerial Imagery to Assess Wetland Hydrology (Minnesota Board of Water and Soil Resources (BWSR) 2010) and Guidance for Submittal of Delineation Reports to the St. Paul District Corps of Engineers and Wetland Conservation Act Local Governmental Units in Minnesota, Version 2.0 (USACE 2015). These methods use aerial photography and antecedent precipitation conditions to identify areas that have wetland hydrology signatures during periods of typical precipitation.

Available years of Farm Service Agency (FSA) aerial photography were reviewed for the site to determine long-term hydrology. In cases where additional aerial photography was relevant, available, and necessary to make hydrology determinations, we reviewed aerial photography from other sources such as the Minnesota Geospatial Information Office (MnGEO) and Google Earth.

Signatures at locations of potential wetlands on aerial photographs were interpreted and classified using seven codes (**Table 2**).

Table 2. Aerial photograph interpretation codes

Code	Classification
CS	Crop stress
DO	Drowned out
NC	Not cropped
SW	Standing water
WS	Wetland signature
AP	Altered pattern
NV	Normal vegetation

This analysis used only aerial photographs taken following periods of precipitation within the normal range as determined using the Wetland Delineation Precipitation Data Retrieval tool (Minnesota Climatology Office 2015). This tool classifies antecedent precipitation as Normal (N), Wet (W) or Dry (D) by comparing precipitation during the three months preceding the estimated date of aerial photography to the 30-year average from 1981-2010.

Results

Available aerial FSA photographs from the 5 most recent and available normal years (1995, 1996, 2008, 2010, and 2015) were assessed. Photo years were assessed for wet/normal/dry climatic conditions using the Wetland Delineation Precipitation Data Retrieval tool using a date of July 1. Areas showing at least a wetland signature for a recent Wet year (2013) were included in the aerial review. The review areas are shown on **Figure 7**. The Wetland Hydrology Recording from Aerial Imagery - Recording Form, photos of each Review Area, and FSA photographs for each year of review are included in **Attachment C**.

Based on the results of the offsite hydrology review, none of the areas warranted field review.

However, sample points (**Attachment D**) were taken in Areas A and C for documentation of field conditions. Both soil points lacked hydric soils and contained high amounts of sand throughout the soil profile which likely precludes these areas from ponding/holding water for more than 14 consecutive days. Area B was not observable in the field (no observable depression, standing water, or drowned out vegetation).

Based on the lack of sufficient hydrology signatures in normal climatic years, plus additional soil information confirming the lack of hydric soil, no wetlands were identified within cropped portions of the site.

Summary

No other depressional areas were observed onsite. No other areas were shown as wetland on the NWI-map, and no areas were mapped with hydric soil on the soil survey. No wetlands were delineated on the Pearson Farm South site in Ramsey.

Attachment A of this memo includes a Joint Application Form for Activities Affecting Water Resources in Minnesota, which is submitted in request for: (1) concurrence with the no wetland determination from the Lower Rum River Watershed Management Organization under the Minnesota Wetland Conservation Act (WCA), and (2) concurrence from the U.S. Army Corps of Engineers (USACE) that the site lacks waters of the U.S. for Section 404 of the Federal Clean Water Act.

Pearson Farm South, Ramsey, MN

Site Assessment for Wetlands

FIGURES

1. Site Location
2. Existing Conditions
3. National Wetlands Inventory
4. Soil Survey
5. DNR Public Waters Inventory
6. National Hydrography Dataset

Figure 1 - Site Location

N

0 1,500 Feet

KJOLHAUG ENVIRONMENTAL SERVICES COMPANY

Source: ESRI Streets Basemap

Pearson Farm South (KES 2019-154)
Ramsey, Minnesota

Note: Boundaries indicated on this figure are approximate and do not constitute an official survey product.

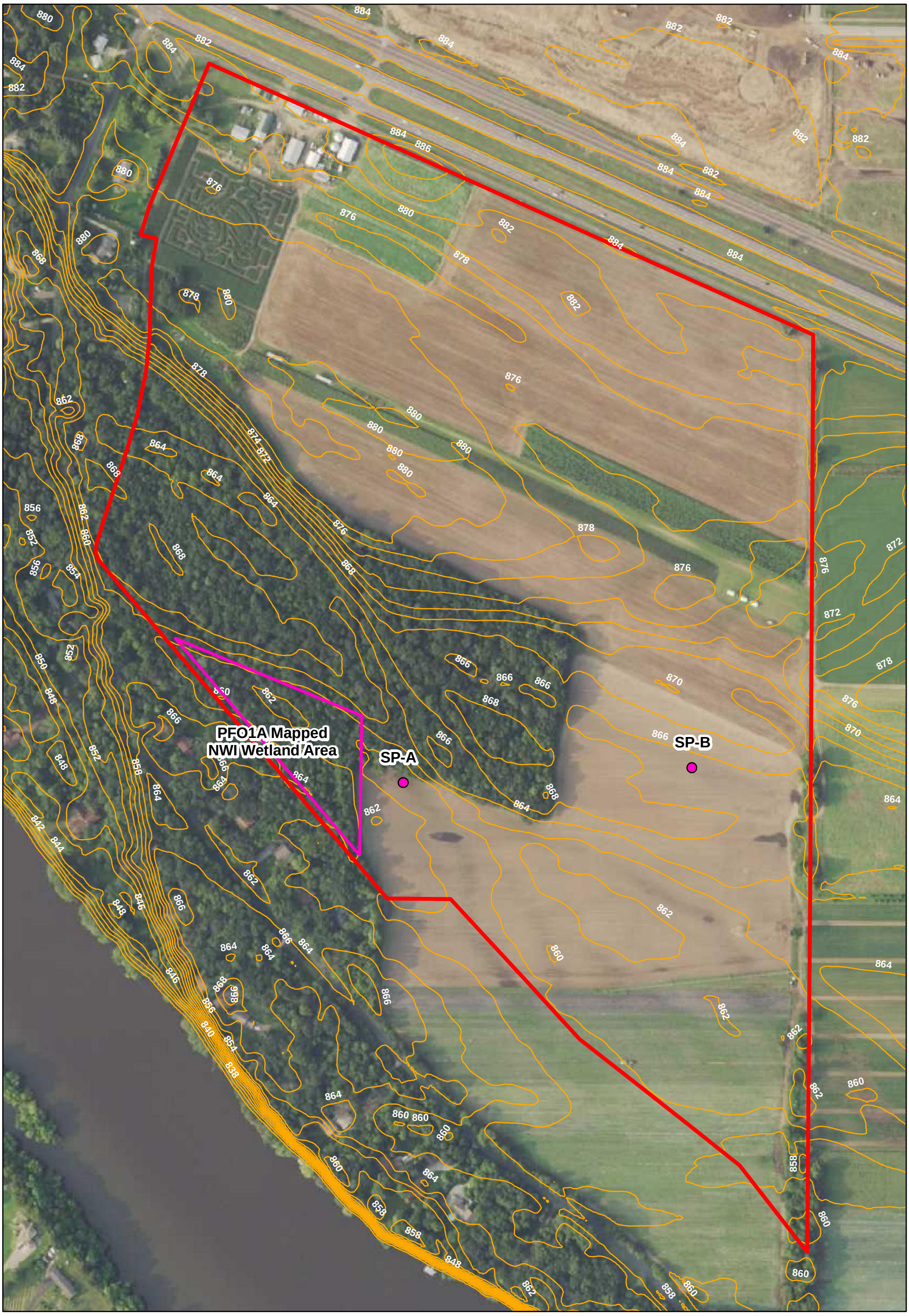

Figure 2 - Existing Conditions (2017 FSA Photo - Wet Year)

N

0 500 Feet

Legend

Site Boundary

Sample pt

Anoka County Lidar

Pearson Farm South (KES 2019-154)
Ramsey, Minnesota

Note: Boundaries indicated on this figure are approximate and do not constitute an official survey product.

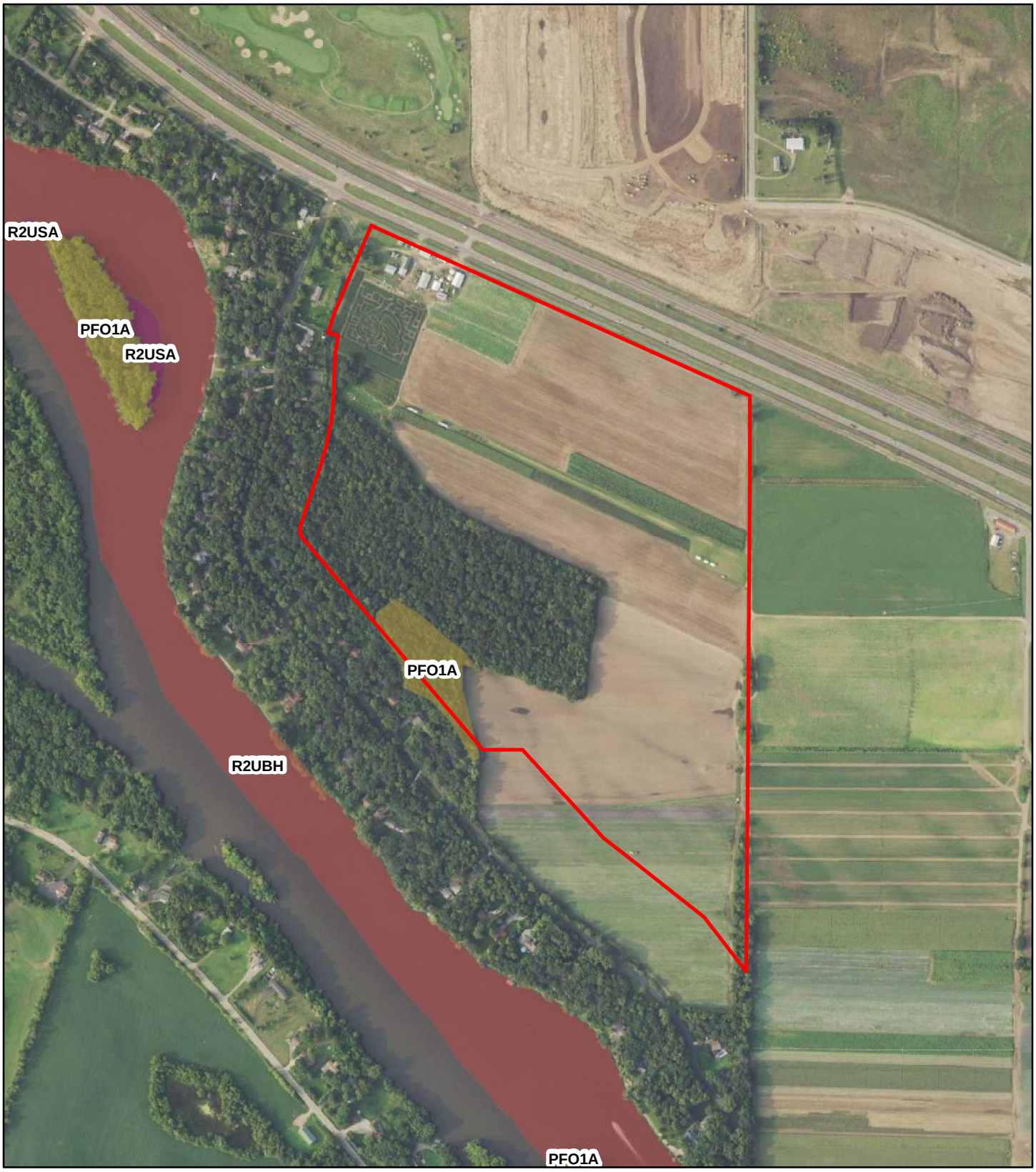

Figure 3 - National Wetlands Inventory

N

0 500 Feet

KJOLHAUG ENVIRONMENTAL SERVICES COMPANY

Source: MNGEO Spatial Commons, USFWS

Pearson Farm South (KES 2019-154)
Ramsey, Minnesota

Note: Boundaries indicated on this figure are approximate and do not constitute an official survey product.

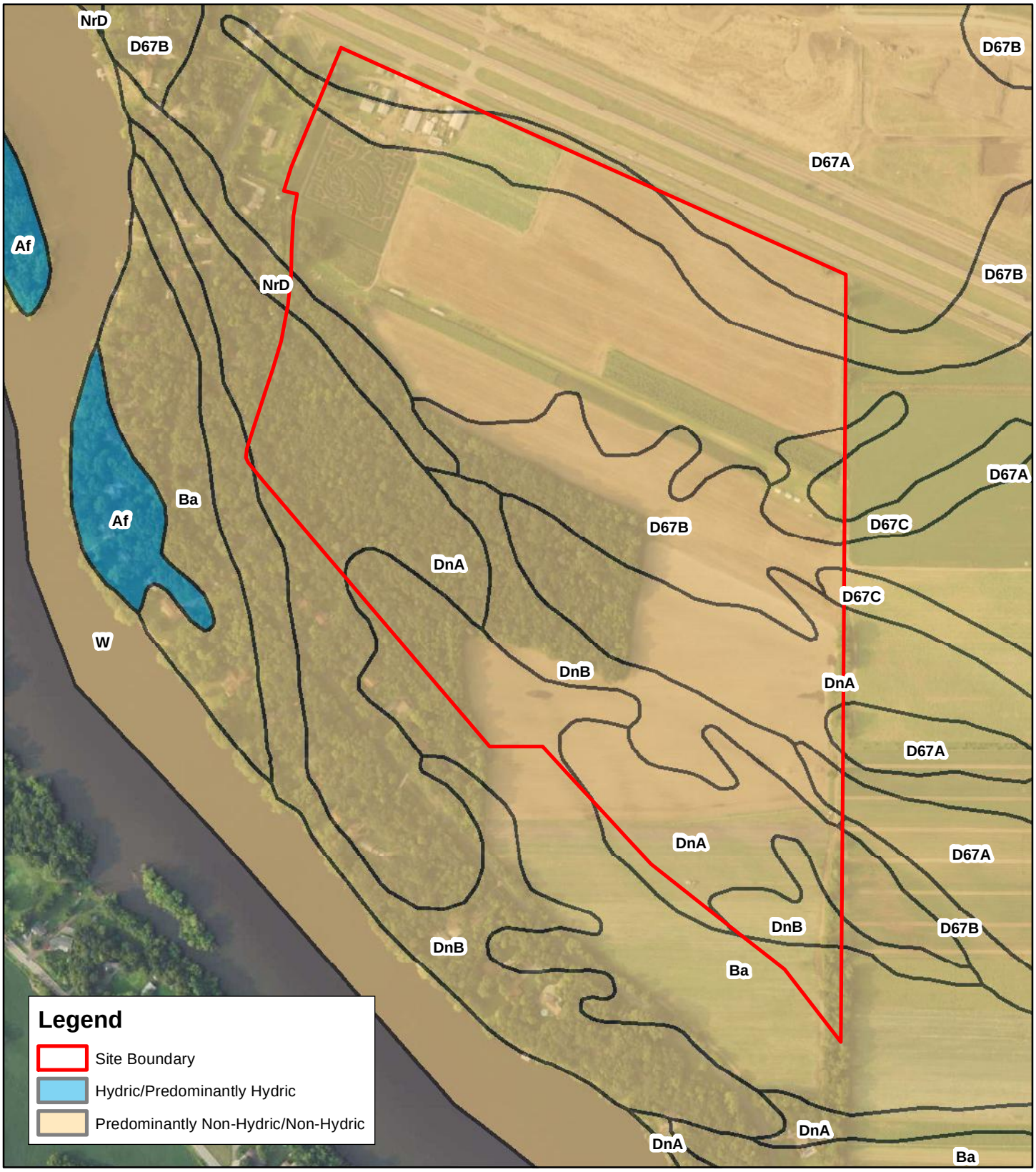

Figure 4 - Soil Survey

N

0 500 Feet

KJOLHAUG ENVIRONMENTAL SERVICES COMPANY

Source: MNGEO Spatial Commons, USDA, NRCS

Pearson Farm South (KES 2019-154)
Ramsey, Minnesota

Note: Boundaries indicated on this figure are approximate and do not constitute an official survey product.

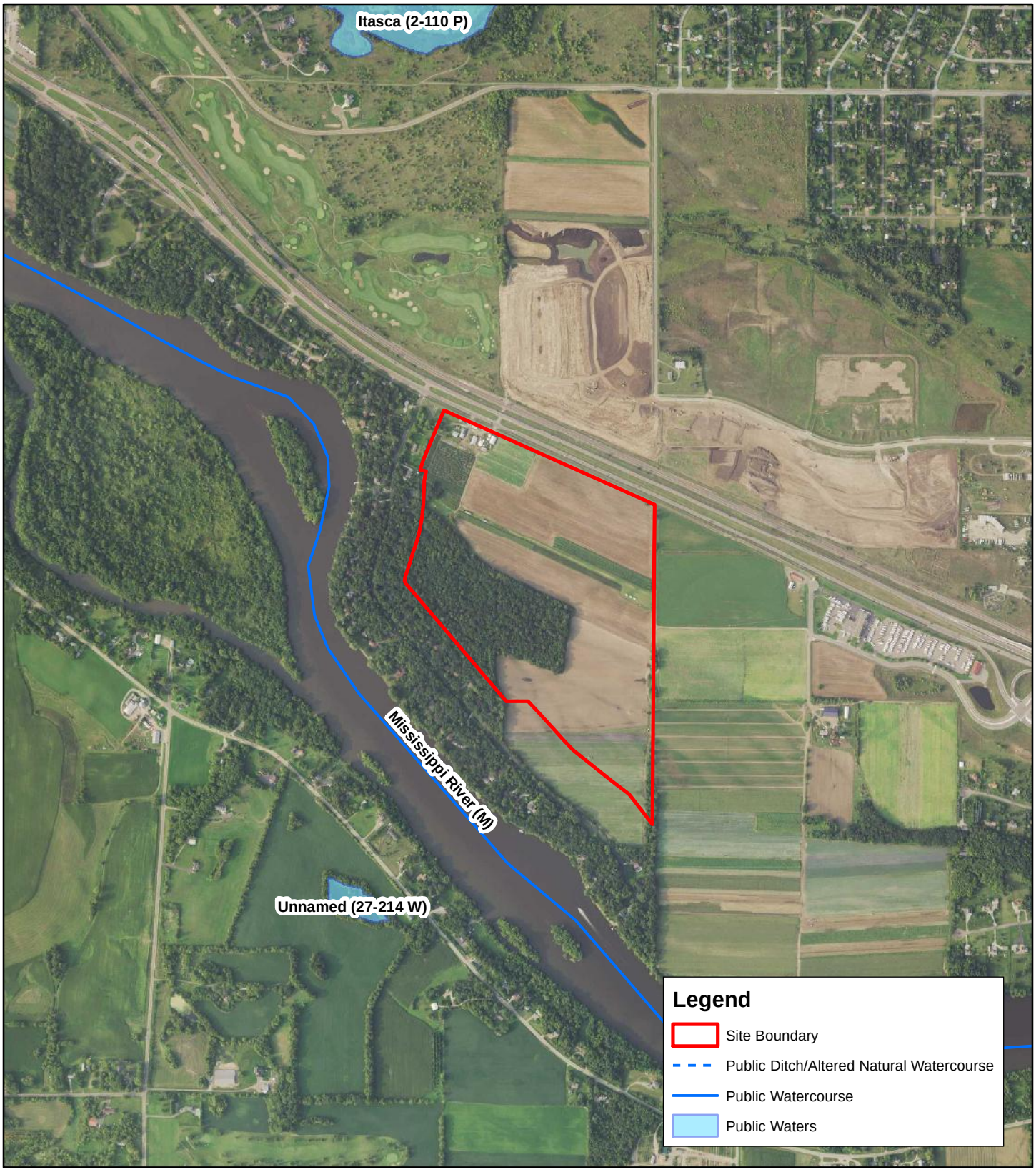

Figure 5 - DNR Public Waters Inventory

N

0 2,000 Feet

KJOLHAUG ENVIRONMENTAL SERVICES COMPANY

Source: MNGEO Spatial Commons, MN DNR

Pearson Farm South (KES 2019-154)
Ramsey, Minnesota

Note: Boundaries indicated on this figure are approximate and do not constitute an official survey product.

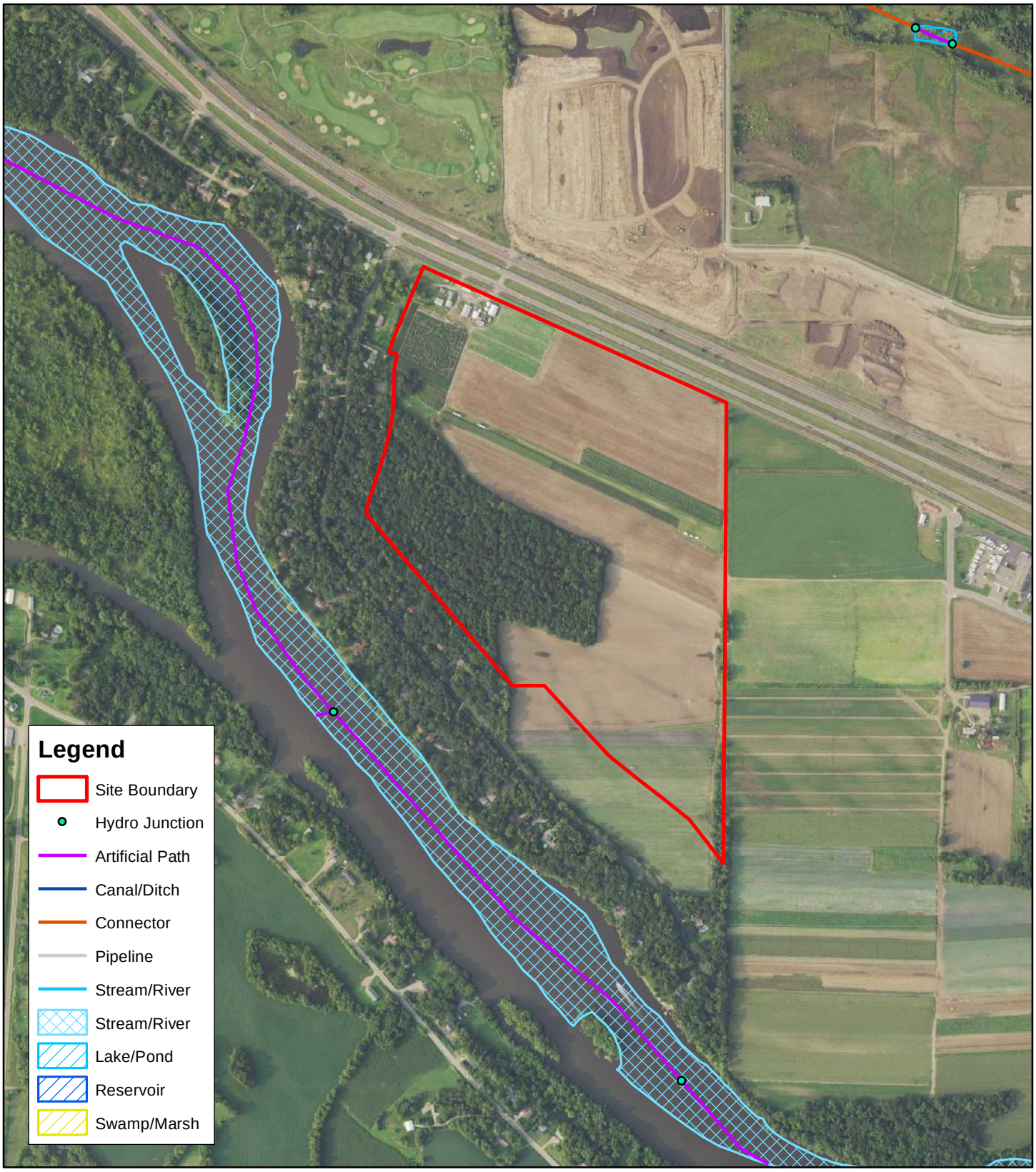

Figure 6 - National Hydrography Dataset

N

0 1,000 Feet

KJOLHAUG ENVIRONMENTAL SERVICES COMPANY

Source: MNGEO Spatial Commons, USGS

Pearson Farm South (KES 2019-154)
Ramsey, Minnesota

Note: Boundaries indicated on this figure are approximate and do not constitute an official survey product.

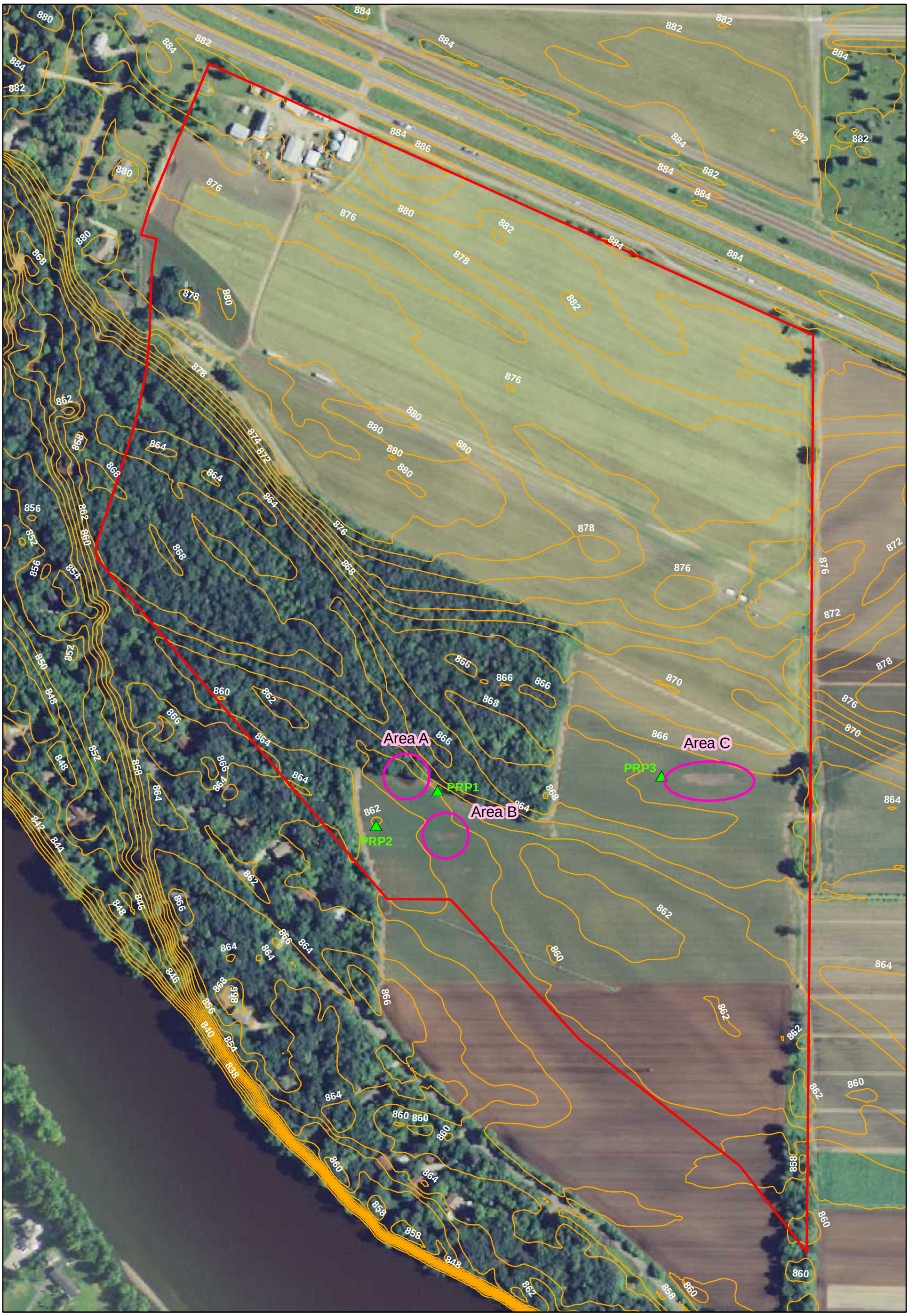

Figure 7 - Offsite Hydrology Review Areas (2013 FSA Photo - Wet Year)

Lower
Rum River
WMO

November 25, 2019

Mr. Steve Bona: stephen@capstonehomes-mn.com
Capstone Homes
14015 Sunfish Lake Blvd.
Suite 400
Ramsey, MN 55303

Subject: LRRWMO Permit #2019-23 ~ Pearson Farm South ~ Ramsey

Dear Mr. Bona:

The LRRWMO, at its November 21, 2019 meeting, addressed the permit indicated above.

The LRRWMO Board as administrator for the Minnesota Wetland Conservation Act has taken action to approve the no-wetland determination as detailed on the attached Barr Engineering memorandum dated November 15, 2019.

If you have any questions regarding this process, please contact Ms. Karen Wold of Barr Engineering.

Sincerely,

Todd Haas
Chair

Attachments: Barr Engineering Memo
Minnesota Wetland Conservation Act Notice of Decision
Approved Permit 2019-23

cc: Melissa Barrett, Kjolhaug Environmental: melissa@kjolhaugenv.com
Bruce Westby, City of Ramsey
Leonard Linton, City of Ramsey
Leslie Parris, MnDNR Div. of Ecological & Water Resources
Becky Wozney, Anoka Conservation District
Ben Meyer, MN Board of Water & Soil Resources
Marissa Merriman, U.S. Army Corps of Engineers
LRRWMO
Bob Obermeyer, Barr Engineering Co.

resourceful. naturally.
engineering and environmental consultants

BARR

Memorandum

To: Lower Rum River Watershed Management Organization (LRRWMO)
From: Karen Wold, Barr Engineering Co.
Subject: Pearson Farm South ~ Ramsey
Date: November 15, 2019
Barr Project: 23020047.00 RJB 1923
LRRWMO Permit: 2019-23

c: Bob Obermeyer, Barr Engineering Co.
Carla Wirth, TimeSaver, LRRWMO Recording Secretary

On October 14, 2019, Barr received a wetland delineation report and request for concurrence with a no-wetland determination from Kjolhaug Environmental for the Pearson Farm South site.
On October 21, 2019, we were notified that a LRRWMO permit application had been received.
We determined the application to be complete and submitted a Minnesota Wetland Conservation Act Notice of Application on October 30, 2019.
A Technical Evaluation Panel (TEP) site review was conducted on October 25, 2019.
The comment period ends on November 21, 2019.

If no comments are received between now and the end of the comment period on November 21st, which is also the date of the LRRWMO meeting, we recommend that the LRRWMO approve the no-wetland determination as described in the attached draft Minnesota Wetland Conservation Act Notice of Decision.

BOARD OF WATER AND SOIL RESOURCES

Minnesota Wetland Conservation Act
Notice of Decision

Local Government Unit (LGU): Lower Rum River Watershed Management Organization (LRRWMO) **County:** Anoka
Applicant Name: Capstone Homes **Applicant Representative:** Steve Bona
Project Name: Pearson Farm South **LGU Project No. (if any):** 2019-23
Date Application Received by LGU: 10/21/2019
Date of LGU Decision: 11/21/2019
Date this Notice was Sent: 11/25/2019

Minnesota Wetland Conservation Act (WCA) Decision Type - check all that apply

☒Wetland Boundary/Type ☐Sequencing ☐Replacement Plan ☐Bank Plan (not credit purchase) ☐No-Loss (8420.0415) ☐Exemption (8420.0420) Part: ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ H Subpart: ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9

Replacement Plan Impacts (replacement plan decisions only)

Total WCA Wetland Impact Area:
Wetland Replacement Type: ☐ Project Specific Credits: ☐ Bank Credits:
Bank Account Number(s):

Technical Evaluation Panel (TEP) Findings and Recommendations (attach if any)

☐ Approve ☐ Approve w/Conditions ☐ Deny ☒ No TEP Findings Report, see TEP involvement and communication described below.

LGU Decision

☐ Approved with Conditions (specify below)[1] List Conditions:	☒ Approved[1]	☐ Denied
Decision-Maker for this Application: ☐ Staff ☒ Governing Board/Council ☐ Other: **Decision is valid for:** ☒ 5 years (default) ☐ Other (specify):		

[1] *Wetland Replacement Plan approval is not valid until BWSR confirms the withdrawal of any required wetland bank credits. For project-specific replacement a financial assurance per MN Rule 8420.0522, Subp. 9 and evidence that all required forms have been recorded on the title of the property on which the replacement wetland is located must be provided to the LGU for the approval to be valid.*

LGU Findings – Attach document(s) and/or insert narrative providing the basis for the LGU decision[1].

☒ Attachment(s) (specify): **site maps** ☒ Summary: **On behalf of Capstone Homes, Kjolhaug Environmental submitted a wetland delineation report and joint application form requesting concurrence with a no-wetland determination for the Pearson Farm South site located in the City of Ramsey (Section 30, Township 32N, Range 25W) within Anoka County.** **The report included a Level II site wetland delineation and a Level I off site aerial imagery review to assess wetland hydrology in agricultural cropland. The report concluded that no wetlands are present within the wetland evaluation area.**

A site review was conducted on 10/25/2019 with Ben Meyer (Minnesota Board of Water and Soil Resources), Karen Wold (Barr Engineering for the LRRWMO), and Adam Cameron (Kjolhaug Environmental).
The wetland delineation report and a WCA Notice of Application were provided to TEP members on 10/30/2019.
The comment period ended on 11/21/2019 and no comments were received.
The no-wetland determination is accurate based on the requirements of the 1987 U.S. Army Corps of Engineers (USACE) Wetland Delineation Manual, the 2010 Midwest Regional Supplement, and the 2015 Guidance for Submittal of Delineation Reports to the USACE and WCA LGU in Minnesota, Version 2.0.

[1] *Findings must consider any TEP recommendations.*

Attached Project Documents

☒ Site Location Map ☐ Project Plan(s)/Descriptions/Reports (specify):

Appeals of LGU Decisions

If you wish to appeal this decision, you must provide a written request within 30 calendar days of the date you received the notice. All appeals must be submitted to the Board of Water and Soil Resources Executive Director along with a check payable to BWSR for $500 *unless* the LGU has adopted a local appeal process as identified below. The check must be sent by mail and the written request to appeal can be submitted by mail or e-mail. The appeal should include a copy of this notice, name and contact information of appellant(s) and their representatives (if applicable), a statement clarifying the intent to appeal and supporting information as to why the decision is in error. Send to:

Appeals & Regulatory Compliance Coordinator
Minnesota Board of Water & Soils Resources
520 Lafayette Road North
St. Paul, MN 55155
travis.germundson@state.mn.us

Does the LGU have a local appeal process applicable to this decision?

☐ Yes[1] ☒ No

[1]*If yes, all appeals must first be considered via the local appeals process.*

Local Appeals Submittal Requirements (LGU must describe how to appeal, submittal requirements, fees, etc. as applicable)

Notice Distribution (include name)

Required on all notices:

☒ SWCD TEP Member: Becky Wozney	☒ BWSR TEP Member: Ben Meyer
☐ LGU TEP Member (if different than LGU contact):	
☒ DNR Representative: Leslie Parris	
☒ Watershed District or Watershed Mgmt. Org.: Todd Haas (LRRWMO), Bob Obermeyer (Barr Engineering Co.)	
☒ City Contact for LRRWMO permitting: Bruce Westby and Leonard Linton (City of Ramsey)	
☒ Applicant (notice only): Steve Bona (Capstone Homes)	☒ Agent/Consultant (notice only): Melissa Barrett (Kjolhaug Environmental)

Optional or As Applicable:

☒ Corps of Engineers:	
☐ BWSR Wetland Mitigation Coordinator (required for bank plan applications only):	
☐ Members of the Public (notice only):	☐ Other:

Signature:	Date:
	11/21/2019

This notice and accompanying application materials may be sent electronically or by mail. The LGU may opt to send a summary of the application to members of the public upon request per 8420.0255, Subp. 3.

Lower Rum River Watershed Management Organization ("LRRWMO")

Andover—Anoka—Ramsey

2015 First Avenue • Anoka, MN 55303

PERMIT APPLICATION

Permit # 19-23

The $100.00 application fee and the $700.00 escrow deposit must accompany this permit application. Applications for projects involving wetlands and/or involving a Wetland Replacement Plans must include an additional $75 application fee plus an escrow deposit as determined in accordance with LRRWMO Attachment C.

Permits are to be processed at the same time as the site plan, preliminary plat or other city land use or building application submitted to the city in which the work or project is located.

The permit and supporting documentation must be submitted to the LRRWMO by the THIRD THURSDAY OF THE MONTH TO BE ON THE FOLLOWING REGULARLY SCHEDULED MONTHLY LRRWMO MEETING AGENDA. A PERMIT NUMBER WILL NOT BE ASSIGNED UNTIL CITY AUTHORIZATION IS RECEIVED.

Project Name: Pearson Farm South

Address/Location: 8846 Hwy 10 NW

Project Description/Purpose: residential development

Steve Bona, Capstone Homes	Melissa Barrett, Kjolhaug Env.
Name of Applicant (Site Owner or Property Owner)	Applicant's Contact / Organization Name
14015 Sunfish Lk Blvd, Ste 400	2500 Shadywood Rd, Ste 130
Address	Address
Ramsey, MN 55303	Orono, MN 55331
City, State, Zip	City, State, Zip
651-271-4951	952-401-8757
Phone / Fax	Phone / Fax
Stephen@CapstoneHomes-mn.com	mElissa@Kjolhaug-env.com
Email	Email

Submittal Requirements

Complete applications are to be submitted as per LRRWMO attachments A (Permit Requirements), B (Office Procedure), C (Fees, Deposit, and Sureties for Wetland Conservation Act). Projects involving wetlands and/or involving a Wetland Replacement Plan have special notice requirements and require submittal of four copies (4) and an electronic copy of all wetland-related submittal materials.

PROJECT SUBMITTALS (check all that apply):

- ☐ **GRADING PLAN:** Including existing and proposed contours and boundaries of all wetlands and surface waters.
- ☐ **STORM SEWER/ DRAINAGE PLAN:** Including all permanent drainage features and all permanent water quality features.
- ☐ **STORM DRAINAGE CALCULATIONS:** Design computations as required by the LRRWMO.
- ☐ **EROSION CONTROL PLAN:** Including all temporary measures proposed to retain all sediment on site.
- ☒ **MITIGATION PLAN*/WETLAND DETERMINATION:** Quality level of mitigated wetland(s) shall be determined by the LRRWMO.
- ☐ **REQUEST FOR EXEMPTION UNDER THE WETLAND CONSERVATION ACT (WCA)**
- ☐ **OTHER**

NOTE: Four copies of permit submittals are required for projects involving wetland replacement plans.

Lower Rum River Watershed Management Organization ("LRRWMO")

Andover—Anoka—Ramsey

2015 First Avenue • Anoka, MN 55303

START OF PROJECT: _____ EST. COMPLETION DATE: _____ APPROVAL DATE: 11/21/19

By signing this Permit Application, the undersigned consents and agrees on behalf of the Applicant that:

1. The permit application fee is non-refundable. Escrow deposits will be held by the LRRWMO until the project has been completed and all conditions of issuance of the permit are satisfied. The Applicant is responsible for all expenses incurred by the LRRWMO in the processing, administration and enforcement of the permit application and permit. The escrow deposit will be used to reimburse the LRRWMO for all expenses incurred by the LRRWMO in processing, administering and enforcing the permit application and permit, including engineering, legal and other consultant costs. If such expenses exceed the escrow deposit, the LRRWMO will bill the Applicant or Permittee for such excess amount and payment will be due within twenty (20) days of mailing the invoice. Timely payment of such invoices is a condition of all permits and work may be stopped on the project for failure to make payments when due.
2. The undersigned, its agents, principal, assigns and/or representatives (hereinafter "Permittee") shall abide by all the standard conditions and special terms and conditions of the LRRWMO.
3. Any work that violates the terms of the permit may result in the LRRWMO or the City in which the work is being done immediately causing the work on the project relating to the permit to cease and desist. All work on the project shall cease until the permit conditions are met and approved by the LRRWMO and/or the City in which the work is being done.
4. The Permittee agrees to be bound by the terms of the LRRWMO permit requirements, final permit, standard conditions, and special conditions required by the LRRWMO for approval of the permit. The undersigned has the authority to bind the permit holder, the owner of the property and/or any entity performing work on the property pursuant to the terms of LRRWMO permit, and shall be responsible for complying with terms of the LRRWMO permit.

"I certify that I have thoroughly read and understand the above information."

Signature of property owner or designated Agent (no agent without a letter of authority)	Date	Signature of applicant if different from property owner	Date
		Tom Barreiges	10-14-19
Print Signer's name		Print Signer's name	

Application Acknowledged by City: Leonard Linton (Name of City Official) Ramsey (City) 10-18-19 (Date)

SIGNATURE OF LRRWMO CHAIRMAN: ** _____

NOTE: Subject to conditions recommended by Bob Obermeyer, Barr Engineering (see attached).

PERMIT IS NOT VALID IF PROJECT HAS NOT STARTED WITHIN ONE YEAR FROM DATE OF APPROVAL

DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, ST. PAUL DISTRICT
180 FIFTH STREET EAST, SUITE 700
ST. PAUL, MN 55101-1678

June 15, 2020

Regulatory File No. 2019-02513-SSC

Capstone Homes
Steve Bona
14015 Sunfish Lake Boulevard, Suite 400
Ramsey, Minnesota 55303

Dear Mr. Bona:

We are responding to your request, submitted by Melissa Barrett (Kjolhaug Environmental Services) on your behalf, for Corps of Engineers (Corps) concurrence with the delineation of aquatic resources completed on the Pearson Farm South site. The project site is in Sections 29 and 30, Township 32 North, Range 25 West, Anoka County, Minnesota.

We have reviewed the aquatic resource delineation memorandum, dated October 14, 2019 and concur that no aquatic resources are present within review area. Therefore, you are not required to obtain Department of the Army authorization to discharge dredged or fill material within this area. This concurrence is only valid for the review area shown on the enclosed figures labeled MVP-2019-02513-SSC Page 1 of 2 through 2 of 2.

This letter does not eliminate the need for state, local, or other authorizations, such as those of the Department of Natural Resources or county.

No jurisdictional determination was prepared for this project, nor is one required to support this concurrence. This concurrence may generally be relied upon for five years from the date of this letter. However, we reserve the right to review and revise our concurrence in response to changing site conditions, information that was not considered during our initial review, or off-site activities that could indirectly alter the extent of aquatic resources on-site. Our concurrence may be renewed at the end of this period provided you submit a written request and our staff are able to verify that the determination is still valid.

If you have any questions, please contact me in our St. Paul office at (651) 290-5268 or Samantha.S.Coungeris@usace.army.mil. In any correspondence or inquiries, please refer to the Regulatory file number shown above.

Sincerely,

Samantha Coungeris

Samantha Coungeris
Project Manager

Enclosure

cc:
Melissa Barrett (Agent)
Karen Wold (LGU)
Ben Meyer (BWSR)

Appendix C

Groundwater Well Map and Well Logs

Riverstone South EAW

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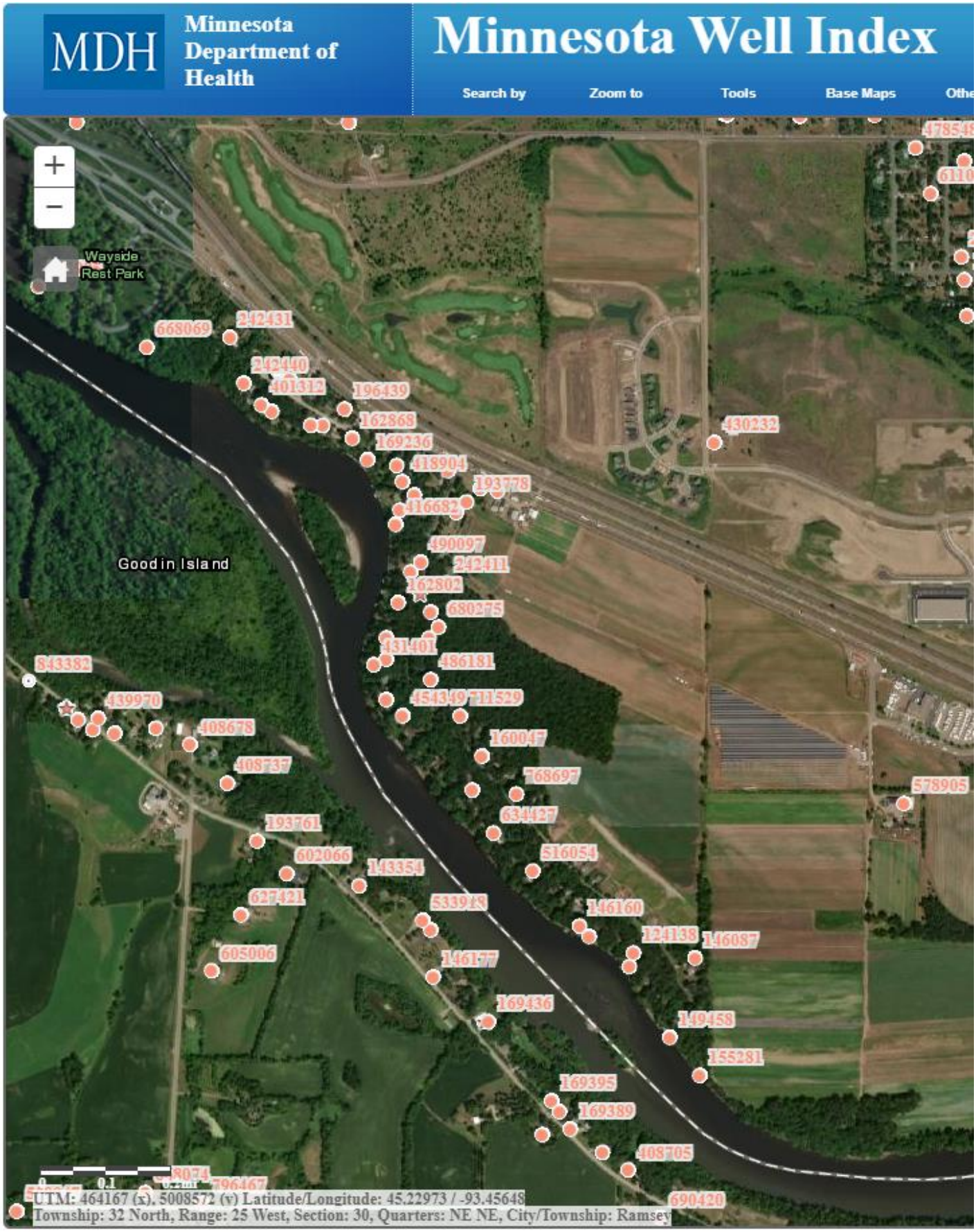
MDH
Minnesota Department of Health
Minnesota Well Index
Search by
Zoom to
Tools
Base Maps
Othe
Wayside Rest Park
Good in Island
668069
242431
242440
401312
196439
162868
169236
418904
193778
416682
490097
242411
162802
680275
431401
486181
454349
711529
843382
439970
408678
408737
160047
768697
634427
578905
193761
602066
143354
516054
627421
533949
146160
124138
146087
605006
146177
169436
149458
155281
169395
169389
408705
690420
796467
UTM: 464167 (x), 5008572 (y) Latitude/Longitude: 45.22973 / -93.45648
Township: 32 North, Range: 25 West, Section: 30, Quarters: NE NE, City/Township: Ramsey

Minnesota Unique Well Number

503721

County Anoka
Quad Anoka
Quad ID 120B

MINNESOTA DEPARTMENT OF HEALTH

WELL AND BORING REPORT

Minnesota Statutes Chapter 1031

Entry Date 04/15/1991
Update Date 08/18/2014
Received Date 10/12/1989

Well Name	Township	Range	Dir	Section	Subsection
OLSON,	32	25	W	30	AABABA

Elevation 882 ft. **Elev. Method** 7.5 minute topographic map (+/- 5 feet)

Address

Well 14840 BOWERS DR NW RAMSEY MN 55303

Stratigraphy Information

Geological Material	From	To (ft.)	Color	Hardness
DIRT	0	5	BLACK	SOFT
SAND & GRAVEL	5	37		SOFT
CLAY	37	62	GRAY	MEDIUM
GRAVEL	62	73		HARD
CLAY	73	98	GRAY	MEDIUM
GRAVEL	98	103		HARD
CLAY	103	118	GRAY	MEDIUM
SHALE & SANDROCK	118	221	VARIED	HARD

Remarks

SECTION MAP.

Well Depth 221 ft. **Depth Completed** 221 ft. **Date Well Completed** 08/05/1989

Drill Method Non-specified Rotary **Drill Fluid** Bentonite

Use domestic **Status** Active

Well Hydrofractured? Yes ☐ No ☐ **From** **To**

Casing Type Single casing **Joint** Threaded
Drive Shoe? Yes ☒ No ☐ **Above/Below** 1 ft.

Casing Diameter	Weight	Hole Diameter
4 in. To 156 ft.	11 lbs./ft.	6.2 in. To 156 ft.
		4 in. To 221 ft.

Open Hole From 156 ft. To 221 ft.

Screen? ☐ **Type** **Make**

Static Water Level

35 ft. land surface Measure 08/05/1989

Pumping Level (below land surface)

100 ft. 2.5 hrs. Pumping at 40 g.p.m.

Wellhead Completion

Pitless adapter manufacturer MONITOR Model 8PL41UC1

☐ Casing Protection ☒ 12 in. above grade
☐ At-grade (Environmental Wells and Borings ONLY)

Grouting Information Well Grouted? ☒ Yes ☐ No ☐ Not Specified

Material	Amount	From	To
cuttings		ft.	ft.
bentonite		ft.	ft.

Nearest Known Source of Contamination

63 feet South Direction Sewer Type

Well disinfected upon completion? ☒ Yes ☐ No

Pump ☐ Not Installed Date Installed 09/10/1989

Manufacturer's name LOWARA

Model Number 11AM07412 HP 0.75 Volt 230

Length of drop pipe 60 ft Capacity 15 g.p. Typ Submersible

Abandoned

Does property have any not in use and not sealed well(s)? ☐ Yes ☒ No

Variance

Was a variance granted from the MDH for this well? ☐ Yes ☐ No

Miscellaneous

First Bedrock St.Lawrence-Tunnel City Aquifer St.Lawrence-
Last Strat St.Lawrence-Tunnel City Depth to Bedrock 118 ft
Located by Minnesota Geological Survey
Locate Method Digitization (Screen) - Map (1:24,000) (15 meters or
System UTM - NAD83, Zone 15, Meters X 461225 Y 5009846
Unique Number Verification Address verification Input Date 07/03/2008

Angled Drill Hole

Well Contractor

Mork Well Co.	02133	AESHLIMAN, S.
Licensee Business	Lic. or Reg. No.	Name of Driller

Minnesota Unique Well Number

430232

County Anoka
Quad Anoka
Quad ID 120B

MINNESOTA DEPARTMENT OF HEALTH

WELL AND BORING REPORT

Minnesota Statutes Chapter 1031

Entry Date 04/15/1991
Update Date 08/18/2014
Received Date

Well Name	Township	Range	Dir	Section	Subsection
MCINNIS, DAN	32	25	W	20	CDCCCA

Elevation 883 ft. **Elev. Method** 7.5 minute topographic map (+/- 5 feet)

Address

Well 14915 PUMA ST NW RAMSEY MN 55303

Stratigraphy Information

Geological Material	From	To (ft.)	Color	Hardness
SAND	0	27	BROWN	SOFT
CLAY	27	30	BROWN	SOFT
SAND & GRAVEL	30	51	BROWN	SOFT
CLAY & GRAVEL	51	93	BROWN	HARD
CLAY	93	116	GRAY	MEDIUM
SANDROCK & SHALE	116	131	YEL/BRN	HARD
SHALE & SANDROCK	131	140	WHITE	SOFT
SANDROCK & SHALE	140	176	PNK/GRN	SOFT
SANDROCK & SHALE	176	276	GREEN	SOFT
SANDROCK & SHALE	276	338	BRN/GRN	HARD

Remarks

Well Depth	Depth Completed	Date Well Completed
338 ft.	338 ft.	03/17/1988

Drill Method Non-specified Rotary **Drill Fluid** Bentonite

Use domestic **Status** Active

Well Hydrofractured? Yes ☐ No ☐ **From** **To**

Casing Type Single casing **Joint**
Drive Shoe? Yes ☒ No ☐ **Above/Below** 1 ft.

Casing Diameter	Weight	Hole Diameter
4 in. To 294 ft.	11 lbs./ft.	6.2 in. To 294 ft.
		4 in. To 338 ft.

Open Hole From 294 ft. To 338 ft.

Screen? ☐ **Type** **Make**

Static Water Level
30 ft. land surface Measure 03/17/1988

Pumping Level (below land surface)
100 ft. 3 hrs. Pumping at 50 g.p.m.

Wellhead Completion
Pitless adapter manufacturer MONITOR Model 8PL41UCI
☐ Casing Protection ☒ 12 in. above grade
☐ At-grade (Environmental Wells and Borings ONLY)

Grouting Information Well Grouted? ☒ Yes ☐ No ☐ Not Specified

Material	Amount	From	To
cuttings		0 ft.	194 ft.

Nearest Known Source of Contamination
75 feet East Direction Septic tank/drain field Type
Well disinfected upon completion? ☒ Yes ☐ No

Pump ☐ Not Installed Date Installed 03/21/1988
Manufacturer's name MEYERS
Model Number B352BM- HP 0.5 Volt 230
Length of drop pipe 60 ft Capacity 10 g.p. Typ Submersible

Abandoned
Does property have any not in use and not sealed well(s)? ☐ Yes ☒ No

Variance
Was a variance granted from the MDH for this well? ☐ Yes ☐ No

Miscellaneous
First Bedrock St.Lawrence-Tunnel City Aquifer Wonewoc
Last Strat Wonewoc Sandstone Depth to Bedrock 116 ft
Located by Minnesota Geological Survey
Locate Method Digitized - scale 1:24,000 or larger (Digitizing Table)
System UTM - NAD83, Zone 15, Meters X 461892 Y 5009911
Unique Number Verification Address verification Input Date 01/01/1990

Angled Drill Hole

Well Contractor

Licensee Business	Lic. or Reg. No.	Name of Driller
Mork Well Co.	02133	LAWRENCE, R.

Minnesota Unique Well Number

511952

County Anoka
Quad Anoka
Quad ID 120B

MINNESOTA DEPARTMENT OF HEALTH

WELL AND BORING REPORT

Minnesota Statutes Chapter 1031

Entry Date 04/15/1991
Update Date 08/18/2014
Received Date 01/18/1990

Well Name	Township	Range	Dir	Section	Subsection
	32	25	W	30	ADBBAD

Elevation 860 ft. **Elev. Method** 7.5 minute topographic map (+/- 5 feet)

Address

Well 14691 BOWERS DR NW RAMSEY MN 55303

Stratigraphy Information

Geological Material	From	To (ft.)	Color	Hardness
SAND	0	42	BROWN	SOFT
CLAY	42	122	BROWN	MEDIUM
SAND ROCK W/SHALE	122	170	GRAY	HARD

Remarks

SECTION MAP.

Well Depth 170 ft. **Depth Completed** 170 ft. **Date Well Completed** 11/07/1989

Drill Method Non-specified Rotary **Drill Fluid** Bentonite

Use domestic **Status** Active

Well Hydrofractured? Yes ☐ No ☐ **From** **To**

Casing Type Single casing **Joint** Threaded

Drive Shoe? Yes ☒ No ☐ **Above/Below** 1 ft.

Casing Diameter	Weight	Hole Diameter
4 in. To 134 ft.	11 lbs./ft.	6.2 in. To 134 ft.
		4 in. To 170 ft.

Open Hole From 134 ft. To 170 ft.

Screen? ☐ **Type** **Make**

Static Water Level

28 ft. land surface Measure 11/07/1989

Pumping Level (below land surface)

40 ft. 3 hrs. Pumping at 35 g.p.m.

Wellhead Completion

Pitless adapter manufacturer WHITEWATER Model

☐ Casing Protection ☐ 12 in. above grade

☐ At-grade (Environmental Wells and Borings ONLY)

Grouting Information Well Grouted? ☒ Yes ☐ No ☐ Not Specified

Material	Amount	From	To
cuttings		ft.	ft.
bentonite		ft. 134	ft.

Nearest Known Source of Contamination

75 feet Southwes Direction Septic tank/drain field Type

Well disinfected upon completion? ☐ Yes ☐ No

Pump ☐ Not Installed Date Installed 11/08/1989

Manufacturer's name GOULDS

Model Number HP 0.5 Volt 220

Length of drop pipe 60 ft Capacity 12 g.p. Typ Submersible

Abandoned

Does property have any not in use and not sealed well(s)? ☐ Yes ☒ No

Variance

Was a variance granted from the MDH for this well? ☐ Yes ☐ No

Miscellaneous

First Bedrock Tunnel City Group Aquifer Tunnel City

Last Strat Tunnel City Group Depth to Bedrock 122 ft

Located by Minnesota Geological Survey

Locate Method Digitization (Screen) - Map (1:24,000) (15 meters or

System UTM - NAD83, Zone 15, Meters X 461173 Y 5009427

Unique Number Verification Address verification Input Date 07/03/2008

Angled Drill Hole

Well Contractor

Ruppert & Son 27086 RUPPERT, C.

Licensee Business Lic. or Reg. No. Name of Driller

Minnesota Unique Well Number

486181

County Anoka
Quad Anoka
Quad ID 120B

MINNESOTA DEPARTMENT OF HEALTH

WELL AND BORING REPORT

Minnesota Statutes Chapter 1031

Entry Date 12/12/1991
Update Date 02/14/2014
Received Date 09/13/1991

Well Name	Township	Range	Dir	Section	Subsection
	32	25	W	30	ADBCAD

Elevation 858 ft. **Elev. Method** 7.5 minute topographic map (+/- 5 feet)

Address

Well 14623 BOWERS DR NW RAMSEY MN 55303

Stratigraphy Information

Geological Material	From	To (ft.)	Color	Hardness
CLAY & GRAVEL	0	135	BROWN	MEDIUM
GRAVEL	135	145		SOFT

Remarks

SECTION MAP.

Well Depth 145 ft. **Depth Completed** 145 ft. **Date Well Completed** 06/14/1991

Drill Method Non-specified Rotary **Drill Fluid** Bentonite

Use domestic **Status** Active

Well Hydrofractured? Yes ☐ No ☐ **From** **To**

Casing Type Single casing **Joint**

Drive Shoe? Yes ☐ No ☒ **Above/Below** 1 ft.

Casing Diameter	Weight	Hole Diameter
4 in. To 135 ft.	lbs./ft.	6 in. To 145 ft.

Open Hole From ft. To ft.

Screen? ☒ **Type** stainless **Make** JOHNSON

Diameter	Slot/Gauze	Length	Set
2 in.	15	12.3 ft.	135 ft. 145 ft.

Static Water Level

13 ft. land surface Measure 06/14/1991

Pumping Level (below land surface)

130 ft. 1 hrs. Pumping at 50 g.p.m.

Wellhead Completion

Pitless adapter manufacturer MONITOR Model 8PL41UC1

☐ Casing Protection ☒ 12 in. above grade

☐ At-grade (Environmental Wells and Borings ONLY)

Grouting Information Well Grouted? ☒ Yes ☐ No ☐ Not Specified

Material	Amount	From	To
neat cement	0	0 ft.	30 ft.

Nearest Known Source of Contamination

feet Direction Type

Well disinfected upon completion? ☒ Yes ☐ No

Pump ☐ Not Installed Date Installed 07/01/1991

Manufacturer's name MYERS

Model Number 23242D700 HP 0.5 Volt 230

Length of drop pipe 50 ft Capacity 10 g.p. Typ Submersible

Abandoned

Does property have any not in use and not sealed well(s)? ☐ Yes ☒ No

Variance

Was a variance granted from the MDH for this well? ☐ Yes ☐ No

Miscellaneous

First Bedrock Aquifer Quat. buried

Last Strat gravel (+larger) Depth to Bedrock ft

Located by Minnesota Geological Survey

Locate Method Digitization (Screen) - Map (1:24,000) (15 meters or

System UTM - NAD83, Zone 15, Meters X 461177 Y 5009324

Unique Number Verification Address verification Input Date 07/03/2008

Angled Drill Hole

Well Contractor

Mork Well Co. 02133 AESHLIMAN, S.

Licensee Business Lic. or Reg. No. Name of Driller

Minnesota Well Index Report **486181**

Printed on 10/13/2020

HE-01205-15

Minnesota Unique Well Number

227345

County Anoka
Quad Anoka
Quad ID 120B

MINNESOTA DEPARTMENT OF HEALTH

WELL AND BORING REPORT

Minnesota Statutes Chapter 1031

Entry Date 04/15/1991
Update Date 02/14/2014
Received Date

Well Name	Township	Range	Dir	Section	Subsection
PEARSON,	32	25	W	30	AAABCA

Elevation 883 ft. **Elev. Method** 7.5 minute topographic map (+/- 5 feet)

Address

C/W 8846 10 HY NW RAMSEY MN 55303

Stratigraphy Information

Geological Material	From	To (ft.)	Color	Hardness
SAND	0	10	BROWN	
GRAVEL & SAND	10	15	YELLOW	
CLAY & GRAVEL	15	60	BROWN	
GRAVEL	60	75	BROWN	

Remarks

WELL LOCATION: SOUTH SIDE OF HIGHWAY 10 & EAST OF PUMA

Well Depth 75 ft. **Depth Completed** 75 ft. **Date Well Completed** 12/13/1972

Drill Method **Drill Fluid**

Use domestic **Status** Active

Well Hydrofractured? Yes ☐ No ☐ **From** **To**

Casing Type Single casing **Joint** Threaded
Drive Shoe? Yes ☐ No ☐ **Above/Below** 0 ft.

Casing Diameter **Weight**
4 in. To 71 ft. lbs./ft.

Open Hole From ft. To ft.

Screen? ☒ **Type** stainless **Make** JOHNSON

Diameter	Slot/Gauze	Length	Set
4 in.	20	4 ft.	ft. ft.

Static Water Level
30 ft. land surface Measure 12/13/1972

Pumping Level (below land surface)
40 ft. hrs. Pumping at 17 g.p.m.

Wellhead Completion
Pitless adapter manufacturer BAKER Model
☐ Casing Protection ☐ 12 in. above grade
☐ At-grade (Environmental Wells and Borings ONLY)

Grouting Information Well Grouted? ☐ Yes ☐ No ☒ Not Specified

Nearest Known Source of Contamination
feet Direction Type
Well disinfected upon completion? ☐ Yes ☐ No

Pump ☐ Not Installed Date Installed 12/00/1972
Manufacturer's name AERMOTOR
Model Number HP 0.75 Volt
Length of drop pipe 50 ft Capacity 12 g.p. Typ Submersible

Abandoned
Does property have any not in use and not sealed well(s)? ☐ Yes ☐ No

Variance
Was a variance granted from the MDH for this well? ☐ Yes ☐ No

Miscellaneous
First Bedrock Aquifer Quat. buried
Last Strat gravel (+larger)-brown Depth to Bedrock ft
Located by Minnesota Geological Survey
Locate Method Digitized - scale 1:24,000 or larger (Digitizing Table)
System UTM - NAD83, Zone 15, Meters X 461304 Y 5009799
Unique Number Verification Address verification Input Date 01/01/1990

Angled Drill Hole

Well Contractor

Licensee Business	Lic. or Reg. No.	Name of Driller
Renner E.H. & Sons	27015	LEDBETTER, B.

Minnesota Unique Well Number

256060

County Anoka
Quad Anoka
Quad ID 120B

MINNESOTA DEPARTMENT OF HEALTH

WELL AND BORING REPORT

Minnesota Statutes Chapter 1031

Entry Date 11/25/2008
Update Date 08/18/2014
Received Date

Well Name	Township	Range	Dir	Section	Subsection
LAWRENCE, JIM	32	25	W	30	ACBABA

Elevation 863 ft. **Elev. Method** 7.5 minute topographic map (+/- 5 feet)

Address

Well 14720 BOWERS DR NW RAMSEY MN

Stratigraphy Information

Geological Material	From	To (ft.)	Color	Hardness
SAND	0	50		
HARD PAN	50	112		
CLAY & ROCKS	112	186		

Remarks

LOT 39 E. V. BUILDERS JOB # 68

Well Depth 186 ft. **Depth Completed** 186 ft. **Date Well Completed** 00/00/1972

Drill Method **Drill Fluid** Bentonite

Use unknown **Status** Active

Well Hydrofractured? **Yes** ☐ **No** ☐ **From** **To**

Casing Type **Joint**

Drive Shoe? **Yes** ☐ **No** ☐ **Above/Below**

Casing Diameter	Weight	Hole Diameter
4 in. To 130 ft.	10.7 lbs./ft.	6.2 in. To 130 ft.
		4 in. To 186 ft.

Open Hole From 130 ft. To 186 ft.

Screen? ☐ **Type** **Make**

Static Water Level

40 ft. land surface Measure 00/00/1972

Pumping Level (below land surface)

Wellhead Completion

Pitless adapter manufacturer WHITEWATER Model

☐ Casing Protection ☐ 12 in. above grade

☐ At-grade (Environmental Wells and Borings ONLY)

Grouting Information Well Grouted? ☐ Yes ☐ No ☒ Not Specified

Nearest Known Source of Contamination

50 feet West Direction Septic tank/drain field Type

Well disinfected upon completion? ☐ Yes ☐ No

Pump ☐ Not Installed Date Installed 00/00/1972

Manufacturer's name AY MCDONALD

Model Number HP 0.5 Volt 230

Length of drop pipe 63 ft Capacity 10 g.p. Typ

Abandoned

Does property have any not in use and not sealed well(s)? ☐ Yes ☐ No

Variance

Was a variance granted from the MDH for this well? ☐ Yes ☐ No

Miscellaneous

First Bedrock St.Lawrence-Tunnel City Aquifer St.Lawrence-

Last Strat St.Lawrence-Tunnel City Depth to Bedrock 112 ft

Located by Minnesota Geological Survey

Locate Method GPS SA Off (averaged) (15 meters)

System UTM - NAD83, Zone 15, Meters X 461150 Y 5009540

Unique Number Verification Address verification Input Date 01/04/2010

Angled Drill Hole

Well Contractor

Torgerson Well Co. 27056

Licensee Business Lic. or Reg. No. Name of Driller

Minnesota Well Index Report | **256060** | Printed on 10/13/2020

HE-01205-15

Minnesota Unique Well Number

114352

County Anoka
Quad Anoka
Quad ID 120B

MINNESOTA DEPARTMENT OF HEALTH

WELL AND BORING REPORT

Minnesota Statutes Chapter 1031

Entry Date 04/15/1991
Update Date 08/18/2014
Received Date

Well Name	Township	Range	Dir	Section	Subsection
PEARSON,	32	25	W	19	DDCCBD

Elevation 877 ft. **Elev. Method** 7.5 minute topographic map (+/- 5 feet)

Address

Well 8964 10 HY NW ANOKA MN 55303

Stratigraphy Information

Geological Material	From	To (ft.)	Color	Hardness
SAND	0	55	BROWN	
SAND	55	88	GRAY	
GRAVEL	88	95	BROWN	
SANDSTONE	95	136	YELLOW	SOFT
SANDSTONE	136	155	WHITE	HARD
SANDSTONE & SHALE	155	176	BLUE	

Remarks

SCREEN SET AT 95 FT. PRODUCED 3 GPM.

Well Depth 176 ft. **Depth Completed** 176 ft. **Date Well Completed** 12/09/1975

Drill Method Cable Tool **Drill Fluid**

Use domestic **Status** Active

Well Hydrofractured? Yes ☐ No ☐ **From** **To**

Casing Type Single casing **Joint** Welded

Drive Shoe? Yes ☒ No ☐ **Above/Below** 1 ft.

Casing Diameter **Weight**

4 in. To 134 ft. 10.7 lbs./ft.

Open Hole From 134 ft. To 176 ft.

Screen? ☐ **Type** **Make**

Static Water Level

40 ft. land surface Measure 09/12/1975

Pumping Level (below land surface)

50 ft. 3 hrs. Pumping at 20 g.p.m.

Wellhead Completion

Pitless adapter manufacturer BAKER Model

☐ Casing Protection ☒ 12 in. above grade

☐ At-grade (Environmental Wells and Borings ONLY)

Grouting Information Well Grouted? ☐ Yes ☐ No ☐ Not Specified

Nearest Known Source of Contamination

feet Direction Type

Well disinfected upon completion? ☒ Yes ☐ No

Pump ☐ Not Installed Date Installed 12/10/1975

Manufacturer's name RED JACKET

Model Number BVC 751 HP 0.75 Volt 230

Length of drop pipe 63 ft Capacity 12 g.p. Typ Submersible

Abandoned

Does property have any not in use and not sealed well(s)? ☐ Yes ☐ No

Variance

Was a variance granted from the MDH for this well? ☐ Yes ☐ No

Miscellaneous

First Bedrock Tunnel City Group Aquifer Tunnel City

Last Strat Tunnel City Group Depth to Bedrock 95 ft

Located by Minnesota Geological Survey

Locate Method Digitized - scale 1:24,000 or larger (Digitizing Table)

System UTM - NAD83, Zone 15, Meters X 461100 Y 5009915

Unique Number Verification Input Date 01/01/1990

Angled Drill Hole

Well Contractor

Renner E.H. & Sons 27015

Licensee Business Lic. or Reg. No. Name of Driller

Minnesota Unique Well Number

124137

County Anoka
Quad Anoka
Quad ID 120B

MINNESOTA DEPARTMENT OF HEALTH

WELL AND BORING REPORT

Minnesota Statutes Chapter 1031

Entry Date 04/15/1991
Update Date 08/18/2014
Received Date

Well Name	Township	Range	Dir	Section	Subsection
SWEDAL,	32	25	W	30	ACBCAB

Elevation 861 ft. **Elev. Method** 7.5 minute topographic map (+/- 5 feet)

Address

C/W 14723 BOWERS DR NW RAMSEY MN 55303

Stratigraphy Information

Geological Material	From	To (ft.)	Color	Hardness
SAND	0	50	BROWN	SOFT
CLAY	50	72	BROWN	SOFT
ROCKS	72	106	BROWN	HARD
CLAY	106	121	BROWN	HARD
SAND	121	149	BROWN	HARD
SANDROCK	149	161	YELLOW	SOFT
SANDROCK	161	246	YELLOW	HARD

Remarks

Well Depth 246 ft. **Depth Completed** 246 ft. **Date Well Completed** 01/24/1976

Drill Method Non-specified Rotary **Drill Fluid**

Use domestic **Status** Active

Well Hydrofractured? Yes ☐ No ☐ **From** **To**

Casing Type Single casing **Joint** Threaded
Drive Shoe? Yes ☒ No ☐ **Above/Below** 1.5 ft.

Casing Diameter	Weight	Hole Diameter
4 in. To 161 ft.	11 lbs./ft.	4 in. To 246 ft.

Open Hole From 161 ft. To 246 ft.

Screen? ☐ **Type** **Make**

Static Water Level
20 ft. land surface Measure 01/24/1976

Pumping Level (below land surface)
42 ft. 2 hrs. Pumping at 50 g.p.m.

Wellhead Completion
Pitless adapter manufacturer Model
☐ Casing Protection ☒ 12 in. above grade
☐ At-grade (Environmental Wells and Borings ONLY)

Grouting Information Well Grouted? ☒ Yes ☐ No ☐ Not Specified

Material	Amount	From	To
bentonite		ft.	ft.

Nearest Known Source of Contamination
75 feet West Direction Septic tank/drain field Type
Well disinfected upon completion? ☒ Yes ☐ No

Pump ☐ Not Installed Date Installed 09/02/1976
Manufacturer's name STA-RITE
Model Number GP8C2 HP 0.5 Volt 230
Length of drop pipe 36 ft Capacity 12 g.p. Typ Submersible

Abandoned
Does property have any not in use and not sealed well(s)? ☐ Yes ☐ No

Variance
Was a variance granted from the MDH for this well? ☐ Yes ☐ No

Miscellaneous
First Bedrock Tunnel City Group Aquifer Tunnel City
Last Strat Tunnel City Group Depth to Bedrock 149 ft
Located by Minnesota Geological Survey
Locate Method Digitization (Screen) - Map (1:24,000) (15 meters or
System UTM - NAD83, Zone 15, Meters X 461179 Y 5009493
Unique Number Verification Address verification Input Date 01/01/1990

Angled Drill Hole

Well Contractor

Licensee Business	Lic. or Reg. No.	Name of Driller
Torgerson, Art & Son	02203	OTTEN, D.

Minnesota Unique Well Number

711529

County Anoka
Quad Anoka
Quad ID 120B

MINNESOTA DEPARTMENT OF HEALTH

WELL AND BORING REPORT

Minnesota Statutes Chapter 1031

Entry Date 01/11/2005
Update Date 07/29/2008
Received Date 08/13/2004

Well Name	Township	Range	Dir	Section	Subsection
MORAVETZ,	32	25	W	30	ADCAAC

Elevation 863 ft. **Elev. Method** 7.5 minute topographic map (+/- 5 feet)

Address

Well 14593 BOWERS DR NW RAMSEY MN 55303

Stratigraphy Information

Geological Material	From	To (ft.)	Color	Hardness
SAND & GRAVEL	0	32	BROWN	SOFT
CLAY & GRAVEL	32	35	BROWN	SOFT
SAND	35	48	BROWN	SOFT
CLAY & GRAVEL	48	92	BROWN	HARD
SAND & SILT	92	102	BROWN	SOFT
SAND & CLAY	102	134	BROWN	SOFT
CLAY & GRAVEL	134	140	BROWN	SOFT
SAND	140	155	BROWN	SOFT

Remarks

SECTION MAP.

Well Depth 155 ft. **Depth Completed** 153 ft. **Date Well Completed** 07/12/2004

Drill Method Non-specified Rotary **Drill Fluid** Bentonite

Use domestic **Status** Active

Well Hydrofractured? Yes ☐ No ☒ **From** **To**

Casing Type Single casing **Joint** Glued

Drive Shoe? Yes ☐ No ☒ **Above/Below**

Casing Diameter	Weight	Hole Diameter
4 in. To 142 ft.	lbs./ft.	8.5 in. To 30 ft.
		6.5 in. To 155 ft.

Open Hole From ft. To ft.

Screen? ☒ **Type** stainless **Make** JOHNSON

Diameter	Slot/Gauze	Length	Set	
2 in.	10	8 ft.	142 ft.	153 ft.

Static Water Level

30 ft. land surface Measure 07/12/2004

Pumping Level (below land surface)

ft. 3 hrs. Pumping at 25 g.p.m.

Wellhead Completion

Pitless adapter manufacturer MONITOR Model SNAPPY

☐ Casing Protection ☒ 12 in. above grade

☐ At-grade (Environmental Wells and Borings ONLY)

Grouting Information Well Grouted? ☒ Yes ☐ No ☐ Not Specified

Material	Amount	From	To
high solids bentonite	5 Sacks	0 ft.	30 ft.
cuttings		30 ft.	142 ft.

Nearest Known Source of Contamination

51 feet South Direction Other Type

Well disinfected upon completion? ☒ Yes ☐ No

Pump ☐ Not Installed Date Installed 07/19/2004

Manufacturer's name RED JACKET

Model Number 75F211 HP 0.75 Volt 230

Length of drop pipe 60 ft Capacity 15 g.p. Typ Submersible

Abandoned

Does property have any not in use and not sealed well(s)? ☐ Yes ☒ No

Variance

Was a variance granted from the MDH for this well? ☐ Yes ☒ No

Miscellaneous

First Bedrock Aquifer Quat. buried

Last Strat sand-brown Depth to Bedrock ft

Located by Minnesota Geological Survey

Locate Method Digitization (Screen) - Map (1:24,000) (15 meters or

System UTM - NAD83, Zone 15, Meters X 461251 Y 5009233

Unique Number Verification Address verification Input Date 07/03/2008

Angled Drill Hole

Well Contractor

Mork Well Co., Inc. 02730 BECKWORTH, D.

Licensee Business Lic. or Reg. No. Name of Driller

Minnesota Well Index Report | **711529** | Printed on 10/13/2020

HE-01205-15

Minnesota Unique Well Number

516054

County Anoka
Quad Anoka
Quad ID 120B

MINNESOTA DEPARTMENT OF HEALTH

WELL AND BORING REPORT

Minnesota Statutes Chapter 1031

Entry Date 11/17/1992
Update Date 08/18/2014
Received Date 10/08/1992

Well Name	Township	Range	Dir	Section	Subsection
ANDERSON,	32	25	W	30	DADAAC

Elevation 864 ft. **Elev. Method** 7.5 minute topographic map (+/- 5 feet)

Address

Well 14440 BOWERS DR NW RAMSEY MN 55303

Stratigraphy Information

Geological Material	From	To (ft.)	Color	Hardness
CLAY FIRM	0	10	BROWN	
FINE SAND	10	50	BROWN	SOFT
CLAY & ROCKS FIRM	50	90	BROWN	
SANDY CLAY	90	130	BROWN	SOFT
SAND & GRAVEL	130	138	BROWN	SOFT
CLAY & ROCKS FIRM	138	145	BROWN	
FRANCONIA SS	145	147	TAN	SOFT
FRANCONIA SS FIRM	147	157	LT. GRN	
FRANCONIA SS FIRM	157	190	GREEN	

Remarks

SECTION MAP.

Well Depth 190 ft. **Depth Completed** 190 ft. **Date Well Completed** 09/18/1992

Drill Method Non-specified Rotary **Drill Fluid** Bentonite

Use domestic **Status** Active

Well Hydrofractured? Yes ☐ No ☐ **From** **To**

Casing Type Single casing **Joint** Threaded

Drive Shoe? Yes ☒ No ☐ **Above/Below**

Casing Diameter	Weight	Hole Diameter
4 in. To 146 ft.	10.7 lbs./ft.	6.2 in. To 146 ft.
		4 in. To 190 ft.

Open Hole From 146 ft. To 190 ft.

Screen? ☐ **Type** **Make**

Static Water Level

30 ft. land surface Measure 09/18/1992

Pumping Level (below land surface)

55 ft. 3 hrs. Pumping at 35 g.p.m.

Wellhead Completion

Pitless adapter manufacturer BAKER Model SNAPPY

☐ Casing Protection ☒ 12 in. above grade

☐ At-grade (Environmental Wells and Borings ONLY)

Grouting Information Well Grouted? ☒ Yes ☐ No ☐ Not Specified

Material	Amount	From	To
bentonite	0.9 Cubic yards	ft.	146 ft.

Nearest Known Source of Contamination

100 feet South Direction Septic tank/drain field Type

Well disinfected upon completion? ☒ Yes ☐ No

Pump ☐ Not Installed Date Installed 09/23/1992

Manufacturer's name GRUNDFOS

Model Number 16S07-8 HP 0.75 Volt 230

Length of drop pipe 63 ft Capacity 16 g.p. Typ Submersible

Abandoned

Does property have any not in use and not sealed well(s)? ☐ Yes ☒ No

Variance

Was a variance granted from the MDH for this well? ☐ Yes ☐ No

Miscellaneous

First Bedrock Tunnel City Group Aquifer Tunnel City

Last Strat Tunnel City Group Depth to Bedrock 145 ft

Located by Minnesota Geological Survey

Locate Method Digitization (Screen) - Map (1:24,000) (15 meters or

System UTM - NAD83, Zone 15, Meters X 461430 Y 5008845

Unique Number Verification Address verification Input Date 07/03/2008

Angled Drill Hole

Well Contractor

Renner E.H. Well 71015 PRAUGHT, V.

Licensee Business Lic. or Reg. No. Name of Driller

Minnesota Unique Well Number

133390

County Anoka
Quad Anoka
Quad ID 120B

MINNESOTA DEPARTMENT OF HEALTH

WELL AND BORING REPORT

Minnesota Statutes Chapter 1031

Entry Date 04/15/1991
Update Date 08/18/2014
Received Date

Well Name	Township	Range	Dir	Section	Subsection
GANDRUD,	32	25	W	30	AABCBA

Elevation 875 ft. **Elev. Method** 7.5 minute topographic map (+/- 5 feet)

Address

C/W 14820 BOWERS DR NW RAMSEY MN 55303

Stratigraphy Information

Geological Material	From	To (ft.)	Color	Hardness
GRAVEL	0	69	DARK	
CLAY & GRAVEL	69	138	RED	
SHALE & SANDSTONE	138	154	VARIED	
SHALE & SANDSTONE	154	190	VARIED	

Remarks

Well Depth 190 ft. **Depth Completed** 190 ft. **Date Well Completed** 03/17/1978

Drill Method Non-specified Rotary **Drill Fluid**

Use domestic **Status** Active

Well Hydrofractured? Yes ☐ No ☐ **From** **To**

Casing Type Single casing **Joint** Threaded

Drive Shoe? Yes ☐ No ☒ **Above/Below** 1 ft.

Casing Diameter	Weight	Hole Diameter
4 in. To 162 ft.	10.7 lbs./ft.	4 in. To 190 ft.

Open Hole From 162 ft. To 190 ft.

Screen? ☐ **Type** **Make**

Static Water Level

39 ft. land surface Measure 03/17/1978

Pumping Level (below land surface)

ft. 3 hrs. Pumping at 30 g.p.m.

Wellhead Completion

Pitless adapter manufacturer Model

☐ Casing Protection ☒ 12 in. above grade

☐ At-grade (Environmental Wells and Borings ONLY)

Grouting Information Well Grouted? ☒ Yes ☐ No ☐ Not Specified

Material	Amount	From	To
bentonite		ft.	ft.

Nearest Known Source of Contamination

feet Direction Type

Well disinfected upon completion? ☒ Yes ☐ No

Pump ☐ Not Installed Date Installed 03/17/1978

Manufacturer's name JACUZZI

Model Number 7S4M12-S/2 HP 0.75 Volt 230

Length of drop pipe 72 ft Capacity 12 g.p. Typ Submersible

Abandoned

Does property have any not in use and not sealed well(s)? ☐ Yes ☐ No

Variance

Was a variance granted from the MDH for this well? ☐ Yes ☐ No

Miscellaneous

First Bedrock Tunnel City Group Aquifer Tunnel City

Last Strat Tunnel City Group Depth to Bedrock 138 ft

Located by Minnesota Geological Survey

Locate Method Digitized - scale 1:24,000 or larger (Digitizing Table)

System UTM - NAD83, Zone 15, Meters X 461103 Y 5009747

Unique Number Verification Name on mailbox Input Date 01/01/1990

Angled Drill Hole

Well Contractor

Licensee Business	Lic. or Reg. No.	Name of Driller
Renner E.H. & Sons	27015	WOLTERS, P.

Minnesota Unique Well Number

193778

County Anoka
Quad Anoka
Quad ID 120B

MINNESOTA DEPARTMENT OF HEALTH

WELL AND BORING REPORT

Minnesota Statutes Chapter 1031

Entry Date 04/15/1991
Update Date 08/18/2014
Received Date

Well Name	Township	Range	Dir	Section	Subsection
	32	25	W	30	ABADAD

Elevation 880 ft. **Elev. Method** 7.5 minute topographic map (+/- 5 feet)

Address

Well 14821 BOWERS DR NW RAMSEY MN 55303

Stratigraphy Information

Geological Material	From	To (ft.)	Color	Hardness
SAND	0	8	BROWN	SOFT
WATERSAND	8	18	BROWN	SOFT
ROCKS & GRAVEL	18	60	BROWN	HARD
CLAY	60	66	BROWN	HARD
ROCKS & GRAVEL	66	72	BROWN	HARD
SAND	72	80	BROWN	HARD
DRY GRAVEL	80	155	BROWN	HARD
SHALE	155	170	BLUE	HARD
SANDROCK	170	186	YELLOW	HARD

Remarks

Well Depth 186 ft. **Depth Completed** 186 ft. **Date Well Completed** 09/30/1983

Drill Method Non-specified Rotary **Drill Fluid**

Use domestic **Status** Active

Well Hydrofractured? Yes ☐ No ☐ **From** **To**

Casing Type Single casing **Joint** Threaded
Drive Shoe? Yes ☒ No ☐ **Above/Below** 1.5 ft.

Casing Diameter	Weight	Hole Diameter
4 in. To 155 ft.	11 lbs./ft.	6 in. To 155 ft.
		4 in. To 186 ft.

Open Hole From 155 ft. To 186 ft.

Screen? ☐ **Type** **Make**

Static Water Level
18 ft. land surface Measure 09/30/1983

Pumping Level (below land surface)
60 ft. 2 hrs. Pumping at 40 g.p.m.

Wellhead Completion
Pitless adapter manufacturer WHITEWATER Model SU4X5.5
☐ Casing Protection ☒ 12 in. above grade
☐ At-grade (Environmental Wells and Borings ONLY)

Grouting Information Well Grouted? ☐ Yes ☐ No ☐ Not Specified

Nearest Known Source of Contamination
75 feet Southwes Direction Septic tank/drain field Type
Well disinfected upon completion? ☒ Yes ☐ No

Pump ☐ Not Installed Date Installed 10/06/1983
Manufacturer's name STA-RITE
Model Number 8P4C025 HP 0.5 Volt 230
Length of drop pipe 54 ft Capacity 12 g.p. Typ Submersible

Abandoned
Does property have any not in use and not sealed well(s)? ☐ Yes ☐ No

Variance
Was a variance granted from the MDH for this well? ☐ Yes ☐ No

Miscellaneous
First Bedrock Tunnel City Group Aquifer Tunnel City
Last Strat Tunnel City Group Depth to Bedrock 155 ft
Located by Minnesota Geological Survey
Locate Method Digitization (Screen) - Map (1:24,000) (15 meters or
System UTM - NAD83, Zone 15, Meters X 461269 Y 5009766
Unique Number Verification Information from Input Date 01/01/1990

Angled Drill Hole

Well Contractor
Torgerson, Art & Son 02203 TORGERSON, S.
Licensee Business Lic. or Reg. No. Name of Driller

Minnesota Unique Well Number

672386

County Anoka
Quad Anoka
Quad ID 120B

MINNESOTA DEPARTMENT OF HEALTH

WELL AND BORING REPORT

Minnesota Statutes Chapter 1031

Entry Date 12/30/2002
Update Date 07/29/2008
Received Date

Well Name	Township	Range	Dir	Section	Subsection
KLABOUGH,	32	25	W	30	ACAADD

Elevation 849 ft. **Elev. Method** 7.5 minute topographic map (+/- 5 feet)

Address

Well 14660 BOWERS DR NW RAMSEY MN 55303

Stratigraphy Information

Geological Material	From	To (ft.)	Color	Hardness
SAND	0	8	BROWN	SOFT
GRAVEL, ROCKS	8	52	BROWN	SOFT
CLAY	52	54	BROWN	MEDIUM
GRAVEL, ROCKS	54	70	BROWN	SOFT
CLAY	70	70	GRAY	MEDIUM

Remarks

SECTION MAP.

Well Depth 70 ft. **Depth Completed** 70 ft. **Date Well Completed** 05/20/2002

Drill Method Non-specified Rotary **Drill Fluid** Bentonite

Use domestic **Status** Active

Well Hydrofractured? Yes ☐ No ☒ **From** **To**

Casing Type Single casing **Joint**

Drive Shoe? Yes ☐ No ☒ **Above/Below**

Casing Diameter	Weight	Hole Diameter
4 in. To 65 ft.	1.9 lbs./ft.	6.5 in. To 70 ft.

Open Hole From ft. To ft.

Screen? ☒ **Type** stainless **Make** JOHNSON

Diameter	Slot/Gauze	Length	Set
2 in.	12	5 ft.	65 ft. 70 ft.

Static Water Level

14 ft. land surface Measure 05/20/2002

Pumping Level (below land surface)

65 ft. 2 hrs. Pumping at 30 g.p.m.

Wellhead Completion

Pitless adapter manufacturer MONITOR Model

☐ Casing Protection ☒ 12 in. above grade

☐ At-grade (Environmental Wells and Borings ONLY)

Grouting Information Well Grouted? ☒ Yes ☐ No ☐ Not Specified

Material	Amount	From	To
high solids bentonite	0.17 Cubic yards	0 ft.	30 ft.
cuttings		30 ft.	65 ft.

Nearest Known Source of Contamination

40 feet East Direction Septic tank/drain field Type

Well disinfected upon completion? ☒ Yes ☐ No

Pump ☐ Not Installed Date Installed 09/04/2002

Manufacturer's name AERMOTOR

Model Number T12-75 HP 0.75 Volt 230

Length of drop pipe 40 ft Capacity 15 g.p. Typ Submersible

Abandoned

Does property have any not in use and not sealed well(s)? ☐ Yes ☒ No

Variance

Was a variance granted from the MDH for this well? ☐ Yes ☒ No

Miscellaneous

First Bedrock Aquifer Quat. Water

Last Strat clay-gray Depth to Bedrock ft

Located by Minnesota Geological Survey

Locate Method Digitization (Screen) - Map (1:24,000) (15 meters or

System UTM - NAD83, Zone 15, Meters X 461066 Y 5009376

Unique Number Verification Address verification Input Date 07/03/2008

Angled Drill Hole

Well Contractor

Mc Alpine Brothers 27636 MCALPINE, B.

Licensee Business Lic. or Reg. No. Name of Driller

Minnesota Unique Well Number

124138

County Anoka
Quad Anoka
Quad ID 120B

MINNESOTA DEPARTMENT OF HEALTH

WELL AND BORING REPORT

Minnesota Statutes Chapter 1031

Entry Date 04/15/1991
Update Date 08/18/2014
Received Date

Well Name	Township	Range	Dir	Section	Subsection
HOLLAND	32	25	W	29	CCABBB

Elevation 862 ft. **Elev. Method** 7.5 minute topographic map (+/- 5 feet)

Address

Well 14350 BOWERS DR NW RAMSEY MN 55303

Stratigraphy Information

Geological Material	From	To (ft.)	Color	Hardness
SAND	0	50	BROWN	SOFT
CLAY	50	79	BROWN	SOFT
SAND	79	92	BROWN	HARD
ROCKS	92	111	BROWN	HARD
CLAY	111	136	BROWN	HARD
SAND	136	151	BROWN	HARD
SANDROCK	151	170	YELLOW	SOFT
SANDROCK	170	246	YELLOW	HARD

Remarks

FORMER OWNER ROBERT DREWS.

Well Depth 246 ft. **Depth Completed** 246 ft. **Date Well Completed** 01/23/1976

Drill Method Non-specified Rotary **Drill Fluid**

Use domestic **Status** Active

Well Hydrofractured? Yes ☐ No ☐ **From** **To**

Casing Type Single casing **Joint** Threaded
Drive Shoe? Yes ☒ No ☐ **Above/Below** 1.5 ft.

Casing Diameter	Weight	Hole Diameter
4 in. To 170 ft.	11 lbs./ft.	4 in. To 246 ft.

Open Hole From 170 ft. To 246 ft.

Screen? ☐ **Type** **Make**

Static Water Level

20 ft. land surface Measure 01/23/1976

Pumping Level (below land surface)

60 ft. 2 hrs. Pumping at 50 g.p.m.

Wellhead Completion

Pitless adapter manufacturer Model

☐ Casing Protection ☒ 12 in. above grade
☐ At-grade (Environmental Wells and Borings ONLY)

Grouting Information Well Grouted? ☒ Yes ☐ No ☐ Not Specified

Material	Amount	From	To
bentonite		ft.	ft.

Nearest Known Source of Contamination

75 feet East Direction Septic tank/drain field Type

Well disinfected upon completion? ☒ Yes ☐ No

Pump ☐ Not Installed Date Installed 01/23/1976

Manufacturer's name STA-RITE

Model Number GP8C2 HP 0.5 Volt 230

Length of drop pipe 54 ft Capacity 12 g.p. Typ Submersible

Abandoned

Does property have any not in use and not sealed well(s)? ☐ Yes ☐ No

Variance

Was a variance granted from the MDH for this well? ☐ Yes ☐ No

Miscellaneous

First Bedrock Tunnel City Group Aquifer Tunnel City

Last Strat Tunnel City Group Depth to Bedrock 151 ft

Located by Minnesota Geological Survey

Locate Method Digitized - scale 1:24,000 or larger (Digitizing Table)

System UTM - NAD83, Zone 15, Meters X 461681 Y 5008639

Unique Number Verification Address verification Input Date 01/01/1990

Angled Drill Hole

Well Contractor

Torgerson, Art & Son 02203 OTTEN, D.

Licensee Business Lic. or Reg. No. Name of Driller

Minnesota Unique Well Number

242411

County Anoka
Quad Anoka
Quad ID 120B

MINNESOTA DEPARTMENT OF HEALTH

WELL AND BORING REPORT

Minnesota Statutes Chapter 1031

Entry Date 12/10/1999
Update Date 01/06/2017
Received Date 12/09/1999

Well Name	Township	Range	Dir	Section	Subsection
WALDOWSKI,	32	25	W	30	AACDBA

Elevation 871 ft. **Elev. Method** 7.5 minute topographic map (+/- 5 feet)

Address

Well 14743 BOWERS DR NW RAMSEY MN 55303

Stratigraphy Information

Geological Material	From	To (ft.)	Color	Hardness
SAND	0	50		
CLAY	50	72		
CLAY & ROCKS	72	106		
CLAY	106	121		
SAND	121	149		
FRANCONIA	149	178		

Remarks

GEOLOGY TAKEN FROM NEIGHBOR'S WELL RECORD.
SECTION MAP.
WELL DRILLED BY WOODROW TORGERSON.
RECORD PREPARED BY RAYMOND T. RENNER.

Well Depth 178 ft. **Depth Completed** 178 ft. **Date Well Completed** 08/26/1969

Drill Method Non-specified Rotary **Drill Fluid** Bentonite

Use domestic **Status** Active

Well Hydrofractured? Yes ☐ No ☐ **From** **To**

Casing Type Single casing **Joint** Threaded
Drive Shoe? Yes ☒ No ☐ **Above/Below**

Casing Diameter	Weight	Hole Diameter
4 in. To ft.	10.7 lbs./ft.	4 in. To 178 ft.

Open Hole From 0 ft. To 178 ft.

Screen? ☐ **Type** **Make**

Static Water Level
14 ft. land surface Measure 11/17/1999

Pumping Level (below land surface)
40 ft. 3 hrs. Pumping at 10 g.p.m.

Wellhead Completion
Pitless adapter manufacturer Model WELL SEAL
☐ Casing Protection ☒ 12 in. above grade
☐ At-grade (Environmental Wells and Borings ONLY)

Grouting Information Well Grouted? ☐ Yes ☐ No ☒ Not Specified

Nearest Known Source of Contamination
50 feet West Direction Septic tank/drain field Type
Well disinfected upon completion? ☐ Yes ☐ No

Pump ☐ Not Installed Date Installed 11/17/1999
Manufacturer's name GRUNDFOS
Model Number 10S05-9 HP 0.5 Volt 230
Length of drop pipe 52 ft Capacity 10 g.p. Typ Submersible

Abandoned
Does property have any not in use and not sealed well(s)? ☐ Yes ☐ No

Variance
Was a variance granted from the MDH for this well? ☐ Yes ☐ No

Miscellaneous
First Bedrock Tunnel City Group Aquifer
Last Strat Tunnel City Group Depth to Bedrock 149 ft
Located by Minnesota Geological Survey
Locate Method Digitization (Screen) - Map (1:24,000) (15 meters or
System UTM - NAD83, Zone 15, Meters X 461217 Y 5009565
Unique Number Verification Address verification Input Date 07/03/2008

Angled Drill Hole

Well Contractor
TORGERSON, W.
Licensee Business Lic. or Reg. No. Name of Driller

Minnesota Unique Well Number

416682

County Anoka
Quad Anoka
Quad ID 120B

MINNESOTA DEPARTMENT OF HEALTH

WELL AND BORING REPORT

Minnesota Statutes Chapter 1031

Entry Date 04/15/1991
Update Date 08/18/2014
Received Date

Well Name	Township	Range	Dir	Section	Subsection
GUY, HAROLD	32	25	W	30	AABCCA

Elevation 861 ft. **Elev. Method** 7.5 minute topographic map (+/- 5 feet)

Address

C/W 14760 BOWER DR NW RAMSEY MN 55303

Stratigraphy Information

Geological Material	From	To (ft.)	Color	Hardness
SAND	0	69		
HARDPAN	69	103		
SHALE	103	168		
SANDROCK	168	186		

Remarks

Well Depth	Depth Completed	Date Well Completed
186 ft.	186 ft.	12/12/1985

Drill Method Non-specified Rotary **Drill Fluid**

Use domestic **Status** Active

Well Hydrofractured? Yes ☐ No ☐ **From** **To**

Casing Type Single casing **Joint**
Drive Shoe? Yes ☐ No ☐ **Above/Below**

Casing Diameter	Weight
4 in. To 133 ft.	lbs./ft.

Open Hole From 133 ft. To 186 ft.

Screen? ☐ **Type** **Make**

Static Water Level
18 ft. land surface Measure 12/12/1985

Pumping Level (below land surface)
ft. hrs. Pumping at 25 g.p.m.

Wellhead Completion
Pitless adapter manufacturer WHITEWATER Model
☐ Casing Protection ☐ 12 in. above grade
☐ At-grade (Environmental Wells and Borings ONLY)

Grouting Information Well Grouted? ☒ Yes ☐ No ☐ Not Specified

Material	Amount	From	To
neat cement		ft.	ft.

Nearest Known Source of Contamination
feet Direction Type
Well disinfected upon completion? ☒ Yes ☐ No

Pump ☐ Not Installed Date Installed 12/13/1985
Manufacturer's name RED JACKET
Model Number HP 0.5 Volt
Length of drop pipe 21 ft Capacity g.p. Typ Submersible

Abandoned
Does property have any not in use and not sealed well(s)? ☐ Yes ☐ No

Variance
Was a variance granted from the MDH for this well? ☐ Yes ☐ No

Miscellaneous
First Bedrock St.Lawrence-Tunnel City Aquifer Tunnel City
Last Strat Tunnel City Group Depth to Bedrock 103 ft
Located by Minnesota Geological Survey
Locate Method Digitized - scale 1:24,000 or larger (Digitizing Table)
System UTM - NAD83, Zone 15, Meters X 461092 Y 5009712
Unique Number Verification Information from Input Date 01/01/1990

Angled Drill Hole

Well Contractor

Licensee Business	Lic. or Reg. No.	Name of Driller
Torgerson Well Co.	27056	TORGERSON, R.

Minnesota Unique Well Number

179361

County Anoka
Quad Anoka
Quad ID 120B

MINNESOTA DEPARTMENT OF HEALTH

WELL AND BORING REPORT

Minnesota Statutes Chapter 1031

Entry Date 04/15/1991
Update Date 08/18/2014
Received Date

Well Name	Township	Range	Dir	Section	Subsection
	32	25	W	30	AABBBA

Elevation 878 ft. **Elev. Method** 7.5 minute topographic map (+/- 5 feet)

Address

Well 14830 BOWERS DR NW RAMSEY MN 55303

Stratigraphy Information

Geological Material	From	To (ft.)	Color	Hardness
TOP SOIL	0	6	TAN	SOFT
SAND & GRAVEL	6	68	TAN	SOFT
CLAY	68	78	RED	HARD
CLAY & ROCKS	78	114	GRAY	HARD
SHALE	114	160	GREEN	MEDIUM
SHALE & SANDSTONE	160	170	GREEN	HARD
SANDSTONE	170	210	GRAY	HARD

Remarks

Well Depth 210 ft. **Depth Completed** 210 ft. **Date Well Completed** 03/05/1981

Drill Method Non-specified Rotary **Drill Fluid**

Use domestic **Status** Active

Well Hydrofractured? Yes ☐ No ☐ **From** **To**

Casing Type Single casing **Joint** Threaded
Drive Shoe? Yes ☒ No ☐ **Above/Below** 1 ft.

Casing Diameter		Weight		Hole Diameter	
4 in. To 170 ft.		10.7 lbs./ft.		4 in. To 210 ft.	

Open Hole From 170 ft. To 210 ft.

Screen? ☐ **Type** **Make**

Static Water Level
35 ft. land surface Measure 03/05/1981

Pumping Level (below land surface)
45 ft. 3 hrs. Pumping at 50 g.p.m.

Wellhead Completion
Pitless adapter manufacturer Model
☐ Casing Protection ☒ 12 in. above grade
☐ At-grade (Environmental Wells and Borings ONLY)

Grouting Information Well Grouted? ☒ Yes ☐ No ☐ Not Specified

Material	Amount	From	To
bentonite		0 ft.	20 ft.

Nearest Known Source of Contamination
50 feet West Direction Septic tank/drain field Type
Well disinfected upon completion? ☒ Yes ☐ No

Pump ☐ Not Installed Date Installed 03/10/1981
Manufacturer's name AERMOTOR
Model Number SD 12-50 HP 0.5 Volt 230
Length of drop pipe 54 ft Capacity 12 g.p. Typ Submersible

Abandoned
Does property have any not in use and not sealed well(s)? ☐ Yes ☐ No

Variance
Was a variance granted from the MDH for this well? ☐ Yes ☐ No

Miscellaneous
First Bedrock St.Lawrence-Tunnel City Aquifer Tunnel City
Last Strat Tunnel City Group Depth to Bedrock 114 ft
Located by Minnesota Geological Survey
Locate Method Digitized - scale 1:24,000 or larger (Digitizing Table)
System UTM - NAD83, Zone 15, Meters X 461095 Y 5009858
Unique Number Verification Address verification Input Date 01/01/1990

Angled Drill Hole

Well Contractor
Hadden Well Co. 02164 HADDEN, R.
Licensee Business Lic. or Reg. No. Name of Driller

Minnesota Unique Well Number

541778

County Anoka
Quad Anoka
Quad ID 120B

MINNESOTA DEPARTMENT OF HEALTH

WELL AND BORING REPORT

Minnesota Statutes Chapter 1031

Entry Date 08/05/1997
Update Date 02/14/2014
Received Date

Well Name	Township	Range	Dir	Section	Subsection
PEARSON,	32	25	W	30	AABACD

Elevation 883 ft. **Elev. Method** 7.5 minute topographic map (+/- 5 feet)

Address

Well 8846 10 SH W RAMSEY MN 55303

Stratigraphy Information

Geological Material	From	To (ft.)	Color	Hardness
SAND	0	23	BROWN	SOFT
CLAY & ROCKS	23	43	BROWN	SOFT
SAND	43	66	GRAY	SOFT
CLAY FIRM	66	66	GRAY	

Remarks

Well Depth 66 ft. **Depth Completed** 66 ft. **Date Well Completed** 08/24/1994

Drill Method Non-specified Rotary **Drill Fluid** Bentonite

Use domestic **Status** Active

Well Hydrofractured? Yes ☐ No ☐ **From** **To**

Casing Type Single casing **Joint** Threaded

Drive Shoe? Yes ☐ No ☒ **Above/Below**

Casing Diameter	Weight	Hole Diameter
4 in. To 63 ft.	10.7 lbs./ft.	8.7 in. To 30 ft.
		6.2 in. To 66 ft.

Open Hole From ft. To ft.

Screen? ☒ **Type** stainless **Make** JOHNSON 304

Diameter	Slot/Gauze	Length	Set	
4.5 in.	18	4 ft.	62 ft.	66 ft.

Static Water Level

28 ft. land surface Measure 08/24/1994

Pumping Level (below land surface)

48 ft. 3 hrs. Pumping at 40 g.p.m.

Wellhead Completion

Pitless adapter manufacturer BAKER Model SNAPPY

☒ Casing Protection ☒ 12 in. above grade

☐ At-grade (Environmental Wells and Borings ONLY)

Grouting Information Well Grouted? ☒ Yes ☐ No ☐ Not Specified

Material	Amount	From	To
bentonite	0.8 Cubic yards	ft.	60 ft.

Nearest Known Source of Contamination

50 feet South Direction Septic tank/drain field Type

Well disinfected upon completion? ☒ Yes ☐ No

Pump ☐ Not Installed Date Installed 01/10/1994

Manufacturer's name RED JACKET

Model Number 100CNS1- HP 1 Volt 230

Length of drop pipe 42 ft Capacity 18 g.p. Typ Submersible

Abandoned

Does property have any not in use and not sealed well(s)? ☐ Yes ☒ No

Variance

Was a variance granted from the MDH for this well? ☐ Yes ☐ No

Miscellaneous

First Bedrock Aquifer Quat. buried

Last Strat clay-gray Depth to Bedrock ft

Located by Minnesota Geological Survey

Locate Method Digitization (Screen) - Map (1:24,000) (15 meters or

System UTM - NAD83, Zone 15, Meters X 461347 Y 5009793

Unique Number Verification Address verification Input Date 07/03/2008

Angled Drill Hole

Well Contractor

Licensee Business	Lic. or Reg. No.	Name of Driller
Renner E.H. Well	71015	SCHAFFER, R.

Minnesota Well Index Report | **541778** | Printed on 10/13/2020

HE-01205-15

Minnesota Unique Well Number

160047

County Anoka
Quad Anoka
Quad ID 120B

MINNESOTA DEPARTMENT OF HEALTH

WELL AND BORING REPORT

Minnesota Statutes Chapter 1031

Entry Date 04/15/1991
Update Date 08/18/2014
Received Date

Well Name	Township	Range	Dir	Section	Subsection
BEBEAU, LYLE	32	25	W	30	ADDCAC

Elevation 865 ft. **Elev. Method** 7.5 minute topographic map (+/- 5 feet)

Address

Well 14543 BOWERS DR NW RAMSEY MN 55303

Stratigraphy Information

Geological Material	From	To (ft.)	Color	Hardness
CLAY	0	10	BROWN	
COARSE GRAVEL	10	60	DARK	
CLAY & GRAVEL &	60	121	RED	
GRAVEL	121	143	DK. BRN	
LAYERED SHALE &	143	185	GREEN	HARD
LAYERED SHALE &	185	205	RED	SOFT
LAYERED SHALE &	205	260	GRN/RED	HARD

Remarks

Well Depth 260 ft. **Depth Completed** 260 ft. **Date Well Completed** 06/04/1979

Drill Method Non-specified Rotary **Drill Fluid**

Use domestic **Status** Active

Well Hydrofractured? Yes ☐ No ☐ **From** **To**

Casing Type Single casing **Joint** Threaded
Drive Shoe? Yes ☒ No ☐ **Above/Below** 1 ft.

Casing Diameter	Weight	Hole Diameter
4 in. To 215 ft.	10.7 lbs./ft.	4 in. To 260 ft.

Open Hole From 215 ft. To 260 ft.

Screen? ☐ **Type** **Make**

Static Water Level
18 ft. land surface Measure 06/04/1979

Pumping Level (below land surface)
ft. 3 hrs. Pumping at 45 g.p.m.

Wellhead Completion
Pitless adapter manufacturer Model
☐ Casing Protection ☐ 12 in. above grade
☐ At-grade (Environmental Wells and Borings ONLY)

Grouting Information Well Grouted? ☒ Yes ☐ No ☐ Not Specified

Material	Amount	From	To
bentonite		ft.	ft.

Nearest Known Source of Contamination
feet Direction Type
Well disinfected upon completion? ☐ Yes ☐ No

Pump ☐ Not Installed Date Installed 06/07/1979
Manufacturer's name JACUZZI
Model Number 7S4M12-S2 HP 0.75 Volt 230
Length of drop pipe 42 ft Capacity 12 g.p. Typ Submersible

Abandoned
Does property have any not in use and not sealed well(s)? ☐ Yes ☐ No

Variance
Was a variance granted from the MDH for this well? ☐ Yes ☐ No

Miscellaneous
First Bedrock Tunnel City Group Aquifer Tunnel City
Last Strat Tunnel City Group Depth to Bedrock 143 ft
Located by Minnesota Geological Survey
Locate Method Digitized - scale 1:24,000 or larger (Digitizing Table)
System UTM - NAD83, Zone 15, Meters X 461305 Y 5009133
Unique Number Verification Address verification Input Date 01/01/1990

Angled Drill Hole

Well Contractor

Licensee Business	Lic. or Reg. No.	Name of Driller
Renner E.H. & Sons	02015	SHIMMING, D.

Minnesota Unique Well Number

169236

County Anoka
Quad Anoka
Quad ID 120B

MINNESOTA DEPARTMENT OF HEALTH

WELL AND BORING REPORT

Minnesota Statutes Chapter 1031

Entry Date 04/15/1991
Update Date 02/14/2014
Received Date

Well Name	Township	Range	Dir	Section	Subsection
PETERSON,	32	25	W	19	DCDDDC

Elevation 870 ft. **Elev. Method** 7.5 minute topographic map (+/- 5 feet)

Address

C/W 9002 10 HY W RAMSEY MN 55303

Stratigraphy Information

Geological Material	From	To (ft.)	Color	Hardness
SAND	0	82	BROWN	SOFT

Remarks

Well Depth	Depth Completed	Date Well Completed
82 ft.	82 ft.	12/29/1980

Drill Method Non-specified Rotary **Drill Fluid**

Use domestic **Status** Active

Well Hydrofractured? Yes ☐ No ☐ **From** **To**

Casing Type Single casing **Joint** Threaded
Drive Shoe? Yes ☐ No ☒ **Above/Below** 1 ft.

Casing Diameter	Weight	Hole Diameter
4 in. To 78 ft.	11 lbs./ft.	6.2 in. To 78 ft.
		4 in. To 82 ft.

Open Hole From ft. To ft.

Screen? ☒ **Type** stainless **Make** JOHNSON

Diameter	Slot/Gauze	Length	Set	
4 in.	15	4 ft.	78 ft.	82 ft.

Static Water Level

40 ft. land surface Measure 12/29/1980

Pumping Level (below land surface)

47 ft. 3 hrs. Pumping at 30 g.p.m.

Wellhead Completion

Pitless adapter manufacturer Model

☐ Casing Protection ☒ 12 in. above grade
☐ At-grade (Environmental Wells and Borings ONLY)

Grouting Information Well Grouted? ☒ Yes ☐ No ☐ Not Specified

Material	Amount	From	To
cuttings		ft.	ft.
bentonite		ft. 78	ft.

Nearest Known Source of Contamination

50 feet East Direction Septic tank/drain field Type

Well disinfected upon completion? ☒ Yes ☐ No

Pump ☐ Not Installed Date Installed 01/02/1981

Manufacturer's name RED JACKET

Model Number 75V19BC HP 0.75 Volt 230

Length of drop pipe 54 ft Capacity 14 g.p. Typ Submersible

Abandoned

Does property have any not in use and not sealed well(s)? ☐ Yes ☐ No

Variance

Was a variance granted from the MDH for this well? ☐ Yes ☐ No

Miscellaneous

First Bedrock Aquifer Quat. Water

Last Strat sand-brown Depth to Bedrock ft

Located by Minnesota Geological Survey

Locate Method Digitization (Screen) - Map (1:24,000) (15 meters or

System UTM - NAD83, Zone 15, Meters X 461023 Y 5009874

Unique Number Verification Information from Input Date 08/19/2008

Angled Drill Hole

Well Contractor

Ruppert & Son 27086 RUPPERT, G.
Licensee Business Lic. or Reg. No. Name of Driller

Minnesota Well Index Report | **169236** | Printed on 10/13/2020 HE-01205-15

Minnesota Unique Well Number

155281

County Anoka
Quad Anoka
Quad ID 120B

MINNESOTA DEPARTMENT OF HEALTH

WELL AND BORING REPORT

Minnesota Statutes Chapter 1031

Entry Date 04/15/1991
Update Date 08/18/2014
Received Date

Well Name	Township	Range	Dir	Section	Subsection
LUKE, TERRY	32	25	W	29	CCCDDD

Elevation 866 ft. **Elev. Method** 7.5 minute topographic map (+/- 5 feet)

Address

Well 14200 BOWERS DR NW RAMSEY MN 55303

Stratigraphy Information

Geological Material	From	To (ft.)	Color	Hardness
SAND	0	80		
GRAVEL	80	130		
CLAY	130	150		
SANDROCK	150	186		
ROCK	186	248		

Remarks

BOWERS MISS. ACRES BLK 1 LOT 8. SOUTH 0.5 SECT.

Well Depth	Depth Completed	Date Well Completed
248 ft.	248 ft.	10/24/1978

Drill Method Non-specified Rotary **Drill Fluid**

Use domestic **Status** Active

Well Hydrofractured? Yes ☐ No ☐ **From** **To**

Casing Type Single casing **Joint** Threaded
Drive Shoe? Yes ☐ No ☐ **Above/Below**

Casing Diameter	Weight	Hole Diameter
4 in. To 186 ft.	lbs./ft.	4 in. To 248 ft.

Open Hole From 186 ft. To 248 ft.

Screen? ☐ **Type** **Make**

Static Water Level

30 ft. land surface Measure 10/24/1978

Pumping Level (below land surface)

40 ft. 3 hrs. Pumping at 30 g.p.m.

Wellhead Completion

Pitless adapter manufacturer Model

☐ Casing Protection ☐ 12 in. above grade
☐ At-grade (Environmental Wells and Borings ONLY)

Grouting Information Well Grouted? ☒ Yes ☐ No ☐ Not Specified

Nearest Known Source of Contamination

feet Direction Type

Well disinfected upon completion? ☒ Yes ☐ No

Pump ☐ Not Installed Date Installed 10/27/1978

Manufacturer's name AERMOTOR

Model Number HP 0.5 Volt

Length of drop pipe 54 ft Capacity g.p. Typ Submersible

Abandoned

Does property have any not in use and not sealed well(s)? ☐ Yes ☐ No

Variance

Was a variance granted from the MDH for this well? ☐ Yes ☐ No

Miscellaneous

First Bedrock Tunnel City Group Aquifer Tunnel City

Last Strat Tunnel City Group Depth to Bedrock 150 ft

Located by Minnesota Geological Survey

Locate Method Digitization (Screen) - Map (1:24,000) (15 meters or

System UTM - NAD83, Zone 15, Meters X 461846 Y 5008333

Unique Number Verification Address verification Input Date 06/02/2000

Angled Drill Hole

Well Contractor

Torgerson Well Co. 27056 OTTEN, D.

Licensee Business Lic. or Reg. No. Name of Driller

Minnesota Well Index Report | **155281** | Printed on 10/13/2020

HE-01205-15

Minnesota Unique Well Number

417963

County Anoka
Quad Anoka
Quad ID 120B

MINNESOTA DEPARTMENT OF HEALTH

WELL AND BORING REPORT

Minnesota Statutes Chapter 1031

Entry Date 04/15/1991
Update Date 08/18/2014
Received Date

Well Name	Township	Range	Dir	Section	Subsection
	32	25	W	30	ADBBBC

Elevation 850 ft. **Elev. Method** 7.5 minute topographic map (+/- 5 feet)

Address

Well 14670 BOWERS DR NW ANOKA MN 55303

Stratigraphy Information

Geological Material	From	To (ft.)	Color	Hardness
TOP SOIL	0	6	BLK/BRN	SOFT
SAND & GRAVEL	6	40	BROWN	MEDIUM
SILTY SAND	40	58	BROWN	SOFT
CLAY & ROCK	58	96	BROWN	HARD
SHALE & SANDROCK	96	122	GRN/WHT	MEDIUM
SHALE & SANDROCK	122	147	GRN/RED	HARD
SANDROCK	147	170	WHITE	HARD

Remarks

Well Depth 170 ft. **Depth Completed** 170 ft. **Date Well Completed** 01/13/1986

Drill Method Non-specified Rotary **Drill Fluid**

Use domestic **Status** Active

Well Hydrofractured? Yes ☐ No ☐ **From** **To**

Casing Type Single casing **Joint** Threaded
Drive Shoe? Yes ☒ No ☐ **Above/Below** 1 ft.

Casing Diameter	Weight	Hole Diameter
4 in. To 124 ft.	12 lbs./ft.	6 in. To 124 ft.
		4 in. To 170 ft.

Open Hole From 124 ft. To 170 ft.

Screen? ☐ **Type** **Make**

Static Water Level
10 ft. land surface Measure 01/13/1986

Pumping Level (below land surface)
10 ft. 2 hrs. Pumping at 40 g.p.m.

Wellhead Completion
Pitless adapter manufacturer WHITEWATER Model SU6.5
☐ Casing Protection ☒ 12 in. above grade
☐ At-grade (Environmental Wells and Borings ONLY)

Grouting Information Well Grouted? ☒ Yes ☐ No ☐ Not Specified

Material	Amount	From	To
bentonite		0 ft.	124 ft.

Nearest Known Source of Contamination
75 feet East Direction Septic tank/drain field Type
Well disinfected upon completion? ☒ Yes ☐ No

Pump ☐ Not Installed Date Installed 01/15/1986
Manufacturer's name AERMOTOR
Model Number SD1250 HP 0.5 Volt 230
Length of drop pipe 40 ft Capacity 12 g.p. Typ Submersible

Abandoned
Does property have any not in use and not sealed well(s)? ☐ Yes ☐ No

Variance
Was a variance granted from the MDH for this well? ☐ Yes ☐ No

Miscellaneous
First Bedrock St.Lawrence-Tunnel City Aquifer Tunnel City
Last Strat Tunnel City Group Depth to Bedrock 96 ft
Located by Minnesota Geological Survey
Locate Method Digitized - scale 1:24,000 or larger (Digitizing Table)
System UTM - NAD83, Zone 15, Meters X 461067 Y 5009429
Unique Number Verification Information from Input Date 01/01/1990

Angled Drill Hole

Well Contractor
Mc Alpine's Well Co. 27186 MCALPINE, T.
Licensee Business Lic. or Reg. No. Name of Driller

Minnesota Unique Well Number

162802

County Anoka
Quad Anoka
Quad ID 120B

MINNESOTA DEPARTMENT OF HEALTH

WELL AND BORING REPORT

Minnesota Statutes Chapter 1031

Entry Date 04/15/1991
Update Date 02/14/2014
Received Date

Well Name	Township	Range	Dir	Section	Subsection
KUSS, GENE	32	25	W	30	AACCCA

Elevation 855 ft. **Elev. Method** 7.5 minute topographic map (+/- 5 feet)

Address

C/W 14710 BOWERS DR NW RAMSEY MN 55303

Stratigraphy Information

Geological Material	From	To (ft.)	Color	Hardness
SAND	0	15	BROWN	SOFT
CLAY & ROCK	15	70	BROWN	MEDIUM
CLAY	70	105	GRAY	HARD
FINE SAND	105	120	RED	SOFT
COARSE SAND	120	130	YELLOW	MEDIUM

Remarks

Well Depth 130 ft. **Depth Completed** 130 ft. **Date Well Completed** 08/03/1979

Drill Method Non-specified Rotary **Drill Fluid**

Use domestic **Status** Active

Well Hydrofractured? Yes ☐ No ☐ **From** **To**

Casing Type Single casing **Joint** Threaded
Drive Shoe? Yes ☒ No ☐ **Above/Below** 1 ft.

Casing Diameter	Weight	Hole Diameter
4 in. To 125 ft.	12 lbs./ft.	6 in. To 125 ft.

Open Hole From ft. To ft.

Screen? ☒ **Type** stainless **Make** JOHNSON

Diameter	Slot/Gauze	Length	Set
2 in.		5 ft.	125 ft. 130 ft.

Static Water Level
20 ft. land surface Measure 08/03/1979

Pumping Level (below land surface)
20 ft. 3 hrs. Pumping at 20 g.p.m.

Wellhead Completion
Pitless adapter manufacturer Model
☐ Casing Protection ☐ 12 in. above grade
☐ At-grade (Environmental Wells and Borings ONLY)

Grouting Information Well Grouted? ☒ Yes ☐ No ☐ Not Specified

Material	Amount	From	To
bentonite		0 ft.	125 ft.

Nearest Known Source of Contamination
50 feet Direction Septic tank/drain field Type
Well disinfected upon completion? ☒ Yes ☐ No

Pump ☐ Not Installed Date Installed 08/06/1979
Manufacturer's name AERMOTOR
Model Number SD 1250 HP 0.5 Volt 230
Length of drop pipe 42 ft Capacity 20 g.p. Typ Submersible

Abandoned
Does property have any not in use and not sealed well(s)? ☐ Yes ☐ No

Variance
Was a variance granted from the MDH for this well? ☐ Yes ☐ No

Miscellaneous
First Bedrock Aquifer Quat. buried
Last Strat sand-yellow Depth to Bedrock ft
Located by Minnesota Geological Survey
Locate Method Digitized - scale 1:24,000 or larger (Digitizing Table)
System UTM - NAD83, Zone 15, Meters X 461097 Y 5009517
Unique Number Verification Address verification Input Date 01/01/1990

Angled Drill Hole

Well Contractor

Licensee Business	Lic. or Reg. No.	Name of Driller
Mc Alpine's Well Co.	27186	MCALPINE, G.

Minnesota Unique Well Number

149458

County Anoka
Quad Anoka
Quad ID 120B

MINNESOTA DEPARTMENT OF HEALTH

WELL AND BORING REPORT

Minnesota Statutes Chapter 1031

Entry Date 04/15/1991
Update Date 08/18/2014
Received Date

Well Name	Township	Range	Dir	Section	Subsection
LUKE, TERRY	32	25	W	29	CCCDBB

Elevation 865 ft. **Elev. Method** 7.5 minute topographic map (+/- 5 feet)

Address

C/W 14250 BOWERS DR NW RAMSEY MN 55303

Stratigraphy Information

Geological Material	From	To (ft.)	Color	Hardness
CLAY	0	150	BLUE	
SAND	150	180	BROWN	
ROCK	180	211	WHITE	

Remarks

SOUTH 0.5 SECTION

Well Depth	Depth Completed	Date Well Completed
211 ft.	211 ft.	08/00/1976

Drill Method Non-specified Rotary **Drill Fluid**

Use domestic **Status** Active

Well Hydrofractured? Yes ☐ No ☐ **From** **To**

Casing Type Single casing **Joint** Threaded

Drive Shoe? Yes ☐ No ☐ **Above/Below**

Casing Diameter	Weight	Hole Diameter
4 in. To 200 ft.	lbs./ft.	4 in. To 211 ft.

Open Hole From 200 ft. To 211 ft.

Screen? ☐ **Type** **Make**

Static Water Level

50 ft. land surface Measure 08/00/1976

Pumping Level (below land surface)

60 ft. 3 hrs. Pumping at 40 g.p.m.

Wellhead Completion

Pitless adapter manufacturer Model

☐ Casing Protection ☐ 12 in. above grade
☐ At-grade (Environmental Wells and Borings ONLY)

Grouting Information Well Grouted? ☒ Yes ☐ No ☐ Not Specified

Material	Amount	From	To
well grouted, type unknown		ft.	ft.

Nearest Known Source of Contamination

feet Direction Type

Well disinfected upon completion? ☒ Yes ☐ No

Pump ☐ Not Installed Date Installed 08/00/1976

Manufacturer's name AERMOTOR

Model Number HP 0.5 Volt

Length of drop pipe 54 ft Capacity g.p. Typ Submersible

Abandoned

Does property have any not in use and not sealed well(s)? ☐ Yes ☐ No

Variance

Was a variance granted from the MDH for this well? ☐ Yes ☐ No

Miscellaneous

First Bedrock Tunnel City Group Aquifer Tunnel City

Last Strat Tunnel City Group Depth to Bedrock 180 ft

Located by Minnesota Geological Survey

Locate Method Digitization (Screen) - Map (1:24,000) (15 meters or

System UTM - NAD83, Zone 15, Meters X 461771 Y 5008429

Unique Number Verification Address verification Input Date 06/02/2000

Angled Drill Hole

Well Contractor

Torgerson Well Co. 27056

Licensee Business Lic. or Reg. No. Name of Driller

Minnesota Unique Well Number

431401

County Anoka
Quad Anoka
Quad ID 120B

MINNESOTA DEPARTMENT OF HEALTH

WELL AND BORING REPORT

Minnesota Statutes Chapter 1031

Entry Date 04/15/1991
Update Date 08/18/2014
Received Date

Well Name	Township	Range	Dir	Section	Subsection
	32	25	W	30	ACAADD

Elevation 852 ft. **Elev. Method** 7.5 minute topographic map (+/- 5 feet)

Address

Well 14650 BOWERS DR NW RAMSEY MN 55303

Stratigraphy Information

Geological Material	From	To (ft.)	Color	Hardness
SANDY CLAY	0	21	BROWN	MEDIUM
SAND	21	52	TAN	SOFT
CLAY	52	108	BROWN	MEDIUM
SHALE & SOME	108	120	BLU/TAN	MEDIUM
SANDSTONE	120	127	TAN/WHT	M.SOFT

Remarks

Well Depth 127 ft. **Depth Completed** 127 ft. **Date Well Completed** 01/13/1987

Drill Method Non-specified Rotary **Drill Fluid** Bentonite

Use domestic **Status** Active

Well Hydrofractured? Yes ☐ No ☐ **From** **To**

Casing Type Single casing **Joint** Threaded
Drive Shoe? Yes ☒ No ☐ **Above/Below** 1 ft.

Casing Diameter		Weight	
4	in. To 123 ft.	11	lbs./ft.

Open Hole From ft. To ft.

Screen? ☒ **Type** stainless **Make** JOHNSON

Diameter	Slot/Gauze	Length	Set	
4 in.	15	4 ft.	123 ft.	127 ft.

Static Water Level

15 ft. land surface Measure 01/13/1987

Pumping Level (below land surface)

25 ft. 4 hrs. Pumping at 30 g.p.m.

Wellhead Completion

Pitless adapter manufacturer WHITEWATER Model

☐ Casing Protection ☐ 12 in. above grade
☐ At-grade (Environmental Wells and Borings ONLY)

Grouting Information Well Grouted? ☒ Yes ☐ No ☐ Not Specified

Material	Amount	From	To
bentonite		0 ft.	123 ft.
cuttings		ft.	ft.

Nearest Known Source of Contamination

50 feet Northeas Direction Septic tank/drain field Type

Well disinfected upon completion? ☒ Yes ☐ No

Pump ☐ Not Installed Date Installed 01/22/1987

Manufacturer's name RED JACKET

Model Number 50UI9BC HP 0.5 Volt 230

Length of drop pipe 40 ft Capacity 14 g.p. Typ Submersible

Abandoned

Does property have any not in use and not sealed well(s)? ☐ Yes ☒ No

Variance

Was a variance granted from the MDH for this well? ☐ Yes ☐ No

Miscellaneous

First Bedrock St.Lawrence-Tunnel City Aquifer Tunnel City
Last Strat Tunnel City Group Depth to Bedrock 108 ft
Located by Minnesota Geological Survey
Locate Method Digitized - scale 1:24,000 or larger (Digitizing Table)
System UTM - NAD83, Zone 15, Meters X 461035 Y 5009362
Unique Number Verification Address verification Input Date 01/01/1990

Angled Drill Hole

Well Contractor

Licensee Business	Lic. or Reg. No.	Name of Driller
Ruppert & Son	27086	RUPPERT, G.

Minnesota Unique Well Number

656433

County Anoka
Quad Anoka
Quad ID 120B

MINNESOTA DEPARTMENT OF HEALTH

WELL AND BORING REPORT

Minnesota Statutes Chapter 1031

Entry Date 11/07/2001
Update Date 08/18/2014
Received Date 07/18/2001

Well Name	Township	Range	Dir	Section	Subsection
NASH, STEVE &	32	25	W	30	DBCDBD

Elevation 865 ft. **Elev. Method** 7.5 minute topographic map (+/- 5 feet)

Address

C/W 14500 BOWERS DR RAMSEY MN 55303

Stratigraphy Information

Geological Material	From	To (ft.)	Color	Hardness
SAND/CLAY	0	30	BROWN	
SAND	30	50	BROWN	
ROCKS/GRAVEL	50	80	BROWN	HARD
CLAY/GRAVEL	80	137	BROWN	
SHALE	137	150	GREEN	MEDIUM
SANDSTONE	150	175	WHT/BRN	M.HARD

Remarks

Well Depth	Depth Completed	Date Well Completed
175 ft.	175 ft.	01/28/2001

Drill Method Non-specified Rotary **Drill Fluid** Bentonite

Use domestic **Status** Active

Well Hydrofractured? Yes ☐ No ☒ **From** **To**

Casing Type Single casing **Joint** Threaded
Drive Shoe? Yes ☒ No ☐ **Above/Below**

Casing Diameter	Weight	Hole Diameter
4 in. To 147 ft.	11 lbs./ft.	8 in. To 136 ft.
		4 in. To 175 ft.

Open Hole From 136 ft. To 175 ft.

Screen? ☐ **Type** **Make**

Static Water Level
25 ft. land surface Measure 01/28/2001

Pumping Level (below land surface)
175 ft. 1 hrs. Pumping at 50 g.p.m.

Wellhead Completion
Pitless adapter manufacturer SNAPPY Model 1INCH
☐ Casing Protection ☒ 12 in. above grade
☐ At-grade (Environmental Wells and Borings ONLY)

Grouting Information Well Grouted? ☒ Yes ☐ No ☐ Not Specified

Material	Amount	From	To
high solids bentonite	3 Sacks	0 ft.	40 ft.

Nearest Known Source of Contamination
52 feet Southwes Direction Septic tank/drain field Type
Well disinfected upon completion? ☒ Yes ☐ No

Pump ☐ Not Installed Date Installed 02/07/2001
Manufacturer's name MYERS
Model Number 2 WIRE HP 0.75 Volt 230
Length of drop pipe 60 ft Capacity 12 g.p. Typ Submersible

Abandoned
Does property have any not in use and not sealed well(s)? ☐ Yes ☒ No

Variance
Was a variance granted from the MDH for this well? ☐ Yes ☒ No

Miscellaneous
First Bedrock Tunnel City Group Aquifer Tunnel City
Last Strat Tunnel City Group Depth to Bedrock 137 ft
Located by Minnesota Department of Health
Locate Method GPS SA Off (averaged) (15 meters)
System UTM - NAD83, Zone 15, Meters X 461280 Y 5009048
Unique Number Verification Input Date 01/30/2001

Angled Drill Hole

Well Contractor
Barott B. Well Co. 02566 BAROTT, B.
Licensee Business Lic. or Reg. No. Name of Driller

Minnesota Well Index Report | **656433** | Printed on 10/13/2020 HE-01205-15

Minnesota Unique Well Number

126498

County Anoka
Quad Anoka
Quad ID 120B

MINNESOTA DEPARTMENT OF HEALTH

WELL AND BORING REPORT

Minnesota Statutes Chapter 1031

Entry Date 04/15/1991
Update Date 08/18/2014
Received Date

Well Name	Township	Range	Dir	Section	Subsection
JOHNSON, AL	32	25	W	29	CCBCBC

Elevation 865 ft. **Elev. Method** 7.5 minute topographic map (+/- 5 feet)

Address

Well 14330 BOWERS DR NW RAMSEY MN 55303

Stratigraphy Information

Geological Material	From	To (ft.)	Color	Hardness
SAND	0	68		
CLAY	68	108		
GRAVEL	108	146		
SOFT SANDROCK	146	186		
HARD SANDROCK	186	201		

Remarks

SOUTH 0.5 SECT.

Well Depth 201 ft. **Depth Completed** 201 ft. **Date Well Completed** 06/08/1976

Drill Method Non-specified Rotary **Drill Fluid**

Use domestic **Status** Active

Well Hydrofractured? Yes ☐ No ☐ **From** **To**

Casing Type Single casing **Joint** Threaded

Drive Shoe? Yes ☐ No ☐ **Above/Below**

Casing Diameter **Weight**

4 in. To 188 ft. lbs./ft.

Open Hole From ft. To ft.

Screen? ☒ **Type** stainless **Make** JOHNSON

Static Water Level

15 ft. land surface Measure 06/08/1976

Pumping Level (below land surface)

25 ft. 3 hrs. Pumping at g.p.m.

Wellhead Completion

Pitless adapter manufacturer Model

☐ Casing Protection ☐ 12 in. above grade

☐ At-grade (Environmental Wells and Borings ONLY)

Grouting Information Well Grouted? ☒ Yes ☐ No ☐ Not Specified

Nearest Known Source of Contamination

feet Direction Type

Well disinfected upon completion? ☒ Yes ☐ No

Pump ☐ Not Installed Date Installed 06/12/1976

Manufacturer's name AERMOTOR

Model Number HP 0.75 Volt

Length of drop pipe ft Capacity g.p. Typ Submersible

Abandoned

Does property have any not in use and not sealed well(s)? ☐ Yes ☐ No

Variance

Was a variance granted from the MDH for this well? ☐ Yes ☐ No

Miscellaneous

First Bedrock Tunnel City Group Aquifer Tunnel City

Last Strat Tunnel City Group Depth to Bedrock 146 ft

Located by Minnesota Geological Survey

Locate Method Digitization (Screen) - Map (1:24,000) (15 meters or

System UTM - NAD83, Zone 15, Meters X 461670 Y 5008605

Unique Number Verification Address verification Input Date 06/02/2000

Angled Drill Hole

Well Contractor

Torgerson Well Co. 27056 OTTEN, D.

Licensee Business Lic. or Reg. No. Name of Driller

Minnesota Unique Well Number

409591

County Anoka
Quad Anoka
Quad ID 120B

MINNESOTA DEPARTMENT OF HEALTH

WELL AND BORING REPORT

Minnesota Statutes Chapter 1031

Entry Date 04/15/1991
Update Date 08/18/2014
Received Date

Well Name	Township	Range	Dir	Section	Subsection
MILLER, GARY	32	25	W	30	AABBDD

Elevation 881 ft. **Elev. Method** 7.5 minute topographic map (+/- 5 feet)

Address

C/W 14810 BOWERS DR NW RAMSEY MN 55303

Stratigraphy Information

Geological Material	From	To (ft.)	Color	Hardness
SAND	0	54	BROWN	
CLAY	54	58	GRAY	
CLAY & SANDSTONE	58	112	BROWN	
GRAVEL	112	119	VARIED	
SHALE & SANDSTONE	119	148	GRN/BRN	
SANDSTONE & SHALE	148	213		

Remarks

Well Depth	Depth Completed	Date Well Completed
213 ft.	213 ft.	05/21/1985

Drill Method Non-specified Rotary **Drill Fluid**

Use domestic **Status** Active

Well Hydrofractured? Yes ☐ No ☐ **From** **To**

Casing Type Single casing **Joint**
Drive Shoe? Yes ☒ No ☐ **Above/Below** 1 ft.

Casing Diameter	Weight	Hole Diameter
4 in. To 168 ft.	10.7 lbs./ft.	6.2 in. To 168 ft.
		4 in. To 213 ft.

Open Hole From 168 ft. To 213 ft.

Screen? ☐ **Type** **Make**

Static Water Level
32 ft. land surface Measure 05/21/1985

Pumping Level (below land surface)
38 ft. 3 hrs. Pumping at 60 g.p.m.

Wellhead Completion
Pitless adapter manufacturer SNAPPY Model PLASTIC
☐ Casing Protection ☐ 12 in. above grade
☐ At-grade (Environmental Wells and Borings ONLY)

Grouting Information Well Grouted? ☒ Yes ☐ No ☐ Not Specified

Material	Amount	From	To
bentonite		0 ft.	168 ft.

Nearest Known Source of Contamination
feet Direction Type
Well disinfected upon completion? ☒ Yes ☐ No

Pump ☐ Not Installed Date Installed 05/23/1985
Manufacturer's name GRUNDFOS
Model Number SP4-8 HP 0.75 Volt 230
Length of drop pipe 63 ft Capacity 20 g.p. Typ Submersible

Abandoned
Does property have any not in use and not sealed well(s)? ☐ Yes ☐ No

Variance
Was a variance granted from the MDH for this well? ☐ Yes ☐ No

Miscellaneous
First Bedrock St.Lawrence-Tunnel City Aquifer Tunnel City
Last Strat Tunnel City Group Depth to Bedrock 119 ft
Located by Minnesota Geological Survey
Locate Method Digitized - scale 1:24,000 or larger (Digitizing Table)
System UTM - NAD83, Zone 15, Meters X 461139 Y 5009785
Unique Number Verification Information from Input Date 01/01/1990

Angled Drill Hole

Well Contractor

Licensee Business	Lic. or Reg. No.	Name of Driller
Renner E.H. & Sons	02015	SUTTON, G.

Minnesota Unique Well Number

146087

County Anoka
Quad Anoka
Quad ID 120B

MINNESOTA DEPARTMENT OF HEALTH

WELL AND BORING REPORT

Minnesota Statutes Chapter 1031

Entry Date 04/15/1991
Update Date 08/18/2014
Received Date

Well Name	Township	Range	Dir	Section	Subsection
LUKE, MARVIN	32	25	W	29	CCABCC

Elevation 865 ft. **Elev. Method** 7.5 minute topographic map (+/- 5 feet)

Address

C/W 14235 BOWERS DR NW RAMSEY MN 55303

Stratigraphy Information

Geological Material	From	To (ft.)	Color	Hardness
SAND & GRAVEL	0	48	YELLOW	SOFT
CLAY & ROCK	48	120	RED	HARD
GRAVEL	120	150	BLACK	HARD
SANDROCK	150	160	WHITE	HARD

Remarks

SOUTH 0.5 SECTION

Well Depth 160 ft. **Depth Completed** 160 ft. **Date Well Completed** 08/31/1977

Drill Method Non-specified Rotary **Drill Fluid**

Use domestic **Status** Active

Well Hydrofractured? Yes ☐ No ☐ **From** **To**

Casing Type Single casing **Joint** Threaded

Drive Shoe? Yes ☒ No ☐ **Above/Below** 1 ft.

Casing Diameter	Weight	Hole Diameter
4 in. To 155 ft.	12 lbs./ft.	6 in. To 155 ft.

Open Hole From ft. To ft.

Screen? ☒ **Type** stainless **Make** JOHNSON

Diameter	Slot/Gauze	Length	Set	
2 in.	10	5 ft.	155 ft.	160 ft.

Static Water Level

20 ft. land surface Measure 08/31/1977

Pumping Level (below land surface)

20 ft. 2 hrs. Pumping at 20 g.p.m.

Wellhead Completion

Pitless adapter manufacturer Model

☐ Casing Protection ☒ 12 in. above grade

☐ At-grade (Environmental Wells and Borings ONLY)

Grouting Information Well Grouted? ☒ Yes ☐ No ☐ Not Specified

Material	Amount	From	To
bentonite		0 ft.	155 ft.

Nearest Known Source of Contamination

50 feet Direction Septic tank/drain field Type

Well disinfected upon completion? ☒ Yes ☐ No

Pump ☐ Not Installed Date Installed 09/01/1977

Manufacturer's name AERMOTOR

Model Number SD1250 HP 0.5 Volt 230

Length of drop pipe 42 ft Capacity 20 g.p. Typ Submersible

Abandoned

Does property have any not in use and not sealed well(s)? ☐ Yes ☐ No

Variance

Was a variance granted from the MDH for this well? ☐ Yes ☐ No

Miscellaneous

First Bedrock Tunnel City Group Aquifer Tunnel City

Last Strat Tunnel City Group Depth to Bedrock 150 ft

Located by Minnesota Geological Survey

Locate Method Digitization (Screen) - Map (1:24,000) (15 meters or

System UTM - NAD83, Zone 15, Meters X 461835 Y 5008627

Unique Number Verification Address verification Input Date 06/02/2000

Angled Drill Hole

Well Contractor

Mc Alpine's Well Co. 27186 MCALPINE, G.

Licensee Business Lic. or Reg. No. Name of Driller

Minnesota Unique Well Number

634427

County Anoka
Quad Anoka
Quad ID 120B

MINNESOTA DEPARTMENT OF HEALTH

WELL AND BORING REPORT

Minnesota Statutes Chapter 1031

Entry Date 04/29/2002
Update Date 08/18/2014
Received Date

Well Name	Township	Range	Dir	Section	Subsection
BOYUM,	32	25	W	30	DCABDB

Elevation 862 ft. **Elev. Method** 7.5 minute topographic map (+/- 5 feet)

Address

C/W 14470 BOWERS DR ANOKA MN 55303

Stratigraphy Information

Geological Material	From	To (ft.)	Color	Hardness
SAND	0	30	BROWN	MEDIUM
CLAY & STONE	30	80	BROWN	MEDIUM
STONE & CLAY	80	100	BROWN	HARD
CLAY & ROCKS	100	110	BROWN	HARD
RUBBLE	110	120	WHT/BLK	HARD
SANDSTONE	120	120		

Remarks

Well Depth 120 ft. **Depth Completed** 120 ft. **Date Well Completed** 11/19/2001

Drill Method Non-specified Rotary **Drill Fluid** Bentonite

Use domestic **Status** Active

Well Hydrofractured? Yes ☐ No ☐ **From** **To**

Casing Type Single casing **Joint** Welded
Drive Shoe? Yes ☐ No ☒ **Above/Below**

Casing Diameter	Weight	Hole Diameter
4 in. To 110 ft.	lbs./ft.	8.7 in. To 30 ft.
		6.5 in. To 120 ft.

Open Hole From ft. To ft.

Screen? ☒ **Type** slotted pipe **Make** CERTAIN

Diameter	Slot/Gauze	Length	Set
4 in.	12	ft. 110 ft.	120 ft.

Static Water Level

25 ft. land surface Measure 11/19/2001

Pumping Level (below land surface)

ft. 4 hrs. Pumping at 20 g.p.m.

Wellhead Completion

Pitless adapter manufacturer SNAPPY Model

☐ Casing Protection ☒ 12 in. above grade
☐ At-grade (Environmental Wells and Borings ONLY)

Grouting Information Well Grouted? ☒ Yes ☐ No ☐ Not Specified

Material	Amount	From	To
well grouted, type unknown	4 Sacks	0 ft.	30 ft.

Nearest Known Source of Contamination

feet Direction Type

Well disinfected upon completion? ☒ Yes ☐ No

Pump ☐ Not Installed Date Installed

Manufacturer's name STA RITE

Model Number 1/2 HP 0.5 Volt 220

Length of drop pipe 80 ft Capacity g.p. Typ Submersible

Abandoned

Does property have any not in use and not sealed well(s)? ☐ Yes ☒ No

Variance

Was a variance granted from the MDH for this well? ☐ Yes ☒ No

Miscellaneous

First Bedrock St.Lawrence-Tunnel City Aquifer Quat. buried

Last Strat St.Lawrence-Tunnel City Depth to Bedrock 120 ft

Located by Minnesota Department of Health

Locate Method GPS SA Off (averaged) (15 meters)

System UTM - NAD83, Zone 15, Meters X 461332 Y 5008940

Unique Number Verification Input Date 09/12/2001

Angled Drill Hole

Well Contractor

Licensee Business	Lic. or Reg. No.	Name of Driller
Rum River Drilling	27659	PRAUGHT, N.

Minnesota Unique Well Number

418904

County Anoka
Quad Anoka
Quad ID 120B

MINNESOTA DEPARTMENT OF HEALTH

WELL AND BORING REPORT

Minnesota Statutes Chapter 1031

Entry Date 04/15/1991
Update Date 08/18/2014
Received Date

Well Name	Township	Range	Dir	Section	Subsection
BECHTOLD,	32	25	W	30	AABBBD

Elevation 881 ft. **Elev. Method** 7.5 minute topographic map (+/- 5 feet)

Address

Well 14826 BOWERS DR NW RAMSEY MN 55303

Stratigraphy Information

Geological Material	From	To (ft.)	Color	Hardness
SAND	0	18	TAN	SOFT
GRAVEL	18	47	TAN	SOFT
CLAY	47	85	RED/GRY	SOFT
CLAY	85	110	GRAY	SOFT
SHALE	110	137	RED	SOFT
SANDSTONE	137	148	YELLOW	SOFT
SANDSTONE	148	170	YEL/WHT	HARD

Remarks

SECTION MAP.

Well Depth 170 ft. **Depth Completed** 170 ft. **Date Well Completed** 11/06/1986

Drill Method Non-specified Rotary **Drill Fluid**

Use domestic **Status** Active

Well Hydrofractured? Yes ☐ No ☐ **From** **To**

Casing Type Single casing **Joint** Threaded

Drive Shoe? Yes ☐ No ☒ **Above/Below** 1 ft.

Casing Diameter	Weight	Hole Diameter
4 in. To 148 ft.	11 lbs./ft.	6.2 in. To 148 ft.
		4 in. To 170 ft.

Open Hole From 148 ft. To 170 ft.

Screen? ☐ **Type** **Make**

Static Water Level

45 ft. land surface Measure 11/07/1986

Pumping Level (below land surface)

ft. hrs. Pumping at 35 g.p.m.

Wellhead Completion

Pitless adapter manufacturer MONITOR Model SNAPPY

☐ Casing Protection ☒ 12 in. above grade

☐ At-grade (Environmental Wells and Borings ONLY)

Grouting Information Well Grouted? ☒ Yes ☐ No ☐ Not Specified

Material	Amount	From	To
bentonite		ft.	ft.

Nearest Known Source of Contamination

55 feet South Direction Septic tank/drain field Type

Well disinfected upon completion? ☒ Yes ☐ No

Pump ☐ Not Installed Date Installed 11/06/1986

Manufacturer's name FLINT & WALLING

Model Number HP 0.5 Volt 230

Length of drop pipe 65 ft Capacity 10 g.p. Typ Submersible

Abandoned

Does property have any not in use and not sealed well(s)? ☐ Yes ☐ No

Variance

Was a variance granted from the MDH for this well? ☐ Yes ☐ No

Miscellaneous

First Bedrock St.Lawrence Formation Aquifer Tunnel City

Last Strat Tunnel City Group Depth to Bedrock 110 ft

Located by Minnesota Geological Survey

Locate Method Digitization (Screen) - Map (1:24,000) (15 meters or

System UTM - NAD83, Zone 15, Meters X 461109 Y 5009818

Unique Number Verification Address verification Input Date 07/03/2008

Angled Drill Hole

Well Contractor

Bill's Well Co. 33087 JAPP, P.

Licensee Business Lic. or Reg. No. Name of Driller

Minnesota Unique Well Number

425746

County Anoka
Quad Anoka
Quad ID 120B

MINNESOTA DEPARTMENT OF HEALTH

WELL AND BORING REPORT

Minnesota Statutes Chapter 1031

Entry Date 04/15/1991
Update Date 02/14/2014
Received Date

Well Name	Township	Range	Dir	Section	Subsection
LETOURNEAU	32	25	W	30	ADBDCD

Elevation 860 ft. **Elev. Method** 7.5 minute topographic map (+/- 5 feet)

Address

C/W 14607 BOWERS DR NW RAMSEY MN 55303

Stratigraphy Information

Geological Material	From	To (ft.)	Color	Hardness
SAND GRAVEL	0	7	BROWN	SOFT
CLAY	7	14	BROWN	SOFT
CLAY GRAVEL	14	33	BROWN	SOFT
GRAVEL & SAND	33	43	BROWN	SOFT
BOULDERS, & CLAY	43	122	BROWN	HARD
GRAVEL & SAND	122	135	BROWN	SOFT

Remarks

Well Depth 135 ft. **Depth Completed** 135 ft. **Date Well Completed** 10/16/1986

Drill Method Non-specified Rotary **Drill Fluid** Bentonite

Use domestic **Status** Active

Well Hydrofractured? Yes ☐ No ☐ **From** **To**

Casing Type Single casing **Joint**
Drive Shoe? Yes ☐ No ☐ **Above/Below** 1 ft.

Casing Diameter	Weight
4 in. To 120 ft.	lbs./ft.

Open Hole From ft. To ft.

Screen? ☒ **Type** stainless **Make** JOHNSON

Diameter	Slot/Gauze	Length	Set	
2 in.	15	12 ft.	120 ft.	135 ft.

Static Water Level
12 ft. land surface Measure 10/16/1986

Pumping Level (below land surface)
100 ft. 1.5 hrs. Pumping at 55 g.p.m.

Wellhead Completion
Pitless adapter manufacturer MONITOR Model 8PL41UC7
☐ Casing Protection ☐ 12 in. above grade
☐ At-grade (Environmental Wells and Borings ONLY)

Grouting Information Well Grouted? ☒ Yes ☐ No ☐ Not Specified

Material	Amount	From	To
neat cement		0 ft.	30 ft.
bentonite		30 ft.	120 ft.

Nearest Known Source of Contamination
66 feet North Direction Septic tank/drain field Type
Well disinfected upon completion? ☒ Yes ☐ No

Pump ☐ Not Installed Date Installed 10/18/1986
Manufacturer's name AERMOTOR
Model Number SD1250 HP 0.5 Volt 230
Length of drop pipe 40 ft Capacity 10 g.p. Typ Submersible

Abandoned
Does property have any not in use and not sealed well(s)? ☐ Yes ☒ No

Variance
Was a variance granted from the MDH for this well? ☐ Yes ☐ No

Miscellaneous
First Bedrock Aquifer Quat. buried
Last Strat sand +larger-brown Depth to Bedrock ft
Located by Minnesota Geological Survey
Locate Method Digitized - scale 1:24,000 or larger (Digitizing Table)
System UTM - NAD83, Zone 15, Meters X 461186 Y 5009277
Unique Number Verification Address verification Input Date 01/01/1990

Angled Drill Hole

Well Contractor
Mork Well Co. 02133 LAWRENCE, R.
Licensee Business Lic. or Reg. No. Name of Driller

Minnesota Unique Well Number

494213

County Anoka
Quad Anoka
Quad ID 120B

MINNESOTA DEPARTMENT OF HEALTH

WELL AND BORING REPORT

Minnesota Statutes Chapter 1031

Entry Date 12/23/1991
Update Date 08/18/2014
Received Date

Well Name	Township	Range	Dir	Section	Subsection
GORHAM, GARY	32	25	W	30	ABADCB

Elevation 878 ft. **Elev. Method** 7.5 minute topographic map (+/- 5 feet)

Address

C/W 14801 BOWERS DR NW RAMSEY MN 55303

Stratigraphy Information

Geological Material	From	To (ft.)	Color	Hardness
SAND & GRAVEL	0	14	TAN	SOFT
GRAVEL	14	40	TAN	MEDIUM
CLAY	40	45	BROWN	HARD
CLAY & GRAVEL	45	130	BROWN	HARD
SHALE & SANDSTONE	130	150	TAN	MEDIUM
SANDSTONE & SHALE	150	211	TAN/BRN	HARD

Remarks

Well Depth 211 ft. **Depth Completed** 211 ft. **Date Well Completed** 08/07/1991

Drill Method Non-specified Rotary **Drill Fluid** Bentonite

Use domestic **Status** Active

Well Hydrofractured? Yes ☐ No ☐ **From** **To**

Casing Type Single casing **Joint** Threaded
Drive Shoe? Yes ☒ No ☐ **Above/Below** 1 ft.

Casing Diameter	Weight	Hole Diameter
4 in. To 151 ft.	11 lbs./ft.	4 in. To 211 ft.

Open Hole From 151 ft. To 211 ft.

Screen? ☐ **Type** **Make**

Static Water Level
33 ft. land surface Measure 08/05/1991

Pumping Level (below land surface)
43 ft. 3 hrs. Pumping at 49 g.p.m.

Wellhead Completion
Pitless adapter manufacturer MONITOR Model 5PS45BS4C1
☐ Casing Protection ☒ 12 in. above grade
☐ At-grade (Environmental Wells and Borings ONLY)

Grouting Information Well Grouted? ☒ Yes ☐ No ☐ Not Specified

Material	Amount	From	To
bentonite		ft.	ft.

Nearest Known Source of Contamination
57 feet West Direction Septic tank/drain field Type
Well disinfected upon completion? ☒ Yes ☐ No

Pump ☐ Not Installed Date Installed 08/07/1991
Manufacturer's name AERMOTOR
Model Number SD 20-75 HP 0.75 Volt 230
Length of drop pipe 60 ft Capacity 18 g.p. Typ Submersible

Abandoned
Does property have any not in use and not sealed well(s)? ☐ Yes ☒ No

Variance
Was a variance granted from the MDH for this well? ☐ Yes ☐ No

Miscellaneous
First Bedrock St.Lawrence-Tunnel City Aquifer Tunnel City
Last Strat Tunnel City Group Depth to Bedrock 130 ft
Located by Minnesota Geological Survey
Locate Method Digitization (Screen) - Map (1:24,000) (15 meters or
System UTM - NAD83, Zone 15, Meters X 461244 Y 5009740
Unique Number Verification Information from Input Date 05/17/2006

Angled Drill Hole

Well Contractor
Hadden Well Co. 02164 HADDEN, M.
Licensee Business Lic. or Reg. No. Name of Driller

Minnesota Unique Well Number

722207

County Anoka
Quad Anoka
Quad ID 120B

MINNESOTA DEPARTMENT OF HEALTH

WELL AND BORING REPORT

Minnesota Statutes Chapter 1031

Entry Date 12/28/2005
Update Date 08/18/2014
Received Date

Well Name	Township	Range	Dir	Section	Subsection
	32	25	W	30	AACBDC

Elevation 860 ft. **Elev. Method** 7.5 minute topographic map (+/- 5 feet)

Address

Well 14750 BOWERS DR NW RAMSEY MN 55303

Stratigraphy Information

Geological Material	From	To (ft.)	Color	Hardness
GRAVEL	0	25	BROWN	SOFT
ROCKS, GRAVEL	25	30	BROWN	MEDIUM
CLAY, GRAVEL, ROCKS	30	111	BROWN	HARD
SHALE, SANDROCK	111	130	GRN/WHT	SOFT
SANDROCK, SHALE	130	200	WHT/GRN	HARD

Remarks

SECTION MAP.

Well Depth 200 ft. **Depth Completed** 200 ft. **Date Well Completed** 06/06/2005

Drill Method Non-specified Rotary **Drill Fluid** Bentonite

Use domestic **Status** Active

Well Hydrofractured? Yes ☐ No ☒ **From** **To**

Casing Type Single casing **Joint** Glued

Drive Shoe? Yes ☐ No ☒ **Above/Below**

Casing Diameter	Weight	Hole Diameter
4 in. To 135 ft.	lbs./ft.	8.5 in. To 135 ft.
		4.5 in. To 200 ft.

Open Hole From 135 ft. To 200 ft.

Screen? ☐ **Type** **Make**

Static Water Level

23 ft. land surface Measure 06/06/2005

Pumping Level (below land surface)

75 ft. 2 hrs. Pumping at 75 g.p.m.

Wellhead Completion

Pitless adapter manufacturer MONITOR Model SNAPPY

☐ Casing Protection ☒ 12 in. above grade

☐ At-grade (Environmental Wells and Borings ONLY)

Grouting Information Well Grouted? ☒ Yes ☐ No ☐ Not Specified

Material	Amount		From	To
neat cement	3	Sacks	105 ft.	135 ft.
high solids bentonite	11	Sacks	ft.	105 ft.

Nearest Known Source of Contamination

36 feet South Direction Type

Well disinfected upon completion? ☒ Yes ☐ No

Pump ☐ Not Installed Date Installed 08/18/2005

Manufacturer's name RED JACKET

Model Number 75F211/12G HP 0.75 Volt 230

Length of drop pipe 60 ft Capacity 15 g.p. Typ Submersible

Abandoned

Does property have any not in use and not sealed well(s)? ☐ Yes ☒ No

Variance

Was a variance granted from the MDH for this well? ☐ Yes ☒ No

Miscellaneous

First Bedrock St.Lawrence-Tunnel City Aquifer Tunnel City

Last Strat Tunnel City Group Depth to Bedrock 111 ft

Located by Minnesota Geological Survey

Locate Method Digitization (Screen) - Map (1:24,000) (15 meters or

System UTM - NAD83, Zone 15, Meters X 461129 Y 5009593

Unique Number Verification Address verification Input Date 07/03/2008

Angled Drill Hole

Well Contractor

Mork Well Co., Inc. 02730 GOODIN, G.

Licensee Business Lic. or Reg. No. Name of Driller

Minnesota Well Index Report **722207**

Printed on 10/13/2020

HE-01205-15

Minnesota Unique Well Number

656104

County Anoka
Quad Anoka
Quad ID 120B

MINNESOTA DEPARTMENT OF HEALTH

WELL AND BORING REPORT

Minnesota Statutes Chapter 1031

Entry Date 08/01/2001
Update Date 07/29/2008
Received Date 03/30/2001

Well Name	Township	Range	Dir	Section	Subsection
HOWIE, JEFF &	32	25	W	30	ACDAAA

Elevation 853 ft. **Elev. Method** 7.5 minute topographic map (+/- 5 feet)

Address

Well 14630 BOWERS DR NW RAMSEY MN 55303

Stratigraphy Information

Geological Material	From	To (ft.)	Color	Hardness
SAND	0	57	BROWN	SOFT
CLAY & GRAVEL	57	67	BROWN	MEDIUM
GRAVEL	67	73	BROWN	SOFT
CLAY & GRAVEL	73	73	BROWN	MEDIUM

Remarks

MISSISSIPPI ACRES LOT 15.
SECTION MAP.

Well Depth 73 ft. **Depth Completed** 73 ft. **Date Well Completed** 03/01/2001

Drill Method Non-specified Rotary **Drill Fluid** Bentonite

Use domestic **Status** Active

Well Hydrofractured? Yes ☐ No ☒ **From** **To**

Casing Type Single casing **Joint**
Drive Shoe? Yes ☐ No ☒ **Above/Below**

Casing Diameter	Weight	Hole Diameter
4 in. To 68 ft.	1.9 lbs./ft.	6.5 in. To 73 ft.

Open Hole From ft. To ft.

Screen? ☒ **Type** stainless **Make** JOHNSON

Diameter	Slot/Gauze	Length	Set	
2 in.	12	5 ft.	68 ft.	73 ft.

Static Water Level

25 ft. land surface Measure 03/01/2001

Pumping Level (below land surface)

68 ft. 2 hrs. Pumping at 20 g.p.m.

Wellhead Completion

Pitless adapter manufacturer MONITOR Model BULLDOG
☐ Casing Protection ☒ 12 in. above grade
☐ At-grade (Environmental Wells and Borings ONLY)

Grouting Information Well Grouted? ☒ Yes ☐ No ☐ Not Specified

Material	Amount	From	To
high solids bentonite	0.17 Cubic yards	0 ft.	30 ft.
cuttings		30 ft.	68 ft.

Nearest Known Source of Contamination

35 feet West Direction Septic tank/drain field Type
Well disinfected upon completion? ☒ Yes ☐ No

Pump ☐ Not Installed Date Installed 03/02/2001
Manufacturer's name AERMOTOR
Model Number T12-50 HP 0.5 Volt 230
Length of drop pipe 50 ft Capacity 10 g.p. Typ Submersible

Abandoned

Does property have any not in use and not sealed well(s)? ☐ Yes ☒ No

Variance

Was a variance granted from the MDH for this well? ☐ Yes ☒ No

Miscellaneous

First Bedrock Aquifer Quat. buried
Last Strat pebbly sand/silt/clay- Depth to Bedrock ft
Located by Minnesota Geological Survey
Locate Method Digitization (Screen) - Map (1:24,000) (15 meters or
System UTM - NAD83, Zone 15, Meters X 461066 Y 5009275
Unique Number Verification Address verification Input Date 07/03/2008

Angled Drill Hole

Well Contractor

McAlpine Bros., Inc. 27270 GOODIN, G.
Licensee Business Lic. or Reg. No. Name of Driller

Minnesota Well Index Report | **656104** | Printed on 10/13/2020 HE-01205-15

Minnesota Unique Well Number

104707

County Anoka
Quad Anoka
Quad ID 120B

MINNESOTA DEPARTMENT OF HEALTH

WELL AND BORING REPORT

Minnesota Statutes Chapter 1031

Entry Date 04/15/1991
Update Date 08/18/2014
Received Date

Well Name	Township	Range	Dir	Section	Subsection
MENTH, TOM &	32	25	W	29	CCBBBC

Elevation 863 ft. **Elev. Method** 7.5 minute topographic map (+/- 5 feet)

Address

Well 14370 BOWERS DR NW RAMSEY MN 55303

Stratigraphy Information

Geological Material	From	To (ft.)	Color	Hardness
CLAY	0	7	BROWN	MEDIUM
CLAY	7	9	LT. GRY	MEDIUM
SAND & GRAVEL	9	53	BROWN	SOFT
FINE SAND	53	68	BROWN	SOFT
SANDY CLAY	68	79	RED/BRN	MEDIUM
CLAY & GRAVEL	79	126	BROWN	HARD
CLAY & GRAVEL	126	132	BROWN	MEDIUM
CLAY	132	136	BROWN	MEDIUM
CLAY & GRAVEL	136	160	BROWN	MEDIUM
HARDPAN & SHALE	160	190	GRAY	HARD
SANDROCK	190	225	WHT/GRY	M.HARD

Remarks

SOUTH 0.5 SECT.

Well Depth 225 ft. **Depth Completed** 225 ft. **Date Well Completed** 03/03/1975

Drill Method Non-specified Rotary **Drill Fluid**

Use domestic **Status** Active

Well Hydrofractured? Yes ☐ No ☐ **From** **To**

Casing Type Single casing **Joint** Threaded
Drive Shoe? Yes ☒ No ☐ **Above/Below** 1 ft.

Casing Diameter		Weight		Hole Diameter	
4 in. To 194 ft.		11 lbs./ft.		4 in. To 225 ft.	

Open Hole From 194 ft. To 225 ft.

Screen? ☐ **Type** **Make**

Static Water Level

26 ft. land surface Measure 03/03/1975

Pumping Level (below land surface)

45 ft. hrs. Pumping at 30 g.p.m.

Wellhead Completion

Pitless adapter manufacturer Model

☐ Casing Protection ☐ 12 in. above grade
☐ At-grade (Environmental Wells and Borings ONLY)

Grouting Information Well Grouted? ☒ Yes ☐ No ☐ Not Specified

Material	Amount	From	To
bentonite		0 ft.	194 ft.

Nearest Known Source of Contamination

50 feet South Direction Septic tank/drain field Type

Well disinfected upon completion? ☒ Yes ☐ No

Pump ☐ Not Installed Date Installed 04/16/1975

Manufacturer's name FLINT & WALLING

Model Number 5BA8 HP 0 Volt

Length of drop pipe 51 ft Capacity 10 g.p. Typ Submersible

Abandoned

Does property have any not in use and not sealed well(s)? ☐ Yes ☐ No

Variance

Was a variance granted from the MDH for this well? ☐ Yes ☐ No

Miscellaneous

First Bedrock Tunnel City Group Aquifer Tunnel City

Last Strat Tunnel City Group Depth to Bedrock 160 ft

Located by Minnesota Geological Survey

Locate Method Digitization (Screen) - Map (1:24,000) (15 meters or

System UTM - NAD83, Zone 15, Meters X 461570 Y 5008682

Unique Number Verification Other, note in Input Date 06/02/2000

Angled Drill Hole

Well Contractor

Licensee Business	Lic. or Reg. No.	Name of Driller
Ruppert & Son	27086	CLARK, F.

Minnesota Unique Well Number

454349

County Anoka
Quad Anoka
Quad ID 120B

MINNESOTA DEPARTMENT OF HEALTH

WELL AND BORING REPORT

Minnesota Statutes Chapter 1031

Entry Date 10/22/1992
Update Date 09/21/2016
Received Date

Well Name	Township	Range	Dir	Section	Subsection
	32	25	W	30	ACDD

Elevation 850 ft. **Elev. Method** LiDAR 1m DEM (MNDNR)

Address

Well 14590 BOWER DR NW RAMSEY 55303

Stratigraphy Information

Geological Material	From	To (ft.)	Color	Hardness
SAND	0	35	BROWN	SOFT
CLAY	35	75	BROWN	SOFT
SAND	75	92	BROWN	SOFT

Remarks

SECTION MAP.
NEW BAKER SNAPPY PITLESS 9-13-2016.

Well Depth 92 ft. **Depth Completed** 92 ft. **Date Well Completed** 07/12/1989

Drill Method Non-specified Rotary **Drill Fluid** Additive (+ Bentonite)

Use domestic **Status** Active

Well Hydrofractured? Yes ☐ No ☐ **From** **To**

Casing Type Single casing **Joint** Threaded
Drive Shoe? Yes ☐ No ☒ **Above/Below** 1 ft.

Casing Diameter	Weight	Hole Diameter
4 in. To 87 ft.	11 lbs./ft.	6.2 in. To 92 ft.

Open Hole From ft. To ft.

Screen? ☒ **Type** stainless **Make** COOK

Diameter	Slot/Gauze	Length	Set	
2 in.	15	7 ft.	87 ft.	92 ft.

Static Water Level

30 ft. land surface Measure 07/12/1989

Pumping Level (below land surface)

ft. hrs. Pumping at 20 g.p.m.

Wellhead Completion

Pitless adapter manufacturer BAKER Model SNAPPY
☐ Casing Protection ☒ 12 in. above grade
☐ At-grade (Environmental Wells and Borings ONLY)

Grouting Information Well Grouted? ☒ Yes ☐ No ☐ Not Specified

Material	Amount	From	To
bentonite		ft.	ft.

Nearest Known Source of Contamination

50 feet South Direction Septic tank/drain field Type
Well disinfected upon completion? ☒ Yes ☐ No

Pump ☐ Not Installed Date Installed 09/13/2016
Manufacturer's name GRUNDFOS
Model Number SQ05-160 HP 0.5 Volt 230
Length of drop pipe 60 ft Capacity 12 g.p. Typ Submersible

Abandoned

Does property have any not in use and not sealed well(s)? ☐ Yes ☒ No

Variance

Was a variance granted from the MDH for this well? ☐ Yes ☐ No

Miscellaneous

First Bedrock Aquifer Quat. buried
Last Strat sand-brown Depth to Bedrock ft
Located by Minnesota Geological Survey
Locate Method Digitization (Screen) - Map (1:24,000) (15 meters or
System UTM - NAD83, Zone 15, Meters X 461107 Y 5009235
Unique Number Verification Info/GPS from data Input Date 07/03/2008

Angled Drill Hole

Well Contractor

Bill's Well Co. 33087 JAPP, P.
Licensee Business Lic. or Reg. No. Name of Driller

Minnesota Unique Well Number

768697

County Anoka
Quad Anoka
Quad ID 120B

MINNESOTA DEPARTMENT OF HEALTH

WELL AND BORING REPORT

Minnesota Statutes Chapter 1031

Entry Date 10/09/2009
Update Date 08/18/2014
Received Date 09/08/2009

Well Name	Township	Range	Dir	Section	Subsection
OLSON, BRYAN	32	25	W	30	DAAABC

Elevation 867 ft. **Elev. Method** 7.5 minute topographic map (+/- 5 feet)

Address

C/W 14513 BOWERS DR NW RAMSEY MN 55303

Stratigraphy Information

Geological Material	From	To (ft.)	Color	Hardness
BLACK DIRT	0	6	BLACK	SOFT
SANDY CLAY	6	38	BROWN	SOFT
ROCKS/CLAY/GRAVEL	38	128	GRAY	MEDIUM
CLAY/GRAVEL	128	130	GRAY	MEDIUM
GRAVEL/SHALE	130	138	BRN/GRY	MEDIUM
SANDSTONE/SHALE	138	185	TAN/GRY	HARD

Remarks

REPLACEMENT WELL.
NAMES OF DRILLER: LUCAS PRAUGHT AND ED RENNER

Well Depth 185 ft. **Depth Completed** 185 ft. **Date Well Completed** 07/10/2009

Drill Method Non-specified Rotary **Drill Fluid** Bentonite

Use domestic **Status** Active

Well Hydrofractured? Yes ☐ No ☐ **From** **To**

Casing Type Single casing **Joint** Threaded
Drive Shoe? Yes ☒ No ☐ **Above/Below**

Casing Diameter	Weight	Hole Diameter
4 in. To 145 ft.	10.7 lbs./ft.	9 in. To 30 ft.
		7 in. To 143 ft.
		4 in. To 185 ft.

Open Hole From 143 ft. To 185 ft.

Screen? ☐ **Type** **Make**

Static Water Level
21 ft. top of casing Measure 07/14/2009

Pumping Level (below land surface)
ft. 5 hrs. Pumping at 20 g.p.m.

Wellhead Completion
Pitless adapter manufacturer BAKER Model SNAPPY
☐ Casing Protection ☒ 12 in. above grade
☐ At-grade (Environmental Wells and Borings ONLY)

Grouting Information Well Grouted? ☒ Yes ☐ No ☐ Not Specified

Material	Amount	From	To
bentonite	5 Sacks	0 ft.	50 ft.

Nearest Known Source of Contamination
50 feet North Direction Septic tank/drain field Type
Well disinfected upon completion? ☒ Yes ☐ No

Pump ☐ Not Installed Date Installed 07/16/2009
Manufacturer's name GRUNDFOS
Model Number 16S10-10 HP 1 Volt 23
Length of drop pipe 63 ft Capacity 16 g.p. Typ Submersible

Abandoned
Does property have any not in use and not sealed well(s)? ☐ Yes ☒ No

Variance
Was a variance granted from the MDH for this well? ☐ Yes ☒ No

Miscellaneous
First Bedrock St.Lawrence-Tunnel City Aquifer St.Lawrence-
Last Strat St.Lawrence-Tunnel City Depth to Bedrock 130 ft
Located by Minnesota Geological Survey
Locate Method Digitization (Screen) - Map (1:24,000) (15 meters or
System UTM - NAD83, Zone 15, Meters X 461390 Y 5009037
Unique Number Verification Address verification Input Date 01/04/2010

Angled Drill Hole

Well Contractor

Licensee Business	Lic. or Reg. No.	Name of Driller
EH Renner and Sons, Inc.	1431	SEE REMARKS

Minnesota Unique Well Number

680275

County Anoka
Quad Anoka
Quad ID 120B

MINNESOTA DEPARTMENT OF HEALTH

WELL AND BORING REPORT

Minnesota Statutes Chapter 1031

Entry Date 03/27/2003
Update Date 08/18/2014
Received Date

Well Name	Township	Range	Dir	Section	Subsection
	32	25	W	30	ADBABB

Elevation 853 ft. **Elev. Method** 7.5 minute topographic map (+/- 5 feet)

Address

Well 14713 BOWERS DR NW RAMSEY MN 55303

Stratigraphy Information

Geological Material	From	To (ft.)	Color	Hardness
SAND	0	18	BROWN	SOFT
ROCKY CLAY FIRM	18	35	RED	
ROCKY SAND GRAVEL	35	55	BROWN	SOFT
ROCKY CLAY FIRM	55	105	BROWN	
ROCKY SAND	105	125	BROWN	SOFT
SANDSTONE SHALE	125	186	TAN/BLU	

Remarks

SECTION MAP.

Well Depth 186 ft. **Depth Completed** 186 ft. **Date Well Completed** 02/24/2003

Drill Method Non-specified Rotary **Drill Fluid** Bentonite

Use domestic **Status** Active

Well Hydrofractured? Yes ☐ No ☒ **From** **To**

Casing Type Single casing **Joint**

Drive Shoe? Yes ☐ No ☒ **Above/Below**

Casing Diameter	Weight	Hole Diameter
4 in. To 149 ft.	lbs./ft.	8 in. To 145 ft.
		4 in. To 186 ft.

Open Hole From 149 ft. To 186 ft.

Screen? ☐ **Type** **Make**

Static Water Level

30 ft. land surface Measure 02/19/2003

Pumping Level (below land surface)

70 ft. 1 hrs. Pumping at 40 g.p.m.

Wellhead Completion

Pitless adapter manufacturer MONITOR Model SNAPPY

☐ Casing Protection ☒ 12 in. above grade

☐ At-grade (Environmental Wells and Borings ONLY)

Grouting Information Well Grouted? ☒ Yes ☐ No ☐ Not Specified

Material	Amount		From	To
high solids bentonite	2	Sacks	0 ft.	30 ft.
cuttings			30 ft.	125 ft.
neat cement	4	Sacks	125 ft.	145 ft.

Nearest Known Source of Contamination

60 feet Northwes Direction Sewer Type

Well disinfected upon completion? ☒ Yes ☐ No

Pump ☐ Not Installed Date Installed 02/24/2003

Manufacturer's name AERMOTOR

Model Number T12-50 HP 0.5 Volt 230

Length of drop pipe 60 ft Capacity 12 g.p. Typ Submersible

Abandoned

Does property have any not in use and not sealed well(s)? ☐ Yes ☒ No

Variance

Was a variance granted from the MDH for this well? ☐ Yes ☒ No

Miscellaneous

First Bedrock Tunnel City Group Aquifer Tunnel City

Last Strat Tunnel City Group Depth to Bedrock 125 ft

Located by Minnesota Geological Survey

Locate Method Digitization (Screen) - Map (1:24,000) (15 meters or

System UTM - NAD83, Zone 15, Meters X 461197 Y 5009455

Unique Number Verification Address verification Input Date 07/03/2008

Angled Drill Hole

Well Contractor

Praught M. Well Co. 86576 PRAUGHT, S.

Licensee Business Lic. or Reg. No. Name of Driller

Minnesota Unique Well Number

490097

County Anoka
Quad Anoka
Quad ID 120B

MINNESOTA DEPARTMENT OF HEALTH

WELL AND BORING REPORT

Minnesota Statutes Chapter 1031

Entry Date 06/16/1992
Update Date 08/18/2014
Received Date 11/26/1991

Well Name	Township	Range	Dir	Section	Subsection
DEHEN, JOHN	32	25	W	30	AACBAD

Elevation 866 ft. **Elev. Method** 7.5 minute topographic map (+/- 5 feet)

Address

Well 14806 BOWERS DR NW RAMSEY MN 55303

Stratigraphy Information

Geological Material	From	To (ft.)	Color	Hardness
SAND & GRAVEL	0	34	BROWN	SOFT
SANDY CLAY & ROCKS	34	81	BROWN	HARD
CLAY & GRAVEL FIRM	81	121	RED	
ST. LAWRENCE S.S.	121	171	GREEN	
FRANCONIA S.S.	171	190	RED	SOFT
FRANCONIA S.S.	190	250	GRN/RED	

Remarks

SECTION MAP.

Well Depth	Depth Completed	Date Well Completed
250 ft.	250 ft.	11/11/1991

Drill Method Non-specified Rotary **Drill Fluid** Bentonite

Use domestic **Status** Active

Well Hydrofractured? Yes ☐ No ☐ **From** **To**

Casing Type Single casing **Joint** Threaded
Drive Shoe? Yes ☐ No ☐ **Above/Below** 1 ft.

Casing Diameter	Weight	Hole Diameter
4 in. To 201 ft.	10.7 lbs./ft.	8.7 in. To 201 ft.
		4 in. To 250 ft.

Open Hole From 201 ft. To 250 ft.

Screen? ☐ **Type** **Make**

Static Water Level

22 ft. land surface Measure 11/16/1991

Pumping Level (below land surface)

32 ft. 3 hrs. Pumping at 40 g.p.m.

Wellhead Completion

Pitless adapter manufacturer BAKER Model STANDARD

☐ Casing Protection ☒ 12 in. above grade
☐ At-grade (Environmental Wells and Borings ONLY)

Grouting Information Well Grouted? ☒ Yes ☐ No ☐ Not Specified

Material	Amount	From	To
neat cement		100 ft.	201 ft.
bentonite		ft.	ft.

Nearest Known Source of Contamination

160 feet Northwes Direction Septic tank/drain field Type

Well disinfected upon completion? ☐ Yes ☐ No

Pump ☐ Not Installed Date Installed 11/16/1991

Manufacturer's name GRUNDFOS

Model Number 16S07-8 HP 0.75 Volt 230

Length of drop pipe 42 ft Capacity 16 g.p. Typ Submersible

Abandoned

Does property have any not in use and not sealed well(s)? ☐ Yes ☒ No

Variance

Was a variance granted from the MDH for this well? ☐ Yes ☐ No

Miscellaneous

First Bedrock St.Lawrence-Tunnel City Aquifer Tunnel City

Last Strat Tunnel City Group Depth to Bedrock 121 ft

Located by Minnesota Geological Survey

Locate Method Digitization (Screen) - Map (1:24,000) (15 meters or

System UTM - NAD83, Zone 15, Meters X 461154 Y 5009617

Unique Number Verification Address verification Input Date 07/03/2008

Angled Drill Hole

Well Contractor

Renner E.H. Well 71015 SCHAFER, R.

Licensee Business Lic. or Reg. No. Name of Driller

Minnesota Unique Well Number

146160

County Anoka
Quad Anoka
Quad ID 120B

MINNESOTA DEPARTMENT OF HEALTH

WELL AND BORING REPORT

Minnesota Statutes Chapter 1031

Entry Date 04/15/1991
Update Date 02/14/2014
Received Date

Well Name	Township	Range	Dir	Section	Subsection
	32	25	W	29	CCBBBB

Elevation 863 ft. **Elev. Method** 7.5 minute topographic map (+/- 5 feet)

Address

Well 14390 BOWERS DR NW RAMSEY MN 55303

Stratigraphy Information

Geological Material	From	To (ft.)	Color	Hardness
SAND-GRAVEL	0	50	BROWN	SOFT
CLAY-ROCK	50	140	BROWN	HARD
COARSE GRAVEL	140	156	BLACK	MEDIUM

Remarks

SOUTH 0.5 SECT.

Well Depth 156 ft. **Depth Completed** 156 ft. **Date Well Completed** 11/07/1977

Drill Method Non-specified Rotary **Drill Fluid**

Use domestic **Status** Active

Well Hydrofractured? Yes ☐ No ☐ **From** **To**

Casing Type Single casing **Joint** Threaded

Drive Shoe? Yes ☒ No ☐ **Above/Below** 1 ft.

Casing Diameter		Weight		Hole Diameter	
4 in. To	151 ft.	12 lbs./ft.		6 in. To	151 ft.

Open Hole From ft. To ft.

Screen? ☒ **Type** stainless **Make** JOHNSON

Diameter	Slot/Gauze	Length	Set	
2 in.	18	5 ft.	151 ft.	150 ft.

Static Water Level

20 ft. land surface Measure 11/03/1977

Pumping Level (below land surface)

20 ft. 2 hrs. Pumping at 20 g.p.m.

Wellhead Completion

Pitless adapter manufacturer Model

☐ Casing Protection ☐ 12 in. above grade
☐ At-grade (Environmental Wells and Borings ONLY)

Grouting Information Well Grouted? ☒ Yes ☐ No ☐ Not Specified

Material	Amount	From	To
bentonite		0 ft.	151 ft.

Nearest Known Source of Contamination

50 feet Direction Septic tank/drain field Type

Well disinfected upon completion? ☒ Yes ☐ No

Pump ☐ Not Installed Date Installed 11/04/1977

Manufacturer's name AERMOTOR

Model Number SD1250 HP 0.5 Volt 230

Length of drop pipe 42 ft Capacity 20 g.p. Typ Submersible

Abandoned

Does property have any not in use and not sealed well(s)? ☐ Yes ☐ No

Variance

Was a variance granted from the MDH for this well? ☐ Yes ☐ No

Miscellaneous

First Bedrock Aquifer Quat. buried

Last Strat gravel (+larger)-black Depth to Bedrock ft

Located by Minnesota Geological Survey

Locate Method Digitization (Screen) - Map (1:24,000) (15 meters or

System UTM - NAD83, Zone 15, Meters X 461546 Y 5008707

Unique Number Verification Address verification Input Date 06/02/2000

Angled Drill Hole

Well Contractor

Mc Alpine's Well Co.	27186	MCALPINE, G.
Licensee Business	Lic. or Reg. No.	Name of Driller

Appendix D

Phase I Environmental Site Assessment Conclusions and Summary

Riverstone South EAW

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PHASE I ENVIRONMENTAL SITE ASSESSMENT

Riverstone South/Pearson Properties
Ramsey, Minnesota

Project # 8494-00

Prepared for:

Capstone Homes, Inc.
14015 Sunfish Lake Boulevard NW #400
Ramsey, Minnesota 55303

August 12, 2020

CARLSON McCAIN

3890 PHEASANT RIDGE DRIVE NE, SUITE 100
BLAINE, MN 55449

TEL 763.489.7900
FAX 763.489.7959

CARLSONMCAIN.COM

ENGINEERING \ LAND SURVEYING \ ENVIRONMENTAL

CONCLUSIONS

At the request of Mr. Tom Bakritges with Capstone Homes, Inc., Carlson McCain, Inc. (Carlson McCain) has performed a Phase I Environmental Site Assessment (ESA) in general conformance with the scope and limitations of American Society for Testing and Materials (ASTM) Standard Practice E 1527-13 for the Riverstone South/Pearson Properties, which includes portions of parcel identification numbers (PIN) 29-32-25-23-0004 and 29-32-25-22-0003, located southeast of the intersection of US Highway 10 and Bowers Drive Northwest in the City of Ramsey, Minnesota. Any exceptions to, or deletions from this practice are described in Section 9.0 of this report.

This Assessment has revealed no evidence of "recognized environmental conditions" (RECs) in connection with the Property.

Historical recognized environmental conditions (HRECs) are defined by ASTM as a past release of any hazardous substances or petroleum products that has occurred in connection with the Property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the Property to any required controls.

- There were no HRECs identified during the course of this assessment.

Controlled recognized environmental condition (CRECs) are defined by ASTM as a REC resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority.

- There were no CRECs identified during the course of this assessment.

PROJECT SUMMARY

This section of the report identifies known or suspected RECs, Controlled RECs, Historical RECs, and de minimis conditions. In addition, the table states the opinion of the environmental professional regarding the potential impact on the Property of conditions identified in the findings section.

Report Section		NFA	REC	CREC	HREC	Opinion
5.2.1	Standard Environmental Record Sources for the Subject Property	✔				No listings identified for the Property.
5.2.2	Standard Environmental Record Sources for Surrounding Sites	✔				None of the surrounding sites appear to be a REC for the Property due to site closure, their hydraulically

Report Section		NFA	REC	CREC	HREC	Opinion
						down-gradient position with respect to the Property, or their considerable distance away.
5.2.3	MPCA Institutional Controls	✔				The Property is not included on this list, which is current up to January 2018 (Appendix D).
5.3	File Review	✔				Local files did not identify any RECs for the Property.
6.0	HISTORICAL USE INFORMATION	✔				Cultivated agricultural land generally involves the application of pesticides and herbicides, some of which can be persistent in the environment. No evidence of bulk storage or improper application was identified. If properly applied, the use of these chemicals would not likely result in enforcement action if brought to the attention of a regulatory agency; therefore, this is not considered to be a REC.
7.0	SITE RECONNAISSANCE	✔				Site reconnaissance did not identify any RECs for the Property.
8.0	INTERVIEWS	✔				The fire department identified two aboveground storage tanks (ASTs) at the primary residence which is adjacent to the Property and is not considered a REC. Interviews did not identify any RECs for the Property.
10.0	DATA GAPS	✔				None identified.

1.0 SUMMARY

Carlson McCain has performed a Phase I ESA in general accordance with the scope of work and limitations of ASTM Standard Practice E1527-13, the U.S. Environmental Protection Agency (EPA) Standards and Practices for All Appropriate Inquiries (AAI) (40 CFR Part 312) for the Riverstone South/Pearson Properties which includes parcel identification (Parcel ID) numbers 29-32-25-23-0004 and 29-32-25-22-0003 (the "Property"). The Property is located south and east of 8846 Highway 10 Northwest in Ramsey, Anoka County, Minnesota. The Phase I ESA is designed to provide an assessment concerning environmental conditions (limited to those issues identified in the report) as they exist at the Property.

1.1 Property Description

The Property is located southeast of the intersection of U.S. Highway 10 and Bowers Drive Northwest within a mostly residential and agricultural area of Ramsey, Minnesota. The table below provides further information regarding the Property:

Address:	Riverstone South/Pearson Properties which includes parcel identification (Parcel ID) numbers 29-32-25-23-0004 and 29-32-25-22-0003, Ramsey, Anoka County, Minnesota 55303
Assessor's Parcel Number (APN):	29-32-25-23-0004, 29-32-25-22-0003
Site Zoning Classification:	Residential
Number of Buildings:	No buildings.
Construction Details:	Not applicable.
Land Acreage (Ac):	~75 Acres
Date of Construction:	Not applicable.
Current Owner/Current Use:	Pearson Properties of Ramsey LLC
Historical Property Uses:	Agricultural, Undeveloped.
Surrounding Property Characteristics:	Agricultural, Residential.
Assumed Groundwater Flow Direction and Depth:	Flow is assumed to be to the south-southeast, 0 to 10 feet below ground surface (bgs)

5.2.2 Standard Environmental Record Sources for Surrounding Sites

The following table(s) are a summary of select sites located in close proximity with an elevated risk for impacting the Property within the specified search radii for the databases searched that were determined to be located adjacent to, in an expected hydraulically up-gradient direction from the Property or likely to lead to contamination of the Property. There were numerous other surrounding sites in the database report that were reviewed and the details for those sites can be found in the database report included in Appendix B.

Facility Name:	Dave Nathe Farm
Address:	14750 Bowers Drive, Ramsey, Minnesota 55303
Distance (feet) & Direction:	422 feet west
Hydrologic Position to the Property:	Side-gradient
Databases Listed:	LUAST, LUAST2016, WIMN
Comments:	Leak ID# 6487 listed as closed on 04/24/1996 and reported on 06/30/1993. Contaminated soils remaining are listed as unknown, offsite contamination is listed as unknown, groundwater contamination is listed as not reported and product released is listed as diesel.
Opinion:	This site is not considered a REC due to it's considerable distance away and in a hydraulically side-gradient position in relation to the Property.

It should be noted that this is a limited file search and does not include a complete review of all records and reports. However, the database report does contain a comprehensive listing of most sites that are known to be or are suspected to have environmental concerns. For this Phase I ESA, the database file search appeared to provide sufficient and current information on potential or reported environmental impacts at or near the Property. A detailed map and description of the facilities identified in the State and Federal databases are included in Appendix B.

*Links to description of codes can be found in the References Section 12.0 and described in the database report. Waste codes of F001, F002, D039 and D040 are associated with chlorinated solvents.

5.2.3 MPCA Institutional Controls

A list of sites in Minnesota that contain Institutional Controls was obtained from the MPCA. The Property is not included on this list, which is current up to January 2018 (Appendix D).

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Appendix E

Tree Survey Memorandum

Riverstone South EAW

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KJOLHAUG ENVIRONMENTAL SERVICES COMPANY

Providing Sound, Balanced, Comprehensive Natural Resource Solutions

Memorandum

Date: May 7, 2020

To: Tom Bakritges – Capstone Homes

From: Kyle Uhler – Kjolhaug Environmental Services Company
Mark Kjolhaug – Kjolhaug Environmental Services Company

For: Riverstone South Development Tree Survey Ramsey, MN

Riverstone South Development is located at 8846 Highway 10 NW Ramsey, MN (**Figure 1**) More specifically the project area contained PIDs: 30-32-25-11-0031, 30-32-25-11-0032, 29-32-25-22-0003, and 29-32-25-23-0004. The site covered approximately 110 acres and consisted of roughly 27 acres of woodland. The purpose of the Riverstone South tree survey was to inventory all significant trees on site. The Ramsey, MN Municipal Code of Ordinances Sec. 117-327 (C)(2) defines *Significant Trees:*

a. All species of oak that have a DBH of four inches or greater;
b. All evergreen species that have a DBH of four inches or greater; and
c. All other trees that have a DBH of eight inches or more;

This inventory defined the sites resource composition including species, diameter at breast height (DBH or 4.5' from the ground), and health condition. All trees on site were assessed and only significant trees were given a unique tag number and recorded. A list of identified significant trees and associated attributes is included in **Appendix A**. The sampled trees were located with a Trimble® R1 GNSS Receiver utilizing real-time differential corrections to obtain sub-meter accuracies.

Tree Inventory Results

Kjolhaug Environmental Services inventoried all significant trees at the Riverstone South Development site in Ramsey, MN April 13th through the 16th, 2020. The survey inventoried 2,305 significant trees within the project boundaries. The tagged tree locations are included in **Figure 2A-2E**. This inventory recorded 28 different species. Elm and oak trees combined account for 71.9% for all significant trees on site. Three species of elm trees were identified (*Ulmus Americana*, *Ulmus pumila*, and *Ulmus rubra*). The overlapping presentation between different species vegetative structures present reduced identification confidence to Genus level identification therefore all elm species sampled were combined into Ulmus spp. group. Hackberry trees were subdominant to elm and oak accounting for 12.4% of trees. All other tree

species totaled 15.7% of individuals sampled. The average DBH across all trees sampled was 14" with measurements ranging from 4"- 52". **Table 1** shows the observed tree species in order of prevalence by DBH class.

Table 1. Observed tree species in order of prevalence by DBH class (in) at Riverstone South site.

Species	4-8	8-12	12-18	18-24	24-30	30-36	36-42	>42	Total	% Total
Elm spp.	N/A	578	219	41	12	3	2	-	855	37.1
Bur oak	12	120	285	173	79	34	16	8	727	31.5
Hackberry	N/A	152	81	37	9	5	1	-	285	12.4
Boxelder	N/A	75	34	10	4	6	1	1	131	5.7
White oak	4	19	32	14	5	1	-	-	75	3.3
Green ash	N/A	29	14	8	1	-	1	-	53	2.3
Ironwood	N/A	22	14	2	-	-	-	-	38	1.6
White cedar	20	7	2	-	-	1	-	-	30	1.3
Eastern red cedar	11	9	4	1	-	-	-	-	25	1.1
Black cherry	N/A	15	5	2	1	-	-	-	23	1
American basswood	N/A	10	3	1	2	-	-	-	16	0.69
Sugar maple	N/A	5	2	2	-	-	-	-	9	0.39
Norway spruce	-	1	3	2	-	-	-	-	6	0.26
Scots pine	-	3	3	-	-	-	-	-	6	0.26
Apple spp.	N/A	1	3	1	-	-	-	-	5	0.22
Colorado spruce	-	1	4	-	-	-	-	-	5	0.22
Northern catalpa	N/A	3	-	-	-	-	-	-	3	0.13
Red oak	-	2	-	1	-	-	-	-	3	0.13
Black walnut	N/A	1	1	-	-	-	-	-	2	0.08
Plains cottonwood*	N/A	-	-	-	-	-	-	2	2	0.08
Balsam fir		-	1	-	-	-	-	-	1	0.04
Red maple	N/A	-	1	-	-	-	-	-	1	0.04
Honey locust	N/A	1	-	-	-	-	-	-	1	0.04
White spruce	-	-	1	-	-	-	-	-	1	0.04
Red pine	-	-	1	-	-	-	-	-	1	0.04
White swamp oak	-	-	1	-	-	-	-	-	1	0.04
Total	47	1054	714	295	113	50	21	11	**2305**	100

*Largest DBH recorded was a Plains Cottonwood at 52"

DBH was mapped by density for the three most prevalent trees species (elm spp., bur oak, and hackberry) and is included in **Figure 3A-3C**. Although elm trees accounted for the greatest number of individuals sampled on site bur oaks accounted for ~50% of the total basal area. A list of observed species by total basal area is included in **Appendix B**.

Trees were overall healthy with approximately 94% of trees sampled had a health scored greater or equal to 75% or "Good" condition. **Table 2** below shows tree health condition of the three most common species.

Table 2 Health conditions for Elm spp., Bur Oak, and Hackberry trees at Riverstone South

Health Condition (%)	**Dead/Dying 0-25**	**Poor 25-50**	**Fair 50-75**	**Good 75-100**
Elm spp.	8	8	19	820
Bur Oak	8	10	38	671
Hackberry	0	1	1	283
Percent of Total	0.9	1	3.1	95

Health condition was mapped by density of "Good" specimens for all significant trees located and is included in **Figure 4**.

Conclusion

The Riverstone South tree survey inventoried 2,305 trees on site. Oaks trees accounted for approximately half of the basal area on site.

Thank You

Riverstone South

Tree Survey

FIGURES

1. Site Location
2. Tree Location
3. Tree Density
4. Healthy Tree Density

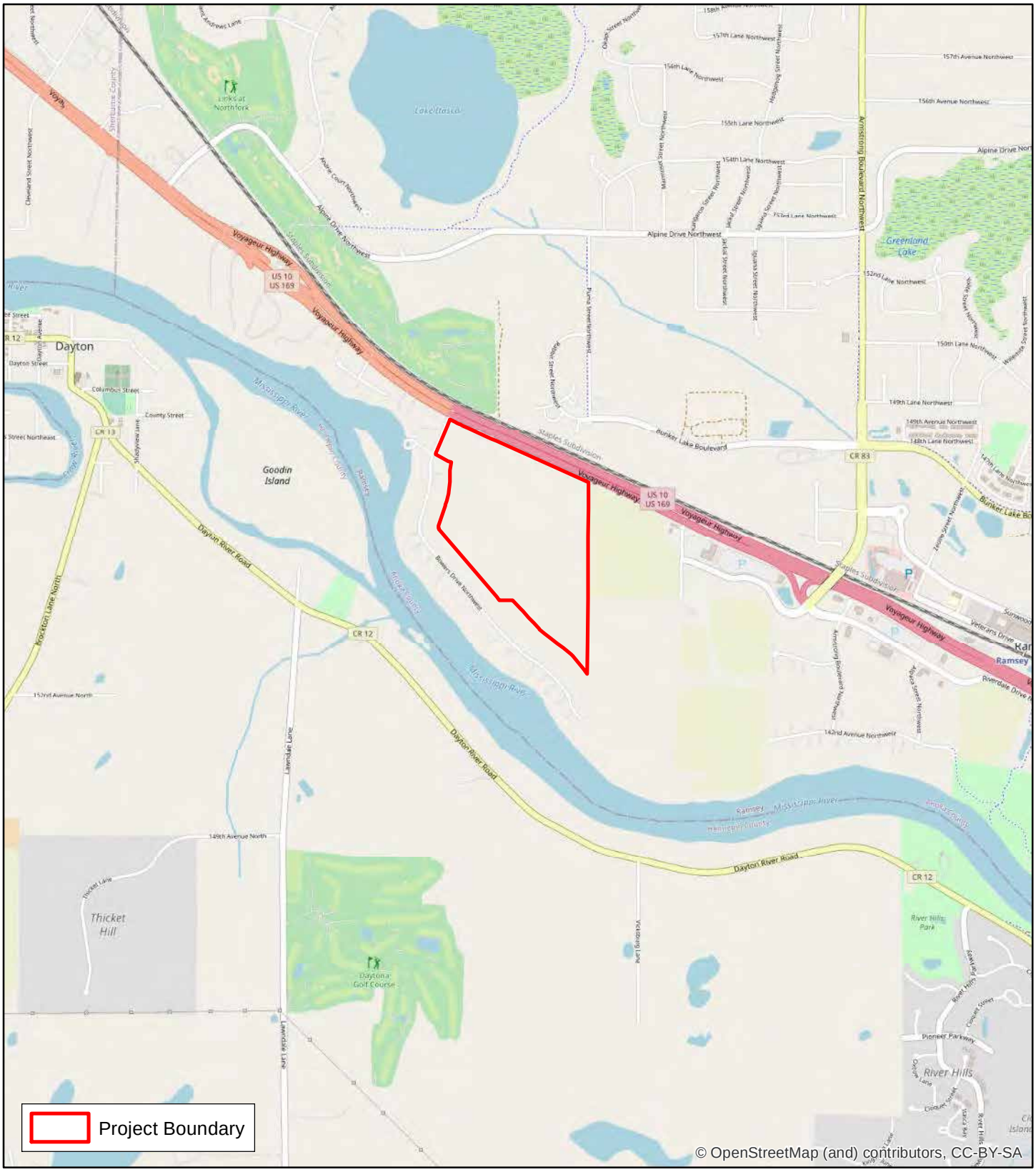

Figure 1 - Site Location

N

0 2,000 Feet

KJOLHAUG ENVIRONMENTAL SERVICES COMPANY

Source: ESRI Open Street Map

Riverstone South Tree Survey (KES 2020-017)
Ramsey, Minnesota

Note: Boundaries indicated on this figure are approximate and do not constitute an official survey product.

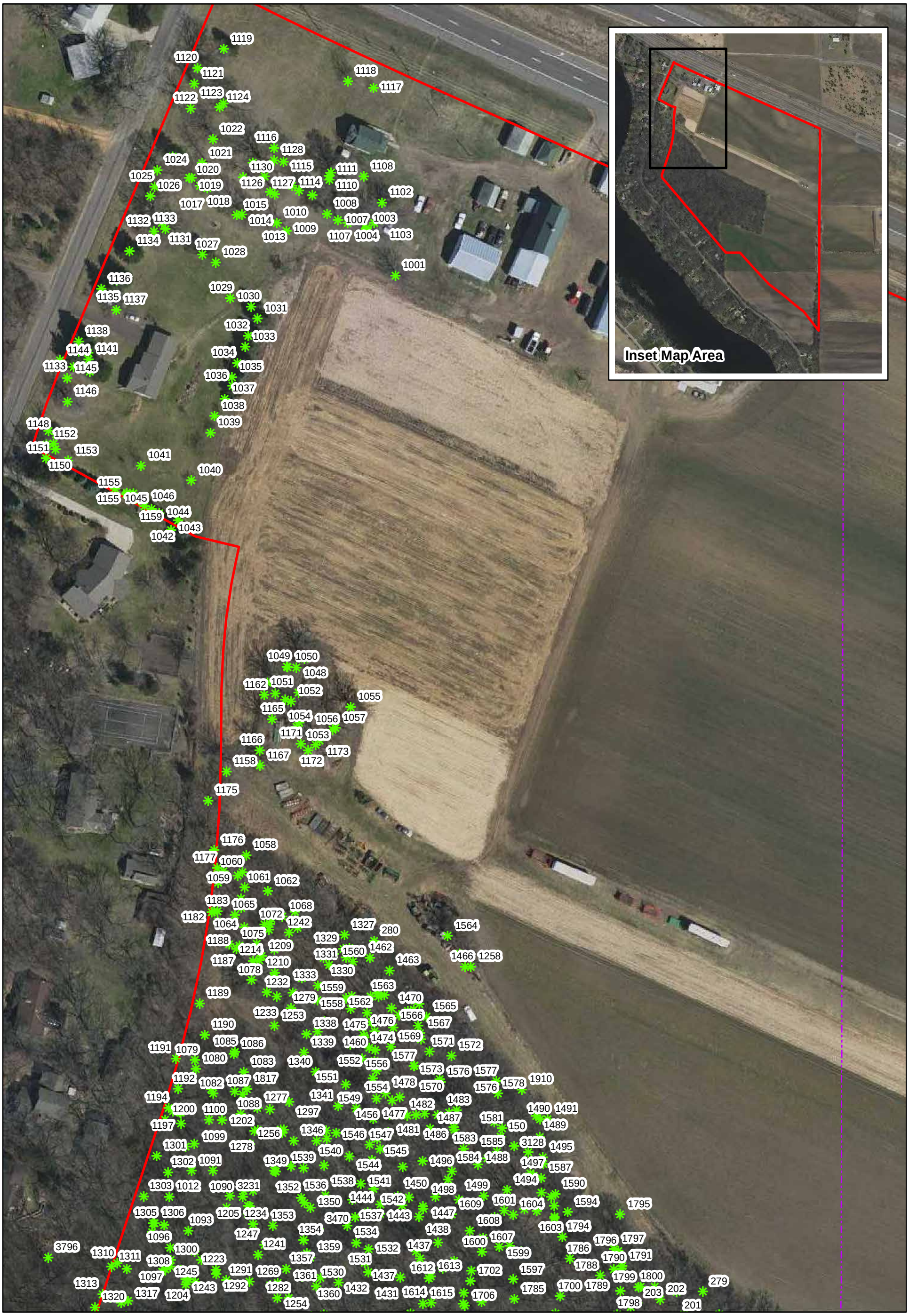

Figure 2A - Tree Location (2016 MnGeo Imagery)

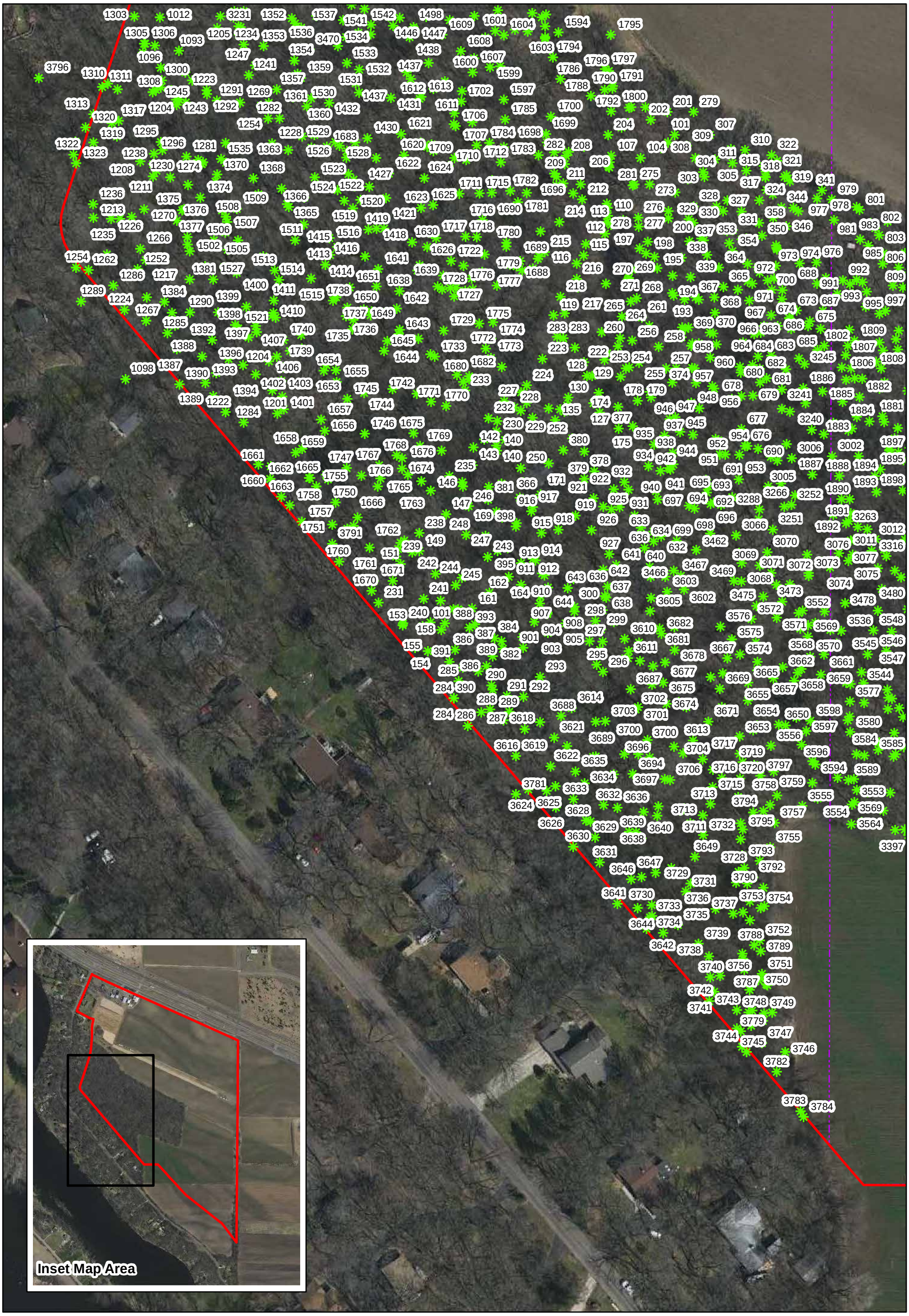

Figure 2B - Tree Location (2016 MnGeo Imagery)

N

0 100 Feet

Source: MNGEO Spatial Commons

Tree location

Project Boundary

Mississippi Critical Area

Riverstone South Tree Survey (KES 2020-017)
Ramsey, Minnesota

Note: Boundaries indicated on this figure are approximate and do not constitute an official survey product.

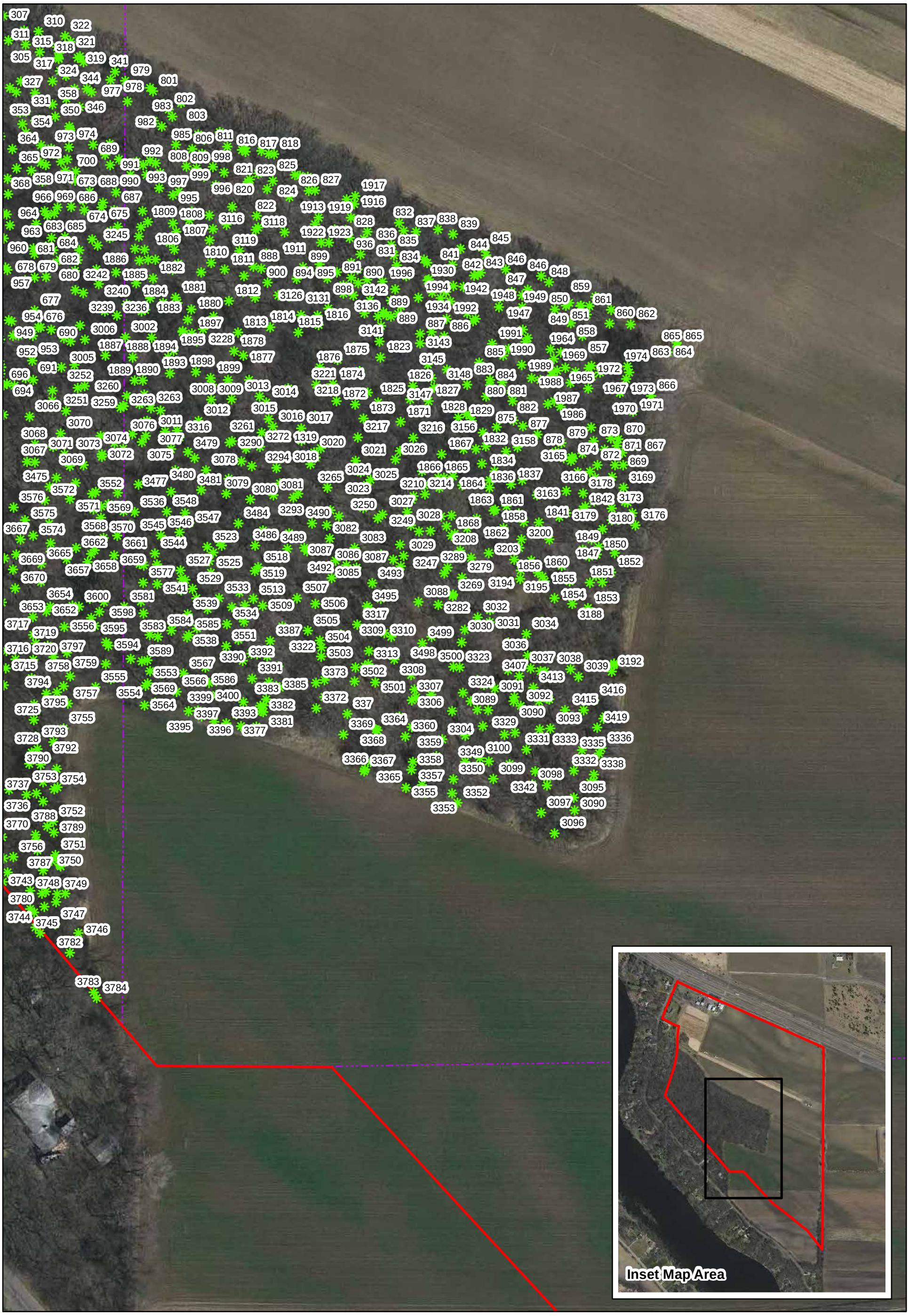

Figure 2C - Tree Location (2016 MnGeo Imagery)

N

0 100 Feet

Source: MNGEO Spatial Commons

Tree location

Project Boundary

Mississippi Critical Area

Riverstone South Tree Survey (KES 2020-017)
Ramsey, Minnesota

Note: Boundaries indicated on this figure are approximate and do not constitute an official survey product.

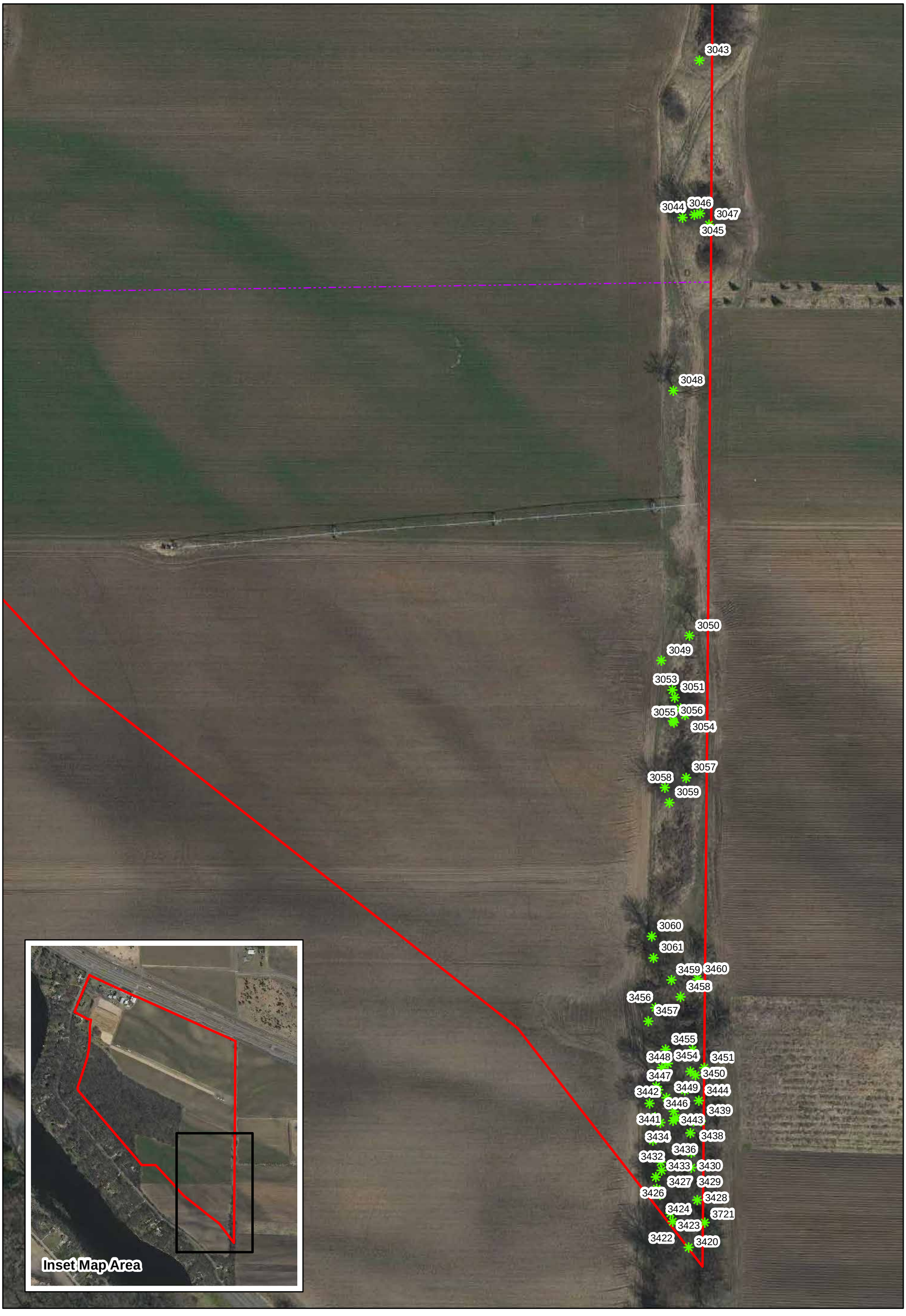

Figure 2D - Tree Location (2016 MnGeo Imagery)

N

0 100 Feet

Source: MNGEO Spatial Commons

Tree location

Project Boundary

Mississippi Critical Area

Riverstone South Tree Survey (KES 2020-017)
Ramsey, Minnesota

Note: Boundaries indicated on this figure are approximate and do not constitute an official survey product.

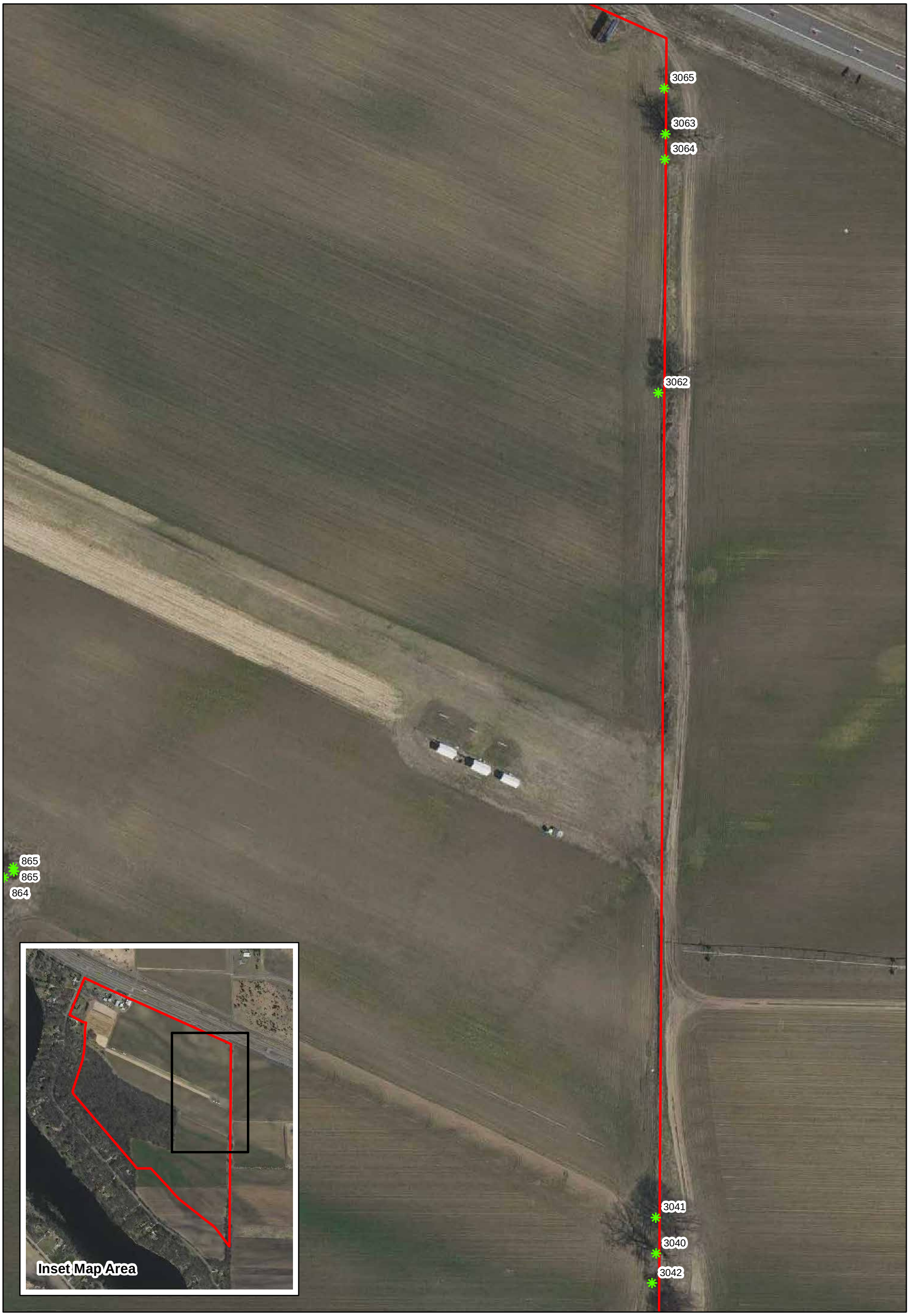

Figure 2E - Tree Location (2016 MnGeo Imagery)

N

0 100 Feet

Source: MNGEO Spatial Commons

Tree location

Project Boundary

Mississippi Critical Area

Riverstone South Tree Survey (KES 2020-017)
Ramsey, Minnesota

Note: Boundaries indicated on this figure are approximate and do not constitute an official survey product.

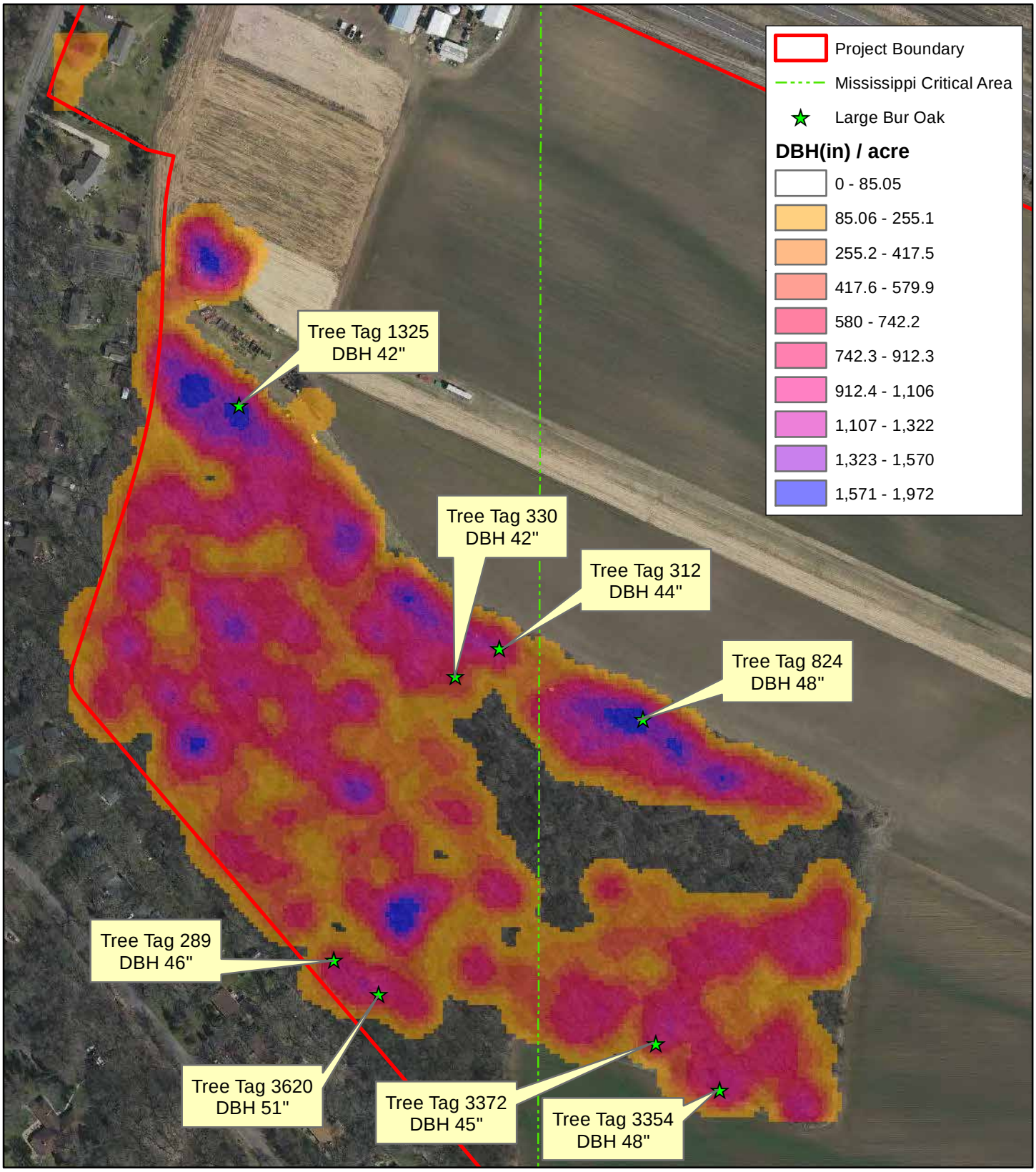

Figure 3A - Oak Density (2016 MnGeo Imagery)

N

0 250 Feet

KJOLHAUG ENVIRONMENTAL SERVICES COMPANY

Source: MNGEO Spatial Commons

Riverstone South Tree Survey (KES 2020-017)
Ramsey, Minnesota

Note: Boundaries indicated on this figure are approximate and do not constitute an official survey product.

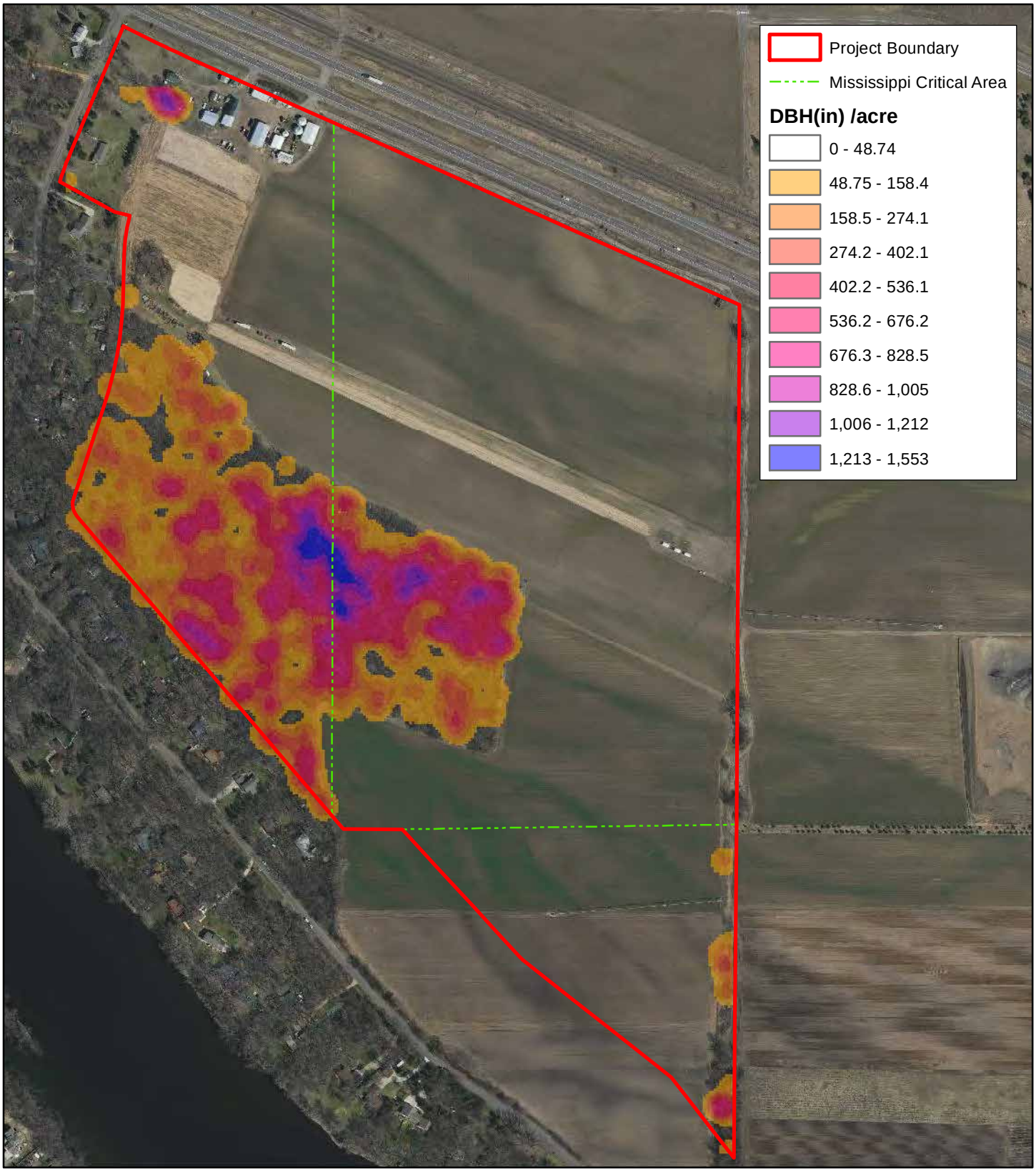

Figure 3B - Elm Density (2016 MnGeo Imagery)

N

0 450 Feet

KJOLHAUG ENVIRONMENTAL SERVICES COMPANY

Source: MNGEO Spatial Commons

Riverstone South Tree Survey (KES 2020-017)
Ramsey, Minnesota

Note: Boundaries indicated on this figure are approximate and do not constitute an official survey product.

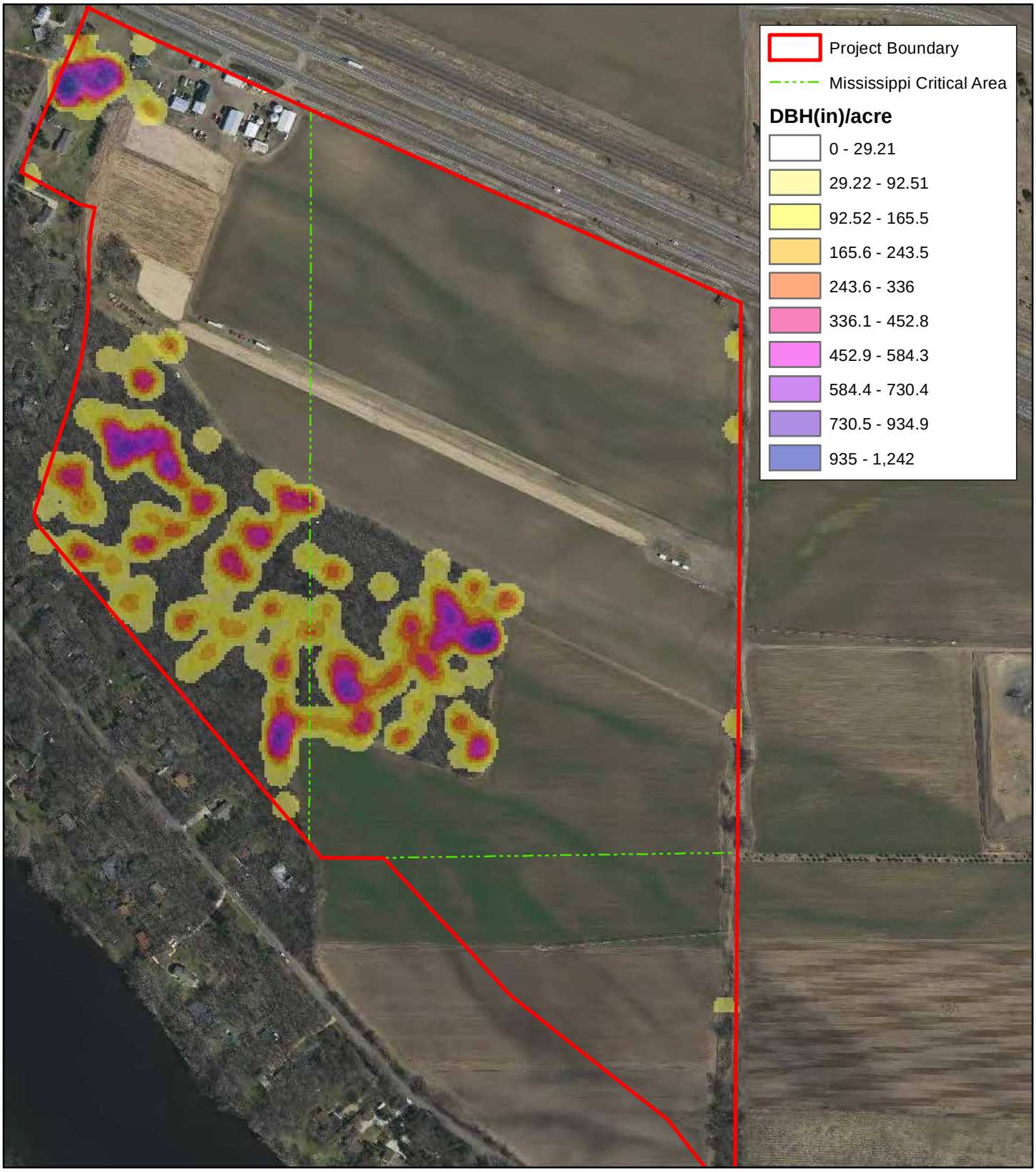

Figure 3C - Hackberry Density (2016 MnGeo Imagery)

N

0 425 Feet

KJOLHAUG ENVIRONMENTAL SERVICES COMPANY

Source: MNGEO Spatial Commons

Riverstone South Tree Survey (KES 2020-017)
Ramsey, Minnesota

Note: Boundaries indicated on this figure are approximate and do not constitute an official survey product.

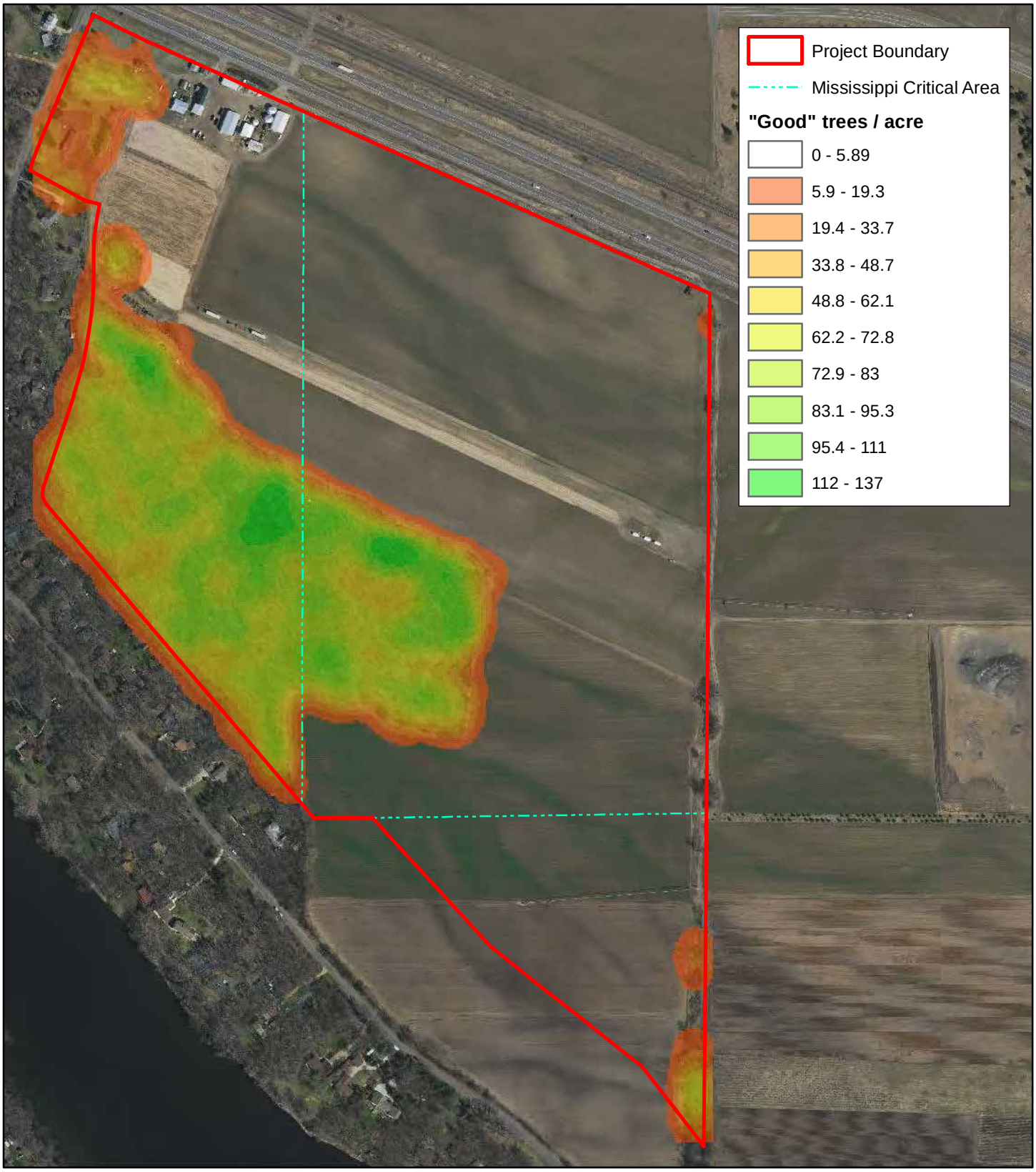

Figure 4 - Healthy Tree Density (2016 MnGeo Imagery)

N

0 450 Feet

KJOLHAUG ENVIRONMENTAL SERVICES COMPANY

Source: MNGEO Spatial Commons

Riverstone South Tree Survey (KES 2020-017)
Ramsey, Minnesota

Note: Boundaries indicated on this figure are approximate and do not constitute an official survey product.

Appendix F
Phase I Archaeological Survey Report

Riverstone South EAW

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Phase I Archaeological Survey of Proposed Housing Development in Ramsey, Anoka County, Minnesota

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Final Report
October 27, 2020

Phase I Archaeological Survey of Proposed Capstone Homes Housing Development in Ramsey, Anoka County, Minnesota

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Final Report
October 27, 2020

Management Summary

Capstone Homes is proposing to build a residential development in the City of Ramsey, Anoka County, Minnesota. The project area, approximately 78.63 acres in size, is located in the E ½ of Section 30 and W ¼ of Section 29 of Township 32N, Range 25W in Archaeological Region 4e: Central Lakes Deciduous East. Historically and recently the majority of the project area was cultivated with a long wooded patch along the southwestern edge. The project area is bordered by Highway 10 approximately 500 feet to the north, the Mississippi River approximately 600 to 700 feet to the south, Bowers Drive approximately 200 feet to the west, and a solar farm on the east. Planned development includes a tree preservation area within the existing stretch of woods, 243 detached residential units, residential streets, and single-acre public park at the center.

Nienow Cultural Consultants LLC (NCC) was contracted to complete a Phase I Archaeological Survey in October of 2020. NCC's Principal Investigators for this project were Jeremy Nienow, PhD., RPA, who is licensed for Phase I archaeological work in Minnesota (20-042, Appendix A), and Laura Koski, MSc, RPA. Work began with a literature review October 7 followed by fieldwork completed October 9, 14-15, 2020. Fieldwork consisted of surface survey of corn fields and a cabbage and pumpkin patch, and shovel testing of the wooded area. Surface visibility in the agricultural fields ranged between 0 and 80%. Surface survey transects were spaced on a maximum of a five-meter interval. Fifty-two shovel tests were excavated. Shovel tests were typically 35-40 centimeters (cm) wide and at least 80cm deep. All soils were screened through ¼" mesh screen, detailed profile notes completed, photographs taken, and GPS points collected for each shovel test. No prehistoric cultural materials were encountered. Recent historic materials (i.e. shotgun shells, whiteware sherds) and modern debris (i.e. plastics, aluminum cans) were encountered, but not collected.

Shovel test profiles documented consistent ancient floodplain soils. No prehistoric cultural material or archaeological features were identified during the field survey. Based on these results, Nienow Cultural Consultants recommends no further archaeological work be completed, and the project continues as planned. With any project there is the chance of unanticipated discovery. Should archaeological materials surface during any future construction, it is advised a professional archaeologist be consulted. Minnesota Statute 307.08 protects unplatted cemeteries (including burial mounds) and issues guidelines for dealing with unexpected finds. Should human remains be encountered during earth moving activity, all work must stop and local law enforcement must be called.

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1.0 INTRODUCTION

Capstone Homes is proposing to build a residential development in the City of Ramsey, Anoka County, Minnesota. The project area, approximately 78.63 acres in size, is located in the E ½ of Section 30 and W ¼ of Section 29 of Township 32N, Range 25W in Archaeological Region 4e: Central Lakes Deciduous East (Figure 1). Historically and recently the majority of the project area was cultivated with a long wooded patch along the southwestern edge. The project area is bordered by Highway 10 approximately 500 feet to the north, the Mississippi River approximately 600 to 700 feet to the south, Bowers Drive approximately 200 feet to the west, and a solar farm on the east. Planned development includes a tree preservation area within the existing stretch of woods, 243 detached residential units, residential streets, and single-acre public park at the center (Figure 2).

Nienow Cultural Consultants LLC (NCC) was contracted to complete a Phase I Archaeological Survey in October of 2020. NCC's Principal Investigators for this project were Jeremy Nienow, PhD., RPA who is licensed for Phase I archaeological work in Minnesota (20-042, Appendix A), and Laura Koski, MSc, RPA. NCC subcontracted six individuals to assist in completing research, fieldwork, and lab processing for the project: Alexandra Hedquist (Hedquist Archaeological Consulting, LLC), Anastasia Walhovd (Makoons Consulting, LLC), Chris Rico (Rico Cultural Resource Management Services, LLC), Fred Sutherland (Sutherland Relics and Rust LLC), John Strot (John's Archaeological Consulting), and Laura Koski (Zooarchaeo Consulting). The investigation was guided by the Secretary of Interior's Standards and Guidelines for Archaeology and Historic Preservation (48FR44716), the State Historic Preservation Office's (SHPO) Manual for Archaeological Projects in Minnesota (Anfinson 2005), and the State Archaeologist's Manual for Archaeological Projects in Minnesota (Minnesota Office of the State Archaeologist 2011). Research and report preparation were accomplished by professional archaeologists meeting the standards set forth in 35CFR61.

Work began with a literature review October 7 followed by fieldwork completed October 9, 14, and 15, 2020. Fieldwork consisted of surface surveying corn fields, a cabbage, and pumpkin patch, and shovel testing the wooded area. Surface visibility in the agricultural fields ranged between 0 and 80%. Surface survey transects were spaced on four to five-meter intervals. Fifty-two shovel tests were excavated. Shovel tests were typically 35-40 centimeters (cm) wide and at least 80cm deep. All soils were screened through ¼" mesh screen, detailed profile notes completed, photographs taken, and GPS points collected for each shovel test. No prehistoric cultural materials were encountered. Recent historic materials (i.e. shotgun shells, whiteware sherds) and modern debris (i.e. plastics, aluminum cans) were encountered, but not collected.

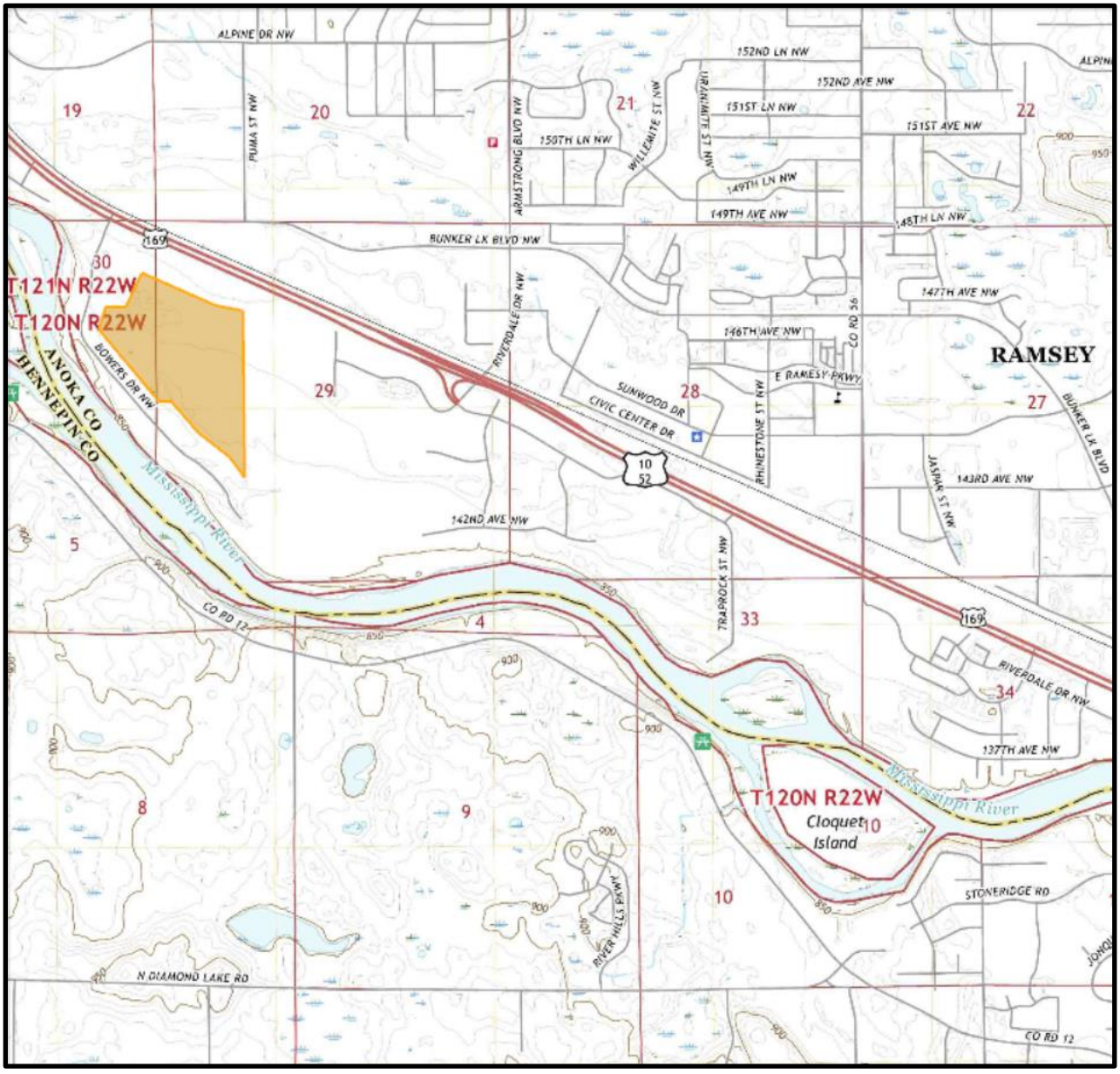

Figure 1: USGS Topographic Map Illustrating Project Area (orange polygon).
(USGS 7.5' Topographic Map, Anoka Quadrangle, 2019, 1:24,000)

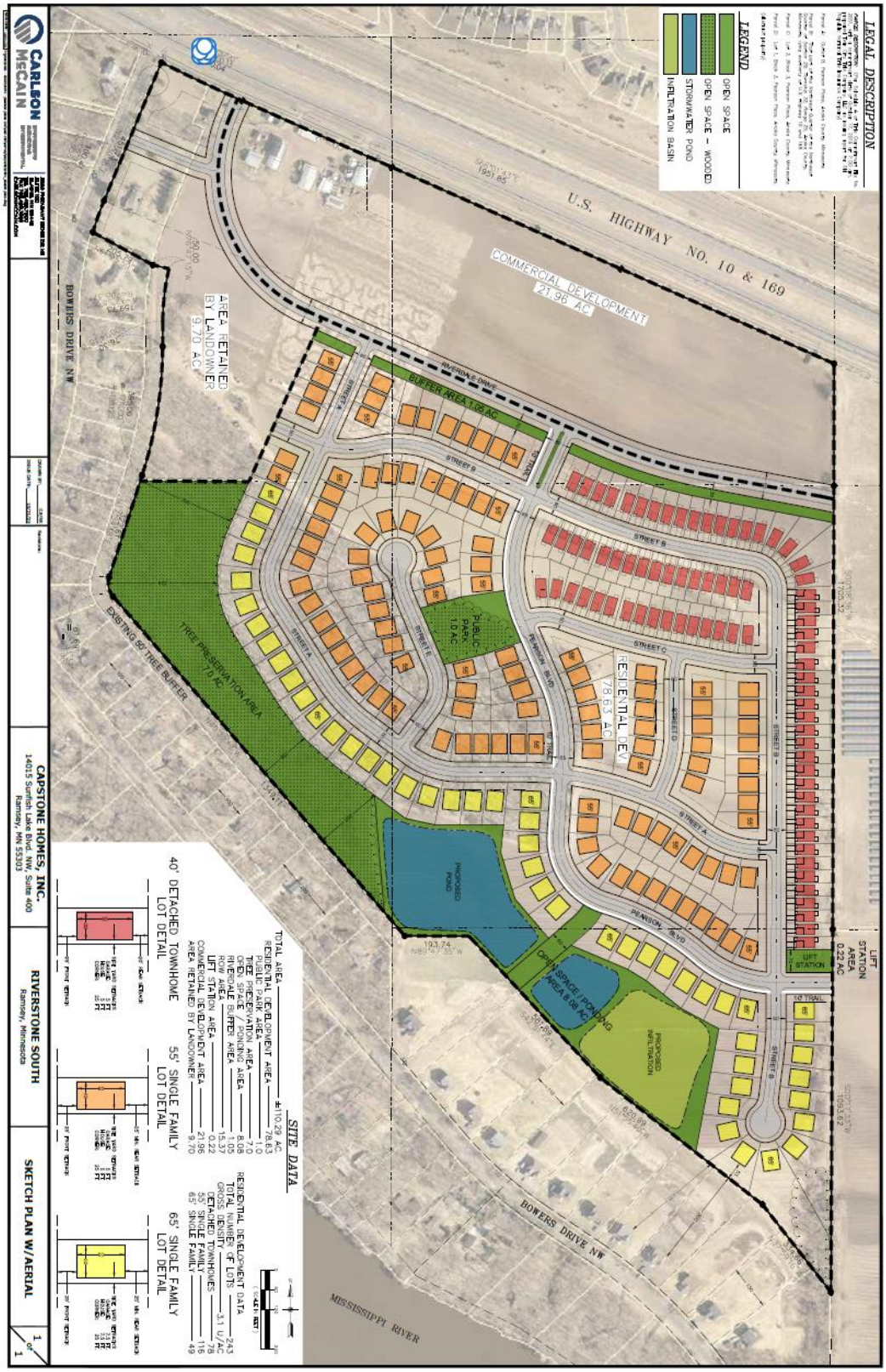

Figure 2: Engineering Sketch Plan of Project Area.
(Provided by Capstone Homes, Inc.)

2.0 RESEARCH DESIGN AND METHODOLOGY

2.1 Literature Review

A literature review was completed on October 7, 2020. Typically, the literature review would be completed by visiting the Office of the State Archaeologist and the State Historic Preservation Office. Unfortunately, both of these offices were closed due to safety precautions surrounding SARS-CoV-2 spread prevention. Instead, previously identified archaeological sites were noted for a two-mile radius surrounding the project area using the online Minnesota Office of the State Archaeologist archaeological sites portal (OSA Portal). In addition, the Township/Range/Sections within the two-mile radius were sent to the State Historic Preservation Office to generate an internal database search. The Township/Range/Section search did not yield any additional sites not included on the OSA Portal. Archaeological survey reports from nearby sites were also requested to determine whether survey had already been completed within the project area. All resulting previously identified sites and requested surveys were reviewed as a part of this project.

2.2 Fieldwork

Fieldwork was completed on October 9, 14, and 15, 2020. Fieldwork included surface survey and shovel testing within the project area (Figure 2). Surface surveyed areas consisted of cultivated corn fields, a cabbage patch, and a pumpkin patch. Ground visibility in all surface-surveyed areas ranged between 0 and 80% (see Appendix B for example surface visibility photographs). These areas were surface surveyed on a four to five-meter interval between cultivated rows. Considering the wooded area contained dense vegetation and fallen leaves preventing surface survey, along with the fact this area lies closest to the Mississippi and is therefore the most likely location within the project area to contain prehistoric cultural materials, the wooded area was tested in three shovel test transects. The first transect was laid in on a 15-meter interval, approximately 15-meters northeast and parallel to the southwestern project boundary. The second transect was laid in 30-meters northeast of and parallel to the first, but considering the negative tests in the first transect, and the clearly documented ancient floodplain soils, shovel tests in this transect were excavated on a 30-meter interval. A third transect was placed on a ridge along the northwestern edge of the wooded area with the intent of targeting what was in the past a high point along the historic Mississippi River's edge. Fifty-two shovel tests were excavated in total. Shovel tests were typically 35-40 centimeters (cm) wide and at least 100cm deep. All soils were screened through ¼" mesh screen, detailed profile notes completed, photographs taken, and GPS points collected for each shovel test.

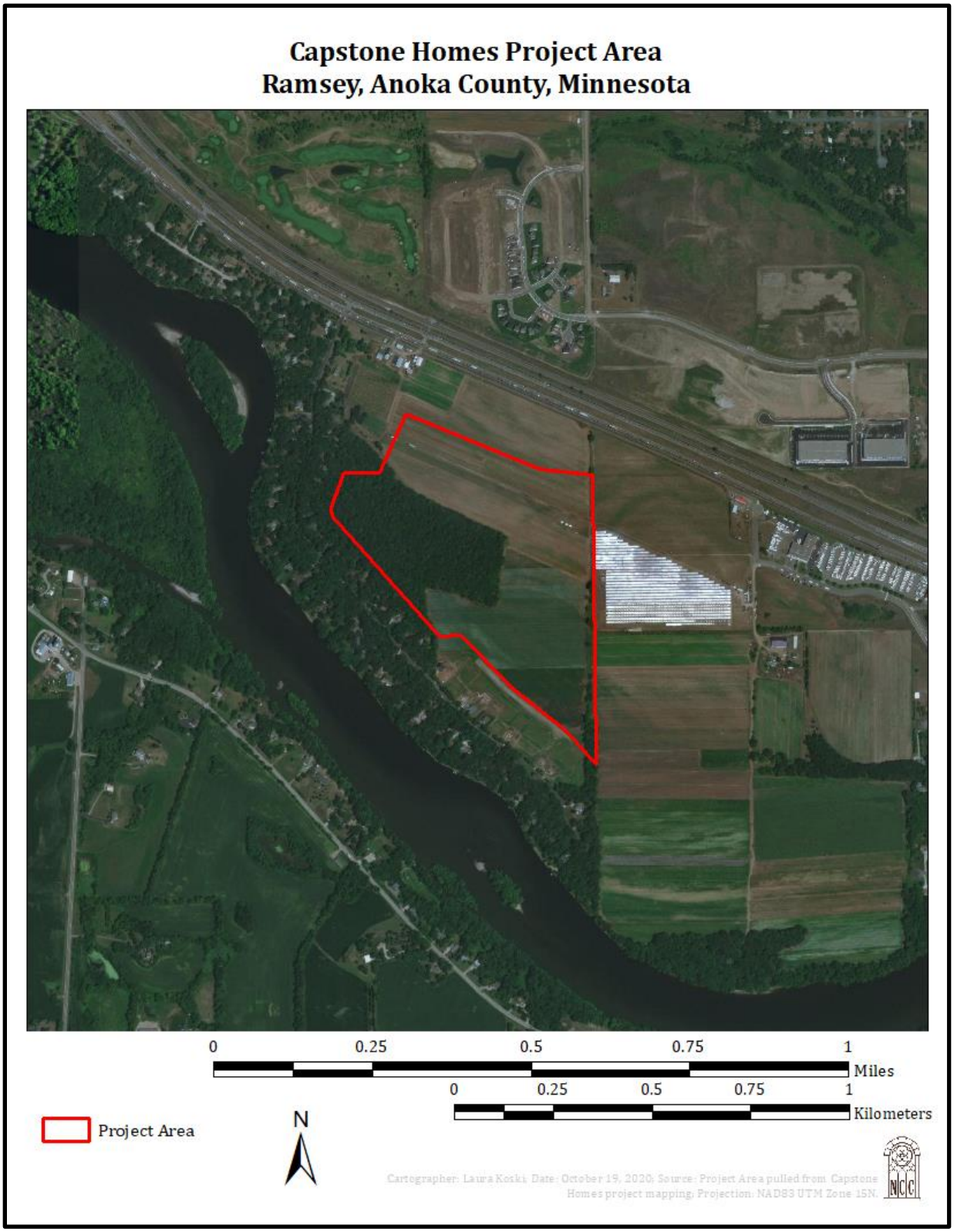

Figure 3: Illustration of Project Area Boundary (red border).
(Basemap provided by 2016 Google Satellite Imagery)

3.0 ENVIRONMENTAL SETTING

3.1 Geological Background and Soils

In his 1990 publication *Archaeological Regions in Minnesota and the Woodland Period,* former State Archaeologist Scott Anfinson divides the state of Minnesota into nine environmental-archaeological regions based on natural resources available within each region. This classification allows archaeologists to research and analyze prehistoric environments in the state, as well as predict where archaeological sites may be located.

The Capstone Homes Development project area falls within the southeastern portion of Anfinson's region 4e: Central Lakes Deciduous East Sub-Region. The region sits within east-central to central Minnesota, spanning Dakota to Becker Counties. Topographically, the region consists of a mixture of moraines, till plains, and outwash plains, and is heavily spotted with lakes, some over 30 meters (m) deep. Major rivers include the Mississippi and Minnesota Rivers flowing along the western boundary of the region, and the St. Croix River along the region's eastern boundary. Streams draining the western part of the region flow in a western direction to the Red River (Anfinson 1990). River formation was the result of a complex glacial history including several episodes of advancing and retreating glacial lobes.

The Central Lakes Deciduous East Sub-Region is located directly west of the Mississippi River, but could arguably incorporate portions of western Wisconsin. The regional topography consists of moraines, glacial till, and outwash plains, as well as a large variety of lakes, streams, and wetlands (Gibbon et al. 2002). Average precipitation ranges from 21 to 32 inches (Grimes 1968). Average high winter temperatures range from 12 to 24 degrees Fahrenheit (F) while average high summer temperatures range from 78 to 82 degrees F. The frost-free season ranges from 140 to 160 days (Gibbon et al. 2002).

Soils in the region reflect a diverse history of glacial and vegetation activity. Soil texture ranges from medium to course, with prairie soils more commonly found in the southern and western portions of the region and forest soils found mostly in the north and east portions (Anfinson 1990). Bedrock outcrops are mainly located along the region's central and eastern edge, and are comprised of mainly granite outcroppings along river banks (Gibbon et al. 2002).

All soil source material was deposited during the Wisconsin stage of the Pleistocene epoch. Two main types of glacial drift were deposited over the county when the Superior Lobe retreated from the area around 13,500 years ago. The Superior Lobe, which flowed into the area from the north, deposited coarse textured material, reddish brown in color, with pebbles of basalt, gabbro, and red sandstone. At a later date, the Grantsburg Sub-lobe, an extension of the Des Moines Lobe, advanced into Sherburne County. This lobe brought in what is commonly called "gray till" or "buff till." During the retreat of the Grantsburg Lobe around 12,500 years ago, the ice stagnated in the northern and eastern parts of the county and melt water left intermixed outwash gravel and sand from both of the previous lobes. Additionally, when the Grantsburg Lobe retreated westward, it uncovered the Mississippi Valley, and melt water from the wasting Des Moines Lobe filled the

valley throughout the county with coarse alluvium, which underlies two broad terraces parallel to the Mississippi River, an example of which is notable in the Capstone Homes project area. The sand in these areas are course in texture near the river and become increasingly finer in texture the further the distance from the river. In various places, it is underlain by strata of calcareous gravel, which was representative of what was found during the current archaeological survey (Grimes 1968).

The project area is comprised of Hubbard loamy sand ranging between 0 to 2 percent and 2 to 12 percent slopes, Dickman sandy loam ranging between 0 to 2 percent and 2 to 6 percent slopes, and Nymore loamy coarse sand on 12 to 25 percent slopes. The Hubbard loamy sand series consists of excessively drained sandy floodplain outwash found on stream terraces and hillslopes. The typical soil profile for the series consists of loamy sand from 0 to 20 centimeters, loamy sand from 20 to 50 centimeters, loamy sand from 50 to 82 centimeters, and sand from 82 to 200 centimeters. The Dickman sandy loam series consists of somewhat excessively drained floodplain outwash found on stream terraces. The typical soil profile for the series consists of sandy loam from 0 to 30 centimeters, sandy loam from 30 to 45 centimeters, and sand from 45 to 152 centimeters. The Nymore loamy coarse sand series consists of excessively drained floodplain outwash found on stream terraces. The typical soil profile for the series consists of loamy coarse sand from 0 to 18 centimeters, loamy sand from 18 to 66 centimeters, and sand from 66 to 152 centimeters (NRCS 2020).

3.2 Regional Flora and Fauna

Vegetation in the area at the time of Euro-American settlement consisted of Big Wood species in both the south and west portions of the region. Most specifically, the trees were deciduous hardwood species, primarily oak, mixed with deciduous-coniferous forest in the northern part of the region (Anfinson 1990) which also contained maple, basswood, and hickory. As Euro-American settlers moved through the area and cleared portions of forest, prairie land became more abundant. White-tailed deer, bison, elk, beaver, bear, prairie chickens, and a variety of fish and waterfowl would have been commonly available resources (Anfinson 1990). Specific to the site area, the majority of the trees on the sand plain consisted of bur oak and northern pin oak, as well as mixed hardwoods which grow in areas of glacial till, specifically in the areas where the Hayden soil series is prominent (Grimes 1968). Large areas of hardwoods invaded areas of native grasses in the outwash plains along the Mississippi River. The Hubbard series discussed above developed in these areas.

4.0 CULTURAL HISTORY

The Minnesota State Historic Preservation Office (SHPO) has developed statewide contexts examining Minnesota's Prehistoric through recent past. These contexts are laid out on the Minnesota Archaeological Site Form (Minnesota Office of the State Archaeologist 2016). Generally, they describe the history of the state and assist in predicting where specific types of sites may occur.

Native American contexts are commonly divided into three major traditions: Paleoindian, Archaic, and Woodland. Late Woodland is further subdivided into Plains Village, Mississippian, and Oneota Traditions. These divisions are based on significant changes in how these communities lived, with a special focus on subsistence strategies. Historic contexts are generally divided into Contact and Post-Contact periods. The Contact period begins with early European exploration and continues through the Post-Contact period including Euro-American settlement and Minnesota statehood. The following is a general summary of these traditions using the Author's general knowledge and various disseminated sources for information including the OSA's website, Elden Johnson's 1988 *The Prehistoric Peoples of Minnesota*, Gibbon and Anfinson's 2008 *Minnesota Archaeology: The First 13,000 Years*, and Gibbon's 2012 *Archaeology of Minnesota: The Prehistory of the Upper Mississippi River Region*.

4.1 Pre-Contact Period

4.1.1 Paleoindian Tradition (11,500 to 7,500 B.C.)

The Paleoindian Tradition in Minnesota is divided into two periods: Early Paleoindian and Late Paleoindian/Early Archaic (Gibbon and Anfinson 2008). Throughout the Paleoindian, Native American communities were small, mobile, and focused on hunting. However, between the early and late periods, the environment and available food resources changed dramatically. The beginning of the Early Paleoindian Tradition is characterized by retreat of glacial ice and the growth of spruce forests. During this time, now extinct megafauna like mastodon, mammoth, and large bison were available for hunting. The Early Paleoindian period is poorly understood in Minnesota because most evidence for Paleoindian lifeways comes from isolated finds of large fluted projectile points (Gibbon and Anfinson 2008). Based on more plentiful sites in the southeastern and southwestern portions of the United States, it is generally assumed Native American populations were small, consisting of highly-mobile hunters and foragers who followed large game throughout the landscape (Gibbon and Anfinson 2008).

By the Late Paleoindian period, modern vegetation zones had established themselves in Minnesota. Modern animal species like white tail deer, grouse, and fish were available for Native American communities to hunt and fish. Lithic tool evidence from Late Paleoindian sites in Minnesota take the form of stemmed rather than fluted points and a wider range of tool types including groundstone tools (Gibbon and Anfinson 2008). Again, lifeways during this time are poorly understood, but based on three well-documented sites found in Minnesota (Cedar Creek-21AK58, Bradbury Brook-21ML42, and Browns Valley-21TR5), communities are still small, highly-mobile and focused on hunting larger animals and foraging for wild plants. However, stone toolkits did diversify and communities began exploiting smaller territories. It is also likely populations started to increase (Gibbon and Anfinson 2008).

4.1.2 Archaic Tradition (7,500 to 800 B.C.)

The Archaic Tradition continues the trend of resource diversification started in the Late Paleoindian period. Native American communities developed broader toolkits, used a wider array of foods, and became less mobile over the course of the Archaic. Additionally, by the end of the Archaic, communities were using communal burial sites. Stemmed and notched points, groundstone tools, particularly those for woodworking, and cold-hammered copper tools are hallmarks of the Archaic Tradition in the archaeological record (Anfinson 1997; Gibbon and Anfinson 2008). By the end of this period the climate shifted to a cooler, wetter pattern up until the strong, human-driven, warmer climates of the modern era. Resource gathering technologies during the Archaic included the aforementioned hunting, as well as trapping, fishing, foraging, woodworking and plant processing. Many of the larger, documented sites in the central portion of the state likely began during the end of this period.

4.1.3 Woodland Tradition (800 B.C. to European Contact)

In the Midwest region, archaeologists tend to divide the Woodland Tradition into three periods: Early, Middle, and Late. However, Anfinson (1987) and Gibbon (2012) suggest in Minnesota it is more appropriate to divide the era into Initial and Terminal Woodland periods. This view is not as widespread as research would at first suggest, with work including Arzigian's *Statewide Multiple Property Documentation Form for the Woodland Tradition* (2008), and Buhta et. al. *On the Periphery?: Archaeological Investigations of the Woodland Tradition in West- Central Minnesota* (2014), retaining the more traditional use of Early, Middle, and Late designations. Beginning approximately 2,800 years ago, peoples in the region experienced increases in population with the advent of first horticultural and then agricultural subsistence strategies to augment already extant systems of hunting, gathering, etc. As populations increased, settlements near favorable transportation and resource corridors shifted from seasonal to year-round occupations as they made forays to collect necessary resources (Johnson 1988; Anfinson 1987:222).

The period also witnessed the technical transition from spear/atlatl to bow and arrow weaponry useful for both hunting and warfare. This change in technology lead to the use of smaller projectile points or arrow heads. Similarly, the period also saw the invention of ceramic vessels and it is these vessels and their change over time, from thick walled, grit tempered, conoidal vessels, to thinner walled, shell tempered, globular vessels, which has greatly assisted the archaeological community in further refining their understanding of group identity, cohesion, and integration throughout the region. Indeed, there are more than ten major recognized ceramic complexes for the state with many temporal overlaps, often based more on location than visual representation. A final example representing not only identity and permanence on the landscape, but also religious practices, was the use of earthen burial mounds. Although community size was likely similar between the Early Woodland and Late Archaic periods, by the Late Woodland period, populations were certainly on the rise.

4.2 Contact/Post-Contact Period (1630 A.D. to Present)

This period generally refers to the span of time extending from the first European explorations until intensive Euro-American settlement of the region. Minnesota's historic period began in 1673 when French explorers Marquette and Joliet discovered the upper portion of the Mississippi River. Ten years later, Catholic Missionary Father Louis Hennepin told his story of exploring Minnesota and being held captive by Dakota Indians in the first book written about Minnesota, *Description de la Louisiane* (Hennepin 1683).

The territory containing modern-day Minnesota was claimed at various periods of time by Spain, France, Great Britain, and the United States. Lieutenant Zebulon Montgomery Pike led the first United States expedition through the area in 1805, which would ultimately become Minnesota in 1858. Fort St. Anthony (later Ft. Snelling) was completed between 1819 and 1824, and in 1836 the Wisconsin Territory, including a portion of Minnesota, was formed. Just one year later, on September 29th, 1837, during treaty negotiations in Washington, D.C., Dakota leaders ceded their lands between the Mississippi and St. Croix Rivers.

The fur trade drove much of European exploration and settlement into Minnesota prior to territorial frontier settlement in the mid-1800s. While the fur trade impacted Native American communities throughout all of Minnesota, the heaviest impacts came with later Euro-American settlement. Intensive settlement and agriculture dramatically transformed the landscape, displacing large numbers of Native Americans and their communities. In 1862 tensions between white settlers and Native Americans resulted in the Dakota War. Ultimately, this war left 462 whites and "an unknown but substantial number" of Native Americans dead (Anderson and Woolworth 1988). The conflict concluded with the largest mass execution in United States history with the hanging of 38 Dakota on December 26, 1862 at Mankato and the deportation of remaining tribal members to Santee, Nebraska.

Native American archaeological site types associated with this period are generally consistent with those of earlier periods, but European and Euro-American traders, missionaries, settlers, and industries affected the locations of these sites. This period also includes Euro-American immigrant settlement patterns, subsistence activities, and economic strategies. Sites associated with Euro-American immigrants appear in the mid-nineteenth century. Associated archaeological and historic site types categorized in the Contact/Post-Contact period include standing structures as well as archaeological sites.

5.0 LITERATURE REVIEW

Fourteen previously identified archaeological sites and four alpha sites are located within two miles of the project area (Table 1). Alpha sites are versions of archaeological sites which have been reported as *potential* sites based on mentions in literature, historic mapping (i.e. the 1874 Andreas Atlas), or by individuals reporting casually finding cultural materials; these sites have yet to be field verified through systematic archaeological research and survey.

Table 1. Previously Identified Archaeological Sites Within Two Miles

Site Number	Site Name	Site Description	Cultural Affiliation	Miles from Project Area	TRS
21AN0044	Winnebago Enclosure	Enclosure and Earthworks	Historic: Native American	0.1 Miles	T32N, R25W, S30 NW ¼, NE ¼, NE ¼
21HE0090	Dayton Mounds	Six Burial Mounds	Pre-Contact: Woodland	0.73 Miles	T121N, R22W, S31 SE ¼, S ½ And SW ¼, S ½
21HE0326	Dayton A	Habitation, Lithic Workshop	Pre-Contact	1 Mile	T120N, R22W, S9 NE ¼, NW ¼, NE ¼
21AN0136	No Name	Lithic Scatter	Pre-Contact	1 Mile	T32N, R25W, S19 SW ¼, NW ¼, NE ¼
21AN0135	No Name	Lithic Scatter	Pre-Contact	1.23 Miles	T32N, R25W, S18 SW ¼, SW ¼, SE ¼
21HE0327	Dayton B	Single Artifact	Pre-Contact	1.24 Miles	T120N, R22W, S29 SE ¼, NE ¼, SW ¼
21HE0189	Cloquet Island Scenic Overlook	Artifact Scatter	Pre-Contact, Contact, Post-Contact	1.33 Miles	T120N, R22W, S10 NW ¼, W ½
21WR0043	Crow River Scenic Overlook	Habitation	Pre-Contact	1.47 Miles	T121N, R23W, S36 SW ¼, SE ¼, NE ¼
21HE0335	No Name	Habitation	Pre-Contact: Woodland	1.54 Miles	T120N, R22W, S10 NW ¼, SW ¼, NW ¼
21HE0328	Dayton D	Habitation	Lithic Workshop	1.6 Miles	T120N, R22W, S9 NE ¼, SE ¼, SE ¼
21AN0184	No Name	Habitation	Pre-Contact: Habitation	1.7 Miles	T32N, R25W, S33 NW ¼, SE ¼, NE ¼
21WR0027	No Name	Single Burial Mound	Pre-Contact: Woodland	1.98 Miles	T120N, R23W, S1 SE ¼, SE ¼, NW ¼
21WR0125	No Name	Artifact Scatter	Pre-Contact and Post-Contact: Euro-American	1.99 Miles	T120N, R23W, S1 NW ¼, SE ¼, NW ¼
21WR0130	Dayton Quarry Burial	Human Remains	Presumably Pre-Contact	1.99 Miles	T120N, R23W, S1 NE ¼, NW ¼, SE ¼
21ANu	Itasca Village	Ghost Town	Historic: Euro-American	0.63 Miles	T32N, R25W, S19 SE ¼, NE ¼, SW ¼
21WRbp	Dayton city	Historic Documentation	Historic: Euro-American	1.19 Miles	T121N, R23W, S36
21WRbo	Waterville	Ghost Town	Historic: Euro-American	1.19 Miles	T121N, R23W, S36
21WRo	Lahn	Artifact Scatter	Pre-Contact	1.2 Miles	T120N, R23W, S12

No previously identified archaeological sites are located within the project area. Sites located within two miles comprise a mixture of pre-contact and historic activities including pre-contact lithic and artifact scatters, habitations, and burial mounds; as well as historic ghost towns and an earthwork enclosure. Of the pre-contact sites, only a few could be attributed to a cultural tradition,

all of them being of the Woodland Tradition, due to either diagnostic artifacts or archaeological features (i.e. burial mounds).

The relatively high volume of pre-contact sites within two miles of the project area, as well as the project's proximity to the Mississippi River, indicate the project area exhibits reasonable potential to contain pre-contact cultural material. LiDAR data (provided by MNDNR) was examined in an attempt to identify any visible above-ground features with a potentially archaeological origin. These features were not identified, but viewing the LiDAR hillshade revealed the project area had been submerged in the Mississippi River floodplain in the past. The old river cut is distinct to the point at least two major previous river edges can be identified in the project area hillshade imagery, accompanied by clear sandbar deposits between the current river path and the previous flooded edge (Figure 3).

6.0 RESULTS

Fieldwork was completed on October 9, 14, and 15, 2020. This began with surface survey of the cornfields, cabbage patch, and pumpkin patch on a four to five-meter interval. Surface visibility within all surface-surveyed areas varied between 0 and 80% (see Appendix B for example surface visibility photographs). No cultural materials or archaeological features were identified during the surface survey.

Shovel testing was completed along three separate transects within the wooded portion of the project area. The first transect was located 15-meters northeast and parallel to the southwestern edge of the project area (the closest edge to the Mississippi River), and consisted of 25 shovel tests excavated at 15-meter intervals. All shovel tests were negative for cultural materials. Due to the non-cultural nature of the first transect, the second transect, placed 30-meters northeast and parallel to the first, contained 11 shovel tests excavated on a 30-meter interval. This transect was also negative for cultural material. Acknowledging this tested portion of the wooded area landed at times in the past floodplain, a third transect was placed on the highest ridge at the northeastern edge of the wooded area in an attempt to capture where the cultural activity may have been focused while this area was previously flooded (see the middle flooded river edge noted in the LiDAR Hillshade imagery in Figure 3). This transect consisted of sixteen shovel tests excavated on a 15-meter interval and was also negative for cultural material. See Figure 4 for an illustration of shovel tested and surface surveyed locations.

All shovel tests were excavated to at least 80 centimeters below surface (cmbs), well into subsoils. Soil profiles were notably consistent across the shovel tested areas with the average profile containing 10YR 3/2 silty sandy loam 0 to approximately 20-30cmbs, followed by 10YR 3/3 to 10YR 3/6 sand from 20-30cmbs through shovel test termination at 80cmbs. Soils typically became more compact beginning around 50cmbs continuing through 80cmbs. Recorded soils exhibited no signs of human-related disturbance, and reflect the sandy soils deposition expected of the ancient floodplain terrace on which this portion of the project area is located. Considering the depth

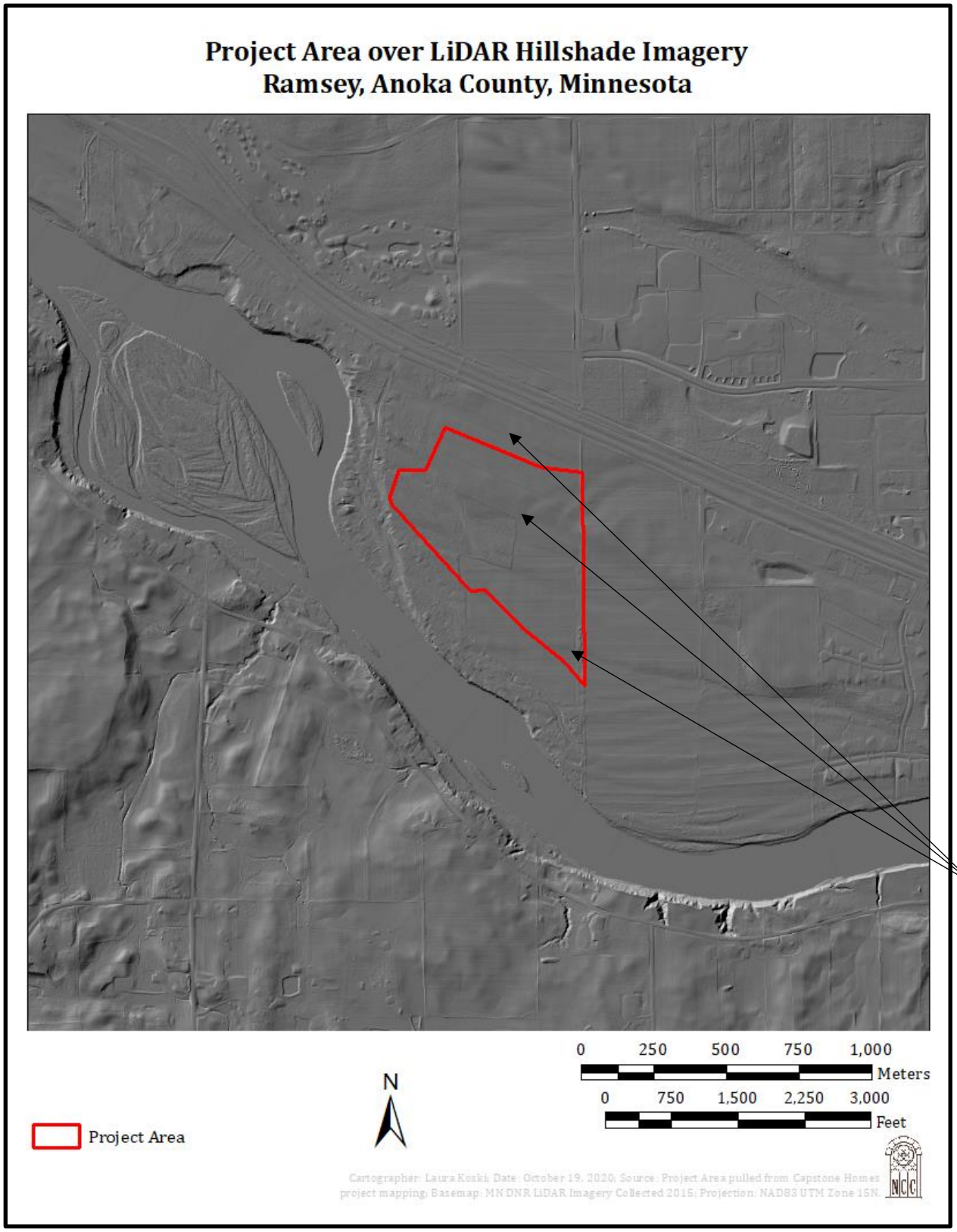

Figure 4: Map of Project Area over LiDAR Hillshade Imagery.

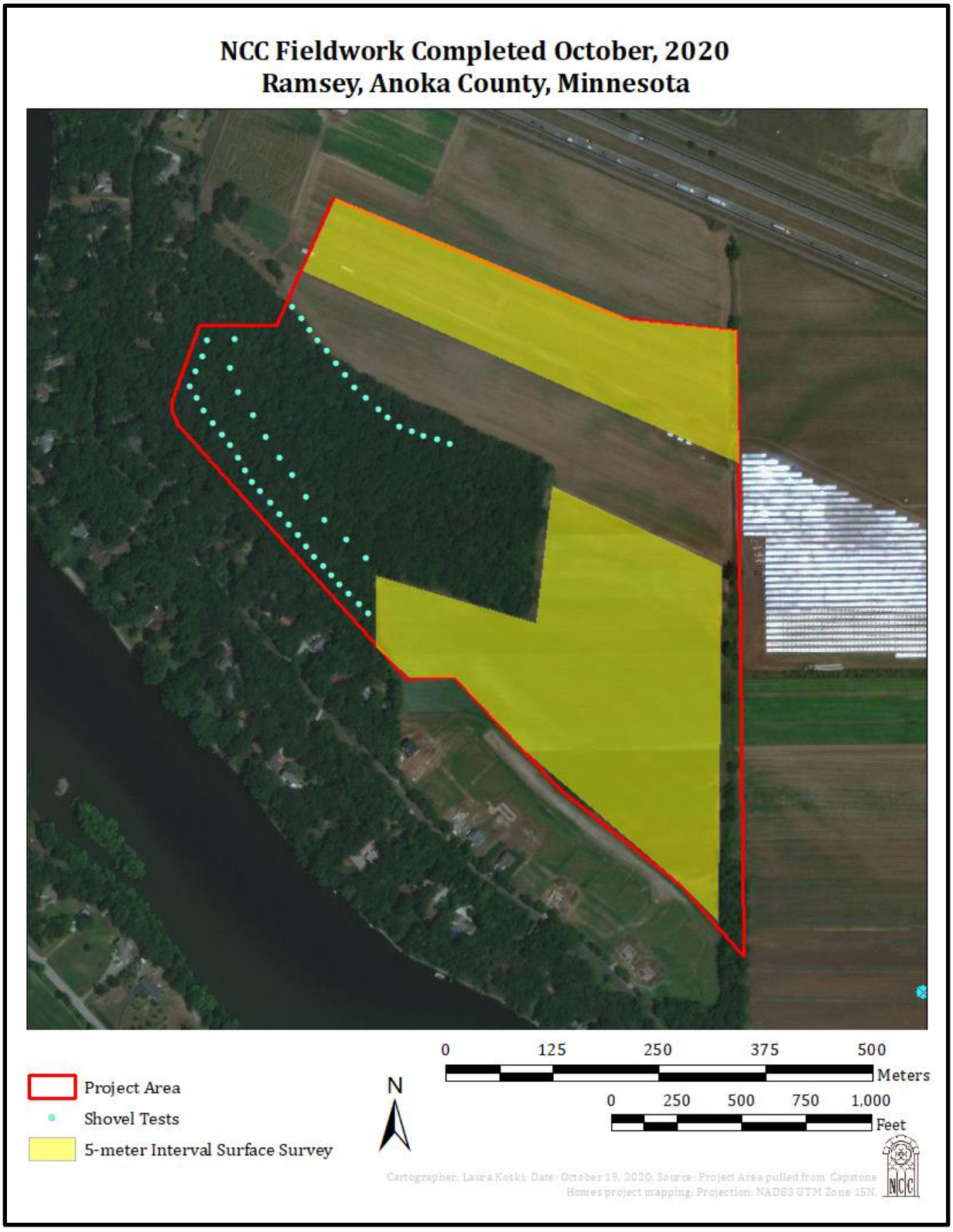

Figure 5: Map of surface surveyed areas and shovel test locations within greater project area. (Basemap provided by 2016 Google Satellite Imagery)

and compaction of these floodplain soils, it is likely this area was flooded consistently enough in the past it was not an attractive location for settlements or camps.

7.0 CONCLUSION AND RECOMMENDATIONS

Capstone Homes is proposing to build a residential development in the City of Ramsey, Anoka County, Minnesota. The project area, approximately 78.63 acres in size, is located in the E ½ of Section 30 and W ¼ of Section 29 of Township 32N, Range 25W in Archaeological Region 4e: Central Lakes Deciduous East. Historically and recently the majority of the project area was cultivated with a long wooded patch along the southwestern edge. The project area is bordered by Highway 10 approximately 500 feet to the north, the Mississippi River approximately 600 to 700 feet to the south, Bowers Drive approximately 200 feet to the west, and a solar farm on the east. Planned development includes a tree preservation area within the existing stretch of woods, 243 detached residential units, residential streets, and single-acre public park at the center.

Work began with a literature review October 7 followed by fieldwork completed October 9, 14, and 15, 2020. Fieldwork consisted of surface surveying corn fields, a cabbage, and pumpkin patch, and shovel testing the wooded area. Surface visibility in the agricultural fields ranged between 0 and 80%. Surface survey transects were spaced on a four to five-meter interval. Fifty-two shovel tests were excavated. Shovel tests were typically 35-40 centimeters (cm) wide and at least 80cm deep. All soils were screened through ¼" mesh screen, detailed profile notes completed, photographs taken, and GPS points collected for each shovel test. No prehistoric cultural materials were encountered. Recent historic materials (i.e. shotgun shells, whiteware sherds) and modern debris (i.e. plastics, aluminum cans) were encountered, but not collected.

Shovel test profiles documented consistent ancient floodplain soils. No prehistoric cultural material or archaeological features were identified during the field survey. Based on these results, Nienow Cultural Consultants recommends no further archaeological work be completed, and the project continues as planned. With any project there is the chance of unanticipated discovery. Should archaeological materials surface during any future construction, it is advised a professional archaeologist be consulted. Minnesota Statute 307.08 protects unplatted cemeteries (including burial mounds) and issues guidelines for dealing with unexpected finds. Should human remains be encountered during earth moving activity, all work must stop and local law enforcement must be called.

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APPENDIX A:

ARCHAEOLOGICAL LICENSE

APPLICATION FOR MINNESOTA ANNUAL ARCHAEOLOGICAL SURVEY LICENSE

This license only applies to reconnaissance (Phase I) surveys conducted under Minnesota Statutes 138.31-.42 during calendar year 2020. Separate licenses must be obtained for monitoring, evaluations/ Phase II and major investigation/Phase III work, and burial site work under Minnesota Statute. This license must be renewed annually. Only the individual indicated below is licensed as principal investigator. The licensed individual is required to comply with all the conditions attached to this license.

Name: Jeremy Loren Nienow

Institution/Agency/Company Affiliation: Nienow Cultural Consultants LLC

Title/Position: Owner / Principal

Address: 200 E. Plato Blvd. St. Paul, MN 55107

Work Phone: 651-295-3744 E-Mail: Jeremy.Nienow@gmail.com

Name of Advanced Degree Institution: U of Minnesota Year: 1997

Department Name: Anthropology Degree: ☐ MA/MS ☑ PhD

Type of Land: (check all that may apply)

☑ State Owned ☑ County Owned ☑ Township/City Owned

☑ Other non-federal public List:

Purpose: (check all that may apply)

☑ CRM ☑ Academic Research ☐ Institutional Field School

Required Documentation:

☑ 1) Curriculum Vita

☑ 2) Documentation of Appropriate Experience

Most Recent License Year 2019 Type I and II *(e.g. Annual, evaluation, mitigation)*

MHS Curation #: 896 Other Approved Facility: RCHS

Signed (applicant): Date: 3/4/20

Submit one copy of this form and attachments to:
Office of the State Archaeologist, 328 West Kellogg Blvd, St. Paul, MN 55102
651-201-2263 651.201.2264 email: mn.osa@state.mn.us

Minnesota Historical Society Approval: Date: 3-9-20

State Archaeologist Approval: Date: 3/5/20

License Number: 20-042

02/28/2019

APPENDIX B:

FIELDWORK PHOTOGRAPHS

Image 1: Of Typical Surface Visibility within Cabbage Patch.

Image 2: Of Field Crew Surveying Cabbage Patch (facing NE).

Image 3: Of Typical Surface Visibility within Corn Fields.

Image 4: Of Field Crew Surveying Pumpkin Patch (Facing SW).
Note Surface Visibility.

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Appendix G
Traffic Impact Study

Riverstone South EAW

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Spack SOLUTIONS

TRAFFIC IMPACT STUDY

Riverstone South Residential Development
Ramsey, Minnesota

I hereby certify this report was prepared by me or under my direct supervision, and I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

By: _____
Jonah Finkelstein, P.E.
License No. 56210

Date: 12/02/2020

Executive Summary

Background:

Riverstone Development, LLC and Capstone Homes, Inc are proposing the Riverstone South Residential development located South of Highway 10, between Bowers Drive and Llama Street in Ramsey, MN. The purpose of this study is to determine the traffic impacts associated with the build-out of the proposed development on the study roads and intersections where potential impact is anticipated. Mitigation measures will be analyzed and recommended if traffic operations are expected to be below traffic engineering standards. It should be noted that minor impacts are expected on corridors not analyzed in this study and improvements along those corridors may be needed in the future to accommodate incremental traffic growth from this and other area developments.

Results:

The principal findings of this study are:

- The proposed development is expected to generate 1,912 new trips during an average weekday, 140 new trips during the a.m. peak hour, and 186 new trips during the p.m. peak hour.
- All study corridors are projected to operate with volumes within their planning level capacity through the 2040 build scenario.
- All study intersections except for Highway 10/Riverdale Drive (currently Highway 10/Bowers Drive) are projected to operate with queues and delays within acceptable bounds through the 2040 build scenario.
- Highway 10/Riverdale Drive (currently Highway 10/Bowers Drive) experiences larger than preferred queueing with excessive delays in the 2022 and 2040 no-build scenarios. Restriction of this access to a ¾-access, where the northbound left-turning movement from Riverdale Drive to Highway 10 westbound is no longer allowed, reduces the queues and delays to acceptable levels for all analyzed scenarios.
- No external bicycle or pedestrian connections are shown in the provided site plan.

Recommendations:

The following items are recommended based on the analyses contained in this study:

- The future Highway 10/Riverdale Drive intersection should be constructed to a ¾-access, eliminating the northbound left turning movement.
- A trail with a 10-foot minimum cross-section should be constructed on the south side of Riverdale Drive connecting to Highway 10/Riverdale Drive and the existing trail on the south side of Highway 10 to the current trail system on the south side of Riverdale Drive to the east of Llama Street.

This study is based upon a concept development plan titled “Riverstone South” and dated October 21, 2020. Assuming the general characteristics of the proposed development remain approximately the same as documented, minor changes in the final design are not expected to alter the results or recommendations of this study.

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1. Introduction

a. Proposed Development

Riverstone Development, LLC and Capstone Homes, Inc are proposing the Riverstone South Residential development located South of Highway 10, between Bowers Drive and Llama Street in Ramsey, MN. Following are key attributes of the proposed development:

i. Access to the site will be provided via a Riverdale Drive extension stretching from Llama Street to Bowers Drive. This new roadway extension will provide two accesses for development traffic. As a part of this roadway extension, the existing intersection of Highway 10/Bowers Drive is proposed to be shifted east to become Highway10/Riverdale Drive. Bowers Drive will intersect this new Riverdale Drive extension south of the new connection with Highway 10. The most up-to-date concept plan is shown in the Appendix.
ii. The proposed development will include 78 detached townhomes and 165 single-family homes.
iii. For this report, the development is expected to be fully occupied by 2022.
iv. The site is currently zoned R-2: Medium-Density Residential.

b. Purpose of Study

The purpose of this study is to determine the traffic impacts associated with the build-out of the proposed development in two target years. The traffic impacts are studied on the roads and intersections where potential impacts are anticipated and improvements are recommended where mitigation is needed. For those not familiar with the general concepts and terms associated with traffic engineering, *The Language of Traffic Engineering* guide is included in the Appendix.

c. Study Objectives

The objectives of this study are:

i. Document how the study intersections and roadways currently operate.
ii. Forecast the amount of traffic expected to be generated by the proposed development.
iii. Determine how the study intersections and roadways will operate in the 2022 and 2040 target year scenarios with and without the proposed development.
iv. Recommend appropriate mitigation measures if poor operations are identified.

The roadways corridors studied in this document include those surrounding the proposed site, which are:

i. Highway 10 (Hwy 10)
ii. Bowers Drive
iii. Llama Street
iv. Armstrong Boulevard

v. Riverdale Drive

For this traffic study, the study intersections closest to the proposed development, and where the highest potential for impact is expected, were chosen for review and include:

i. Hwy 10/Bowers Drive
ii. Riverdale Drive/Llama Street
iii. Armstrong Boulevard/South Hwy 10 Ramps/Riverdale Drive
iv. Armstrong Boulevard/North Hwy 10 Ramps

It should be noted traffic expected from the proposed development will have minor impacts on other corridors and intersections beyond those studied here

Furthermore, this study does not account for the existing roadway conditions such as pavement quality or appropriate drainage.

2. Existing Conditions

a. Corridor Characteristics

As mentioned, the proposed site is located South of Hwy 10, between Bowers Drive and Llama Street. Table 1 shows the characteristics of the key roadway corridors around this site and within the study area.

Table 1 – Study Corridor Characteristics

Name	Designation[1]	Classification[2]	Speed Limit	Lanes	Transit[3]	Peds/ Bicycles
Hwy 10	US 10	Principal Arterial	65 mph	4 Divided	None	None
Bowers Drive	MSAS 115	Local	30 mph	2 Undivided	None	None
Llama Street	MSAS 122	Local	30 mph	2 Undivided	None	None
Armstrong Boulevard	CSAH 83	A-Minor Expander	35 mph	4 Divided	None	Trail on one side
Riverdale Drive	MSAS 115	Local	30 mph	2 Undivided	None	Sidewalk/ Trail on east side

[1] CSAH = County State Aid Highway, MSAS = Municipal State Aid Street.
[2] City of Ramsey 2040 Comprehensive Plan Update and Anoka County Comprehensive Plan
[3] Number of routes around the proposed site followed by the frequency of transit service during the peak periods.

b. Study Intersection Characteristics

All Study intersections are under side street stop control except for Armstrong Boulevard/North Hwy 10 Ramps, which utilizes traffic signal control. The existing traffic control and travel lanes are shown in Figure 1 in the Appendix for the study intersections.

c. Traffic Volumes

Intersection video was collected at the existing study intersections under normal weekday conditions in September/October 2020. Using these videos, 48-hour turning movement counts were obtained at the study intersections. The data from the two days was averaged to provide the base traffic for a "typical weekday" and compared against previously collected data to determine if COVID-19 was having meaningful impacts on the obtain traffic data. This review showed that at the Armstrong Boulevard/Hwy 10 ramps the collected counts were higher than those collected previously. Based on this result the collected turning movement counts were utilized in our analysis.

The average a.m. and p.m. peak hours were found to be from 7:00 to 8:00 a.m. and 4:00 to 5:00 p.m. The “typical day” counts from these two peak hours were used at the study intersections for analysis. The turning movement count data from the counts are contained in fifteen-minute intervals in the Appendix.

Based on the “typical day” turning movement volumes, the current daily traffic volumes on each study corridor are:

i. 38,200 vehicles per day on Hwy 10 east of Bowers Drive
ii. 38,000 vehicles per day on Hwy 10 west of Bowers Drive
iii. 500 vehicles per day on Bowers Drive
iv. 100 vehicles per day on Llama Street
v. 300 vehicles per day on Riverdale Drive between Llama Street and Hwy 10 south ramps
vi. 800 vehicles per day on Riverdale Drive east of Armstrong Boulevard
vii. 5,600 vehicles per day on Armstrong Boulevard south of Hwy 10 north ramps
viii. 9,700 vehicles per day on Armstrong Boulevard north of Hwy 10 north ramps

3. Forecasted Traffic

a. Site Traffic Forecasting

A trip generation analysis was performed for the development site based on the methods published in the *Institute of Transportation Engineers (ITE) Trip Generation Manual, 10th Edition*. Trip generation rates are also based on local data collected by Spack Solutions.

The ITE manual compiles studies from across the country to provide a national average traffic for various land uses. Spack Solutions collects current average traffic volumes for various land uses in the Twin Cities regional area for use in our studies. Local data is considered more relevant than the ITE national data as it is generally newer and accounts for our area's specific characteristics and driving habits. Per the procedure in the *Trip Generation Manual*, local trip generation data is used when possible and supplemented with national ITE data when local data is not available.

The resultant new trips generated by the proposed development are shown in Table 2. A detailed trip generation table showing the exact breakdowns is provided in the Appendix.

Table 2 – New Trip Generation

Land Use Code – Source[1]	Description & Size	Daily			AM Peak Hour			PM Peak Hour		
		In	Out	*Total*	In	Out	*Total*	In	Out	*Total*
210 - ITE	Single Family Detached Housing (165 units)	779	779	*1,558*	31	91	*122*	102	61	*163*
210 - ITE	Single Family Detached Housing (78 units)	368	368	*736*	14	43	*57*	50	29	*79*
Totals Using ITE Rates		**1,147**	**1,147**	***2,294***	**45**	**134**	***179***	**152**	**90**	***242***
Local	Single Family Detached Housing (165 units)	744	744	*1,488*	29	75	*104*	83	62	*145*
Local	Detached Townhomes (78 units)	212	212	*424*	9	27	*36*	26	15	*41*
Totals Using Local Rates		**956**	**956**	***1,912***	**38**	**102**	***140***	**109**	**77**	***186***

[1] Local = Trip generation data collected by Spack Solutions.

As shown in Table 2, the local and ITE daily trip generation rates are similar. However, the ITE rates produce higher trip generation results than local data when observing

peak hours. Based on ITE's recommendation to use local data when available, the trip generation based on local data was utilized in our analysis. Furthermore, the local data presents a more accurate representation of the proposed land uses as ITE no longer has detached townhome data while the local data does.

A trip distribution pattern was developed for the generated traffic going to and from the proposed development. This pattern is based on the existing traffic volumes, site access, and access to the regional transportation system. The general trip distribution pattern for this study is:

i. 44% of the generated traffic to/from the west on Highway 10.
ii. 11% of the generated traffic to/from the north on Armstrong Boulevard.
iii. 44% of the generated traffic to/from the east on Highway 10.
iv. 1% percent of the generated traffic to/from the south on Riverdale Drive.

Traffic generated by the site development was assigned to the area roadways per this distribution pattern.

b. Non-site Traffic Forecasting

The impacts of the proposed development are studied in 2022 and 2040. To forecast future traffic volumes in the study area outside of the proposed development's traffic, specific other developments around the site and the general growth in traffic are considered.

Several sources were considered to determine general background growth in the area, including:

- Historic traffic data on the study roadways.
- 2040 forecast volumes from the 2040 Comprehensive Plan.
- Generic growth factor for the County as developed by MnDOT's County Growth Projection Factors.
- Previous traffic studies in the surrounding area.

Based on this information, a growth rate of approximately 2.0% per year was calculated. This growth rate was applied to all movements in the study network except for those accessing the development, since those movements will only be increased with the development's forecast trip generation.

Applying this background growth rate to the existing traffic volumes established the 2022 and 2040 No-Build forecasts.

c. Total Traffic

Traffic forecasts were developed for the 2022 and 2040 scenarios by adding the traffic generated by the proposed development to the non-site forecast volumes. The resultant 2022 and 2040 peak hour forecasts are shown in Figures 2 through 4 in the Appendix.

d. Build Condition Roadway Changes

A few roadway configuration changes are proposed with construction of the new development. These changes include:

- The Bowers Drive intersection with Hwy 10 will be closed off and converted to a cul-de-sac.
- A new Hwy 10 intersection will be constructed roughly 250 feet east of the existing Bowers Drive intersection, effectively shifting the current intersection to the east.
- The southern leg of this new intersection will be the new Riverdale Drive roadway that extends to Llama Street where it will intercept the existing Riverdale Drive corridor.
- Bowers Drive will connect to Riverdale Drive through a T-intersection roughly 315 feet south of the new Hwy 10/Riverdale Drive intersection.

The proposed roadway geometry can be seen in the site plan provided in the Appendix.

4. Analyses

a. Corridor Vehicular Analysis

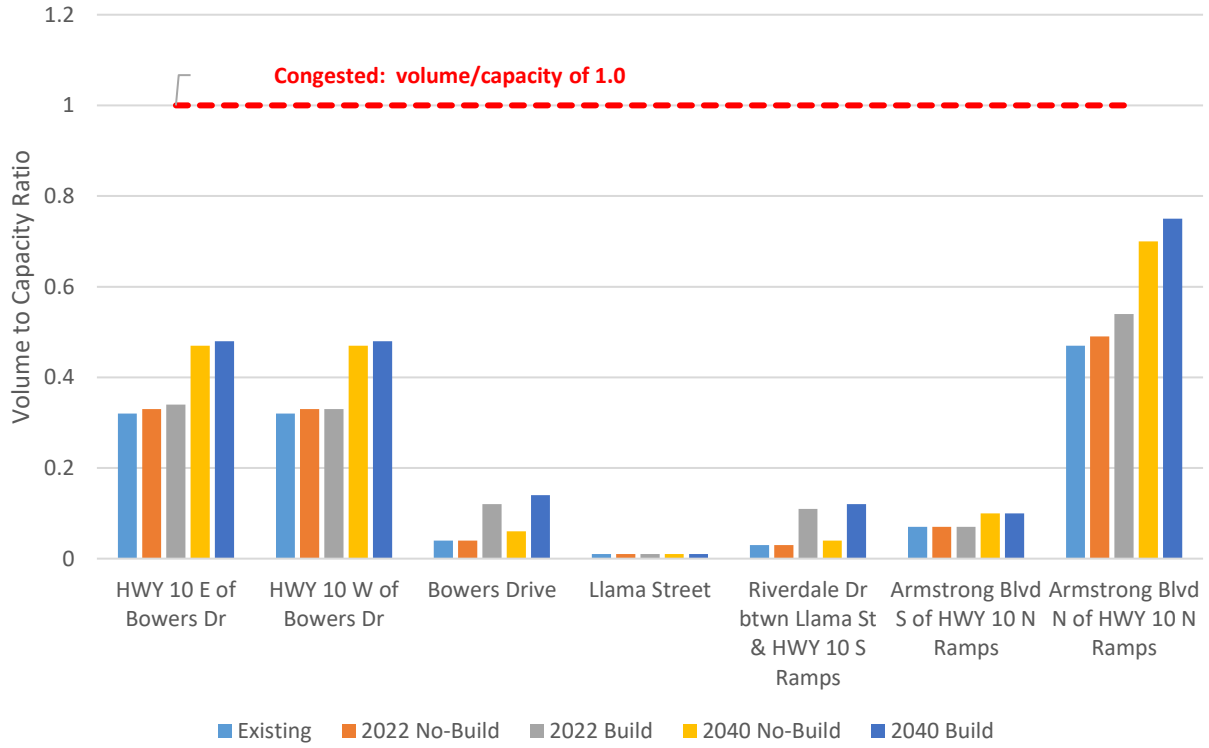
While many factors contribute to a road feeling congested, the two biggest factors are volume, how many vehicles are using the road, and capacity, how many vehicles the road can accommodate a day. Transportation professionals use these pieces of information to create a ratio of volume to capacity. For example, a road with a volume to capacity ratio of 1.0, where the traffic demand is nearly equal to the traffic supply, will feel congested to motorists.

Below is a rough guide of the daily traffic volumes different types of roads can accommodate based on The City of Ramsey's Comprehensive Plan. If the Average Daily Traffic (ADT) volume on a roadway is below the threshold, then it is considered un-congested. If the daily volume falls inside the range, the road is almost congested, and if the daily volume is over the threshold the road is congested.

- 2-Lane undivided streets are considered congested with a volume between 10,000 to 12,000 vehicles per day.
- 2-Lane divided streets are considered congested with a volume between 15,000 to 17,000 vehicles per day.
- 4-Lane divided streets - 28,000 to 32,000 vehicles per day.
- 6-Lane divided freeway – 90,000 to 120,000 vehicles per day.

To provide an initial planning level screening, Chart 1 provides volume to capacity ratios of the study corridors during each of the study years to determine if any of the roadway corridors are candidates for additional through lanes.

Chart 1 – Study Corridor Volume to Capacity



b. Intersection Vehicular Analysis

Individual intersections can perform poorly during peak periods while the overall roadway corridor is operating with an uncongested daily volume to capacity ratio lower than 1.0. Therefore, capacity analyses are performed for the study intersections to determine if they need improvements such as turn lanes or an upgrade in traffic control.

The existing and forecasted turning movement volumes along with the existing intersection configurations and traffic control were used to develop the average delay per intersection in each study scenario. The delay calculations were done in accordance with the *Highway Capacity Manual, 6th Edition* using the Vistro software package. The full calculations for each study scenario, including Level of Service (LOS) grades and queue lengths, are included in the Appendix. Also included in the Appendix is a guide explaining the Level of Service grade concept.

Chart 2 (a.m. peak hour) and Chart 3 (p.m. peak hour) show the average peak hour delay per traffic signal-controlled intersection for each study scenario. The LOS D/E boundary of 55 seconds of delay per vehicle is considered the threshold between acceptable and unacceptable traffic signal operation in Minnesota.

The initial signal timing for the existing conditions was provided by Anoka County.

Chart 2 – A.M. Peak Hour Delays: Signal Controlled Intersections

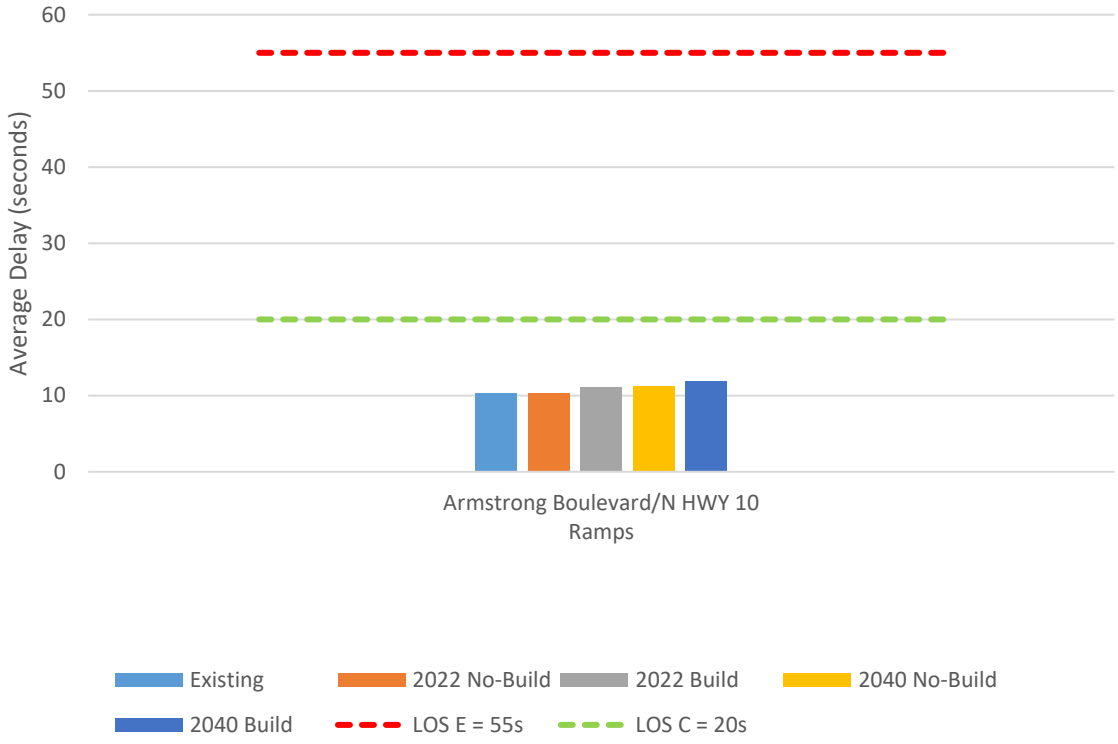


Chart 3 – P.M. Peak Hour Delays: Signal Controlled Intersections

Chart 4 (a.m. peak hour) and Chart 5 (p.m. peak hour) show the 95th percentile queue lengths on the busiest stop sign controlled approach at intersections with side street stop sign control. Average delays are not calculated for intersections with side street stop sign control because the vast majority of vehicles going through the intersection are on the main roadway and have zero delay, which leads to low overall average delays. At side street stop sign controlled approaches to busy roadways, the average delay for all the vehicles on the approach often exceeds 60 seconds. This can be the case for a few vehicles waiting at the stop sign where improvements would not be justified for the low traffic volume. Based on our experience, improvements are not warranted at these types of intersections until the 95th percentile queue at a stop sign is in the five to ten vehicle range.

Chart 6 – A.M. Peak Hour Queues: Side Street Stop Sign Controlled Intersections

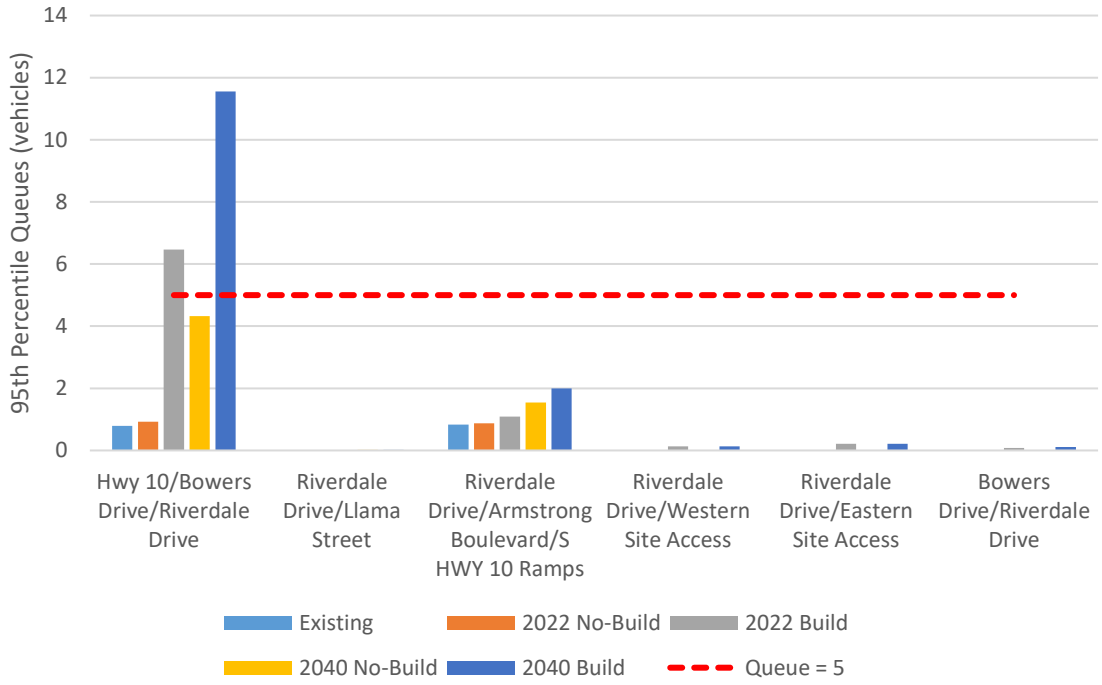
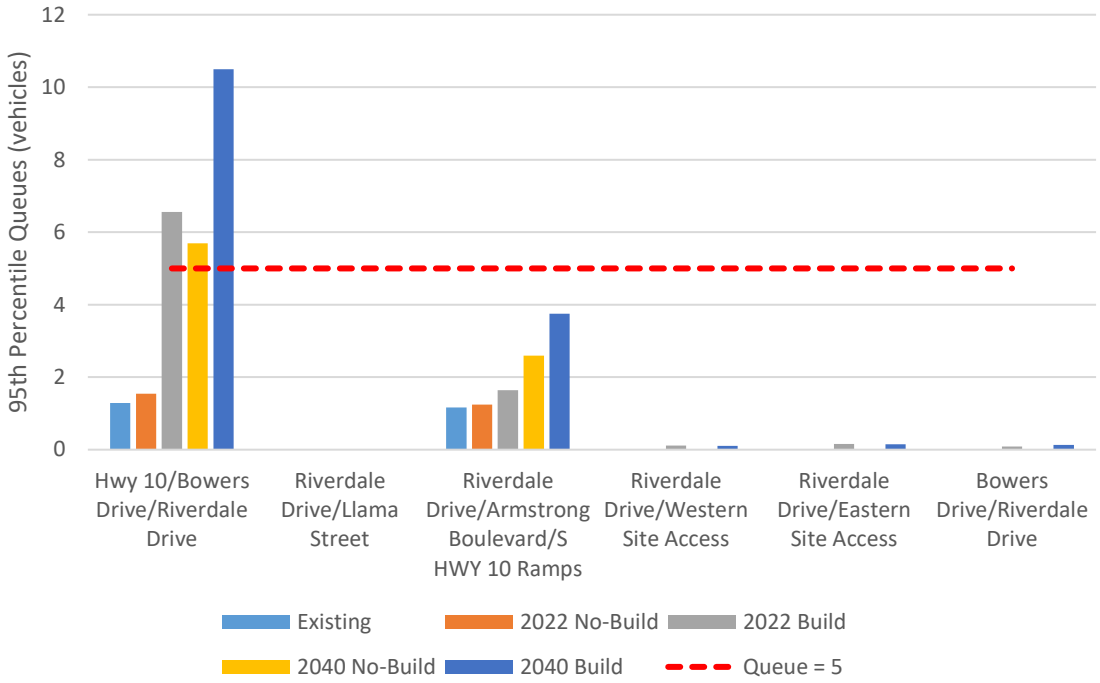


Chart 7 – P.M. Peak Hour Queues: Side Street Stop Sign Controlled Intersections



c. Vehicular Mitigation Analysis

Per the above analyses, most of the study intersections and all corridors will operate acceptably throughout the study scenarios. However, the proposed side street stop control intersection of Hwy 10/Riverdale Drive begins to see queues that extend above five vehicles.

Further investigation into the queues at this intersection revealed that in the no-build and build scenarios delays begin to reach excessive levels for the northbound left turning movements. This movement will experience delays up to:

- Four minutes in the 2022 no-build scenario
- 21 minutes in the 2040 no-build scenario
- 12 minutes in the 2022 build scenario
- Over an hour in the 2040 build scenarios

Alternatives were explored to provide appropriate mitigation at this location, improving the vehicle operations. Specially, mitigation was examined to help reduce delays associated with the northbound left turning vehicles. Generally, the least expensive alternative providing acceptable operations is recommended (i.e. stop signs over a traffic signal if stop signs will be sufficient). Based on these analyses, construction of the proposed Hwy 10/Riverdale Drive intersection as a ¾-access, eliminating the northbound left turning movement from the intersection is recommended.

This configuration removes the highest delayed movement, the cross street left-turning movement (northbound left) from the intersection. These vehicles will now need to route east along Riverdale Drive to the northern Highway 10 Ramps on Armstorng Boulevard, where they will then be able to proceed westbound on Highway 10. In total, roughly 2.25 miles will be added to these vehicles drive, however with projected delays of 21 mintues to more than one hour by the 2040 build scenario, this rerouting will take less time than if the vehicles were to wait to complete a northbound left at the Hwy 10/Riverdale Drive intersection.

The restricted access mitigation was run for the 2040 scenario to determine if it was an effective solution for the delay concerns. The results were improved to:

- 46 seconds of delay per vehicle for northbound vehicles with queueing of less than two vehicles in the 2040 a.m. build scenario.
- 26 seconds of delay per vehicle for northbound vehicles with queueing of less than one vehicle in the 2040 p.m. build scenario.

As previously mentioned, and based on our experience, improvements are not warranted at side-street stop-controlled intersections until the 95th percentile queue at a stop sign is in the five to ten vehicle range. This proposed mitigation reduces the queue to less than five vehicles and brings delays back to standard levels for side street movements at side-street stop-controlled intersections intersecting with busy roadways. The full capacity analysis results can be seen in the Appendix.

d. Concept Site Plan & Multi-Modal Review

The concept site plan contained in the Appendix was reviewed to determine if the plan meets city requirement's, provides appropriate circulation, and minimizes conflicts. Following are key transportation elements of the concept site plan:

i. Car Circulation: vehicle circulation is provided in the site with two proposed accesses on Riverdale Drive. These accesses both provide connections to the entire site, meaning if one access becomes blocked due to a crash or vehicle breakdown, drivers will still be able to navigate the site and enter/exit using the alternate access. Additional future connection stub-outs are provided on the east and west of the site providing further connections when/if the area is built out further.

ii. Truck Circulation: Heavy vehicle turning movements should be considered within the site. Specifically, the two internal cul-de-sacs should be designed in a way that garbage trucks can easily turn around without require any reversing movements.

iii. Bicycle/Walking Paths: No bicycle paths are currently shown on the site plan. At a minimum, a ten-foot wide trail connection on the south side of Riverdale Drive, from the future Highway 10/Riverdale Drive intersection trail system to the trail system that starts on the east side of Riverdale Drive/Llama Street, should be provided. This connection will provide both walking and bicycle

connections for the proposed development. Internally, the eastern most access will provide a sidewalk allowing for connections to the public park.

iv. Parking: Parking for each unit will be provided off-street. Five on-street parking stalls are provided next to the 1.0-acre public park for use by park visitors.

5. Conclusions and Recommendations

The traffic impacts of the proposed development were thoroughly studied, and the principal findings are:

- The proposed development is expected to generate 1,912 new trips during an average weekday, 140 new trips during the a.m. peak hour, and 186 new trips during the p.m. peak hour.
- All study corridors are projected to operate with volumes within their planning level capacity through the 2040 build scenario.
- All study intersections except for Highway 10/Riverdale Drive (currently Highway 10/Bowers Drive) are projected to operate with queues and delays within acceptable bounds through the 2040 build scenario.
- Highway 10/Riverdale Drive (currently Highway 10/Bowers Drive) experiences larger than preferred queueing with excessive delays in the 2022 and 2040 no-build scenarios. Restriction of this access to a ¾-access, where the northbound left turning movement from Riverdale Drive to Highway 10 westbound is no longer allowed, reduces the queues and delays to acceptable levels for all analyzed scenarios.
- No external bicycle or pedestrian connections are shown in the provided site plan.

The following recommendations are made based on the above findings:

- The future Highway 10/Riverdale Drive intersection should be constructed to a ¾-access, eliminating the northbound left turning movement.
- A trail with a 10-foot minimum cross section should be constructed on the south side of Riverdale Drive connecting to Highway 10/Riverdale Drive and the existing trail on the south side of Highway 10, to the current trail system on the south side of Riverdale Drive to the east of Llama Street.

6. Appendix

A. Site Plan

B. The Language of Traffic Engineering

C. Figures 1-4

D. Traffic Counts

E. Trip Generation Table

F. Level of Service (LOS)

G. Capacity Analysis Backup

- AM Existing
- PM Existing
- AM 2022 No-Build
- PM 2022 No-Build
- AM 2040 Build
- PM 2040 Build
- AM 2022 No-Build
- PM 2022 No-Build
- AM 2040 Build
- PM 2040 Build
- Mitigated AM 2040 Build
- Mitigated PM 2040 Build

LEGAL DESCRIPTION

PARCEL DESCRIPTION: (Per Schedule A of Title Commitment File No. 2651, with a commitment date of October 17, 2019 at 7:00 am, prepared Twin City Title Company, LLC as issuing agent for Old Republic National Title Insurance Company)

Parcel A: Outlot B, Pearson Place, Anoka County, Minnesota.

Parcel B: That part of the Northwest Quarter of the Northwest Quarter of Section 29, Township 32, Range 25, Anoka County, Minnesota, lying southerly of U.S. Highway 10 and 169.

Parcel C: Lot 2, Block 3, Pearson Place, Anoka County, Minnesota.

Parcel D: Lot 1, Block 3, Pearson Place, Anoka County, Minnesota.

(abstract property)

LEGEND

- OPEN SPACE
- OPEN SPACE – WOODED
- STORMWATER POND
- INFILTRATION BASIN

U.S. HIGHWAY NO. 10 & 169

COMMERCIAL DEVELOPMENT 21.96 AC

S66°01'47"E 1951.85

S00°08'36"W 1705.32

LIFT STATION AREA 0.22 AC

S00°17'33"W 1093.62

LIFT STATION

8' TRAIL

INF. BASIN

534.66 N37°59'16"W

STREET B

STREET A

STREET C

STREET D

STREET E

PEARSON BLVD

RESIDENTIAL DEV. 78.63 AC

PUBLIC PARK 1.0 AC

POND

INFILTRATION BENCH

LAKE

OPEN SPACE / PONDING AREA - 8.08 AC

581.89 S42°51'14"E

620.99 N51°55'40"W

193.74 N89°47'35"W

BOWERS DRIVE NW

MISSISSIPPI RIVER

RIVERDALE DRIVE

BUFFER AREA 1.05 AC

AREA RETAINED BY LANDOWNER 9.70 AC

TREE PRESERVATION AREA 7.0 AC

EXISTING 50' TREE BUFFER

1349.11 N40°39'13"W

322.61 N17°54'18"E

451.73 N22°50'18"E

205.79 N67°09'42"W

159.73 A=12°58'27" R=706.37

76.30 S00°14'18"W

395.06 A=17°40'00" R=128.25

100.41 A=06°01'20" R=955.30

270.04 A=07°17'00" R=2125.00

50.00 N76°47'15"W

61.69 A=58°33'37" R=60.36

SITE DATA

TOTAL AREA	±110.29 AC.
RESIDENTIAL DEVELOPMENT AREA	78.63
PUBLIC PARK AREA	1.0
TREE PRESERVATION AREA	7.0
OPEN SPACE / PONDING AREA	8.08
RIVERDALE BUFFER AREA	1.05
ROW AREA	15.37
LIFT STATION AREA	0.22
COMMERCIAL DEVELOPMENT AREA	21.96
AREA RETAINED BY LANDOWNER	9.70

N

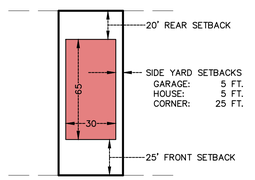
0 60 120 240

(SCALE IN FEET)

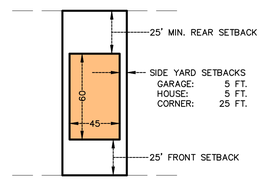
RESIDENTIAL DEVELOPMENT DATA

TOTAL NUMBER OF LOTS	243
GROSS DENSITY	3.1 U/AC
DETACHED TOWNHOMES	78
55' SINGLE FAMILY	116
65' SINGLE FAMILY	49

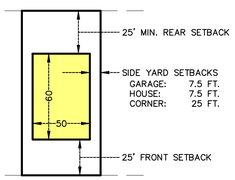
40' DETACHED TOWNHOME LOT DETAIL



55' SINGLE FAMILY LOT DETAIL



65' SINGLE FAMILY LOT DETAIL



CARLSON McCAIN
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DRAWN BY: C#/RR
ISSUE DATE: 12/3/20
Revisions:

CAPSTONE HOMES, INC.
14015 Sunfish Lake Blvd. NW, Suite 400
Ramsey, MN 55303

RIVERSTONE SOUTH
Ramsey, Minnesota

SKETCH PLAN W/AERIAL

1 of 1

[Save Date: 12/03/20] F:\jobs\8481 - 8500\8494 - pearson place 2nd\cad c3d\survey\layouts\8494_sketch plan.dwg

The Language of Traffic Engineering

Traffic Engineering, and Traffic Engineers, often use technical terms or jargon that may be confusing or tough to understand even within the context of a sentence. Key terms and acronyms that can generally be found in all types of traffic studies are defined in this document.

Types of Studies

Access Management – The practice of government agencies limiting the amount of intersections (both public roadway crossings and private driveways) along a roadway corridor based on the function of the roadway to improve safety and mobility while streamlining access.

Corridor Study – A transportation review and analysis of the existing and future traffic operations of a roadway segment. Varies in length from a couple blocks to a few miles and typically covers all modes of travel.

Intersection Control Evaluation (ICE) Report – A document that examines and determines the most appropriate type of control (stop sign, signal, roundabout, or other) at one or more intersections.

Safety Study – An examination of crash records to identify potential trends, issues, and problem intersections/ corridors. Usually includes potential mitigation options expected to decrease crash rates in the future.

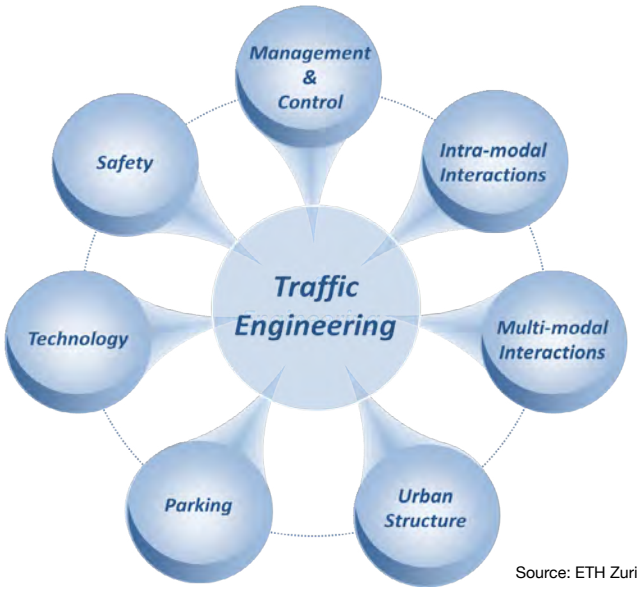
Speed Study – A review of existing travel speeds and the corridor characteristics to determine if speeding is an issue, the appropriate speed to post as the limit, and/or areas to provide reduced speed warnings.

Traffic Impact Study (TIS) – A document that addresses the expected traffic impacts of a development and, if necessary, mitigation options that will reduce or eliminate negative impacts. Also referred to as a Traffic Impact Analysis.

Transportation Plan – A document developed by a government agency to take inventory of their transportation network, identify concerns or issues and lay out the path for improvement of the system.

Travel Demand Management Plan (TDMP) – A plan that documents the existing infrastructure around a site, including transit and non-motorized vehicle options, and develops measures to be implemented to encourage those alternative modes of travel.

Warrant Evaluation – Review of traffic volumes and other characteristics at an intersection against thresholds to determine if a traffic signal or other traffic control option is needed/warranted.



Source: ETH Zurich

Traffic Engineering is a branch of civil engineering that focuses on the safe and efficient movement of people and vehicles. It is part science and part art, requiring not only technical skills for analysis but an understanding of motivations in choosing travel routes.

Key Organizations

AASHTO – American Association of State Highway and Transportation Officials. A nonprofit, nonpartisan association representing transportation departments with a primary goal of fostering the development, operation, and maintenance of an integrated national transportation system.

DOT – Department of Transportation. Government organizations within federal and state agencies dedicated to serving the transportation needs of the community and typically responsible for study, design, operation, and maintenance of all facets of transportation.

FHWA – Federal Highway Administration. An agency within the US Department of Transportation that supports State and local governments in the design, construction, and maintenance of the highway system.

ITE – Institute of Transportation Engineers. An international educational and scientific association of transportation professionals who are responsible for meeting mobility and safety needs.

Results

85th Percentile Speed – Speed at which 85 percent of drivers are traveling at or below. Speed limits are typically set at the 85th percentile speed.

95th Percentile Queue – The distance, generally measured in feet or number of vehicles, which will be exceeded in a lane, typically at an intersection, only five percent of the time. Usually used to help determine intersection turn lane lengths.

Control Delay – The total amount of time a motorist takes to get through a road segment or intersection minus the time it would take without stopping due to traffic controls (like stop signs or traffic signals). Control delay includes decelerating and accelerating back to full driving speed.

Functional Classification – the grouping of streets and highways into categories according to their characteristics and emphasis on mobility or access. Generally, categories include arterials (emphasizing mobility and fast travel), local roads (emphasizing access to adjoining properties), and collector roads (emphasizing a balance between the two and usually connecting arterials to local roads).

Intersection Delay – The average amount of time, usually expressed in seconds, experienced by any vehicle traveling through an intersection.

Level of Service (LOS) – Qualitative measure of traffic operations related to the amount of average delay experienced. Expressed in letter grades with LOS A representing the best operations with little to no delay and LOS F representing the worst operations with excessive delays and congestion.

Measures of Effectiveness – Performance measures that define how well traffic is moving along a corridor or thru an intersection. The common MOEs are travel time, corridor speed, delay, and queues.

Mitigation – Measures intended to reduce the impact of a development or improve an identified traffic issue by either improving capacity (like adding lanes) or reducing demand (like encouraging carpooling).

Queue – Length of line of cars waiting at an intersection or at a bottleneck in a corridor, typically measured for each individual lane of traffic in feet or number of vehicles.

Volume to Capacity (v/c) ratio – the number of vehicles through an intersection or roadway segment in a specific amount of time divided by the expected capacity of the road. Less than 1.0 indicates available capacity and above 1.0 indicates more vehicles than can be accommodated. Typically, a v/c ratio above 0.85 suggests operational issues.

Trip Generation – The amount of vehicle traffic generated by a land use. One trip is equal to one vehicle traveling from an origin to a destination (traveling to and from work equals two trips).

Warrants – Criteria based on volumes and other Measures of Effectiveness for determining when all way stop signs, roundabouts, traffic signals, or other type of control should be installed.

Important Manuals/Guides

HCM – Highway Capacity Manual (released by the Transportation Research Board, or TRB). The guide for engineers and planners to assess traffic and environmental effects of highway projects. This manual presents the foundation of traffic analysis procedures in the US.

MUTCD – Manual of Uniform Traffic Control Devices. A document that sets minimum standards and provides guidance to ensure uniformity of traffic control devices (such as messages, location, size, shapes, and colors) across the nation. All roads are subject to its jurisdiction.

HSM – Highway Safety Manual (released by AASHTO). A guide that presents a variety of methods for quantitatively estimating crash frequency or severity.

Resources

MUTCD, 2009 Edition, published by FHWA

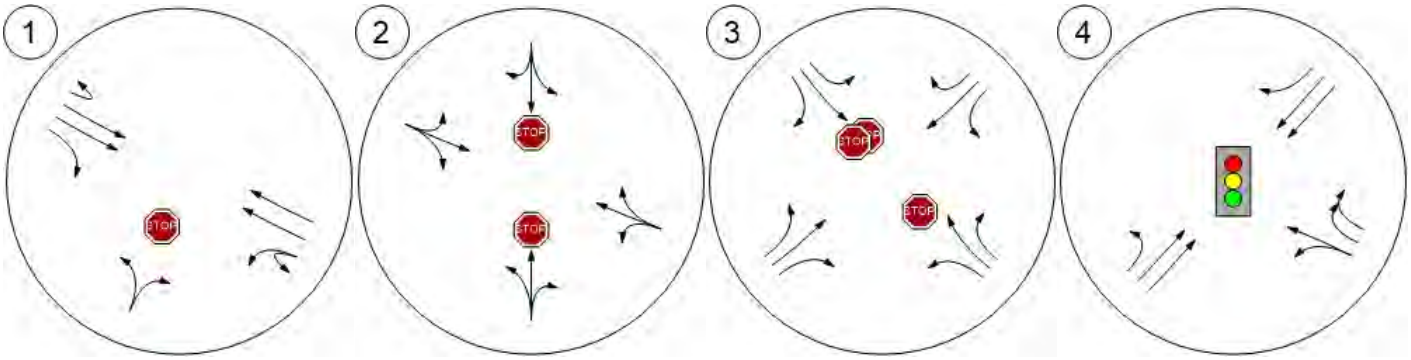
Highway Capacity Manual, HCM2010

Highway Safety Manual, HSM

About This Brief

Spack Solutions prepared this brief as part of our company's vision to significantly improve the practice of traffic engineering and transportation planning. Transportation professionals from around the world have assisted us in developing this document. We are providing this brief under the Creative Commons Attribution License. Feel free to use-modify-share this guide, but please give us some credit in your document. To request our whole series of Design Briefs and to be included on our distribution list for new materials, please email mspack@spacksolutions.com. And please reach out if you have any comments or questions related to this Design Brief.

Lane Configuration and Traffic Control

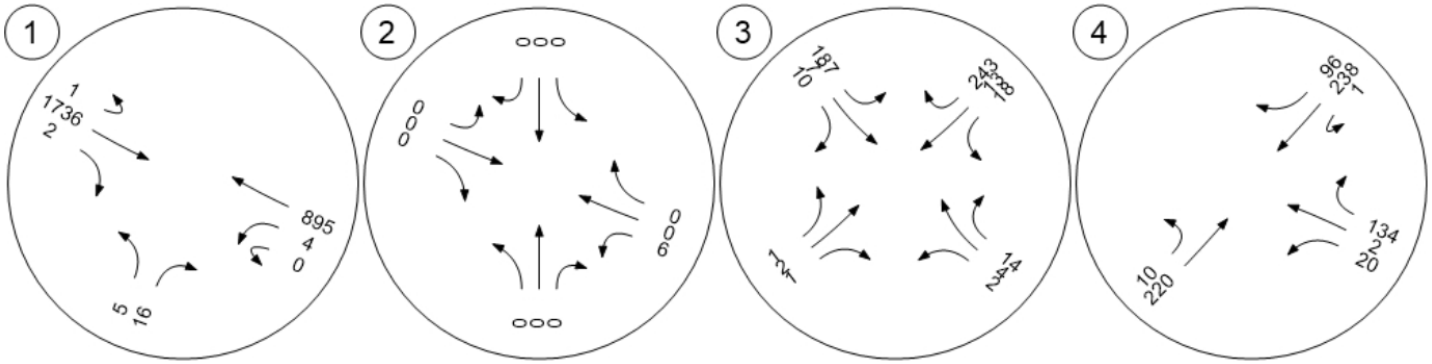


Appendix C - Figures 1 - 4

Figure 2 Through Figure 4

Figure 2 – Existing Scenario

Existing AM Peak



Existing PM Peak

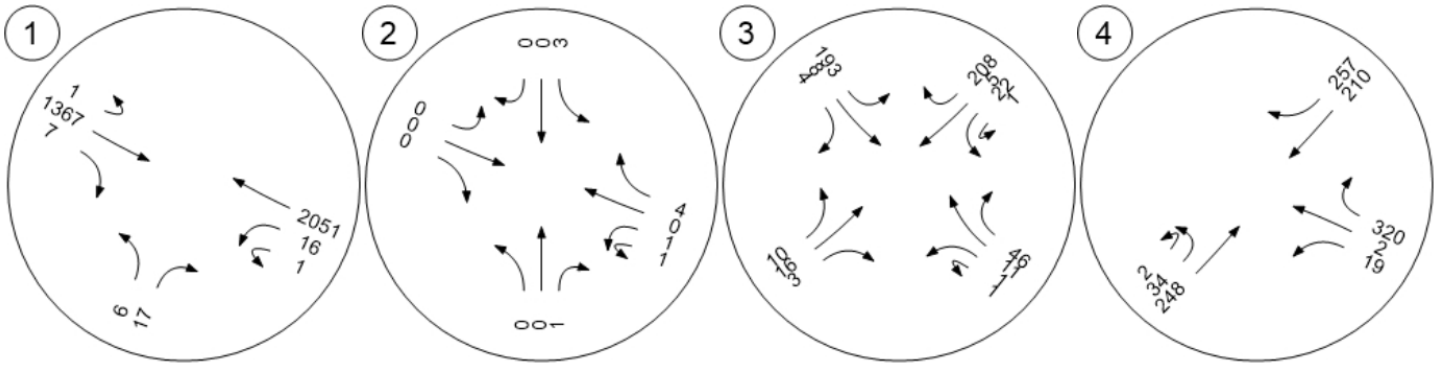
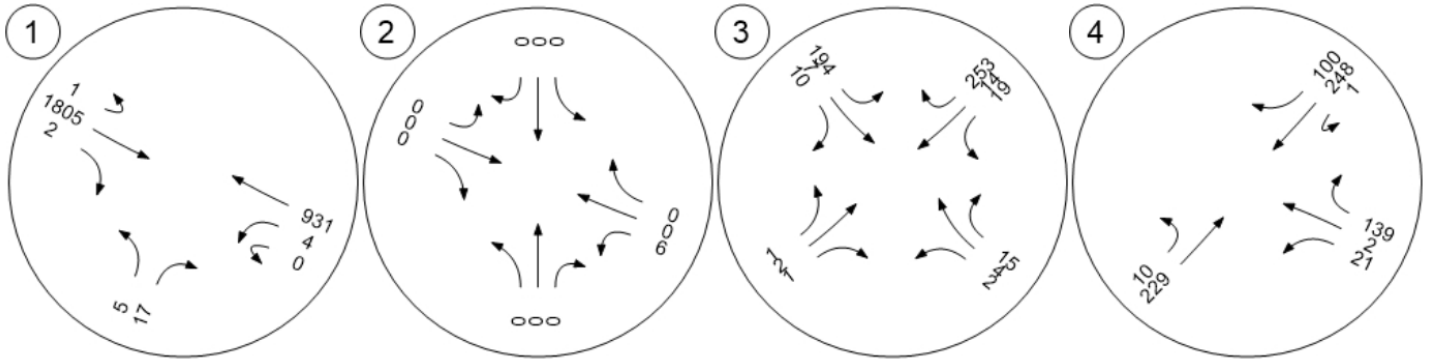


Figure 3 – No Build Scenario

2022 No-Build AM Peak



2022 No-Build PM Peak

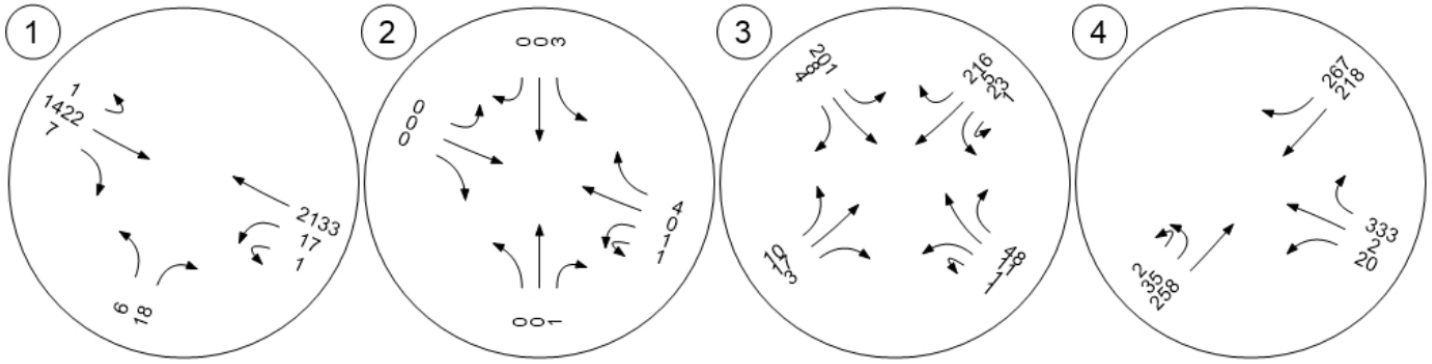
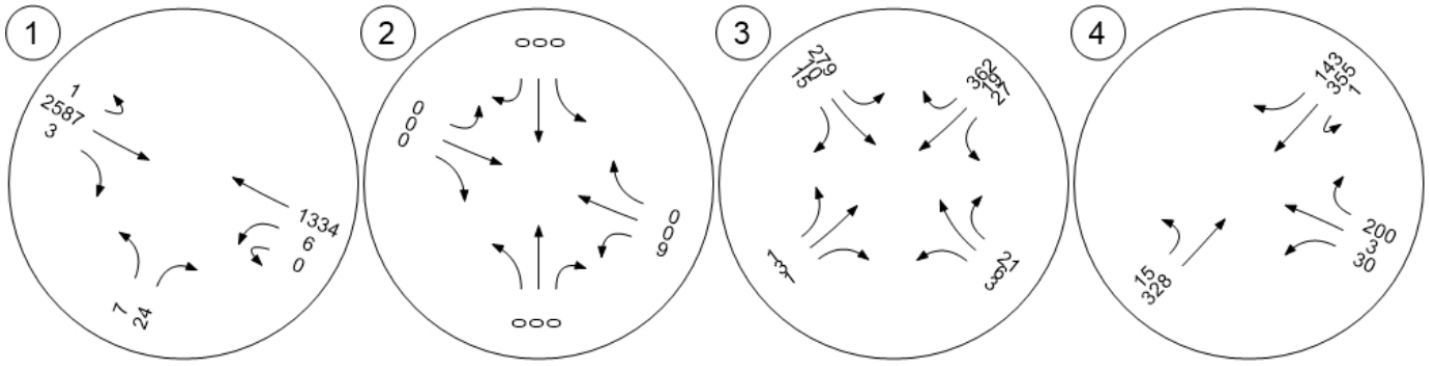


Figure 3 Cont. – No Build Scenario

2040 No-Build AM Peak



2040 No-Build PM Peak

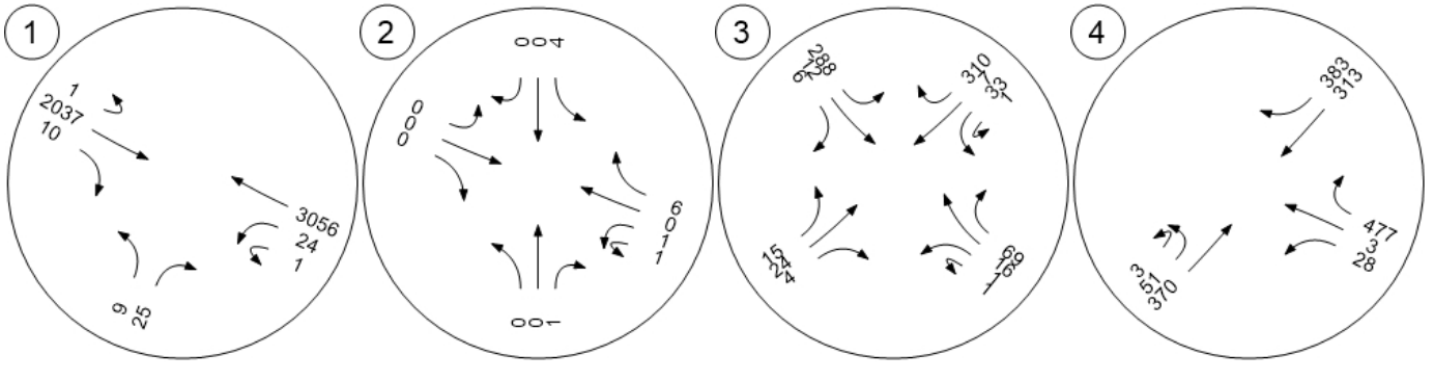
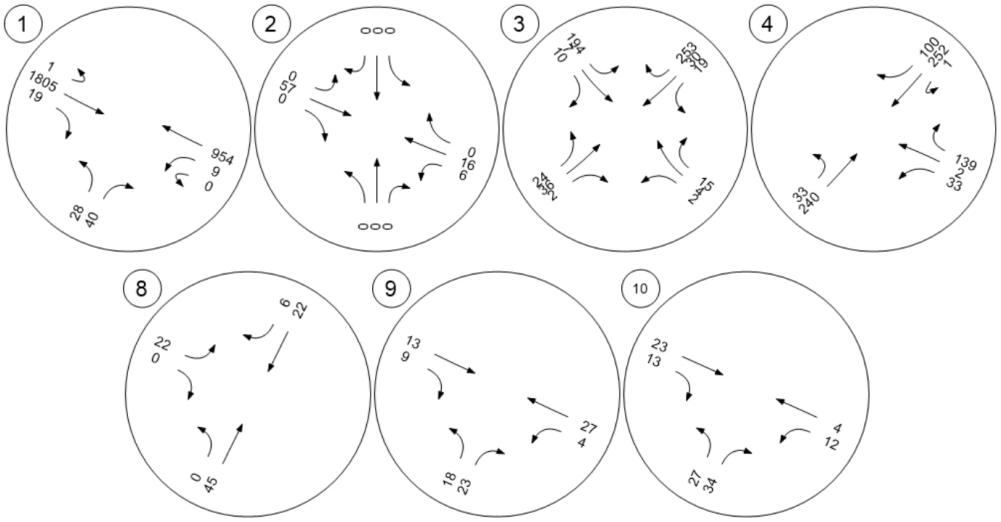


Figure 4 – Build Scenario

2022 Build AM Peak



2022 Build PM Peak

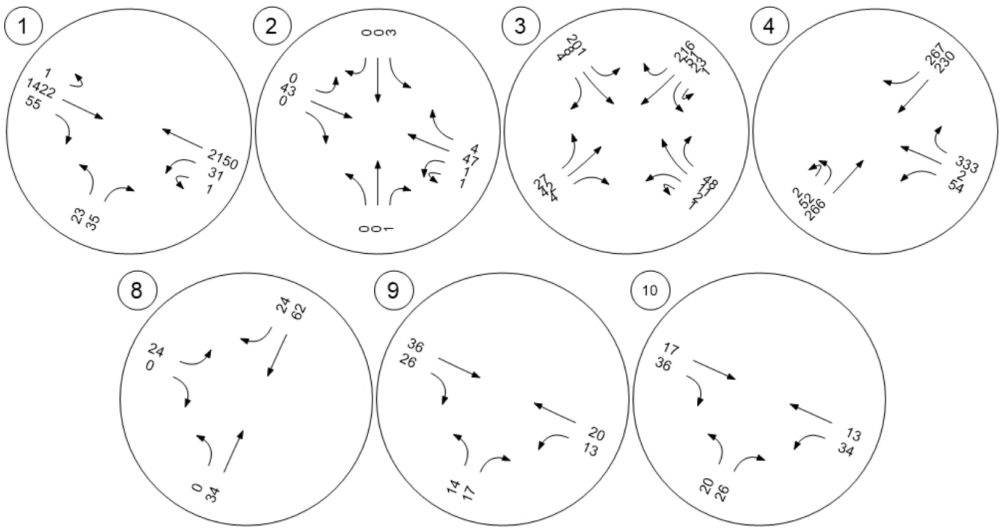
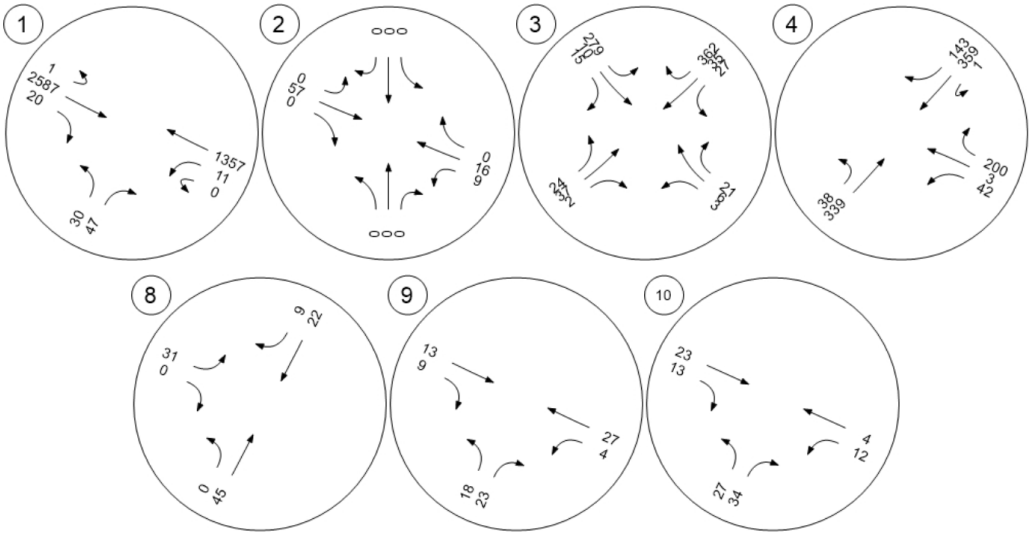
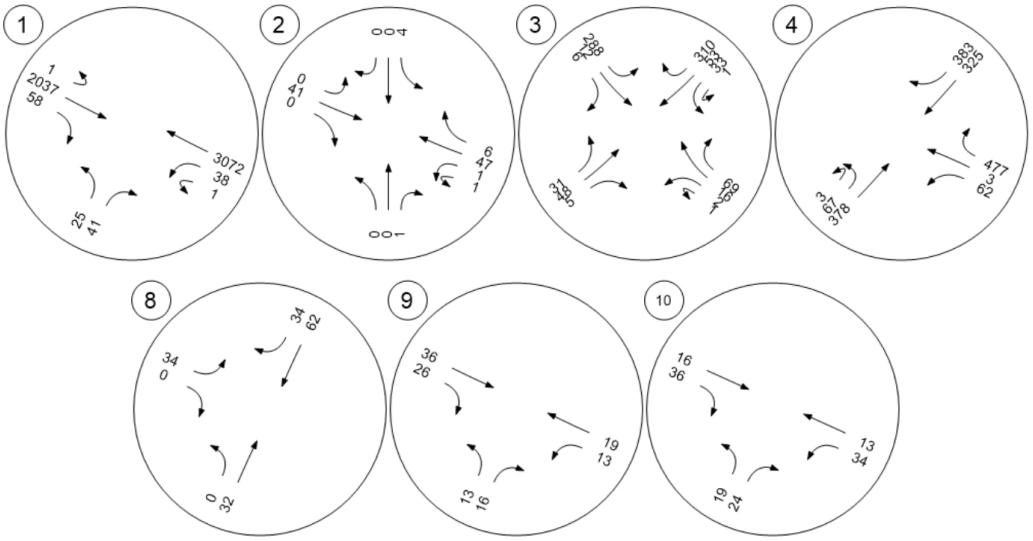


Figure 4 Cont. – Build Scenario

2040 Build AM Peak



2040 Build PM Peak



Appendix D - Traffic Counts

01 Hwy 10 and Bowers Dr
Ramsey MN
Tuesday, September 29, 2020

Time	Southbound NA						Westbound Hwy 10						Northbound Bowers Drive						Eastbound Hwy 10						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	
12:00 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
12:15 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
12:30 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
12:45 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
Hourly Total	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
1:00 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
1:15 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
1:30 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
1:45 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
Hourly Total	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
2:00 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
2:15 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
2:30 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
2:45 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
Hourly Total	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
3:00 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
3:15 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
3:30 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
3:45 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
Hourly Total	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
4:00 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
4:15 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
4:30 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
4:45 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
Hourly Total	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
5:00 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
5:15 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
5:30 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
5:45 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
Hourly Total	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
6:00 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
6:15 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
6:30 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
6:45 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
Hourly Total	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
7:00 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
7:15 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
7:30 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
7:45 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
Hourly Total	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**

Appendix D - Traffic Counts

01 Hwy 10 and Bowers Dr
Ramsey MN
Tuesday, September 29, 2020

Time	Southbound NA						Westbound Hwy 10						Northbound Bowers Drive						Eastbound Hwy 10						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	
8:00 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
8:15 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
8:30 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
8:45 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
Hourly Total	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
9:00 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
9:15 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
9:30 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
9:45 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
Hourly Total	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
10:00 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
10:15 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
10:30 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
10:45 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
Hourly Total	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
11:00 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
11:15 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
11:30 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
11:45 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
Hourly Total	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
12:00 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
12:15 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
12:30 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
12:45 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
Hourly Total	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
1:00 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
1:15 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
1:30 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
1:45 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
Hourly Total	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
2:00 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
2:15 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
2:30 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
2:45 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
Hourly Total	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
3:00 PM	0	0	0	0	0	*0*	0	2	466	0	0	*468*	0	1	0	3	0	*4*	1	0	295	1	0	*297*	**769**
3:15 PM	0	0	0	0	0	*0*	0	5	491	0	0	*496*	0	1	0	3	0	*4*	2	0	325	1	0	*328*	**828**
3:30 PM	0	0	0	0	0	*0*	0	2	453	0	0	*455*	0	1	0	1	0	*2*	0	0	287	1	0	*288*	**745**
3:45 PM	0	0	0	0	0	*0*	0	4	476	0	0	*480*	0	0	0	3	0	*3*	0	0	325	2	0	*327*	**810**
Hourly Total	0	0	0	0	0	*0*	0	13	1886	0	0	*1899*	0	3	0	10	0	*13*	3	0	1232	5	0	*1240*	**3152**

Appendix D - Traffic Counts

01 Hwy 10 and Bowers Dr
Ramsey MN
Tuesday, September 29, 2020

Time	Southbound NA						Westbound Hwy 10						Northbound Bowers Drive						Eastbound Hwy 10						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	
4:00 PM	0	0	0	0	0	*0*	0	3	502	0	0	*505*	0	1	0	3	0	*4*	0	0	331	1	0	*332*	**841**
4:15 PM	0	0	0	0	0	*0*	0	2	537	0	0	*539*	0	1	0	3	0	*4*	0	0	321	2	0	*323*	**866**
4:30 PM	0	0	0	0	0	*0*	0	7	541	0	0	*548*	0	3	0	8	2	*11*	0	0	315	2	0	*317*	**876**
4:45 PM	0	0	0	0	0	*0*	0	4	525	0	0	*529*	0	1	0	3	2	*4*	1	0	385	0	0	*386*	**919**
Hourly Total	0	0	0	0	0	*0*	0	16	2105	0	0	*2121*	0	6	0	17	4	*23*	1	0	1352	5	0	*1358*	**3502**
5:00 PM	0	0	0	0	0	*0*	0	7	464	0	0	*471*	0	1	0	3	0	*4*	0	0	302	0	0	*302*	**777**
5:15 PM	0	0	0	0	0	*0*	1	5	435	0	0	*441*	0	2	0	3	0	*5*	1	0	332	1	0	*334*	**780**
5:30 PM	0	0	0	0	0	*0*	0	3	391	0	0	*394*	0	2	0	1	0	*3*	0	0	329	3	0	*332*	**729**
5:45 PM	0	0	0	0	0	*0*	0	3	327	0	0	*330*	0	0	0	2	3	*2*	2	0	242	3	0	*247*	**579**
Hourly Total	0	0	0	0	0	*0*	1	18	1617	0	0	*1636*	0	5	0	9	3	*14*	3	0	1205	7	0	*1215*	**2865**
6:00 PM	0	0	0	0	0	*0*	0	0	312	0	0	*312*	0	2	0	1	0	*3*	0	0	248	3	0	*251*	**566**
6:15 PM	0	0	0	0	0	*0*	0	6	261	0	0	*267*	0	0	0	3	1	*3*	0	0	295	0	0	*295*	**565**
6:30 PM	0	0	0	0	0	*0*	0	2	264	0	0	*266*	0	1	0	1	0	*2*	1	0	183	0	0	*184*	**452**
6:45 PM	0	0	0	0	0	*0*	0	6	231	0	0	*237*	0	0	0	2	0	*2*	0	0	204	1	0	*205*	**444**
Hourly Total	0	0	0	0	0	*0*	0	14	1068	0	0	*1082*	0	3	0	7	1	*10*	1	0	930	4	0	*935*	**2027**
7:00 PM	0	0	0	0	0	*0*	0	3	231	0	0	*234*	0	1	0	4	3	*5*	0	0	196	1	0	*197*	**436**
7:15 PM	0	0	0	0	0	*0*	0	9	279	0	0	*288*	0	1	0	1	1	*2*	0	0	190	3	0	*193*	**483**
7:30 PM	0	0	0	0	0	*0*	0	2	188	0	0	*190*	0	1	0	0	0	*1*	0	0	145	0	0	*145*	**336**
7:45 PM	0	0	0	0	0	*0*	0	3	181	0	0	*184*	0	0	0	1	0	*1*	0	0	140	4	0	*144*	**329**
Hourly Total	0	0	0	0	0	*0*	0	17	879	0	0	*896*	0	3	0	6	4	*9*	0	0	671	8	0	*679*	**1584**
8:00 PM	0	0	0	0	0	*0*	0	5	172	0	0	*177*	0	1	0	4	0	*5*	0	0	129	2	0	*131*	**313**
8:15 PM	0	0	0	0	0	*0*	0	3	139	0	0	*142*	0	0	0	1	0	*1*	0	0	96	0	0	*96*	**239**
8:30 PM	0	0	0	0	0	*0*	0	3	112	0	0	*115*	0	1	0	0	0	*1*	0	0	104	0	0	*104*	**220**
8:45 PM	0	0	0	0	0	*0*	0	0	123	0	0	*123*	0	1	0	1	0	*2*	0	0	174	1	0	*175*	**300**
Hourly Total	0	0	0	0	0	*0*	0	11	546	0	0	*557*	0	3	0	6	0	*9*	0	0	503	3	0	*506*	**1072**
9:00 PM	0	0	0	0	0	*0*	0	1	93	0	0	*94*	0	0	0	1	0	*1*	0	0	69	0	0	*69*	**164**
9:15 PM	0	0	0	0	0	*0*	0	0	100	0	0	*100*	0	0	0	0	0	*0*	1	0	67	1	0	*69*	**169**
9:30 PM	0	0	0	0	0	*0*	0	2	82	0	0	*84*	0	0	0	0	0	*0*	0	0	55	1	0	*56*	**140**
9:45 PM	0	0	0	0	0	*0*	0	0	63	0	0	*63*	0	0	0	2	0	*2*	0	0	61	0	0	*61*	**126**
Hourly Total	0	0	0	0	0	*0*	0	3	338	0	0	*341*	0	0	0	3	0	*3*	1	0	252	2	0	*255*	**599**
10:00 PM	0	0	0	0	0	*0*	0	1	73	0	0	*74*	0	0	0	0	0	*0*	0	0	62	0	0	*62*	**136**
10:15 PM	0	0	0	0	0	*0*	0	1	60	0	0	*61*	0	0	0	0	0	*0*	0	0	62	0	0	*62*	**123**
10:30 PM	0	0	0	0	0	*0*	0	0	72	0	0	*72*	0	0	0	0	0	*0*	0	0	45	0	0	*45*	**117**
10:45 PM	0	0	0	0	0	*0*	0	0	63	0	0	*63*	0	0	0	0	0	*0*	0	0	40	0	0	*40*	**103**
Hourly Total	0	0	0	0	0	*0*	0	2	268	0	0	*270*	0	0	0	0	0	*0*	0	0	209	0	0	*209*	**479**
11:00 PM	0	0	0	0	0	*0*	0	1	51	0	0	*52*	0	0	0	0	0	*0*	0	0	33	0	0	*33*	**85**
11:15 PM	0	0	0	0	0	*0*	0	0	63	0	0	*63*	0	0	0	0	0	*0*	0	0	36	1	0	*37*	**100**
11:30 PM	0	0	0	0	0	*0*	0	0	41	0	0	*41*	0	0	0	0	0	*0*	0	0	19	0	0	*19*	**60**
11:45 PM	0	0	0	0	0	*0*	0	1	43	0	0	*44*	0	0	0	0	0	*0*	0	0	20	1	0	*21*	**65**
Hourly Total	0	0	0	0	0	*0*	0	2	198	0	0	*200*	0	0	0	0	0	*0*	0	0	108	2	0	*110*	**310**
DAILY TOTAL	**0**	**0**	**0**	**0**	**0**	***0***	**1**	**96**	**8905**	**0**	**0**	***9002***	**0**	**23**	**0**	**58**	**12**	***81***	**9**	**0**	**6462**	**36**	**0**	***6507***	**15590**
Cars	0	0	0	0	0	*0*	1	95	8731	0	0	*8827*	0	23	0	55	3	*78*	8	0	6256	35	0	*6299*	**15204**
Heavy Vehicles	0	0	0	0	0	*0*	0	1	174	0	0	*175*	0	0	0	3	9	*3*	1	0	206	1	0	*208*	**386**
Heavy Vehicle %	0.00%	0.00%	0.00%	0.00%	0.00%	*0.00%*	0.00%	1.04%	1.95%	0.00%	0.00%	*1.94%*	0.00%	0.00%	0.00%	5.17%	75.00%	*3.70%*	11.11%	0.00%	3.19%	2.78%	0.00%	*3.20%*	**2.48%**

01 Hwy 10 and Bowers Dr
Ramsey MN
Tuesday, September 29, 2020

AM Peak Hour

Time	Southbound						Westbound						Northbound						Eastbound						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	
12:00 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
12:15 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
12:30 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
12:45 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
Peak Hour Total	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
PHF	0.000	0.000	0.000	0.000	0.000	*0.000*	0.000	0.000	0.000	0.000	0.000	*0.000*	0.000	0.000	0.000	0.000	0.000	*0.000*	0.000	0.000	0.000	0.000	0.000	*0.000*	**0.000**

PM Peak Hour

Time	Southbound						Westbound						Northbound						Eastbound						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	
4:00 PM	0	0	0	0	0	*0*	0	3	502	0	0	*505*	0	1	0	3	0	*4*	0	0	331	1	0	*332*	**841**
4:15 PM	0	0	0	0	0	*0*	0	2	537	0	0	*539*	0	1	0	3	0	*4*	0	0	321	2	0	*323*	**866**
4:30 PM	0	0	0	0	0	*0*	0	7	541	0	0	*548*	0	3	0	8	2	*11*	0	0	315	2	0	*317*	**876**
4:45 PM	0	0	0	0	0	*0*	0	4	525	0	0	*529*	0	1	0	3	2	*4*	1	0	385	0	0	*386*	**919**
Peak Hour Total	0	0	0	0	0	*0*	0	16	2105	0	0	*2121*	0	6	0	17	4	*23*	1	0	1352	5	0	*1358*	**3502**
PHF	0.000	0.000	0.000	0.000	0.000	*0.000*	0.000	0.571	0.973	0.000	0.000	*0.968*	0.000	0.500	0.000	0.531	0.500	*0.523*	0.250	0.000	0.878	0.625	0.000	*0.880*	**0.953**

Total Vehicles On Leg					0
Vehicles Entering Intersection	0		Vehicles Exiting Intersection		0
Southbound					
Cars	0	0	0	0	0
Heavy	0	0	0	0	0
Total	**0**	**0**	**0**	**0**	**0**

Total Vehicles on Leg 15444	Vehicles Entering Intersection 6507	Vehicles Exiting Intersection 8937	**Eastbound**	Cars	Heavy	**Total**
				0	0	**0**
				8	1	**9**
				0	0	**0**
				6256	206	**6462**
				35	1	**36**

Daily Volumes

Cars	Heavy	**Total**	**Westbound**	Vehicles Entering Intersection 9002	Total Vehicles on Leg 15523
0	0	**0**			
8731	174	**8905**			
95	1	**96**		Vehicles Exiting Intersection 6521	
1	0	**1**			
0	0	**0**			

Cars	3	0	23	0	55
Heavy	9	0	0	0	3
Total	**12**	**0**	**23**	**0**	**58**
Northbound					
Vehicles Entering Intersection	81		Vehicles Exiting Intersection		132
Total Vehicles On Leg			213		

Appendix D - Traffic Counts

01 Hwy 10 and Bowers Dr
Ramsey MN
Wednesday, September 30, 2020

Time	Southbound NA						Westbound Hwy 10						Northbound Bowers Drive						Eastbound Hwy 10						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	
12:00 AM	0	0	0	0	0	*0*	0	0	35	0	0	*35*	0	0	0	0	0	*0*	0	0	17	0	0	*17*	**52**
12:15 AM	0	0	0	0	0	*0*	0	0	25	0	0	*25*	0	0	0	0	0	*0*	0	0	18	0	0	*18*	**43**
12:30 AM	0	0	0	0	0	*0*	0	0	23	0	0	*23*	0	0	0	1	0	*1*	0	0	18	0	0	*18*	**42**
12:45 AM	0	0	0	0	0	*0*	0	0	28	0	0	*28*	0	0	0	0	0	*0*	0	0	12	0	0	*12*	**40**
Hourly Total	0	0	0	0	0	*0*	0	0	111	0	0	*111*	0	0	0	1	0	*1*	0	0	65	0	0	*65*	**177**
1:00 AM	0	0	0	0	0	*0*	0	1	22	0	0	*23*	0	0	0	0	0	*0*	0	0	19	0	0	*19*	**42**
1:15 AM	0	0	0	0	0	*0*	0	1	16	0	0	*17*	0	0	0	0	0	*0*	0	0	20	0	0	*20*	**37**
1:30 AM	0	0	0	0	0	*0*	0	0	27	0	0	*27*	0	0	0	0	0	*0*	0	0	15	0	0	*15*	**42**
1:45 AM	0	0	0	0	0	*0*	0	0	19	0	0	*19*	0	0	0	0	0	*0*	0	0	16	0	0	*16*	**35**
Hourly Total	0	0	0	0	0	*0*	0	2	84	0	0	*86*	0	0	0	0	0	*0*	0	0	70	0	0	*70*	**156**
2:00 AM	0	0	0	0	0	*0*	0	0	13	0	0	*13*	0	0	0	0	0	*0*	0	0	13	0	0	*13*	**26**
2:15 AM	0	0	0	0	0	*0*	0	0	21	0	0	*21*	0	0	0	0	0	*0*	0	0	19	1	0	*20*	**41**
2:30 AM	0	0	0	0	0	*0*	0	1	14	0	0	*15*	0	0	0	0	0	*0*	0	0	19	0	0	*19*	**34**
2:45 AM	0	0	0	0	0	*0*	0	0	10	0	0	*10*	0	0	0	0	0	*0*	0	0	16	0	0	*16*	**26**
Hourly Total	0	0	0	0	0	*0*	0	1	58	0	0	*59*	0	0	0	0	0	*0*	0	0	67	1	0	*68*	**127**
3:00 AM	0	0	0	0	0	*0*	0	0	22	0	0	*22*	0	0	0	0	0	*0*	0	0	21	0	0	*21*	**43**
3:15 AM	0	0	0	0	0	*0*	0	0	16	0	0	*16*	0	0	0	0	0	*0*	0	0	27	0	0	*27*	**43**
3:30 AM	0	0	0	0	0	*0*	0	0	14	0	0	*14*	0	0	0	0	0	*0*	0	0	43	0	0	*43*	**57**
3:45 AM	0	0	0	0	0	*0*	0	0	17	0	0	*17*	0	0	0	0	0	*0*	0	0	39	0	0	*39*	**56**
Hourly Total	0	0	0	0	0	*0*	0	0	69	0	0	*69*	0	0	0	0	0	*0*	0	0	130	0	0	*130*	**199**
4:00 AM	0	0	0	0	0	*0*	0	0	19	0	0	*19*	0	0	0	0	0	*0*	0	0	54	0	0	*54*	**73**
4:15 AM	0	0	0	0	0	*0*	0	0	18	0	0	*18*	0	0	0	1	0	*1*	0	0	99	0	0	*99*	**118**
4:30 AM	0	0	0	0	0	*0*	0	0	47	0	0	*47*	0	0	0	0	0	*0*	0	0	137	0	0	*137*	**184**
4:45 AM	0	0	0	0	0	*0*	0	0	46	0	0	*46*	0	0	0	0	0	*0*	0	0	162	0	0	*162*	**208**
Hourly Total	0	0	0	0	0	*0*	0	0	130	0	0	*130*	0	0	0	1	0	*1*	0	0	452	0	0	*452*	**583**
5:00 AM	0	0	0	0	0	*0*	0	0	50	0	0	*50*	0	0	0	0	0	*0*	0	0	205	0	0	*205*	**255**
5:15 AM	0	0	0	0	0	*0*	0	1	69	0	0	*70*	0	0	0	0	0	*0*	0	0	295	0	0	*295*	**365**
5:30 AM	0	0	0	0	0	*0*	0	0	96	0	0	*96*	0	0	0	2	0	*2*	0	0	384	0	0	*384*	**482**
5:45 AM	0	0	0	0	0	*0*	0	0	113	0	0	*113*	0	0	0	0	0	*0*	0	0	348	0	0	*348*	**461**
Hourly Total	0	0	0	0	0	*0*	0	1	328	0	0	*329*	0	0	0	2	0	*2*	0	0	1232	0	0	*1232*	**1563**
6:00 AM	0	0	0	0	0	*0*	0	0	109	0	0	*109*	0	1	0	2	0	*3*	0	0	475	0	0	*475*	**587**
6:15 AM	0	0	0	0	0	*0*	0	0	161	0	0	*161*	0	0	0	2	0	*2*	0	0	451	1	0	*452*	**615**
6:30 AM	0	0	0	0	0	*0*	0	0	204	0	0	*204*	0	0	0	8	0	*8*	0	0	466	1	0	*467*	**679**
6:45 AM	0	0	0	0	0	*0*	0	0	196	0	0	*196*	0	0	0	2	0	*2*	0	0	423	0	0	*423*	**621**
Hourly Total	0	0	0	0	0	*0*	0	0	670	0	0	*670*	0	1	0	14	0	*15*	0	0	1815	2	0	*1817*	**2502**
7:00 AM	0	0	0	0	0	*0*	0	0	177	0	0	*177*	0	1	0	3	0	*4*	0	0	449	1	0	*450*	**631**
7:15 AM	0	0	0	0	0	*0*	0	1	242	0	0	*243*	0	4	0	2	0	*6*	0	0	410	1	0	*411*	**660**
7:30 AM	0	0	0	0	0	*0*	0	3	249	0	0	*252*	0	1	0	9	0	*10*	0	0	436	0	0	*436*	**698**
7:45 AM	0	0	0	0	0	*0*	0	0	218	0	0	*218*	0	1	0	4	0	*5*	1	0	426	1	0	*428*	**651**
Hourly Total	0	0	0	0	0	*0*	0	4	886	0	0	*890*	0	7	0	18	0	*25*	1	0	1721	3	0	*1725*	**2640**

01 Hwy 10 and Bowers Dr
Ramsey MN
Wednesday, September 30, 2020

Time	Southbound NA						Westbound Hwy 10						Northbound Bowers Drive						Eastbound Hwy 10						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	
8:00 AM	0	0	0	0	0	*0*	0	2	179	0	0	*181*	0	0	0	4	0	*4*	0	0	273	0	0	*273*	**458**
8:15 AM	0	0	0	0	0	*0*	0	1	191	0	0	*192*	0	1	0	1	0	*2*	0	0	303	0	0	*303*	**497**
8:30 AM	0	0	0	0	0	*0*	0	1	168	0	0	*169*	0	0	0	2	0	*2*	0	0	304	1	0	*305*	**476**
8:45 AM	0	0	0	0	0	*0*	0	2	227	0	0	*229*	0	0	0	4	0	*4*	2	0	236	1	0	*239*	**472**
Hourly Total	0	0	0	0	0	*0*	0	6	765	0	0	*771*	0	1	0	11	0	*12*	2	0	1116	2	0	*1120*	**1903**
9:00 AM	0	0	0	0	0	*0*	0	0	197	0	0	*197*	0	1	0	5	0	*6*	0	0	253	2	0	*255*	**458**
9:15 AM	0	0	0	0	0	*0*	0	1	174	0	0	*175*	0	1	0	2	0	*3*	0	0	253	0	0	*253*	**431**
9:30 AM	0	0	0	0	0	*0*	0	2	231	0	0	*233*	0	0	0	4	0	*4*	0	0	261	0	0	*261*	**498**
9:45 AM	0	0	0	0	0	*0*	1	1	215	0	0	*217*	0	2	0	2	0	*4*	0	0	234	0	0	*234*	**455**
Hourly Total	0	0	0	0	0	*0*	1	4	817	0	0	*822*	0	4	0	13	0	*17*	0	0	1001	2	0	*1003*	**1842**
10:00 AM	0	0	0	0	0	*0*	0	1	204	0	0	*205*	0	0	0	1	1	*1*	1	0	199	0	0	*200*	**406**
10:15 AM	0	0	0	0	0	*0*	1	0	188	0	0	*189*	0	0	0	1	0	*1*	0	0	229	1	0	*230*	**420**
10:30 AM	0	0	0	0	0	*0*	1	3	231	0	0	*235*	0	2	0	6	0	*8*	0	0	237	0	0	*237*	**480**
10:45 AM	0	0	0	0	0	*0*	1	2	228	0	0	*231*	0	1	#REF!	5	0	*#REF!*	0	0	248	1	0	*249*	**#REF!**
Hourly Total	0	0	0	0	0	*0*	3	6	851	0	0	*860*	0	3	#REF!	13	1	*#REF!*	1	0	913	2	0	*916*	**#REF!**
11:00 AM	0	0	0	0	0	*0*	0	3	239	0	0	*242*	0	1	0	7	0	*8*	0	0	210	1	0	*211*	**461**
11:15 AM	0	0	0	0	0	*0*	0	5	237	0	0	*242*	0	1	0	4	0	*5*	0	0	281	1	0	*282*	**529**
11:30 AM	0	0	0	0	0	*0*	0	4	252	0	0	*256*	0	0	0	1	0	*1*	0	0	249	0	0	*249*	**506**
11:45 AM	0	0	0	0	0	*0*	0	2	232	0	0	*234*	0	1	0	3	0	*4*	0	0	257	0	0	*257*	**495**
Hourly Total	0	0	0	0	0	*0*	0	14	960	0	0	*974*	0	3	0	15	0	*18*	0	0	997	2	0	*999*	**1991**
12:00 PM	0	0	0	0	0	*0*	0	1	242	0	0	*243*	0	1	0	2	1	*3*	0	0	239	1	0	*240*	**486**
12:15 PM	0	0	0	0	0	*0*	0	2	248	0	0	*250*	0	2	0	4	1	*6*	0	0	258	1	0	*259*	**515**
12:30 PM	0	0	0	0	0	*0*	0	0	239	0	0	*239*	0	0	0	2	1	*2*	0	0	238	1	0	*239*	**480**
12:45 PM	0	0	0	0	0	*0*	0	3	242	0	0	*245*	0	0	0	1	0	*1*	0	0	244	1	0	*245*	**491**
Hourly Total	0	0	0	0	0	*0*	0	6	971	0	0	*977*	0	3	0	9	3	*12*	0	0	979	4	0	*983*	**1972**
1:00 PM	0	0	0	0	0	*0*	0	2	249	0	0	*251*	0	1	0	0	0	*1*	0	0	275	2	0	*277*	**529**
1:15 PM	0	0	0	0	0	*0*	0	5	299	0	0	*304*	0	2	0	6	0	*8*	0	0	261	1	0	*262*	**574**
1:30 PM	0	0	0	0	0	*0*	1	4	284	0	0	*289*	0	0	0	6	1	*6*	0	0	264	0	0	*264*	**559**
1:45 PM	0	0	0	0	0	*0*	0	4	267	0	0	*271*	0	0	0	2	1	*2*	0	0	240	2	0	*242*	**515**
Hourly Total	0	0	0	0	0	*0*	1	15	1099	0	0	*1115*	0	3	0	14	2	*17*	0	0	1040	5	0	*1045*	**2177**
2:00 PM	0	0	0	0	0	*0*	0	5	322	0	0	*327*	0	4	0	4	0	*8*	0	0	276	2	0	*278*	**613**
2:15 PM	0	0	0	0	0	*0*	0	1	354	0	0	*355*	0	0	0	3	0	*3*	0	0	332	3	0	*335*	**693**
2:30 PM	0	0	0	0	0	*0*	0	3	463	0	0	*466*	0	1	0	0	0	*1*	1	0	303	2	0	*306*	**773**
2:45 PM	0	0	0	0	0	*0*	0	7	404	0	0	*411*	0	1	0	6	0	*7*	0	0	309	3	0	*312*	**730**
Hourly Total	0	0	0	0	0	*0*	0	16	1543	0	0	*1559*	0	6	0	13	0	*19*	1	0	1220	10	0	*1231*	**2809**
3:00 PM	0	0	0	0	0	*0*	0	5	431	0	0	*436*	0	0	0	3	0	*3*	0	0	310	0	0	*310*	**749**
3:15 PM	0	0	0	0	0	*0*	1	5	445	0	0	*451*	0	1	0	3	2	*4*	0	0	318	1	0	*319*	**774**
3:30 PM	0	0	0	0	0	*0*	0	6	490	0	0	*496*	0	3	0	2	0	*5*	0	0	297	1	0	*298*	**799**
3:45 PM	0	0	0	0	0	*0*	0	3	495	0	0	*498*	0	2	0	5	0	*7*	0	0	341	1	0	*342*	**847**
Hourly Total	0	0	0	0	0	*0*	1	19	1861	0	0	*1881*	0	6	0	13	2	*19*	0	0	1266	3	0	*1269*	**3169**

01 Hwy 10 and Bowers Dr
Ramsey MN
Wednesday, September 30, 2020

Time	Southbound NA						Westbound Hwy 10						Northbound Bowers Drive						Eastbound Hwy 10						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	
4:00 PM	0	0	0	0	0	*0*	1	4	455	0	0	*460*	0	0	0	4	0	*4*	0	0	320	3	0	*323*	**787**
4:15 PM	0	0	0	0	0	*0*	0	6	445	0	0	*451*	0	1	0	2	0	*3*	0	0	334	3	0	*337*	**791**
4:30 PM	0	0	0	0	0	*0*	0	2	572	0	0	*574*	0	3	0	7	0	*10*	1	0	356	2	0	*359*	**943**
4:45 PM	0	0	0	0	0	*0*	0	4	524	0	0	*528*	0	1	0	3	0	*4*	0	0	372	1	0	*373*	**905**
Hourly Total	0	0	0	0	0	*0*	1	16	1996	0	0	*2013*	0	5	0	16	0	*21*	1	0	1382	9	0	*1392*	**3426**
5:00 PM	0	0	0	0	0	*0*	0	4	466	0	0	*470*	0	3	0	4	0	*7*	0	0	291	1	0	*292*	**769**
5:15 PM	0	0	0	0	0	*0*	0	5	440	0	0	*445*	0	1	0	3	0	*4*	0	0	315	1	0	*316*	**765**
5:30 PM	0	0	0	0	0	*0*	0	7	405	0	0	*412*	0	0	0	0	0	*0*	0	0	323	1	0	*324*	**736**
5:45 PM	0	0	0	0	0	*0*	0	4	378	0	0	*382*	0	1	0	4	1	*5*	0	0	297	1	0	*298*	**685**
Hourly Total	0	0	0	0	0	*0*	0	20	1689	0	0	*1709*	0	5	0	11	1	*16*	0	0	1226	4	0	*1230*	**2955**
6:00 PM	0	0	0	0	0	*0*	0	7	331	0	0	*338*	0	0	0	4	1	*4*	0	0	225	3	0	*228*	**570**
6:15 PM	0	0	0	0	0	*0*	0	3	340	0	0	*343*	0	1	0	4	0	*5*	0	0	251	1	0	*252*	**600**
6:30 PM	0	0	0	0	0	*0*	0	7	303	0	0	*310*	0	1	0	2	0	*3*	0	0	199	1	0	*200*	**513**
6:45 PM	0	0	0	0	0	*0*	0	3	204	0	0	*207*	0	0	0	3	0	*3*	0	0	212	2	0	*214*	**424**
Hourly Total	0	0	0	0	0	*0*	0	20	1178	0	0	*1198*	0	2	0	13	1	*15*	0	0	887	7	0	*894*	**2107**
7:00 PM	0	0	0	0	0	*0*	0	4	248	0	0	*252*	0	0	0	4	0	*4*	2	0	171	2	0	*175*	**431**
7:15 PM	0	0	0	0	0	*0*	0	1	200	0	0	*201*	0	2	0	3	0	*5*	1	0	171	2	0	*174*	**380**
7:30 PM	0	0	0	0	0	*0*	0	6	187	0	0	*193*	0	1	0	2	0	*3*	0	0	139	0	0	*139*	**335**
7:45 PM	0	0	0	0	0	*0*	0	5	190	0	0	*195*	0	0	0	0	0	*0*	0	0	148	2	0	*150*	**345**
Hourly Total	0	0	0	0	0	*0*	0	16	825	0	0	*841*	0	3	0	9	0	*12*	3	0	629	6	0	*638*	**1491**
8:00 PM	0	0	0	0	0	*0*	0	7	146	0	0	*153*	0	1	0	0	0	*1*	0	0	127	1	0	*128*	**282**
8:15 PM	0	0	0	0	0	*0*	0	3	127	0	0	*130*	0	1	0	1	0	*2*	0	0	130	1	0	*131*	**263**
8:30 PM	0	0	0	0	0	*0*	0	2	123	0	0	*125*	0	0	0	0	0	*0*	0	0	97	1	0	*98*	**223**
8:45 PM	0	0	0	0	0	*0*	0	2	128	0	0	*130*	0	1	0	1	0	*2*	1	0	108	1	0	*110*	**242**
Hourly Total	0	0	0	0	0	*0*	0	14	524	0	0	*538*	0	3	0	2	0	*5*	1	0	462	4	0	*467*	**1010**
9:00 PM	0	0	0	0	0	*0*	0	4	114	0	0	*118*	0	0	0	0	0	*0*	0	0	79	0	0	*79*	**197**
9:15 PM	0	0	0	0	0	*0*	0	1	103	0	0	*104*	0	0	0	0	0	*0*	0	0	71	0	0	*71*	**175**
9:30 PM	0	0	0	0	0	*0*	0	2	111	0	0	*113*	0	0	0	2	0	*2*	0	0	81	0	0	*81*	**196**
9:45 PM	0	0	0	0	0	*0*	0	1	90	0	0	*91*	0	0	0	1	0	*1*	0	0	60	0	0	*60*	**152**
Hourly Total	0	0	0	0	0	*0*	0	8	418	0	0	*426*	0	0	0	3	0	*3*	0	0	291	0	0	*291*	**720**
10:00 PM	0	0	0	0	0	*0*	0	2	58	0	0	*60*	0	0	0	1	0	*1*	0	0	69	0	0	*69*	**130**
10:15 PM	0	0	0	0	0	*0*	0	1	71	0	0	*72*	0	0	0	1	0	*1*	0	0	50	0	0	*50*	**123**
10:30 PM	0	0	0	0	0	*0*	0	0	62	0	0	*62*	0	0	0	1	0	*1*	0	0	43	1	0	*44*	**107**
10:45 PM	0	0	0	0	0	*0*	0	0	46	0	0	*46*	0	0	0	3	0	*3*	0	0	45	0	0	*45*	**94**
Hourly Total	0	0	0	0	0	*0*	0	3	237	0	0	*240*	0	0	0	6	0	*6*	0	0	207	1	0	*208*	**454**
11:00 PM	0	0	0	0	0	*0*	0	0	45	0	0	*45*	0	0	0	0	0	*0*	0	0	27	0	0	*27*	**72**
11:15 PM	0	0	0	0	0	*0*	0	1	58	0	0	*59*	0	0	0	0	0	*0*	0	0	38	1	0	*39*	**98**
11:30 PM	0	0	0	0	0	*0*	0	0	60	0	0	*60*	0	0	0	0	0	*0*	0	0	34	0	0	*34*	**94**
11:45 PM	0	0	0	0	0	*0*	0	0	48	0	0	*48*	0	0	0	1	0	*1*	0	0	23	0	0	*23*	**72**
Hourly Total	0	0	0	0	0	*0*	0	1	211	0	0	*212*	0	0	0	1	0	*1*	0	0	122	1	0	*123*	**336**
DAILY TOTAL	**0**	**0**	**0**	**0**	**0**	***0***	**7**	**192**	**18281**	**0**	**0**	***18480***	**0**	**55**	**#REF!**	**198**	**10**	***#REF!***	**10**	**0**	**19290**	**68**	**0**	***19368***	**#REF!**
Cars	0	0	0	0	0	*0*	7	189	17624	0	0	*17820*	0	55	0	192	4	*247*	10	0	18461	63	0	*18534*	**36601**
Heavy Vehicles	0	0	0	0	0	*0*	0	3	657	0	0	*660*	0	0	0	6	6	*6*	0	0	829	5	0	*834*	**1500**
Heavy Vehicle %	0.00%	0.00%	0.00%	0.00%	0.00%	*0.00%*	0.00%	1.56%	3.59%	0.00%	0.00%	*3.57%*	0.00%	0.00%	#REF!	3.03%	60.00%	*#REF!*	0.00%	0.00%	4.30%	7.35%	0.00%	*4.31%*	**#REF!**

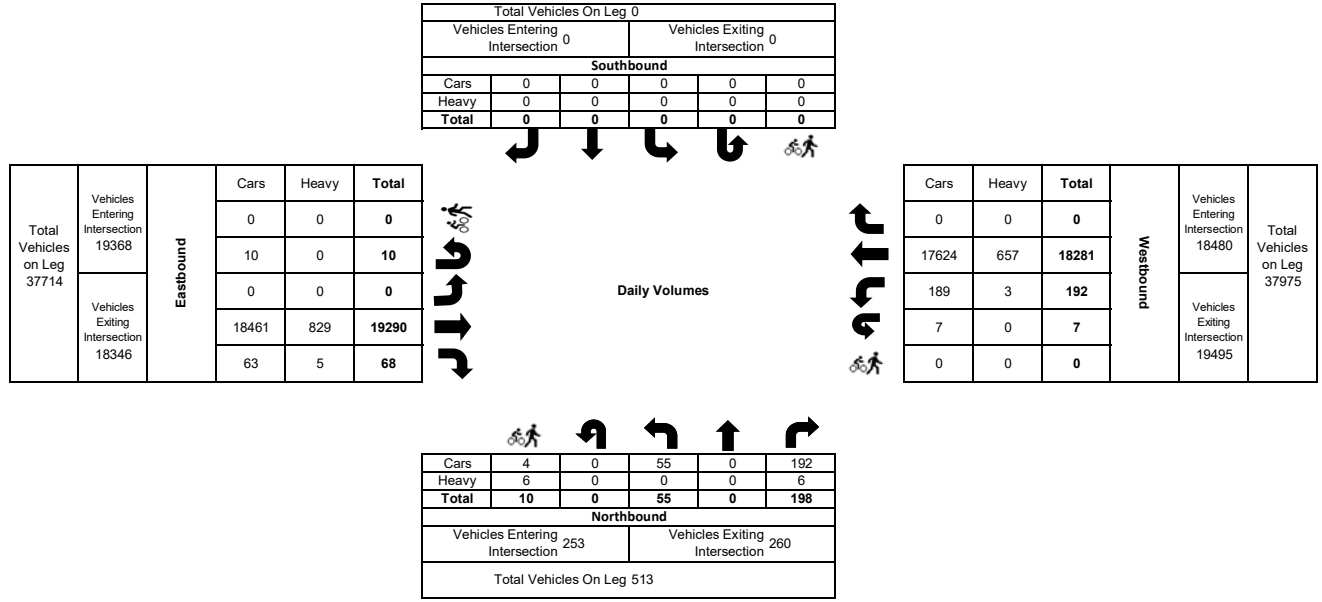
01 Hwy 10 and Bowers Dr
Ramsey MN
Wednesday, September 30, 2020

AM Peak Hour

Time	Southbound						Westbound						Northbound						Eastbound						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	
#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	*#REF!*	#REF!	#REF!	#REF!	#REF!	#REF!	*#REF!*	#REF!	#REF!	#REF!	#REF!	#REF!	*#REF!*	#REF!	#REF!	#REF!	#REF!	#REF!	*#REF!*	**#REF!**
#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	*#REF!*	#REF!	#REF!	#REF!	#REF!	#REF!	*#REF!*	#REF!	#REF!	#REF!	#REF!	#REF!	*#REF!*	#REF!	#REF!	#REF!	#REF!	#REF!	*#REF!*	**#REF!**
#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	*#REF!*	#REF!	#REF!	#REF!	#REF!	#REF!	*#REF!*	#REF!	#REF!	#REF!	#REF!	#REF!	*#REF!*	#REF!	#REF!	#REF!	#REF!	#REF!	*#REF!*	**#REF!**
#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	*#REF!*	#REF!	#REF!	#REF!	#REF!	#REF!	*#REF!*	#REF!	#REF!	#REF!	#REF!	#REF!	*#REF!*	#REF!	#REF!	#REF!	#REF!	#REF!	*#REF!*	**#REF!**
Peak Hour Total	#REF!	#REF!	#REF!	#REF!	#REF!	*#REF!*	#REF!	#REF!	#REF!	#REF!	#REF!	*#REF!*	#REF!	#REF!	#REF!	#REF!	#REF!	*#REF!*	#REF!	#REF!	#REF!	#REF!	#REF!	*#REF!*	**#REF!**
PHF	#REF!	#REF!	#REF!	#REF!	#REF!	*#REF!*	#REF!	#REF!	#REF!	#REF!	#REF!	*#REF!*	#REF!	#REF!	#REF!	#REF!	#REF!	*#REF!*	#REF!	#REF!	#REF!	#REF!	#REF!	*#REF!*	**#REF!**

PM Peak Hour

Time	Southbound						Westbound						Northbound						Eastbound						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	
4:00 PM	0	0	0	0	0	*0*	1	4	455	0	0	*460*	0	0	0	4	0	*4*	0	0	320	3	0	*323*	**787**
4:15 PM	0	0	0	0	0	*0*	0	6	445	0	0	*451*	0	1	0	2	0	*3*	0	0	334	3	0	*337*	**791**
4:30 PM	0	0	0	0	0	*0*	0	2	572	0	0	*574*	0	3	0	7	0	*10*	1	0	356	2	0	*359*	**943**
4:45 PM	0	0	0	0	0	*0*	0	4	524	0	0	*528*	0	1	0	3	0	*4*	0	0	372	1	0	*373*	**905**
Peak Hour Total	0	0	0	0	0	*0*	1	16	1996	0	0	*2013*	0	5	0	16	0	*21*	1	0	1382	9	0	*1392*	**3426**
PHF	0.000	0.000	0.000	0.000	0.000	*0.000*	0.250	0.667	0.872	0.000	0.000	*0.877*	0.000	0.417	0.000	0.571	0.000	*0.525*	0.250	0.000	0.929	0.750	0.000	*0.933*	**0.908**



02 Riverdale Dr and Llama St
Ramsey MN
Tuesday, September 29, 2020

Time	Southbound Llama St						Westbound Riverdale Dr						Northbound Llama St						Eastbound NA						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	
12:00 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
12:15 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
12:30 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
12:45 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
Hourly Total	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
1:00 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
1:15 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
1:30 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
1:45 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
Hourly Total	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
2:00 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
2:15 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
2:30 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
2:45 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
Hourly Total	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
3:00 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
3:15 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
3:30 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
3:45 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
Hourly Total	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
4:00 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
4:15 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
4:30 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
4:45 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
Hourly Total	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
5:00 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
5:15 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
5:30 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
5:45 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
Hourly Total	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
6:00 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
6:15 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
6:30 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
6:45 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
Hourly Total	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
7:00 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
7:15 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
7:30 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
7:45 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
Hourly Total	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**

02 Riverdale Dr and Llama St
Ramsey MN
Tuesday, September 29, 2020

Time	Southbound Llama St						Westbound Riverdale Dr						Northbound Llama St						Eastbound NA						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	
8:00 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
8:15 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
8:30 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
8:45 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
Hourly Total	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
9:00 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
9:15 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
9:30 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
9:45 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
Hourly Total	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
10:00 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
10:15 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
10:30 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
10:45 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
Hourly Total	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
11:00 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
11:15 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
11:30 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
11:45 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
Hourly Total	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
12:00 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
12:15 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
12:30 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
12:45 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
Hourly Total	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
1:00 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
1:15 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
1:30 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
1:45 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
Hourly Total	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
2:00 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
2:15 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
2:30 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
2:45 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
Hourly Total	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
3:00 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
3:15 PM	0	1	0	0	0	*1*	1	0	0	2	0	*3*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**4**
3:30 PM	0	1	0	0	0	*1*	0	0	0	1	0	*1*	0	0	0	1	0	*1*	0	0	0	0	0	*0*	**3**
3:45 PM	0	1	0	0	0	*1*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**1**
Hourly Total	0	3	0	0	0	*3*	1	0	0	3	0	*4*	0	0	0	1	0	*1*	0	0	0	0	0	*0*	**8**

02 Riverdale Dr and Llama St
Ramsey MN
Tuesday, September 29, 2020

Time	Southbound Llama St						Westbound Riverdale Dr						Northbound Llama St						Eastbound NA						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	
4:00 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
4:15 PM	0	1	0	0	0	*1*	0	0	0	1	0	*1*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**2**
4:30 PM	0	1	0	0	0	*1*	0	0	0	5	0	*5*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**6**
4:45 PM	0	2	0	0	0	*2*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**2**
Hourly Total	0	4	0	0	0	*4*	0	0	0	6	0	*6*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**10**
5:00 PM	0	1	0	0	0	*1*	0	0	0	1	0	*1*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**2**
5:15 PM	0	0	0	0	0	*0*	0	1	0	0	0	*1*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**1**
5:30 PM	0	0	0	0	0	*0*	0	1	0	0	0	*1*	0	0	0	2	0	*2*	0	0	0	0	0	*0*	**3**
5:45 PM	0	0	0	0	0	*0*	1	1	0	0	0	*2*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**2**
Hourly Total	0	1	0	0	0	*1*	1	3	0	1	0	*5*	0	0	0	2	0	*2*	0	0	0	0	0	*0*	**8**
6:00 PM	0	2	0	0	0	*2*	0	0	0	0	1	*0*	0	0	0	1	0	*1*	0	0	0	0	0	*0*	**3**
6:15 PM	0	0	0	0	0	*0*	0	1	0	0	0	*1*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**1**
6:30 PM	0	1	0	0	0	*1*	0	0	0	1	0	*1*	0	0	0	1	0	*1*	0	0	0	0	0	*0*	**3**
6:45 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
Hourly Total	0	3	0	0	0	*3*	0	1	0	1	1	*2*	0	0	0	2	0	*2*	0	0	0	0	0	*0*	**7**
7:00 PM	0	0	0	0	0	*0*	0	0	0	0	1	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
7:15 PM	0	0	0	0	0	*0*	0	1	0	0	0	*1*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**1**
7:30 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	1	0	*1*	0	0	0	0	0	*0*	**1**
7:45 PM	0	0	0	0	0	*0*	0	1	0	0	0	*1*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**1**
Hourly Total	0	0	0	0	0	*0*	0	2	0	0	1	*2*	0	0	0	1	0	*1*	0	0	0	0	0	*0*	**3**
8:00 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
8:15 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
8:30 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
8:45 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
Hourly Total	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
9:00 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
9:15 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
9:30 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
9:45 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
Hourly Total	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
10:00 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
10:15 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
10:30 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
10:45 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
Hourly Total	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
11:00 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
11:15 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
11:30 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
11:45 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
Hourly Total	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
DAILY TOTAL	**0**	**11**	**0**	**0**	**0**	***11***	**2**	**6**	**0**	**11**	**2**	***19***	**0**	**0**	**0**	**6**	**0**	***6***	**0**	**0**	**0**	**0**	**0**	***0***	**36**
Cars	0	11	0	0	0	*11*	2	5	0	10	2	*17*	0	0	0	4	0	*4*	0	0	0	0	0	*0*	**32**
Heavy Vehicles	0	0	0	0	0	*0*	0	1	0	1	0	*2*	0	0	0	2	0	*2*	0	0	0	0	0	*0*	**4**
Heavy Vehicle %	0.00%	0.00%	0.00%	0.00%	0.00%	*0.00%*	0.00%	16.67%	0.00%	9.09%	0.00%	*10.53%*	0.00%	0.00%	0.00%	33.33%	0.00%	*33.33%*	0.00%	0.00%	0.00%	0.00%	0.00%	*0.00%*	**11.11%**

02 Riverdale Dr and Llama St
Ramsey MN
Tuesday, September 29, 2020

AM Peak Hour

Time	Southbound						Westbound						Northbound						Eastbound						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	
12:00 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
12:15 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
12:30 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
12:45 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
Peak Hour Total	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
PHF	0.000	0.000	0.000	0.000	0.000	*0.000*	0.000	0.000	0.000	0.000	0.000	*0.000*	0.000	0.000	0.000	0.000	0.000	*0.000*	0.000	0.000	0.000	0.000	0.000	*0.000*	**0.000**

PM Peak Hour

Time	Southbound						Westbound						Northbound						Eastbound						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	
4:15 PM	0	1	0	0	0	*1*	0	0	0	1	0	*1*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**2**
4:30 PM	0	1	0	0	0	*1*	0	0	0	5	0	*5*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**6**
4:45 PM	0	2	0	0	0	*2*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**2**
5:00 PM	0	1	0	0	0	*1*	0	0	0	1	0	*1*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**2**
Peak Hour Total	0	5	0	0	0	*5*	0	0	0	7	0	*7*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**12**
PHF	0.000	0.625	0.000	0.000	0.000	*0.625*	0.000	0.000	0.000	0.350	0.000	*0.350*	0.000	0.000	0.000	0.000	0.000	*0.000*	0.000	0.000	0.000	0.000	0.000	*0.000*	**0.500**

Total Vehicles On Leg			22		
Vehicles Entering Intersection	11		Vehicles Exiting Intersection	11	
Southbound					
Cars	0	0	11	0	0
Heavy	0	0	0	0	0
Total	**0**	**0**	**11**	**0**	**0**

Total Vehicles on Leg 0	Vehicles Entering Intersection 0	**Eastbound**	Cars	Heavy	**Total**
			0	0	**0**
			0	0	**0**
	Vehicles Exiting Intersection 0		0	0	**0**
			0	0	**0**
			0	0	**0**

Daily Volumes

Cars	Heavy	**Total**	**Westbound**	Vehicles Entering Intersection 19	Total Vehicles on Leg 38
10	1	**11**			
0	0	**0**			
5	1	**6**		Vehicles Exiting Intersection 19	
2	0	**2**			
2	0	**2**			

Cars	0	0	0	0	4
Heavy	0	0	0	0	2
Total	**0**	**0**	**0**	**0**	**6**
Northbound					
Vehicles Entering Intersection	6		Vehicles Exiting Intersection	6	
Total Vehicles On Leg			12		

02 Riverdale Dr and Llama St
Ramsey MN
Wednesday, September 30, 2020

Time	Southbound Llama St						Westbound Riverdale Dr						Northbound Llama St						Eastbound NA						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	
12:00 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
12:15 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
12:30 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
12:45 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
Hourly Total	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
1:00 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
1:15 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
1:30 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
1:45 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
Hourly Total	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
2:00 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
2:15 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
2:30 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
2:45 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
Hourly Total	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
3:00 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
3:15 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
3:30 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
3:45 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
Hourly Total	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
4:00 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
4:15 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
4:30 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
4:45 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
Hourly Total	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
5:00 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
5:15 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
5:30 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
5:45 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
Hourly Total	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
6:00 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
6:15 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
6:30 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	1	0	*1*	0	0	0	0	0	*0*	**1**
6:45 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	1	0	*1*	0	0	0	0	0	*0*	**1**
Hourly Total	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	2	0	*2*	0	0	0	0	0	*0*	**2**
7:00 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
7:15 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
7:30 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
7:45 AM	0	0	0	0	0	*0*	0	5	0	0	0	*5*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**5**
Hourly Total	0	0	0	0	0	*0*	0	5	0	0	0	*5*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**5**

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Wednesday, September 30, 2020

Time	Southbound Llama St						Westbound Riverdale Dr						Northbound Llama St						Eastbound NA						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	
8:00 AM	0	0	0	0	0	*0*	0	1	0	0	0	*1*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**1**
8:15 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
8:30 AM	0	0	0	0	0	*0*	0	0	0	1	0	*1*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**1**
8:45 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
Hourly Total	0	0	0	0	0	*0*	0	1	0	1	0	*2*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**2**
9:00 AM	0	2	0	0	0	*2*	1	0	0	1	0	*2*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**4**
9:15 AM	0	0	0	0	0	*0*	0	1	0	0	0	*1*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**1**
9:30 AM	0	1	0	0	0	*1*	0	0	0	2	0	*2*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**3**
9:45 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
Hourly Total	0	3	0	0	0	*3*	1	1	0	3	0	*5*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**8**
10:00 AM	0	0	0	0	1	*0*	0	1	0	0	0	*1*	0	0	0	2	0	*2*	0	0	0	0	0	*0*	**3**
10:15 AM	0	0	0	0	0	*0*	0	1	0	1	0	*2*	0	0	0	1	0	*1*	0	0	0	0	0	*0*	**3**
10:30 AM	0	0	0	0	0	*0*	0	1	0	0	0	*1*	0	0	0	1	0	*1*	0	0	0	0	0	*0*	**2**
10:45 AM	0	0	0	0	0	*0*	1	1	0	0	0	*2*	0	0	0	1	0	*1*	0	0	0	0	0	*0*	**3**
Hourly Total	0	0	0	0	1	*0*	1	4	0	1	0	*6*	0	0	0	5	0	*5*	0	0	0	0	0	*0*	**11**
11:00 AM	0	1	0	0	0	*1*	1	0	0	1	0	*2*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**3**
11:15 AM	0	1	0	0	0	*1*	0	0	0	1	0	*1*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**2**
11:30 AM	0	0	0	0	0	*0*	0	1	0	2	0	*3*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**3**
11:45 AM	0	1	0	0	0	*1*	0	1	0	1	1	*2*	0	0	0	1	0	*1*	0	0	0	0	0	*0*	**4**
Hourly Total	0	3	0	0	0	*3*	1	2	0	5	1	*8*	0	0	0	1	0	*1*	0	0	0	0	0	*0*	**12**
12:00 PM	0	0	0	0	0	*0*	0	1	0	1	0	*2*	0	0	0	3	0	*3*	0	0	0	0	0	*0*	**5**
12:15 PM	0	1	0	0	0	*1*	2	1	0	2	0	*5*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**6**
12:30 PM	0	1	0	0	0	*1*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**1**
12:45 PM	0	0	0	0	0	*0*	0	2	0	0	0	*2*	0	0	0	2	0	*2*	0	0	0	0	0	*0*	**4**
Hourly Total	0	2	0	0	0	*2*	2	4	0	3	0	*9*	0	0	0	5	0	*5*	0	0	0	0	0	*0*	**16**
1:00 PM	0	1	0	0	0	*1*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**1**
1:15 PM	0	0	0	0	0	*0*	0	0	0	1	0	*1*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**1**
1:30 PM	0	1	0	0	0	*1*	0	0	0	1	0	*1*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**2**
1:45 PM	0	1	0	0	0	*1*	1	1	0	0	0	*2*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**3**
Hourly Total	0	3	0	0	0	*3*	1	1	0	2	0	*4*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**7**
2:00 PM	0	1	0	0	0	*1*	0	0	0	1	0	*1*	0	0	0	4	0	*4*	0	0	0	0	0	*0*	**6**
2:15 PM	0	1	0	0	0	*1*	0	0	0	1	0	*1*	0	0	0	2	0	*2*	0	0	0	0	0	*0*	**4**
2:30 PM	0	1	0	0	0	*1*	0	0	0	0	0	*0*	0	0	0	1	0	*1*	0	0	0	0	0	*0*	**2**
2:45 PM	0	2	0	0	0	*2*	0	1	0	1	0	*2*	0	0	0	2	0	*2*	0	0	0	0	0	*0*	**6**
Hourly Total	0	5	0	0	0	*5*	0	1	0	3	0	*4*	0	0	0	9	0	*9*	0	0	0	0	0	*0*	**18**
3:00 PM	0	1	0	0	0	*1*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**1**
3:15 PM	0	0	0	0	0	*0*	1	0	0	0	0	*1*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**1**
3:30 PM	0	2	0	0	0	*2*	0	0	0	3	0	*3*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**5**
3:45 PM	0	3	0	0	0	*3*	0	0	0	2	0	*2*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**5**
Hourly Total	0	6	0	0	0	*6*	1	0	0	5	0	*6*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**12**

02 Riverdale Dr and Llama St
Ramsey MN
Wednesday, September 30, 2020

Time	Southbound Llama St						Westbound Riverdale Dr						Northbound Llama St						Eastbound NA						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	
4:00 PM	0	0	0	0	0	*0*	1	0	0	1	0	*2*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**2**
4:15 PM	0	1	0	0	0	*1*	0	1	0	0	0	*1*	0	0	0	1	0	*1*	0	0	0	0	0	*0*	**3**
4:30 PM	0	1	0	0	0	*1*	0	0	0	1	0	*1*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**2**
4:45 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
Hourly Total	0	2	0	0	0	*2*	1	1	0	2	0	*4*	0	0	0	1	0	*1*	0	0	0	0	0	*0*	**7**
5:00 PM	0	0	0	0	0	*0*	0	2	0	0	0	*2*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**2**
5:15 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	1	0	*1*	0	0	0	0	0	*0*	**1**
5:30 PM	0	1	0	0	0	*1*	0	0	0	0	0	*0*	0	0	0	1	0	*1*	0	0	0	0	0	*0*	**2**
5:45 PM	0	1	0	0	1	*1*	0	0	0	1	0	*1*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**2**
Hourly Total	0	2	0	0	1	*2*	0	2	0	1	0	*3*	0	0	0	2	0	*2*	0	0	0	0	0	*0*	**7**
6:00 PM	0	0	0	0	0	*0*	0	0	0	0	1	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
6:15 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
6:30 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
6:45 PM	0	1	0	0	0	*1*	1	0	0	0	0	*1*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**2**
Hourly Total	0	1	0	0	0	*1*	1	0	0	0	1	*1*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**2**
7:00 PM	0	0	0	0	0	*0*	1	0	0	0	0	*1*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**1**
7:15 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
7:30 PM	0	0	0	0	0	*0*	0	1	0	0	0	*1*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**1**
7:45 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
Hourly Total	0	0	0	0	0	*0*	1	1	0	0	0	*2*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**2**
8:00 PM	0	0	0	0	0	*0*	0	1	0	0	0	*1*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**1**
8:15 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	1	0	*1*	0	0	0	0	0	*0*	**1**
8:30 PM	0	0	0	0	0	*0*	0	1	0	0	0	*1*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**1**
8:45 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
Hourly Total	0	0	0	0	0	*0*	0	2	0	0	0	*2*	0	0	0	1	0	*1*	0	0	0	0	0	*0*	**3**
9:00 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
9:15 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
9:30 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
9:45 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
Hourly Total	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
10:00 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
10:15 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
10:30 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
10:45 PM	0	1	0	0	0	*1*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**1**
Hourly Total	0	1	0	0	0	*1*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**1**
11:00 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
11:15 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
11:30 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
11:45 PM	0	0	0	0	0	*0*	0	0	0	1	0	*1*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**1**
Hourly Total	0	0	0	0	0	*0*	0	0	0	1	0	*1*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**1**
DAILY TOTAL	**0**	**28**	**0**	**0**	**2**	***28***	**10**	**25**	**0**	**27**	**2**	***62***	**0**	**0**	**0**	**26**	**0**	***26***	**0**	**0**	**0**	**0**	**0**	***0***	**116**
Cars	0	28	0	0	2	*28*	8	23	0	26	2	*57*	0	0	0	24	0	*24*	0	0	0	0	0	*0*	**109**
Heavy Vehicles	0	0	0	0	0	*0*	2	2	0	1	0	*5*	0	0	0	2	0	*2*	0	0	0	0	0	*0*	**7**
Heavy Vehicle %	0.00%	0.00%	0.00%	0.00%	0.00%	*0.00%*	20.00%	8.00%	0.00%	3.70%	0.00%	*8.06%*	0.00%	0.00%	0.00%	7.69%	0.00%	*7.69%*	0.00%	0.00%	0.00%	0.00%	0.00%	*0.00%*	**6.03%**

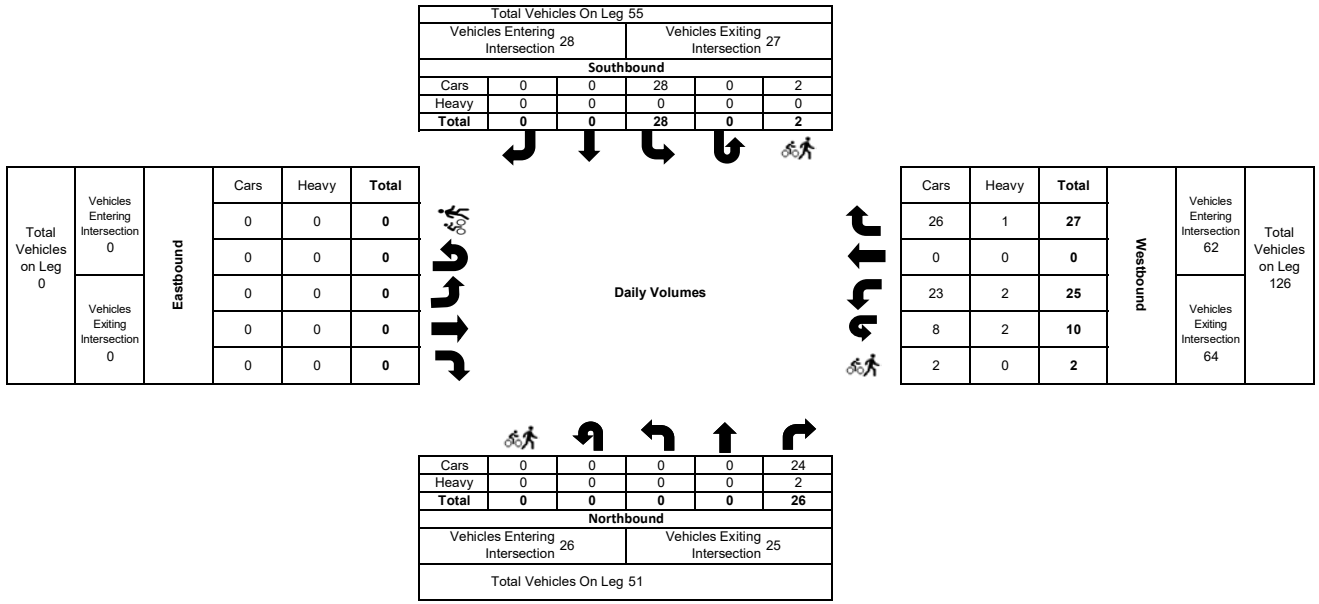
02 Riverdale Dr and Llama St
Ramsey MN
Wednesday, September 30, 2020

AM Peak Hour

Time	Southbound						Westbound						Northbound						Eastbound						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	
11:00 AM	0	1	0	0	0	*1*	1	0	0	1	0	*2*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**3**
11:15 AM	0	1	0	0	0	*1*	0	0	0	1	0	*1*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**2**
11:30 AM	0	0	0	0	0	*0*	0	1	0	2	0	*3*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**3**
11:45 AM	0	1	0	0	0	*1*	0	1	0	1	1	*2*	0	0	0	1	0	*1*	0	0	0	0	0	*0*	**4**
Peak Hour Total	0	3	0	0	0	*3*	1	2	0	5	1	*8*	0	0	0	1	0	*1*	0	0	0	0	0	*0*	**12**
PHF	0.000	0.750	0.000	0.000	0.000	*0.750*	0.250	0.500	0.000	0.625	0.250	*0.667*	0.000	0.000	0.000	0.250	0.000	*0.250*	0.000	0.000	0.000	0.000	0.000	*0.000*	**0.750**

PM Peak Hour

Time	Southbound						Westbound						Northbound						Eastbound						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	
2:00 PM	0	1	0	0	0	*1*	0	0	0	1	0	*1*	0	0	0	4	0	*4*	0	0	0	0	0	*0*	**6**
2:15 PM	0	1	0	0	0	*1*	0	0	0	1	0	*1*	0	0	0	2	0	*2*	0	0	0	0	0	*0*	**4**
2:30 PM	0	1	0	0	0	*1*	0	0	0	0	0	*0*	0	0	0	1	0	*1*	0	0	0	0	0	*0*	**2**
2:45 PM	0	2	0	0	0	*2*	0	1	0	1	0	*2*	0	0	0	2	0	*2*	0	0	0	0	0	*0*	**6**
Peak Hour Total	0	5	0	0	0	*5*	0	1	0	3	0	*4*	0	0	0	9	0	*9*	0	0	0	0	0	*0*	**18**
PHF	0.000	0.625	0.000	0.000	0.000	*0.625*	0.000	0.250	0.000	0.750	0.000	*0.500*	0.000	0.000	0.000	0.563	0.000	*0.563*	0.000	0.000	0.000	0.000	0.000	*0.000*	**0.750**



Appendix D - Traffic Counts

Riverdale Dr and Southern Ramps
Ramsey MN
Wednesday, October 21, 2020

Time	Southbound Armstorng Blvd						Westbound Riverdale Drive						Northbound Riverdale Dr						Eastbound HWY 10 S Ramp						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	
12:00 AM	0	0	0	3	0	*3*	0	0	0	1	0	*1*	0	0	0	0	0	*0*	0	1	0	0	0	*1*	**5**
12:15 AM	0	0	0	1	0	*1*	0	0	0	2	0	*2*	0	0	0	0	0	*0*	0	2	1	0	0	*3*	**6**
12:30 AM	0	0	0	2	0	*2*	0	0	0	1	0	*1*	0	0	0	0	0	*0*	0	1	1	0	0	*2*	**5**
12:45 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
Hourly Total	0	0	0	6	0	*6*	0	0	0	4	0	*4*	0	0	0	0	0	*0*	0	4	2	0	0	*6*	**16**
1:00 AM	0	0	0	3	0	*3*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	2	0	0	0	*2*	**5**
1:15 AM	0	0	0	4	0	*4*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	2	0	0	0	*2*	**6**
1:30 AM	0	0	0	1	0	*1*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	1	0	0	0	*1*	**2**
1:45 AM	0	1	0	3	0	*4*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**4**
Hourly Total	0	1	0	11	0	*12*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	5	0	0	0	*5*	**17**
2:00 AM	0	0	0	3	0	*3*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	1	1	0	0	*2*	**5**
2:15 AM	0	0	0	0	0	*0*	0	0	0	2	0	*2*	0	0	0	0	0	*0*	0	0	1	0	0	*1*	**3**
2:30 AM	0	0	0	3	0	*3*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	4	0	0	0	*4*	**7**
2:45 AM	1	0	0	5	0	*6*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	1	0	0	0	*1*	**7**
Hourly Total	1	0	0	11	0	*12*	0	0	0	2	0	*2*	0	0	0	0	0	*0*	0	6	2	0	0	*8*	**22**
3:00 AM	0	0	0	3	0	*3*	0	0	0	1	0	*1*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**4**
3:15 AM	0	0	0	8	0	*8*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	1	0	0	0	*1*	**9**
3:30 AM	0	0	0	7	0	*7*	0	0	0	1	0	*1*	0	0	0	0	0	*0*	0	3	1	0	0	*4*	**12**
3:45 AM	0	0	0	6	0	*6*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**6**
Hourly Total	0	0	0	24	0	*24*	0	0	0	2	0	*2*	0	0	0	0	0	*0*	0	4	1	0	0	*5*	**31**
4:00 AM	0	0	0	15	0	*15*	0	1	0	0	0	*1*	0	0	0	0	0	*0*	0	1	0	0	0	*1*	**17**
4:15 AM	0	1	1	20	0	*22*	0	0	0	0	0	*0*	0	0	1	1	0	*2*	0	2	0	0	0	*2*	**26**
4:30 AM	0	0	1	15	0	*16*	0	0	0	2	0	*2*	0	0	1	0	0	*1*	0	7	0	0	0	*7*	**26**
4:45 AM	0	1	0	21	0	*22*	0	0	0	2	0	*2*	0	0	0	0	0	*0*	0	9	0	0	0	*9*	**33**
Hourly Total	0	2	2	71	0	*75*	0	1	0	4	0	*5*	0	0	2	1	0	*3*	0	19	0	0	0	*19*	**102**
5:00 AM	0	0	0	30	0	*30*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	8	1	0	0	*9*	**39**
5:15 AM	0	0	1	35	0	*36*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	17	0	0	0	*17*	**53**
5:30 AM	0	1	0	58	0	*59*	0	0	0	1	0	*1*	0	0	0	0	0	*0*	0	28	0	0	0	*28*	**88**
5:45 AM	0	1	0	37	0	*38*	0	1	1	3	0	*5*	0	0	0	0	0	*0*	0	38	0	0	0	*38*	**81**
Hourly Total	0	2	1	160	0	*163*	0	1	1	4	0	*6*	0	0	0	0	0	*0*	0	91	1	0	0	*92*	**261**
6:00 AM	0	3	1	45	0	*49*	0	0	1	1	0	*2*	0	0	0	1	0	*1*	0	20	0	0	0	*20*	**72**
6:15 AM	0	1	2	55	0	*58*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	28	0	0	0	*28*	**86**
6:30 AM	0	4	0	63	0	*67*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	31	2	1	0	*34*	**101**
6:45 AM	0	2	7	60	0	*69*	0	1	1	1	0	*3*	0	0	1	0	0	*1*	0	49	2	7	0	*58*	**131**
Hourly Total	0	10	10	223	0	*243*	0	1	2	2	0	*5*	0	0	1	1	0	*2*	0	128	4	8	0	*140*	**390**
7:00 AM	0	2	3	60	0	*65*	0	0	1	2	0	*3*	0	1	2	0	0	*3*	0	34	2	1	0	*37*	**108**
7:15 AM	0	5	0	60	0	*65*	0	0	1	5	0	*6*	0	0	0	0	0	*0*	0	47	0	2	0	*49*	**120**
7:30 AM	0	9	2	54	0	*65*	0	1	1	0	0	*2*	0	0	0	0	0	*0*	0	53	2	0	0	*55*	**122**
7:45 AM	0	5	6	36	0	*47*	0	0	1	3	0	*4*	0	0	1	0	0	*1*	0	48	6	1	0	*55*	**107**
Hourly Total	0	21	11	210	0	*242*	0	1	4	10	0	*15*	0	1	3	0	0	*4*	0	182	10	4	0	*196*	**457**

Riverdale Dr and Southern Ramps
Ramsey MN
Wednesday, October 21, 2020

Time	Southbound Armstorng Blvd						Westbound Riverdale Drive						Northbound Riverdale Dr						Eastbound HWY 10 S Ramp						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	
8:00 AM	0	6	1	60	0	*67*	0	0	1	5	0	*6*	0	1	0	0	0	*1*	0	22	4	0	0	*26*	**100**
8:15 AM	0	4	1	43	0	*48*	0	0	1	5	0	*6*	0	1	1	0	0	*2*	0	27	2	0	0	*29*	**85**
8:30 AM	0	3	3	34	0	*40*	0	0	1	2	0	*3*	0	1	0	0	0	*1*	0	18	2	3	0	*23*	**67**
8:45 AM	0	5	0	43	0	*48*	0	0	0	2	0	*2*	0	0	0	2	0	*2*	0	19	1	1	0	*21*	**73**
Hourly Total	0	18	5	180	0	*203*	0	0	3	14	0	*17*	0	3	1	2	0	*6*	0	86	9	4	0	*99*	**325**
9:00 AM	0	3	1	41	0	*45*	0	1	0	10	0	*11*	0	0	3	0	0	*3*	0	8	3	0	0	*11*	**70**
9:15 AM	0	7	2	30	0	*39*	0	0	0	2	0	*2*	0	0	0	0	0	*0*	0	18	2	1	0	*21*	**62**
9:30 AM	0	5	2	43	0	*50*	0	0	2	3	0	*5*	0	0	1	1	0	*2*	0	20	4	0	0	*24*	**81**
9:45 AM	0	4	1	28	0	*33*	0	0	2	3	0	*5*	0	2	1	0	0	*3*	0	18	2	1	0	*21*	**62**
Hourly Total	0	19	6	142	0	*167*	0	1	4	18	0	*23*	0	2	5	1	0	*8*	0	64	11	2	0	*77*	**275**
10:00 AM	0	9	1	33	0	*43*	0	1	3	4	0	*8*	0	0	2	0	0	*2*	0	13	3	1	0	*17*	**70**
10:15 AM	0	5	2	30	0	*37*	0	1	1	3	0	*5*	0	0	2	2	0	*4*	0	14	1	1	0	*16*	**62**
10:30 AM	0	5	5	37	0	*47*	0	1	2	5	0	*8*	0	2	5	0	0	*7*	0	20	0	2	0	*22*	**84**
10:45 AM	0	9	3	23	0	*35*	0	0	0	8	0	*8*	0	2	0	2	0	*4*	0	15	0	3	0	*18*	**65**
Hourly Total	0	28	11	123	0	*162*	0	3	6	20	0	*29*	0	4	9	4	0	*17*	0	62	4	7	0	*73*	**281**
11:00 AM	0	9	1	40	0	*50*	0	0	2	3	0	*5*	0	0	3	1	0	*4*	0	16	1	2	0	*19*	**78**
11:15 AM	1	5	0	37	0	*43*	0	0	2	4	0	*6*	0	1	2	0	0	*3*	0	24	3	2	0	*29*	**81**
11:30 AM	0	5	2	41	0	*48*	0	0	0	6	0	*6*	0	1	2	0	0	*3*	0	21	0	1	0	*22*	**79**
11:45 AM	0	5	6	26	0	*37*	0	0	1	10	0	*11*	0	1	2	1	0	*4*	0	23	1	0	0	*24*	**76**
Hourly Total	1	24	9	144	0	*178*	0	0	5	23	0	*28*	0	3	9	2	0	*14*	0	84	5	5	0	*94*	**314**
12:00 PM	1	12	6	30	0	*49*	0	1	1	7	0	*9*	0	4	3	2	0	*9*	0	13	0	2	0	*15*	**82**
12:15 PM	0	7	7	32	0	*46*	0	1	1	8	0	*10*	0	0	6	1	0	*7*	0	29	4	1	0	*34*	**97**
12:30 PM	0	4	2	49	0	*55*	0	0	6	4	0	*10*	0	0	2	0	0	*2*	0	23	1	2	0	*26*	**93**
12:45 PM	0	5	2	31	0	*38*	0	0	1	7	0	*8*	0	2	6	1	0	*9*	0	19	3	2	0	*24*	**79**
Hourly Total	1	28	17	142	0	*188*	0	2	9	26	0	*37*	0	6	17	4	0	*27*	0	84	8	7	0	*99*	**351**
1:00 PM	0	4	1	34	0	*39*	0	0	3	9	0	*12*	0	3	0	0	0	*3*	0	16	2	0	0	*18*	**72**
1:15 PM	0	7	5	39	0	*51*	0	0	0	2	0	*2*	0	0	0	1	0	*1*	0	27	1	0	0	*28*	**82**
1:30 PM	1	4	2	37	0	*44*	0	0	1	6	0	*7*	0	2	2	1	0	*5*	0	20	0	1	0	*21*	**77**
1:45 PM	0	7	1	44	0	*52*	0	0	2	4	0	*6*	0	3	1	1	0	*5*	0	25	1	3	0	*29*	**92**
Hourly Total	1	22	9	154	0	*186*	0	0	6	21	0	*27*	0	8	3	3	0	*14*	0	88	4	4	0	*96*	**323**
2:00 PM	0	7	3	25	0	*35*	0	0	3	3	0	*6*	0	1	1	0	0	*2*	0	25	2	5	0	*32*	**75**
2:15 PM	0	10	3	33	0	*46*	0	0	1	3	0	*4*	0	2	3	1	0	*6*	0	31	1	1	0	*33*	**89**
2:30 PM	0	9	1	28	0	*38*	0	0	2	5	0	*7*	0	1	4	1	0	*6*	0	24	1	1	0	*26*	**77**
2:45 PM	1	3	2	26	0	*32*	0	0	2	7	0	*9*	0	0	1	1	0	*2*	0	29	3	1	0	*33*	**76**
Hourly Total	1	29	9	112	0	*151*	0	0	8	18	0	*26*	0	4	9	3	0	*16*	0	109	7	8	0	*124*	**317**
3:00 PM	0	7	2	32	0	*41*	0	0	2	6	0	*8*	0	0	2	0	0	*2*	0	30	1	1	0	*32*	**83**
3:15 PM	0	7	2	28	0	*37*	0	0	2	8	0	*10*	0	0	2	0	0	*2*	0	46	3	1	0	*50*	**99**
3:30 PM	0	9	0	47	0	*56*	0	0	1	7	0	*8*	0	3	3	0	0	*6*	0	48	3	2	0	*53*	**123**
3:45 PM	0	2	0	44	0	*46*	0	0	1	9	0	*10*	0	0	3	2	0	*5*	0	42	1	3	0	*46*	**107**
Hourly Total	0	25	4	151	0	*180*	0	0	6	30	0	*36*	0	3	10	2	0	*15*	0	166	8	7	0	*181*	**412**

Riverdale Dr and Southern Ramps
Ramsey MN
Wednesday, October 21, 2020

Time	Southbound Armstorng Blvd						Westbound Riverdale Drive						Northbound Riverdale Dr						Eastbound HWY 10 S Ramp						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	
4:00 PM	0	6	0	37	0	*43*	0	0	1	9	0	*10*	0	3	2	0	0	*5*	0	41	1	1	0	*43*	**101**
4:15 PM	0	1	2	41	0	*44*	0	0	1	6	0	*7*	0	1	3	0	0	*4*	0	44	2	1	0	*47*	**102**
4:30 PM	0	3	2	78	0	*83*	0	0	3	12	0	*15*	0	4	8	1	0	*13*	0	52	3	1	0	*56*	**167**
4:45 PM	0	11	3	51	0	*65*	0	1	0	9	1	*10*	0	2	2	1	0	*5*	0	67	3	0	0	*70*	**150**
Hourly Total	0	21	7	207	0	*235*	0	1	5	36	1	*42*	0	10	15	2	0	*27*	0	204	9	3	0	*216*	**520**
5:00 PM	0	3	1	42	0	*46*	0	0	5	17	0	*22*	0	3	1	1	0	*5*	0	46	2	1	0	*49*	**122**
5:15 PM	0	8	1	45	0	*54*	0	0	0	8	0	*8*	0	1	3	0	0	*4*	0	64	3	2	0	*69*	**135**
5:30 PM	0	7	2	52	0	*61*	0	0	2	4	0	*6*	0	1	3	0	0	*4*	0	29	3	0	0	*32*	**103**
5:45 PM	0	4	1	40	0	*45*	0	0	3	8	0	*11*	0	3	2	0	0	*5*	0	40	0	0	0	*40*	**101**
Hourly Total	0	22	5	179	0	*206*	0	0	10	37	0	*47*	0	8	9	1	0	*18*	0	179	8	3	0	*190*	**461**
6:00 PM	0	4	0	39	0	*43*	0	1	3	5	0	*9*	0	1	2	0	0	*3*	0	24	1	0	0	*25*	**80**
6:15 PM	0	3	1	42	0	*46*	0	0	0	4	0	*4*	0	2	3	0	0	*5*	0	31	1	1	0	*33*	**88**
6:30 PM	0	4	0	31	0	*35*	0	0	1	3	0	*4*	0	0	1	0	0	*1*	0	27	0	0	0	*27*	**67**
6:45 PM	0	3	0	29	0	*32*	0	0	2	3	0	*5*	0	2	0	0	0	*2*	0	32	1	0	0	*33*	**72**
Hourly Total	0	14	1	141	0	*156*	0	1	6	15	0	*22*	0	5	6	0	0	*11*	0	114	3	1	0	*118*	**307**
7:00 PM	0	3	0	25	0	*28*	0	0	3	5	0	*8*	0	0	0	0	0	*0*	0	26	1	0	0	*27*	**63**
7:15 PM	0	2	0	17	0	*19*	0	0	4	1	0	*5*	0	0	0	0	0	*0*	0	23	0	0	0	*23*	**47**
7:30 PM	0	4	0	32	0	*36*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	21	0	0	0	*21*	**57**
7:45 PM	0	1	0	7	0	*8*	0	0	1	2	0	*3*	0	0	0	0	0	*0*	0	23	0	0	0	*23*	**34**
Hourly Total	0	10	0	81	0	*91*	0	0	8	8	0	*16*	0	0	0	0	0	*0*	0	93	1	0	0	*94*	**201**
8:00 PM	0	1	0	16	0	*17*	0	0	0	3	0	*3*	0	0	0	0	0	*0*	0	10	0	0	0	*10*	**30**
8:15 PM	0	2	0	15	0	*17*	0	0	0	1	0	*1*	0	0	0	0	0	*0*	0	10	0	0	0	*10*	**28**
8:30 PM	0	1	0	7	0	*8*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	11	0	0	0	*11*	**19**
8:45 PM	0	1	0	12	0	*13*	0	0	0	2	0	*2*	0	0	0	0	0	*0*	0	10	3	0	0	*13*	**28**
Hourly Total	0	5	0	50	0	*55*	0	0	0	6	0	*6*	0	0	0	0	0	*0*	0	41	3	0	0	*44*	**105**
9:00 PM	0	0	2	14	0	*16*	0	0	1	0	0	*1*	0	0	0	0	0	*0*	0	5	0	0	0	*5*	**22**
9:15 PM	1	1	0	9	0	*11*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	4	0	0	0	*4*	**15**
9:30 PM	0	3	0	6	0	*9*	0	0	1	0	0	*1*	0	0	0	0	0	*0*	0	6	0	0	0	*6*	**16**
9:45 PM	0	0	0	4	0	*4*	0	0	0	1	0	*1*	0	0	0	0	0	*0*	0	10	0	0	0	*10*	**15**
Hourly Total	1	4	2	33	0	*40*	0	0	2	1	0	*3*	0	0	0	0	0	*0*	0	25	0	0	0	*25*	**68**
10:00 PM	0	0	0	5	0	*5*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	4	2	0	0	*6*	**11**
10:15 PM	1	1	0	5	0	*7*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	6	0	0	0	*6*	**13**
10:30 PM	0	0	0	10	0	*10*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	4	0	0	0	*4*	**14**
10:45 PM	0	1	0	14	0	*15*	0	0	0	0	0	*0*	0	0	1	0	0	*1*	0	1	0	0	0	*1*	**17**
Hourly Total	1	2	0	34	0	*37*	0	0	0	0	0	*0*	0	0	1	0	0	*1*	0	15	2	0	0	*17*	**55**
11:00 PM	0	0	0	8	0	*8*	0	0	0	1	0	*1*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**9**
11:15 PM	0	1	1	8	0	*10*	0	0	0	0	0	*0*	0	0	1	0	0	*1*	0	5	0	0	0	*5*	**16**
11:30 PM	0	0	0	0	0	*0*	0	0	0	1	0	*1*	0	0	0	0	0	*0*	0	4	0	0	0	*4*	**5**
11:45 PM	0	0	0	1	0	*1*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**1**
Hourly Total	0	1	1	17	0	*19*	0	0	0	2	0	*2*	0	0	1	0	0	*1*	0	9	0	0	0	*9*	**31**
DAILY TOTAL	**7**	**308**	**110**	**2606**	**0**	***3031***	**0**	**12**	**85**	**303**	**1**	***400***	**0**	**57**	**101**	**26**	**0**	***184***	**0**	**1862**	**102**	**63**	**0**	***2027***	**5642**
Cars	6	302	100	2515	0	*2923*	0	10	83	301	1	*394*	0	52	92	24	0	*168*	0	1830	98	60	0	*1988*	**5473**
Heavy Vehicles	1	6	10	91	0	*108*	0	2	2	2	0	*6*	0	5	9	2	0	*16*	0	32	4	3	0	*39*	**169**
Heavy Vehicle %	14.29%	1.95%	9.09%	3.49%	0.00%	*3.56%*	0.00%	16.67%	2.35%	0.66%	0.00%	*1.50%*	0.00%	8.77%	8.91%	7.69%	0.00%	*8.70%*	0.00%	1.72%	3.92%	4.76%	0.00%	*1.92%*	**3.00%**

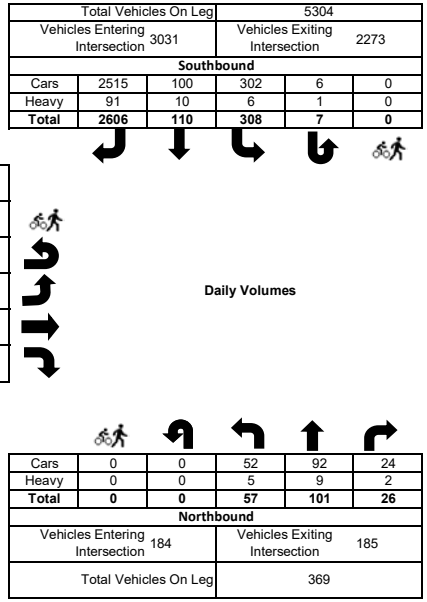
Riverdale Dr and Southern Ramps
Ramsey MN
Wednesday, October 21, 2020

AM Peak Hour

Time	Southbound						Westbound						Northbound						Eastbound						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	
6:45 AM	0	2	7	60	0	*69*	0	1	1	1	0	*3*	0	0	1	0	0	*1*	0	49	2	7	0	*58*	**131**
7:00 AM	0	2	3	60	0	*65*	0	0	1	2	0	*3*	0	1	2	0	0	*3*	0	34	2	1	0	*37*	**108**
7:15 AM	0	5	0	60	0	*65*	0	0	1	5	0	*6*	0	0	0	0	0	*0*	0	47	0	2	0	*49*	**120**
7:30 AM	0	9	2	54	0	*65*	0	1	1	0	0	*2*	0	0	0	0	0	*0*	0	53	2	0	0	*55*	**122**
Peak Hour Total	0	18	12	234	0	*264*	0	2	4	8	0	*14*	0	1	3	0	0	*4*	0	183	6	10	0	*199*	**481**
PHF	0.000	0.500	0.429	0.975	0.000	*0.957*	0.000	0.500	1.000	0.400	0.000	*0.583*	0.000	0.250	0.375	0.000	0.000	*0.333*	0.000	0.863	0.750	0.357	0.000	*0.858*	**0.918**

PM Peak Hour

Time	Southbound						Westbound						Northbound						Eastbound						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	
4:30 PM	0	3	2	78	0	*83*	0	0	3	12	0	*15*	0	4	8	1	0	*13*	0	52	3	1	0	*56*	**167**
4:45 PM	0	11	3	51	0	*65*	0	1	0	9	1	*10*	0	2	2	1	0	*5*	0	67	3	0	0	*70*	**150**
5:00 PM	0	3	1	42	0	*46*	0	0	5	17	0	*22*	0	3	1	1	0	*5*	0	46	2	1	0	*49*	**122**
5:15 PM	0	8	1	45	0	*54*	0	0	0	8	0	*8*	0	1	3	0	0	*4*	0	64	3	2	0	*69*	**135**
Peak Hour Total	0	25	7	216	0	*248*	0	1	8	46	1	*55*	0	10	14	3	0	*27*	0	229	11	4	0	*244*	**574**
PHF	0.000	0.568	0.583	0.692	0.000	*0.747*	0.000	0.250	0.400	0.676	0.250	*0.625*	0.000	0.625	0.438	0.750	0.000	*0.519*	0.000	0.854	0.917	0.500	0.000	*0.871*	**0.859**



Appendix D - Traffic Counts

Riverdale Dr and Southern Ramps
Ramsey MN
Thursday, October 22, 2020

Time	Southbound Armstorng Blvd						Westbound Riverdale Drive						Northbound Riverdale Dr						Eastbound HWY 10 S Ramp						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	
12:00 AM	0	0	0	2	0	*2*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	1	0	0	0	*1*	**3**
12:15 AM	0	1	0	2	0	*3*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**3**
12:30 AM	0	0	0	4	0	*4*	0	0	0	1	0	*1*	0	0	0	0	0	*0*	0	2	0	0	0	*2*	**7**
12:45 AM	0	0	0	1	0	*1*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	3	0	0	0	*3*	**4**
Hourly Total	0	1	0	9	0	*10*	0	0	0	1	0	*1*	0	0	0	0	0	*0*	0	6	0	0	0	*6*	**17**
1:00 AM	0	0	0	1	0	*1*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**1**
1:15 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
1:30 AM	0	2	0	3	0	*5*	0	0	0	1	0	*1*	0	0	0	0	0	*0*	0	2	0	0	0	*2*	**8**
1:45 AM	0	1	0	3	0	*4*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	2	0	0	0	*2*	**6**
Hourly Total	0	3	0	7	0	*10*	0	0	0	1	0	*1*	0	0	0	0	0	*0*	0	4	0	0	0	*4*	**15**
2:00 AM	0	0	0	4	0	*4*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**4**
2:15 AM	0	0	0	1	0	*1*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	2	0	0	0	*2*	**3**
2:30 AM	0	0	0	4	0	*4*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	2	0	0	0	*2*	**6**
2:45 AM	0	0	0	4	0	*4*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**4**
Hourly Total	0	0	0	13	0	*13*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	4	0	0	0	*4*	**17**
3:00 AM	0	0	0	3	0	*3*	0	0	0	1	0	*1*	0	0	0	0	0	*0*	0	1	0	0	0	*1*	**5**
3:15 AM	0	0	0	4	0	*4*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	1	0	0	0	*1*	**5**
3:30 AM	0	0	0	7	0	*7*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	2	0	0	0	*2*	**9**
3:45 AM	0	0	0	13	0	*13*	0	0	0	1	0	*1*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**14**
Hourly Total	0	0	0	27	0	*27*	0	0	0	2	0	*2*	0	0	0	0	0	*0*	0	4	0	0	0	*4*	**33**
4:00 AM	0	1	0	10	0	*11*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	1	0	0	0	*1*	**12**
4:15 AM	0	0	0	14	0	*14*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**14**
4:30 AM	0	0	0	25	0	*25*	0	0	0	2	0	*2*	0	0	0	0	0	*0*	0	5	0	0	0	*5*	**32**
4:45 AM	0	0	0	12	0	*12*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	11	0	0	0	*11*	**23**
Hourly Total	0	1	0	61	0	*62*	0	0	0	2	0	2	0	0	0	0	0	*0*	0	17	0	0	0	*17*	**81**
5:00 AM	0	1	0	29	0	*30*	0	0	0	3	0	*3*	0	0	0	0	0	*0*	0	8	1	0	0	*9*	**42**
5:15 AM	0	0	0	29	0	*29*	0	0	0	1	0	*1*	0	0	0	0	0	*0*	0	14	0	0	0	*14*	**44**
5:30 AM	0	2	0	55	0	*57*	0	0	0	1	0	*1*	0	0	0	0	0	*0*	0	24	0	0	0	*24*	**82**
5:45 AM	0	0	0	32	0	*32*	0	0	0	1	0	*1*	0	0	0	0	0	*0*	0	44	0	0	0	*44*	**77**
Hourly Total	0	3	0	145	0	*148*	0	0	0	6	0	*6*	0	0	0	0	0	*0*	0	90	1	0	0	*91*	**245**
6:00 AM	0	1	0	55	0	*56*	0	1	1	1	0	*3*	0	0	0	0	0	*0*	0	17	1	0	0	*18*	**77**
6:15 AM	0	2	1	60	0	*63*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	22	0	0	0	*22*	**85**
6:30 AM	0	1	1	61	0	*63*	0	0	0	1	0	*1*	0	0	1	0	0	*1*	0	30	2	2	0	*34*	**99**
6:45 AM	0	3	6	57	0	*66*	0	0	2	5	0	*7*	0	0	0	0	0	*0*	0	53	3	4	0	*60*	**133**
Hourly Total	0	7	8	233	0	*248*	0	1	3	7	0	*11*	0	0	1	0	0	*1*	0	122	6	6	0	*134*	**394**
7:00 AM	0	3	3	66	0	*72*	0	1	1	8	0	*10*	0	0	0	1	0	*1*	0	39	2	2	0	*43*	**126**
7:15 AM	0	4	1	73	0	*78*	0	1	0	0	0	*1*	0	0	0	0	0	*0*	0	47	1	3	0	*51*	**130**
7:30 AM	0	8	3	56	0	*67*	0	0	0	6	0	*6*	0	0	0	0	0	*0*	0	51	1	1	0	*53*	**126**
7:45 AM	0	5	0	55	0	*60*	0	0	1	5	0	*6*	0	0	2	0	0	*2*	1	48	9	2	0	*60*	**128**
Hourly Total	0	20	7	250	0	*277*	0	2	2	19	0	23	0	0	2	1	0	3	1	185	13	8	0	*207*	**510**

Appendix D - Traffic Counts

Riverdale Dr and Southern Ramps
Ramsey MN
Thursday, October 22, 2020

Time	Southbound Armstorng Blvd						Westbound Riverdale Drive						Northbound Riverdale Dr						Eastbound HWY 10 S Ramp						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	
8:00 AM	0	5	3	63	0	*71*	0	0	2	4	0	*6*	0	0	2	0	0	*2*	0	30	0	2	0	*32*	**111**
8:15 AM	0	4	1	44	0	*49*	0	0	1	4	0	*5*	0	0	0	2	0	*2*	0	21	3	0	0	*24*	**80**
8:30 AM	0	6	1	43	0	*50*	0	0	1	5	0	*6*	0	1	0	0	0	*1*	0	22	0	3	0	*25*	**82**
8:45 AM	0	2	3	39	0	*44*	0	0	1	1	0	*2*	0	1	0	0	0	*1*	0	22	2	1	0	*25*	**72**
Hourly Total	0	17	8	189	0	*214*	0	0	5	14	0	*19*	0	2	2	2	0	*6*	0	95	5	6	0	*106*	**345**
9:00 AM	0	2	2	37	0	*41*	0	1	2	4	0	*7*	0	1	1	0	0	*2*	0	21	5	1	0	*27*	**77**
9:15 AM	0	5	1	39	0	*45*	0	1	1	3	0	*5*	0	1	4	0	0	*5*	0	13	2	2	0	*17*	**72**
9:30 AM	0	5	0	40	0	*45*	0	1	0	1	0	*2*	0	1	0	1	0	*2*	0	11	2	1	0	*14*	**63**
9:45 AM	0	6	1	41	0	*48*	0	0	2	4	0	*6*	0	0	1	1	0	*2*	0	18	5	0	0	*23*	**79**
Hourly Total	0	18	4	157	0	*179*	0	3	5	12	0	*20*	0	3	6	2	0	*11*	0	63	14	4	0	*81*	**291**
10:00 AM	0	5	4	31	0	*40*	0	1	4	8	0	*13*	0	0	0	2	0	*2*	0	18	0	2	0	*20*	**75**
10:15 AM	0	8	0	32	0	*40*	0	0	4	1	0	*5*	0	1	2	2	0	*5*	0	21	1	2	0	*24*	**74**
10:30 AM	1	3	5	39	0	*48*	0	1	2	5	0	*8*	0	0	6	0	0	*6*	0	16	2	0	0	*18*	**80**
10:45 AM	0	3	2	32	0	*37*	0	0	1	5	0	*6*	0	0	0	0	0	*0*	0	19	3	0	0	*22*	**65**
Hourly Total	1	19	11	134	0	*165*	0	2	11	19	0	*32*	0	1	8	4	0	*13*	0	74	6	4	0	*84*	**294**
11:00 AM	0	11	4	36	0	*51*	0	0	0	4	0	*4*	0	1	2	1	0	*4*	0	14	3	2	0	*19*	**78**
11:15 AM	0	8	3	30	0	*41*	0	0	1	6	0	*7*	0	2	1	0	0	*3*	0	16	1	0	0	*17*	**68**
11:30 AM	1	1	4	24	0	*30*	0	0	3	5	0	*8*	0	0	0	2	0	*2*	0	17	3	1	0	*21*	**61**
11:45 AM	0	3	0	28	0	*31*	0	1	3	7	0	*11*	0	0	1	0	0	*1*	0	20	0	0	0	*20*	**63**
Hourly Total	1	23	11	118	0	*153*	0	1	7	22	0	*30*	0	3	4	3	0	*10*	0	67	7	3	0	*77*	**270**
12:00 PM	0	6	0	34	0	*40*	0	0	1	7	0	*8*	0	0	3	0	0	*3*	0	18	3	2	0	*23*	**74**
12:15 PM	0	7	6	23	0	*36*	0	0	0	9	0	*9*	0	0	3	0	0	*3*	0	16	4	0	0	*20*	**68**
12:30 PM	0	8	2	25	0	*35*	0	0	4	4	0	*8*	0	0	7	0	0	*7*	0	15	1	1	0	*17*	**67**
12:45 PM	0	8	2	25	0	*35*	0	0	0	2	0	*2*	0	1	1	0	0	*2*	1	21	3	0	0	*25*	**64**
Hourly Total	0	29	10	107	0	*146*	0	0	5	22	0	*27*	0	1	14	0	0	*15*	1	70	11	3	0	*85*	**273**
1:00 PM	0	7	2	33	0	*42*	0	0	0	5	0	*5*	0	0	4	0	0	*4*	0	20	2	0	0	*22*	**73**
1:15 PM	0	3	5	31	0	*39*	0	0	0	11	0	*11*	0	1	3	1	0	*5*	0	16	1	0	0	*17*	**72**
1:30 PM	0	7	3	30	0	*40*	0	0	2	0	0	*2*	0	1	2	0	0	*3*	0	25	1	0	0	*26*	**71**
1:45 PM	0	6	2	27	0	*35*	0	1	1	2	0	*4*	0	1	0	0	0	*1*	0	16	5	1	0	*22*	**62**
Hourly Total	0	23	12	121	0	*156*	0	1	3	18	0	*22*	0	3	9	1	0	*13*	0	77	9	1	0	*87*	**278**
2:00 PM	0	3	0	27	0	*30*	0	0	1	7	0	*8*	0	0	1	0	0	*1*	0	20	1	1	0	*22*	**61**
2:15 PM	0	3	3	23	0	*29*	0	0	1	4	0	*5*	0	1	3	0	0	*4*	0	17	3	3	0	*23*	**61**
2:30 PM	0	2	0	23	0	*25*	0	0	2	6	0	*8*	0	2	2	1	0	*5*	1	20	1	3	0	*25*	**63**
2:45 PM	0	4	1	26	0	*31*	0	0	2	3	0	*5*	0	0	0	1	0	*1*	0	30	3	1	0	*34*	**71**
Hourly Total	0	12	4	99	0	*115*	0	0	6	20	0	*26*	0	3	6	2	0	*11*	1	87	8	8	0	*104*	**256**
3:00 PM	0	11	2	40	0	*53*	0	0	1	8	0	*9*	0	1	2	1	0	*4*	0	29	2	1	0	*32*	**98**
3:15 PM	0	8	1	20	0	*29*	0	0	3	6	0	*9*	0	1	1	1	0	*3*	0	34	2	1	0	*37*	**78**
3:30 PM	0	7	1	37	0	*45*	0	0	0	9	0	*9*	0	0	4	1	0	*5*	0	25	0	1	0	*26*	**85**
3:45 PM	0	2	1	28	0	*31*	0	0	1	4	0	*5*	0	0	3	1	0	*4*	0	37	6	1	0	*44*	**84**
Hourly Total	0	28	5	125	0	*158*	0	0	5	27	0	*32*	0	2	10	4	0	*16*	0	125	10	4	0	*139*	**345**

Riverdale Dr and Southern Ramps
Ramsey MN
Thursday, October 22, 2020

Time	Southbound Armstorng Blvd						Westbound Riverdale Drive						Northbound Riverdale Dr						Eastbound HWY 10 S Ramp						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	
4:00 PM	0	4	0	44	0	*48*	0	0	0	10	0	*10*	0	2	2	0	0	*4*	0	45	1	2	0	*48*	**110**
4:15 PM	0	7	0	33	0	*40*	0	0	0	9	0	*9*	0	1	0	0	0	*1*	0	38	3	2	0	*43*	**93**
4:30 PM	0	2	2	69	0	*73*	0	0	5	13	0	*18*	0	3	8	0	0	*11*	0	32	1	3	0	*36*	**138**
4:45 PM	1	3	1	44	0	*49*	1	0	2	6	0	*9*	0	2	5	1	0	*8*	0	39	1	1	0	*41*	**107**
Hourly Total	1	16	3	190	0	*210*	1	0	7	38	0	*46*	0	8	15	1	0	*24*	0	154	6	8	0	*168*	**448**
5:00 PM	0	7	0	53	0	*60*	0	1	5	18	0	*24*	0	2	3	1	0	*6*	0	53	1	0	0	*54*	**144**
5:15 PM	1	6	0	33	0	*40*	0	0	1	8	0	*9*	0	3	1	0	0	*4*	0	33	1	0	0	*34*	**87**
5:30 PM	0	3	0	46	0	*49*	0	0	1	4	0	*5*	0	1	1	0	0	*2*	0	35	3	1	0	*39*	**95**
5:45 PM	0	1	0	19	0	*20*	0	0	1	5	0	*6*	0	0	1	0	0	*1*	0	31	2	0	0	*33*	**60**
Hourly Total	1	17	0	151	0	*169*	0	1	8	35	0	*44*	0	6	6	1	0	*13*	0	152	7	1	0	*160*	**386**
6:00 PM	0	3	2	27	0	*32*	0	0	2	6	0	*8*	0	2	5	2	0	*9*	0	19	0	1	0	*20*	**69**
6:15 PM	0	4	0	28	0	*32*	0	0	0	4	0	*4*	0	0	0	0	0	*0*	0	25	0	0	0	*25*	**61**
6:30 PM	0	0	2	25	0	*27*	0	0	2	1	0	*3*	0	0	1	0	0	*1*	0	18	0	0	0	*18*	**49**
6:45 PM	0	5	0	21	0	*26*	0	0	1	3	0	*4*	0	0	0	0	0	*0*	0	12	1	0	0	*13*	**43**
Hourly Total	0	12	4	101	0	*117*	0	0	5	14	0	*19*	0	2	6	2	0	*10*	0	74	1	1	0	*76*	**222**
7:00 PM	0	3	0	23	0	*26*	0	0	0	2	0	*2*	0	0	1	0	0	*1*	0	17	0	0	0	*17*	**46**
7:15 PM	0	1	0	28	0	*29*	0	0	0	4	0	*4*	0	0	0	0	0	*0*	0	16	0	0	0	*16*	**49**
7:30 PM	0	4	1	16	0	*21*	0	0	1	3	0	*4*	0	1	1	0	0	*2*	0	13	0	0	0	*13*	**40**
7:45 PM	0	1	0	7	0	*8*	0	0	0	4	0	*4*	0	0	0	0	0	*0*	0	16	1	0	0	*17*	**29**
Hourly Total	0	9	1	74	0	*84*	0	0	1	13	0	*14*	0	1	2	0	0	*3*	0	62	1	0	0	*63*	**164**
8:00 PM	0	6	0	13	0	*19*	0	0	0	2	0	*2*	0	0	0	0	0	*0*	0	14	0	0	0	*14*	**35**
8:15 PM	0	2	0	10	0	*12*	0	0	1	0	0	*1*	0	0	0	0	0	*0*	0	11	0	0	0	*11*	**24**
8:30 PM	1	1	1	26	0	*29*	0	0	0	4	0	*4*	0	1	0	1	0	*2*	1	6	2	1	0	*10*	**45**
8:45 PM	0	0	1	7	0	*8*	0	0	0	0	0	*0*	0	2	0	0	0	*2*	0	6	0	0	0	*6*	**16**
Hourly Total	1	9	2	56	0	*68*	0	0	1	6	0	*7*	0	3	0	1	0	*4*	1	37	2	1	0	*41*	**120**
9:00 PM	0	1	1	9	0	*11*	0	0	0	2	0	*2*	0	0	1	0	0	*1*	0	9	1	0	0	*10*	**24**
9:15 PM	0	0	0	7	0	*7*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	9	1	0	0	*10*	**17**
9:30 PM	0	0	1	5	0	*6*	0	0	0	0	0	*0*	0	1	0	0	0	*1*	0	7	0	0	0	*7*	**14**
9:45 PM	2	1	0	3	0	*6*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	5	0	0	0	*5*	**11**
Hourly Total	2	2	2	24	0	*30*	0	0	0	2	0	*2*	0	1	1	0	0	*2*	0	30	2	0	0	*32*	**66**
10:00 PM	1	0	0	12	0	*13*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	4	0	0	0	*4*	**17**
10:15 PM	0	0	0	4	0	*4*	0	0	0	1	0	*1*	0	0	0	0	0	*0*	0	4	0	0	0	*4*	**9**
10:30 PM	0	1	0	4	0	*5*	0	0	0	1	0	*1*	0	0	0	0	0	*0*	0	1	1	0	0	*2*	**8**
10:45 PM	0	0	0	3	0	*3*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	5	1	0	0	*6*	**9**
Hourly Total	1	1	0	23	0	*25*	0	0	0	2	0	*2*	0	0	0	0	0	*0*	0	14	2	0	0	*16*	**43**
11:00 PM	0	0	0	6	0	*6*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	6	0	0	0	*6*	**12**
11:15 PM	0	0	0	5	0	*5*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	2	0	0	0	*2*	**7**
11:30 PM	0	1	0	3	0	*4*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	4	0	0	0	*4*	**8**
11:45 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	2	0	0	0	*2*	**2**
Hourly Total	0	1	0	14	0	*15*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	14	0	0	0	*14*	**29**
DAILY TOTAL	**8**	**271**	**92**	**2428**	**0**	***2799***	**1**	**11**	**74**	**302**	**0**	***388***	**0**	**39**	**92**	**24**	**0**	***155***	**4**	**1627**	**111**	**58**	**0**	***1800***	**5142**
Cars	7	265	80	2345	0	*2697*	1	10	69	296	0	*376*	0	34	79	20	0	*133*	1	1598	106	48	0	*1753*	**4959**
Heavy Vehicles	1	6	12	83	0	*102*	0	1	5	6	0	*12*	0	5	13	4	0	*22*	3	29	5	10	0	*47*	**183**
Heavy Vehicle %	12.50%	2.21%	13.04%	3.42%	0.00%	*3.64%*	0.00%	9.09%	6.76%	1.99%	0.00%	*3.09%*	0.00%	12.82%	14.13%	16.67%	0.00%	*14.19%*	75.00%	1.78%	4.50%	17.24%	0.00%	*2.61%*	**3.56%**

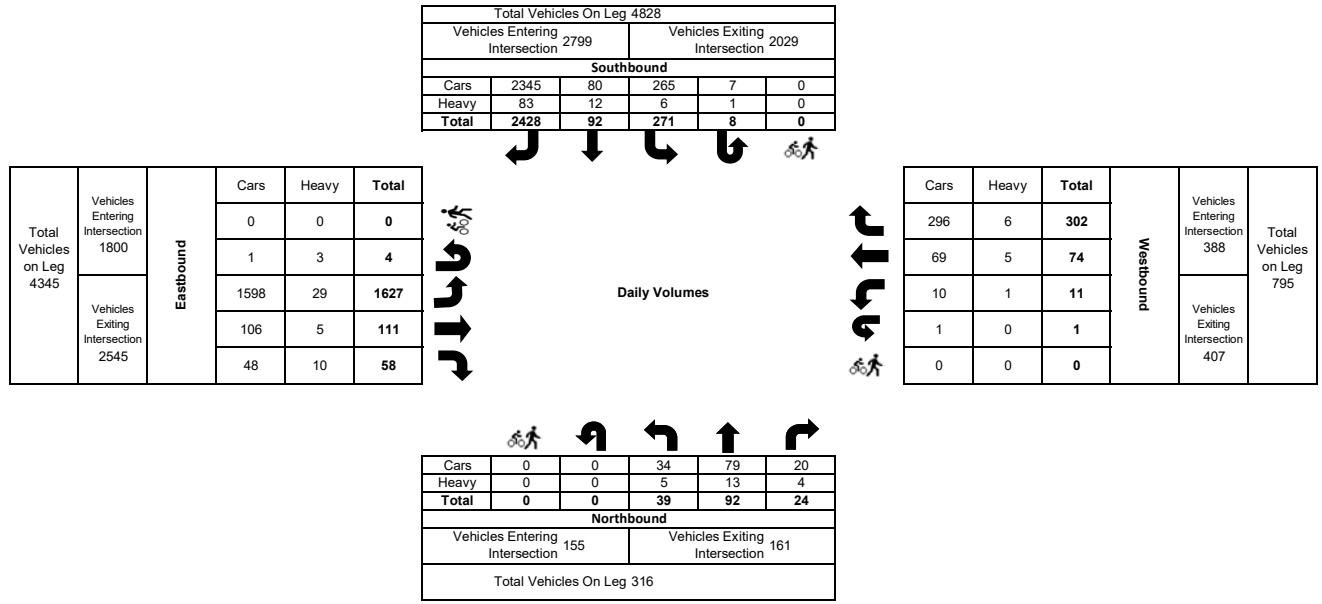
Riverdale Dr and Southern Ramps
Ramsey MN
Thursday, October 22, 2020

AM Peak Hour

Time	Southbound						Westbound						Northbound						Eastbound						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	
6:45 AM	0	3	6	57	0	*66*	0	0	2	5	0	*7*	0	0	0	0	0	*0*	0	53	3	4	0	*60*	**133**
7:00 AM	0	3	3	66	0	*72*	0	1	1	8	0	*10*	0	0	0	1	0	*1*	0	39	2	2	0	*43*	**126**
7:15 AM	0	4	1	73	0	*78*	0	1	0	0	0	*1*	0	0	0	0	0	*0*	0	47	1	3	0	*51*	**130**
7:30 AM	0	8	3	56	0	*67*	0	0	0	6	0	*6*	0	0	0	0	0	*0*	0	51	1	1	0	*53*	**126**
Peak Hour Total	0	18	13	252	0	*283*	0	2	3	19	0	*24*	0	0	0	1	0	*1*	0	190	7	10	0	*207*	**515**
PHF	0.000	0.563	0.542	0.863	0.000	*0.907*	0.000	0.500	0.375	0.594	0.000	*0.600*	0.000	0.000	0.000	0.250	0.000	*0.250*	0.000	0.896	0.583	0.625	0.000	*0.863*	**0.968**

PM Peak Hour

Time	Southbound						Westbound						Northbound						Eastbound						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	
4:15 PM	0	7	0	33	0	*40*	0	0	0	9	0	*9*	0	1	0	0	0	*1*	0	38	3	2	0	*43*	**93**
4:30 PM	0	2	2	69	0	*73*	0	0	5	13	0	*18*	0	3	8	0	0	*11*	0	32	1	3	0	*36*	**138**
4:45 PM	1	3	1	44	0	*49*	1	0	2	6	0	*9*	0	2	5	1	0	*8*	0	39	1	1	0	*41*	**107**
5:00 PM	0	7	0	53	0	*60*	0	1	5	18	0	*24*	0	2	3	1	0	*6*	0	53	1	0	0	*54*	**144**
Peak Hour Total	1	19	3	199	0	*222*	1	1	12	46	0	*60*	0	8	16	2	0	*26*	0	162	6	6	0	*174*	**482**
PHF	0.250	0.679	0.375	0.721	0.000	*0.760*	0.250	0.250	0.600	0.639	0.000	*0.625*	0.000	0.667	0.500	0.500	0.000	*0.591*	0.000	0.764	0.500	0.500	0.000	*0.806*	**0.837**



04 HWY 10 North Ramps and Armstorng Blvd
Ramsey MN
Tuesday, October 13, 2020

Time	Southbound Armstrong Blvd						Westbound HWY 10 Off Ramp						Northbound Armstrong Blvd						Eastbound HWY 10 On Ramp						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	
12:00 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
12:15 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
12:30 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
12:45 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
Hourly Total	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
1:00 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
1:15 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
1:30 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
1:45 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
Hourly Total	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
2:00 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
2:15 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
2:30 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
2:45 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
Hourly Total	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
3:00 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
3:15 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
3:30 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
3:45 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
Hourly Total	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
4:00 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
4:15 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
4:30 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
4:45 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
Hourly Total	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
5:00 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
5:15 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
5:30 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
5:45 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
Hourly Total	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
6:00 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
6:15 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
6:30 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
6:45 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
Hourly Total	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
7:00 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
7:15 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
7:30 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
7:45 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
Hourly Total	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**

04 HWY 10 North Ramps and Armstorng Blvd
Ramsey MN
Tuesday, October 13, 2020

Time	Southbound Armstrong Blvd						Westbound HWY 10 Off Ramp						Northbound Armstrong Blvd						Eastbound HWY 10 On Ramp						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	
8:00 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
8:15 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
8:30 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
8:45 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
Hourly Total	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
9:00 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
9:15 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
9:30 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
9:45 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
Hourly Total	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
10:00 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
10:15 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
10:30 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
10:45 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
Hourly Total	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
11:00 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
11:15 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
11:30 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
11:45 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
Hourly Total	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
12:00 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
12:15 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
12:30 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
12:45 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
Hourly Total	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
1:00 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
1:15 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
1:30 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
1:45 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
Hourly Total	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
2:00 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
2:15 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
2:30 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
2:45 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
Hourly Total	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
3:00 PM	0	0	42	49	0	*91*	0	3	0	67	0	*70*	0	2	43	0	0	*45*	0	0	0	0	0	*0*	**206**
3:15 PM	0	0	35	33	0	*68*	0	0	1	68	0	*69*	0	5	43	0	0	*48*	0	0	0	0	0	*0*	**185**
3:30 PM	0	0	46	70	0	*116*	0	4	0	61	0	*65*	0	3	42	0	0	*45*	0	0	0	0	0	*0*	**226**
3:45 PM	0	0	36	49	0	*85*	0	7	0	76	0	*83*	0	7	44	0	0	*51*	0	0	0	0	0	*0*	**219**
Hourly Total	0	0	159	201	0	*360*	0	14	1	272	0	*287*	0	17	172	0	0	*189*	0	0	0	0	0	*0*	**836**

04 HWY 10 North Ramps and Armstorng Blvd
Ramsey MN
Tuesday, October 13, 2020

Time	Southbound Armstrong Blvd						Westbound HWY 10 Off Ramp						Northbound Armstrong Blvd						Eastbound HWY 10 On Ramp						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	
4:00 PM	0	0	28	40	0	*68*	0	6	1	70	0	*77*	0	3	55	0	0	*58*	0	0	0	0	0	*0*	**203**
4:15 PM	0	0	47	60	0	*107*	0	2	0	94	1	*96*	1	5	48	0	0	*54*	0	0	0	0	0	*0*	**257**
4:30 PM	0	0	72	83	0	*155*	0	9	0	74	1	*83*	0	6	53	0	0	*59*	0	0	0	0	0	*0*	**297**
4:45 PM	0	0	48	67	0	*115*	0	8	1	81	0	*90*	1	5	61	0	0	*67*	0	0	0	0	0	*0*	**272**
Hourly Total	0	0	195	250	0	*445*	0	25	2	319	2	*346*	2	19	217	0	0	*238*	0	0	0	0	0	*0*	**1029**
5:00 PM	0	0	43	61	0	*104*	0	2	1	74	0	*77*	0	17	60	0	0	*77*	0	0	0	0	0	*0*	**258**
5:15 PM	0	0	29	65	0	*94*	0	2	0	80	1	*82*	0	9	61	0	0	*70*	0	0	0	0	0	*0*	**246**
5:30 PM	0	0	52	46	0	*98*	0	2	0	68	0	*70*	0	5	52	0	0	*57*	0	0	0	0	0	*0*	**225**
5:45 PM	0	0	35	31	0	*66*	0	5	0	76	0	*81*	0	3	36	0	0	*39*	0	0	0	0	0	*0*	**186**
Hourly Total	0	0	159	203	0	*362*	0	11	1	298	1	*310*	0	34	209	0	0	*243*	0	0	0	0	0	*0*	**915**
6:00 PM	1	0	35	36	0	*72*	0	7	0	52	1	*59*	0	5	36	0	0	*41*	0	0	0	0	0	*0*	**172**
6:15 PM	0	0	38	36	0	*74*	0	5	0	55	0	*60*	0	8	40	0	0	*48*	0	0	0	0	0	*0*	**182**
6:30 PM	0	0	31	45	0	*76*	0	3	0	39	0	*42*	0	1	29	0	0	*30*	0	0	0	0	0	*0*	**148**
6:45 PM	0	0	23	29	0	*52*	0	2	0	58	0	*60*	0	1	25	0	0	*26*	0	0	0	0	0	*0*	**138**
Hourly Total	1	0	127	146	0	*274*	0	17	0	204	1	*221*	0	15	130	0	0	*145*	0	0	0	0	0	*0*	**640**
7:00 PM	0	0	27	17	0	*44*	0	0	0	48	0	*48*	0	1	23	0	0	*24*	0	0	0	0	0	*0*	**116**
7:15 PM	0	0	12	19	0	*31*	0	1	0	36	0	*37*	0	2	24	0	0	*26*	0	0	0	0	0	*0*	**94**
7:30 PM	0	0	22	13	0	*35*	0	0	0	33	0	*33*	0	0	23	0	0	*23*	0	0	0	0	0	*0*	**91**
7:45 PM	0	0	27	13	0	*40*	0	0	0	38	0	*38*	0	1	15	0	0	*16*	0	0	0	0	0	*0*	**94**
Hourly Total	0	0	88	62	0	*150*	0	1	0	155	0	*156*	0	4	85	0	0	*89*	0	0	0	0	0	*0*	**395**
8:00 PM	0	0	19	11	0	*30*	0	0	0	21	0	*21*	0	2	22	0	0	*24*	0	0	0	0	0	*0*	**75**
8:15 PM	0	0	16	16	0	*32*	0	4	0	27	0	*31*	0	0	6	0	0	*6*	0	0	0	0	0	*0*	**69**
8:30 PM	0	0	10	7	0	*17*	0	0	0	28	0	*28*	0	1	15	0	0	*16*	0	0	0	0	0	*0*	**61**
8:45 PM	0	0	9	10	0	*19*	0	1	0	20	0	*21*	0	0	9	0	0	*9*	0	0	0	0	0	*0*	**49**
Hourly Total	0	0	54	44	0	*98*	0	5	0	96	0	*101*	0	3	52	0	0	*55*	0	0	0	0	0	*0*	**254**
9:00 PM	0	0	19	7	0	*26*	0	2	0	4	0	*6*	0	0	11	0	0	*11*	0	0	0	0	0	*0*	**43**
9:15 PM	0	0	16	17	0	*33*	0	0	0	16	0	*16*	0	0	9	0	0	*9*	0	0	0	0	0	*0*	**58**
9:30 PM	0	0	7	8	0	*15*	0	0	0	12	0	*12*	0	0	6	0	0	*6*	0	0	0	0	0	*0*	**33**
9:45 PM	0	0	5	3	0	*8*	0	0	0	21	0	*21*	0	0	8	0	0	*8*	0	0	0	0	0	*0*	**37**
Hourly Total	0	0	47	35	0	*82*	0	2	0	53	0	*55*	0	0	34	0	0	*34*	0	0	0	0	0	*0*	**171**
10:00 PM	0	0	8	4	0	*12*	0	0	0	16	0	*16*	0	0	3	0	0	*3*	0	0	0	0	0	*0*	**31**
10:15 PM	0	0	7	3	0	*10*	0	1	0	15	0	*16*	0	0	8	0	0	*8*	0	0	0	0	0	*0*	**34**
10:30 PM	0	0	7	2	0	*9*	0	3	0	12	0	*15*	0	0	3	0	0	*3*	0	0	0	0	0	*0*	**27**
10:45 PM	0	0	5	2	0	*7*	0	0	0	16	0	*16*	0	0	4	0	0	*4*	0	0	0	0	0	*0*	**27**
Hourly Total	0	0	27	11	0	*38*	0	4	0	59	0	*63*	0	0	18	0	0	*18*	0	0	0	0	0	*0*	**119**
11:00 PM	0	0	5	1	0	*6*	0	0	0	4	0	*4*	0	0	2	0	0	*2*	0	0	0	0	0	*0*	**12**
11:15 PM	0	0	8	3	0	*11*	0	1	0	11	0	*12*	0	0	6	0	0	*6*	0	0	0	0	0	*0*	**29**
11:30 PM	0	0	1	0	0	*1*	0	0	0	13	0	*13*	0	0	1	0	0	*1*	0	0	0	0	0	*0*	**15**
11:45 PM	0	0	3	1	0	*4*	0	1	0	6	0	*7*	0	0	1	0	0	*1*	0	0	0	0	0	*0*	**12**
Hourly Total	0	0	17	5	0	*22*	0	2	0	34	0	*36*	0	0	10	0	0	*10*	0	0	0	0	0	*0*	**68**
DAILY TOTAL	**1**	**0**	**873**	**957**	**0**	***1831***	**0**	**81**	**4**	**1490**	**4**	***1575***	**2**	**92**	**927**	**0**	**0**	***1021***	**0**	**0**	**0**	**0**	**0**	***0***	**4427**
Cars	1	0	855	949	0	*1805*	0	80	3	1459	3	*1542*	2	89	913	0	0	*1004*	0	0	0	0	0	*0*	**4351**
Heavy Vehicles	0	0	18	8	0	*26*	0	1	1	31	1	*33*	0	3	14	0	0	*17*	0	0	0	0	0	*0*	**76**
Heavy Vehicle %	0.00%	0.00%	2.06%	0.84%	0.00%	*1.42%*	0.00%	1.23%	25.00%	2.08%	25.00%	*2.10%*	0.00%	3.26%	1.51%	0.00%	0.00%	*1.67%*	0.00%	0.00%	0.00%	0.00%	0.00%	*0.00%*	**1.72%**

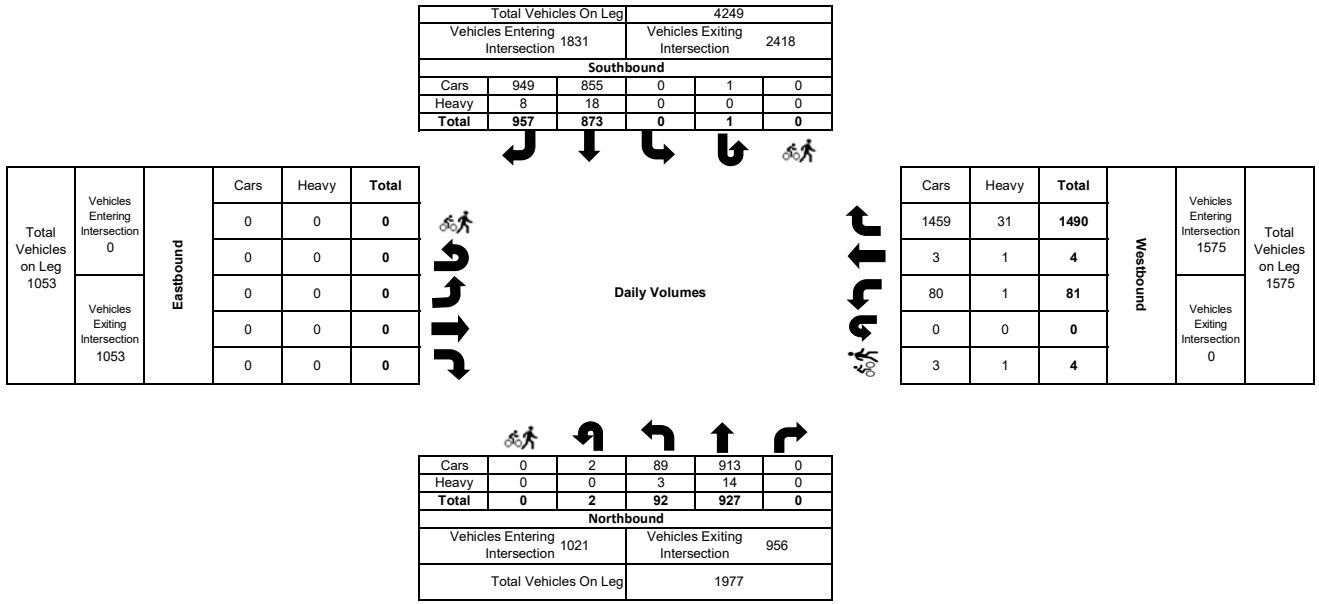
04 HWY 10 North Ramps and Armstorng Blvd
Ramsey MN
Tuesday, October 13, 2020

AM Peak Hour

Time	Southbound						Westbound						Northbound						Eastbound						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	
12:00 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
12:15 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
12:30 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
12:45 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
Peak Hour Total	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
PHF	0.000	0.000	0.000	0.000	0.000	*0.000*	0.000	0.000	0.000	0.000	0.000	*0.000*	0.000	0.000	0.000	0.000	0.000	*0.000*	0.000	0.000	0.000	0.000	0.000	*0.000*	**0.000**

PM Peak Hour

Time	Southbound						Westbound						Northbound						Eastbound						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	
4:15 PM	0	0	47	60	0	*107*	0	2	0	94	1	*96*	1	5	48	0	0	*54*	0	0	0	0	0	*0*	**257**
4:30 PM	0	0	72	83	0	*155*	0	9	0	74	1	*83*	0	6	53	0	0	*59*	0	0	0	0	0	*0*	**297**
4:45 PM	0	0	48	67	0	*115*	0	8	1	81	0	*90*	1	5	61	0	0	*67*	0	0	0	0	0	*0*	**272**
5:00 PM	0	0	43	61	0	*104*	0	2	1	74	0	*77*	0	17	60	0	0	*77*	0	0	0	0	0	*0*	**258**
Peak Hour Total	0	0	210	271	0	*481*	0	21	2	323	2	*346*	2	33	222	0	0	*257*	0	0	0	0	0	*0*	**1084**
PHF	0.000	0.000	0.729	0.816	0.000	*0.776*	0.000	0.583	0.500	0.859	0.500	*0.901*	0.500	0.485	0.910	0.000	0.000	*0.834*	0.000	0.000	0.000	0.000	0.000	*0.000*	**0.912**



04 HWY 10 North Ramps and Armstorng Blvd
Ramsey MN
Wednesday, October 14, 2020

Time	Southbound Armstrong Blvd						Westbound HWY 10 Off Ramp						Northbound Armstrong Blvd						Eastbound HWY 10 On Ramp						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	
12:00 AM	0	0	3	0	0	*3*	0	0	0	5	0	*5*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**8**
12:15 AM	0	0	2	1	0	*3*	0	0	0	4	0	*4*	0	0	1	0	0	*1*	0	0	0	0	0	*0*	**8**
12:30 AM	0	0	1	0	0	*1*	0	0	0	5	0	*5*	0	0	2	0	0	*2*	0	0	0	0	0	*0*	**8**
12:45 AM	0	0	1	1	0	*2*	0	0	0	5	0	*5*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**7**
Hourly Total	0	0	7	2	0	*9*	0	0	0	19	0	*19*	0	0	3	0	0	*3*	0	0	0	0	0	*0*	**31**
1:00 AM	0	0	1	0	0	*1*	0	0	0	1	0	*1*	0	1	3	0	0	*4*	0	0	0	0	0	*0*	**6**
1:15 AM	0	0	0	0	0	*0*	0	0	0	1	0	*1*	0	0	1	0	0	*1*	0	0	0	0	0	*0*	**2**
1:30 AM	0	0	1	0	0	*1*	0	0	0	1	0	*1*	0	0	1	0	0	*1*	0	0	0	0	0	*0*	**3**
1:45 AM	0	0	6	0	0	*6*	0	2	0	4	0	*6*	0	0	1	0	0	*1*	0	0	0	0	0	*0*	**13**
Hourly Total	0	0	8	0	0	*8*	0	2	0	7	0	*9*	0	1	6	0	0	*7*	0	0	0	0	0	*0*	**24**
2:00 AM	0	0	0	2	0	*2*	0	1	0	2	0	*3*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**5**
2:15 AM	0	0	0	0	0	*0*	0	0	0	3	0	*3*	0	0	1	0	0	*1*	0	0	0	0	0	*0*	**4**
2:30 AM	0	0	0	2	0	*2*	0	0	0	2	0	*2*	0	0	1	0	0	*1*	0	0	0	0	0	*0*	**5**
2:45 AM	0	0	3	0	0	*3*	0	0	0	1	0	*1*	0	1	0	0	0	*1*	0	0	0	0	0	*0*	**5**
Hourly Total	0	0	3	4	0	*7*	0	1	0	8	0	*9*	0	1	2	0	0	*3*	0	0	0	0	0	*0*	**19**
3:00 AM	0	0	4	0	0	*4*	0	0	0	0	0	*0*	0	0	1	0	0	*1*	0	0	0	0	0	*0*	**5**
3:15 AM	0	0	3	1	0	*4*	0	0	0	1	0	*1*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**5**
3:30 AM	0	0	8	2	0	*10*	0	0	0	1	0	*1*	0	0	2	0	0	*2*	0	0	0	0	0	*0*	**13**
3:45 AM	0	0	3	0	0	*3*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**3**
Hourly Total	0	0	18	3	0	*21*	0	0	0	2	0	*2*	0	0	3	0	0	*3*	0	0	0	0	0	*0*	**26**
4:00 AM	0	0	15	1	0	*16*	0	0	0	1	0	*1*	0	0	1	0	0	*1*	0	0	0	0	0	*0*	**18**
4:15 AM	0	0	20	4	0	*24*	0	0	0	2	0	*2*	0	1	1	0	0	*2*	0	0	0	0	0	*0*	**28**
4:30 AM	0	0	20	8	0	*28*	0	0	0	1	0	*1*	0	2	7	0	0	*9*	0	0	0	0	0	*0*	**38**
4:45 AM	0	0	24	0	0	*24*	0	0	0	1	0	*1*	0	0	8	0	0	*8*	0	0	0	0	0	*0*	**33**
Hourly Total	0	0	79	13	0	*92*	0	0	0	5	0	*5*	0	3	17	0	0	*20*	0	0	0	0	0	*0*	**117**
5:00 AM	0	0	33	2	0	*35*	0	0	0	4	0	*4*	0	0	8	0	0	*8*	0	0	0	0	0	*0*	**47**
5:15 AM	0	0	43	19	0	*62*	0	0	0	7	0	*7*	0	0	20	0	0	*20*	0	0	0	0	0	*0*	**89**
5:30 AM	0	0	56	14	0	*70*	0	1	0	5	0	*6*	0	2	28	0	0	*30*	0	0	0	0	0	*0*	**106**
5:45 AM	0	0	35	10	0	*45*	0	1	0	11	0	*12*	0	0	41	0	0	*41*	0	0	0	0	0	*0*	**98**
Hourly Total	0	0	167	45	0	*212*	0	2	0	27	0	*29*	0	2	97	0	0	*99*	0	0	0	0	0	*0*	**340**
6:00 AM	0	0	62	15	0	*77*	0	1	0	10	0	*11*	0	1	28	0	0	*29*	0	0	0	0	0	*0*	**117**
6:15 AM	0	0	76	21	0	*97*	0	3	1	19	0	*23*	0	0	27	0	0	*27*	0	0	0	0	0	*0*	**147**
6:30 AM	0	0	73	24	0	*97*	0	0	0	24	0	*24*	0	2	36	0	0	*38*	0	0	0	0	0	*0*	**159**
6:45 AM	0	0	66	19	0	*85*	0	1	0	30	0	*31*	0	2	50	0	0	*52*	0	0	0	0	0	*0*	**168**
Hourly Total	0	0	277	79	0	*356*	0	5	1	83	0	*89*	0	5	141	0	0	*146*	0	0	0	0	0	*0*	**591**
7:00 AM	0	0	71	18	0	*89*	0	2	0	16	0	*18*	0	2	46	0	0	*48*	0	0	0	0	0	*0*	**155**
7:15 AM	0	0	62	21	0	*83*	0	3	0	27	0	*30*	0	2	79	0	0	*81*	0	0	0	0	0	*0*	**194**
7:30 AM	1	0	71	30	0	*102*	0	6	1	30	0	*37*	0	6	81	0	0	*87*	0	0	0	0	0	*0*	**226**
7:45 AM	0	0	64	19	0	*83*	0	8	0	53	0	*61*	0	1	86	0	0	*87*	0	0	0	0	0	*0*	**231**
Hourly Total	1	0	268	88	0	*357*	0	19	1	126	0	*146*	0	11	292	0	0	*303*	0	0	0	0	0	*0*	**806**

04 HWY 10 North Ramps and Armstorng Blvd
Ramsey MN
Wednesday, October 14, 2020

Time	Southbound Armstrong Blvd						Westbound HWY 10 Off Ramp						Northbound Armstrong Blvd						Eastbound HWY 10 On Ramp						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	
8:00 AM	0	0	51	27	0	*78*	0	8	1	35	0	*44*	0	2	34	0	0	*36*	0	0	0	0	0	*0*	**158**
8:15 AM	0	0	47	16	0	*63*	0	3	0	33	0	*36*	0	2	26	0	0	*28*	0	0	0	0	0	*0*	**127**
8:30 AM	0	0	41	29	0	*70*	0	4	0	25	0	*29*	0	1	20	0	0	*21*	0	0	0	0	0	*0*	**120**
8:45 AM	0	0	43	19	0	*62*	0	9	0	25	0	*34*	0	2	17	0	0	*19*	0	0	0	0	0	*0*	**115**
Hourly Total	0	0	182	91	0	*273*	0	24	1	118	0	*143*	0	7	97	0	0	*104*	0	0	0	0	0	*0*	**520**
9:00 AM	0	0	44	16	0	*60*	0	2	0	18	0	*20*	0	2	24	0	0	*26*	0	0	0	0	0	*0*	**106**
9:15 AM	0	0	29	23	0	*52*	0	4	1	26	0	*31*	0	1	29	0	0	*30*	0	0	0	0	0	*0*	**113**
9:30 AM	0	0	48	21	0	*69*	0	6	0	24	0	*30*	0	2	21	0	0	*23*	0	0	0	0	0	*0*	**122**
9:45 AM	0	0	25	24	0	*49*	0	8	0	21	0	*29*	0	7	29	0	0	*36*	0	0	0	0	0	*0*	**114**
Hourly Total	0	0	146	84	0	*230*	0	20	1	89	0	*110*	0	12	103	0	0	*115*	0	0	0	0	0	*0*	**455**
10:00 AM	0	0	44	26	0	*70*	0	2	0	27	0	*29*	0	3	27	0	0	*30*	0	0	0	0	0	*0*	**129**
10:15 AM	0	0	56	18	0	*74*	0	7	0	23	0	*30*	0	2	18	0	0	*20*	0	0	0	0	0	*0*	**124**
10:30 AM	0	0	31	30	0	*61*	0	3	0	33	0	*36*	0	1	12	0	0	*13*	0	0	0	0	0	*0*	**110**
10:45 AM	0	0	30	19	0	*49*	0	8	1	20	0	*29*	0	1	16	0	0	*17*	0	0	0	0	0	*0*	**95**
Hourly Total	0	0	161	93	0	*254*	0	20	1	103	0	*124*	0	7	73	0	0	*80*	0	0	0	0	0	*0*	**458**
11:00 AM	0	0	44	31	0	*75*	0	7	0	23	0	*30*	0	2	26	0	0	*28*	0	0	0	0	0	*0*	**133**
11:15 AM	0	0	46	16	0	*62*	0	9	1	35	0	*45*	0	2	33	0	0	*35*	0	0	0	0	0	*0*	**142**
11:30 AM	0	0	42	24	0	*66*	0	9	0	34	0	*43*	1	5	30	0	0	*36*	0	0	0	0	0	*0*	**145**
11:45 AM	0	0	39	31	0	*70*	0	11	0	35	0	*46*	0	5	33	0	0	*38*	0	0	0	0	0	*0*	**154**
Hourly Total	0	0	171	102	0	*273*	0	36	1	127	0	*164*	1	14	122	0	0	*137*	0	0	0	0	0	*0*	**574**
12:00 PM	0	0	44	23	0	*67*	0	8	0	28	0	*36*	0	6	36	0	0	*42*	0	0	0	0	0	*0*	**145**
12:15 PM	0	0	54	30	0	*84*	0	8	0	44	0	*52*	0	3	34	0	0	*37*	0	0	0	0	0	*0*	**173**
12:30 PM	0	0	46	33	0	*79*	0	16	0	39	0	*55*	0	3	34	0	0	*37*	0	0	0	0	0	*0*	**171**
12:45 PM	0	0	37	13	0	*50*	0	11	0	36	0	*47*	0	2	22	0	0	*24*	0	0	0	0	0	*0*	**121**
Hourly Total	0	0	181	99	0	*280*	0	43	0	147	0	*190*	0	14	126	0	0	*140*	0	0	0	0	0	*0*	**610**
1:00 PM	0	0	40	23	0	*63*	0	5	0	42	0	*47*	0	8	23	0	0	*31*	0	0	0	0	0	*0*	**141**
1:15 PM	0	0	53	20	0	*73*	0	9	1	35	0	*45*	0	5	36	0	0	*41*	0	0	0	0	0	*0*	**159**
1:30 PM	0	0	50	24	0	*74*	0	9	0	47	0	*56*	0	4	37	0	0	*41*	0	0	0	0	0	*0*	**171**
1:45 PM	0	0	43	27	0	*70*	0	9	0	38	0	*47*	0	5	48	0	0	*53*	0	0	0	0	0	*0*	**170**
Hourly Total	0	0	186	94	0	*280*	0	32	1	162	0	*195*	0	22	144	0	0	*166*	0	0	0	0	0	*0*	**641**
2:00 PM	0	0	40	27	0	*67*	0	5	0	40	0	*45*	0	3	15	0	0	*18*	0	0	0	0	0	*0*	**130**
2:15 PM	0	0	36	29	0	*65*	0	7	0	41	0	*48*	0	4	31	0	0	*35*	0	0	0	0	0	*0*	**148**
2:30 PM	0	0	45	50	0	*95*	0	1	1	56	0	*58*	0	4	34	0	0	*38*	0	0	0	0	0	*0*	**191**
2:45 PM	0	0	30	32	0	*62*	0	7	0	48	0	*55*	2	2	45	0	0	*49*	0	0	0	0	0	*0*	**166**
Hourly Total	0	0	151	138	0	*289*	0	20	1	185	0	*206*	2	13	125	0	0	*140*	0	0	0	0	0	*0*	**635**
3:00 PM	0	0	26	42	0	*68*	0	7	0	63	0	*70*	0	5	39	0	0	*44*	0	0	0	0	0	*0*	**182**
3:15 PM	0	0	38	48	0	*86*	0	9	0	63	0	*72*	0	5	51	0	0	*56*	0	0	0	0	0	*0*	**214**
3:30 PM	0	0	63	58	0	*121*	0	3	0	61	0	*64*	1	7	47	0	0	*55*	0	0	0	0	0	*0*	**240**
3:45 PM	0	0	53	47	0	*100*	0	7	2	78	0	*87*	0	1	51	0	0	*52*	0	0	0	0	0	*0*	**239**
Hourly Total	0	0	180	195	0	*375*	0	26	2	265	0	*293*	1	18	188	0	0	*207*	0	0	0	0	0	*0*	**875**

04 HWY 10 North Ramps and Armstorng Blvd
Ramsey MN
Wednesday, October 14, 2020

Time	Southbound Armstrong Blvd						Westbound HWY 10 Off Ramp						Northbound Armstrong Blvd						Eastbound HWY 10 On Ramp						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	
4:00 PM	0	0	38	70	0	*108*	0	5	0	51	0	*56*	0	6	48	0	0	*54*	0	0	0	0	0	*0*	**218**
4:15 PM	0	0	32	60	0	*92*	0	6	0	66	0	*72*	0	7	56	0	0	*63*	0	0	0	0	0	*0*	**227**
4:30 PM	0	0	76	73	0	*149*	0	6	0	77	0	*83*	1	11	54	0	0	*66*	0	0	0	0	0	*0*	**298**
4:45 PM	0	0	55	66	0	*121*	0	3	0	94	0	*97*	0	4	80	0	0	*84*	0	0	0	0	0	*0*	**302**
Hourly Total	0	0	201	269	0	*470*	0	20	0	288	0	*308*	1	28	238	0	0	*267*	0	0	0	0	0	*0*	**1045**
5:00 PM	0	0	50	62	0	*112*	0	4	0	74	0	*78*	0	11	57	0	0	*68*	0	0	0	0	0	*0*	**258**
5:15 PM	0	0	47	36	0	*83*	0	3	1	86	0	*90*	1	5	69	0	0	*75*	0	0	0	0	0	*0*	**248**
5:30 PM	0	0	46	47	0	*93*	0	5	2	83	0	*90*	0	5	63	0	0	*68*	0	0	0	0	0	*0*	**251**
5:45 PM	0	0	56	38	0	*94*	0	3	0	57	0	*60*	0	4	58	0	0	*62*	0	0	0	0	0	*0*	**216**
Hourly Total	0	0	199	183	0	*382*	0	15	3	300	0	*318*	1	25	247	0	0	*273*	0	0	0	0	0	*0*	**973**
6:00 PM	0	0	58	43	0	*101*	0	10	0	57	0	*67*	0	5	31	0	0	*36*	0	0	0	0	0	*0*	**204**
6:15 PM	0	0	34	44	0	*78*	0	3	0	53	0	*56*	0	1	41	0	0	*42*	0	0	0	0	0	*0*	**176**
6:30 PM	0	0	28	22	0	*50*	0	3	0	55	0	*58*	0	2	31	0	0	*33*	0	0	0	0	0	*0*	**141**
6:45 PM	0	0	22	24	0	*46*	0	4	1	33	0	*38*	0	0	30	0	0	*30*	0	0	0	0	0	*0*	**114**
Hourly Total	0	0	142	133	0	*275*	0	20	1	198	0	*219*	0	8	133	0	0	*141*	0	0	0	0	0	*0*	**635**
7:00 PM	0	0	12	29	0	*41*	0	2	0	43	0	*45*	0	2	37	0	0	*39*	0	0	0	0	0	*0*	**125**
7:15 PM	0	0	32	13	0	*45*	0	2	0	39	0	*41*	0	2	17	0	0	*19*	0	0	0	0	0	*0*	**105**
7:30 PM	0	0	27	21	0	*48*	0	2	0	35	0	*37*	0	0	19	0	0	*19*	0	0	0	0	0	*0*	**104**
7:45 PM	0	0	20	8	0	*28*	0	2	0	32	0	*34*	0	1	26	0	0	*27*	0	0	0	0	0	*0*	**89**
Hourly Total	0	0	91	71	0	*162*	0	8	0	149	0	*157*	0	5	99	0	0	*104*	0	0	0	0	0	*0*	**423**
8:00 PM	0	0	14	28	0	*42*	0	2	1	23	0	*26*	0	1	18	0	0	*19*	0	0	0	0	0	*0*	**87**
8:15 PM	0	0	12	13	0	*25*	0	3	1	19	0	*23*	0	0	10	0	0	*10*	0	0	0	0	0	*0*	**58**
8:30 PM	0	0	11	10	0	*21*	0	1	0	22	0	*23*	0	0	12	0	0	*12*	0	0	0	0	0	*0*	**56**
8:45 PM	0	0	10	5	0	*15*	0	0	0	22	0	*22*	0	2	12	0	0	*14*	0	0	0	0	0	*0*	**51**
Hourly Total	0	0	47	56	0	*103*	0	6	2	86	0	*94*	0	3	52	0	0	*55*	0	0	0	0	0	*0*	**252**
9:00 PM	0	0	9	4	0	*13*	0	0	1	26	0	*27*	0	3	7	0	0	*10*	0	0	0	0	0	*0*	**50**
9:15 PM	0	0	2	4	0	*6*	0	0	0	21	0	*21*	0	0	9	0	0	*9*	0	0	0	0	0	*0*	**36**
9:30 PM	0	0	12	9	0	*21*	0	1	0	13	0	*14*	0	0	6	0	0	*6*	0	0	0	0	0	*0*	**41**
9:45 PM	0	0	13	3	0	*16*	0	0	0	19	0	*19*	0	0	7	0	0	*7*	0	0	0	0	0	*0*	**42**
Hourly Total	0	0	36	20	0	*56*	0	1	1	79	0	*81*	0	3	29	0	0	*32*	0	0	0	0	0	*0*	**169**
10:00 PM	0	0	5	4	0	*9*	0	0	0	10	0	*10*	0	0	5	0	0	*5*	0	0	0	0	0	*0*	**24**
10:15 PM	0	0	8	0	0	*8*	0	0	0	9	0	*9*	0	1	5	0	0	*6*	0	0	0	0	0	*0*	**23**
10:30 PM	0	0	3	3	0	*6*	0	0	0	13	0	*13*	0	0	4	0	0	*4*	0	0	0	0	0	*0*	**23**
10:45 PM	0	0	4	2	0	*6*	0	0	0	8	0	*8*	0	0	4	0	0	*4*	0	0	0	0	0	*0*	**18**
Hourly Total	0	0	20	9	0	*29*	0	0	0	40	0	*40*	0	1	18	0	0	*19*	0	0	0	0	0	*0*	**88**
11:00 PM	0	0	5	1	0	*6*	0	0	0	4	0	*4*	0	0	2	0	0	*2*	0	0	0	0	0	*0*	**12**
11:15 PM	0	0	5	1	0	*6*	0	1	0	5	0	*6*	0	0	7	0	0	*7*	0	0	0	0	0	*0*	**19**
11:30 PM	0	0	3	1	0	*4*	0	0	0	10	0	*10*	0	0	2	0	0	*2*	0	0	0	0	0	*0*	**16**
11:45 PM	0	0	4	2	0	*6*	0	0	0	2	0	*2*	0	0	1	0	0	*1*	0	0	0	0	0	*0*	**9**
Hourly Total	0	0	17	5	0	*22*	0	1	0	21	0	*22*	0	0	12	0	0	*12*	0	0	0	0	0	*0*	**56**
DAILY TOTAL	**1**	**0**	**2938**	**1876**	**0**	***4815***	**0**	**321**	**17**	**2634**	**0**	***2972***	**6**	**203**	**2367**	**0**	**0**	***2576***	**0**	**0**	**0**	**0**	**0**	***0***	**10363**
Cars	1	0	2846	1843	0	*4690*	0	300	12	2531	0	*2843*	6	199	2321	0	0	*2526*	0	0	0	0	0	*0*	**10059**
Heavy Vehicles	0	0	92	33	0	*125*	0	21	5	103	0	*129*	0	4	46	0	0	*50*	0	0	0	0	0	*0*	**304**
Heavy Vehicle %	0.00%	0.00%	3.13%	1.76%	0.00%	*2.60%*	0.00%	6.54%	29.41%	3.91%	0.00%	*4.34%*	0.00%	1.97%	1.94%	0.00%	0.00%	*1.94%*	0.00%	0.00%	0.00%	0.00%	0.00%	*0.00%*	**2.93%**

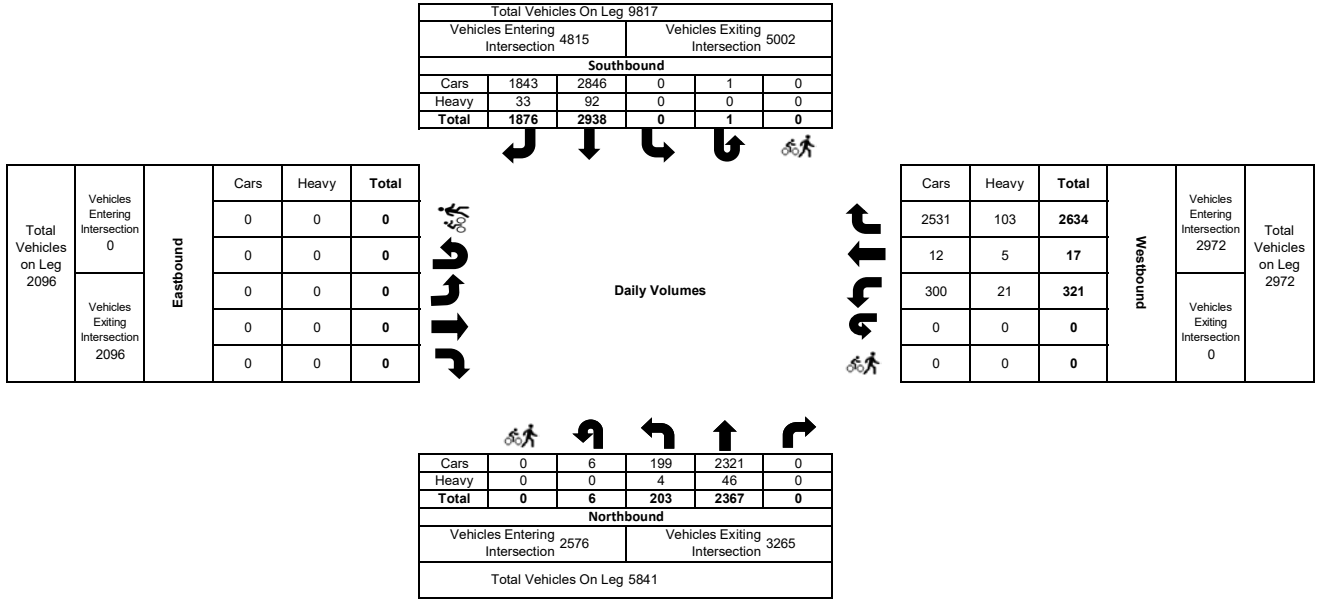
04 HWY 10 North Ramps and Armstorng Blvd
Ramsey MN
Wednesday, October 14, 2020

AM Peak Hour

Time	Southbound						Westbound						Northbound						Eastbound						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	
7:15 AM	0	0	62	21	0	*83*	0	3	0	27	0	*30*	0	2	79	0	0	*81*	0	0	0	0	0	*0*	**194**
7:30 AM	1	0	71	30	0	*102*	0	6	1	30	0	*37*	0	6	81	0	0	*87*	0	0	0	0	0	*0*	**226**
7:45 AM	0	0	64	19	0	*83*	0	8	0	53	0	*61*	0	1	86	0	0	*87*	0	0	0	0	0	*0*	**231**
8:00 AM	0	0	51	27	0	*78*	0	8	1	35	0	*44*	0	2	34	0	0	*36*	0	0	0	0	0	*0*	**158**
Peak Hour Total	1	0	248	97	0	*346*	0	25	2	145	0	*172*	0	11	280	0	0	*291*	0	0	0	0	0	*0*	**809**
PHF	0.250	0.000	0.873	0.808	0.000	*0.848*	0.000	0.781	0.500	0.684	0.000	*0.705*	0.000	0.458	0.814	0.000	0.000	*0.836*	0.000	0.000	0.000	0.000	0.000	*0.000*	**0.876**

PM Peak Hour

Time	Southbound						Westbound						Northbound						Eastbound						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	
4:30 PM	0	0	76	73	0	*149*	0	6	0	77	0	*83*	1	11	54	0	0	*66*	0	0	0	0	0	*0*	**298**
4:45 PM	0	0	55	66	0	*121*	0	3	0	94	0	*97*	0	4	80	0	0	*84*	0	0	0	0	0	*0*	**302**
5:00 PM	0	0	50	62	0	*112*	0	4	0	74	0	*78*	0	11	57	0	0	*68*	0	0	0	0	0	*0*	**258**
5:15 PM	0	0	47	36	0	*83*	0	3	1	86	0	*90*	1	5	69	0	0	*75*	0	0	0	0	0	*0*	**248**
Peak Hour Total	0	0	228	237	0	*465*	0	16	1	331	0	*348*	2	31	260	0	0	*293*	0	0	0	0	0	*0*	**1106**
PHF	0.000	0.000	0.750	0.812	0.000	*0.780*	0.000	0.667	0.250	0.880	0.000	*0.897*	0.500	0.705	0.813	0.000	0.000	*0.872*	0.000	0.000	0.000	0.000	0.000	*0.000*	**0.916**



04 HWY 10 North Ramps and Armstorng Blvd
Ramsey MN
Thursday, October 15, 2020

Time	Southbound Armstrong Blvd						Westbound HWY 10 Off Ramp						Northbound Armstrong Blvd						Eastbound HWY 10 On Ramp						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	
12:00 AM	0	0	0	0	0	*0*	0	0	0	4	0	*4*	0	0	1	0	0	*1*	0	0	0	0	0	*0*	**5**
12:15 AM	0	0	3	1	0	*4*	0	0	0	9	0	*9*	1	0	3	0	0	*4*	0	0	0	0	0	*0*	**17**
12:30 AM	0	0	3	2	0	*5*	0	0	0	5	0	*5*	0	0	1	0	0	*1*	0	0	0	0	0	*0*	**11**
12:45 AM	0	0	3	0	0	*3*	0	0	0	6	0	*6*	0	0	1	0	0	*1*	0	0	0	0	0	*0*	**10**
Hourly Total	0	0	9	3	0	*12*	0	0	0	24	0	*24*	1	0	6	0	0	*7*	0	0	0	0	0	*0*	**43**
1:00 AM	0	0	3	0	0	*3*	0	0	0	3	0	*3*	0	0	2	0	0	*2*	0	0	0	0	0	*0*	**8**
1:15 AM	0	0	1	0	0	*1*	0	0	0	4	0	*4*	0	0	1	0	0	*1*	0	0	0	0	0	*0*	**6**
1:30 AM	0	0	0	2	0	*2*	0	1	0	2	0	*3*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**5**
1:45 AM	0	0	5	0	0	*5*	0	0	0	1	0	*1*	0	0	3	0	0	*3*	0	0	0	0	0	*0*	**9**
Hourly Total	0	0	9	2	0	*11*	0	1	0	10	0	*11*	0	0	6	0	0	*6*	0	0	0	0	0	*0*	**28**
2:00 AM	0	0	1	0	0	*1*	0	0	0	2	0	*2*	0	0	1	0	0	*1*	0	0	0	0	0	*0*	**4**
2:15 AM	0	0	1	0	0	*1*	0	1	0	5	0	*6*	0	0	1	0	0	*1*	0	0	0	0	0	*0*	**8**
2:30 AM	0	0	0	1	0	*1*	0	0	0	1	0	*1*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**2**
2:45 AM	0	0	1	0	0	*1*	0	0	0	3	0	*3*	0	0	1	0	0	*1*	0	0	0	0	0	*0*	**5**
Hourly Total	0	0	3	1	0	*4*	0	1	0	11	0	*12*	0	0	3	0	0	*3*	0	0	0	0	0	*0*	**19**
3:00 AM	0	0	5	2	0	*7*	0	0	0	1	0	*1*	0	1	0	0	0	*1*	0	0	0	0	0	*0*	**9**
3:15 AM	0	0	4	3	0	*7*	0	0	0	2	0	*2*	0	0	1	0	0	*1*	0	0	0	0	0	*0*	**10**
3:30 AM	0	0	7	4	0	*11*	0	1	0	2	0	*3*	0	0	1	0	0	*1*	0	0	0	0	0	*0*	**15**
3:45 AM	0	0	9	0	0	*9*	0	0	0	1	0	*1*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**10**
Hourly Total	0	0	25	9	0	*34*	0	1	0	6	0	*7*	0	1	2	0	0	*3*	0	0	0	0	0	*0*	**44**
4:00 AM	0	0	10	3	0	*13*	0	1	0	1	0	*2*	0	0	3	0	0	*3*	0	0	0	0	0	*0*	**18**
4:15 AM	0	0	14	1	0	*15*	0	0	0	0	0	*0*	0	1	3	0	0	*4*	0	0	0	0	0	*0*	**19**
4:30 AM	0	0	25	6	0	*31*	0	0	0	1	0	*1*	0	2	4	0	0	*6*	0	0	0	0	0	*0*	**38**
4:45 AM	0	0	19	1	0	*20*	0	0	0	1	0	*1*	0	0	6	0	0	*6*	0	0	0	0	0	*0*	**27**
Hourly Total	0	0	68	11	0	*79*	0	1	0	3	0	*4*	0	3	16	0	0	*19*	0	0	0	0	0	*0*	**102**
5:00 AM	0	0	23	7	0	*30*	0	0	0	3	0	*3*	0	1	10	0	0	*11*	0	0	0	0	0	*0*	**44**
5:15 AM	0	0	34	9	0	*43*	0	1	0	3	0	*4*	0	0	16	0	0	*16*	0	0	0	0	0	*0*	**63**
5:30 AM	0	0	51	18	0	*69*	0	1	0	7	0	*8*	0	1	29	0	0	*30*	0	0	0	0	0	*0*	**107**
5:45 AM	0	0	38	5	0	*43*	0	0	0	10	0	*10*	0	0	37	0	0	*37*	0	0	0	0	0	*0*	**90**
Hourly Total	0	0	146	39	0	*185*	0	2	0	23	0	*25*	0	2	92	0	0	*94*	0	0	0	0	0	*0*	**304**
6:00 AM	0	0	52	13	0	*65*	0	3	0	16	0	*19*	0	1	20	0	0	*21*	0	0	0	0	0	*0*	**105**
6:15 AM	0	0	67	17	0	*84*	0	3	0	17	0	*20*	0	0	27	0	0	*27*	0	0	0	0	0	*0*	**131**
6:30 AM	0	0	81	20	0	*101*	0	1	0	19	0	*20*	0	1	35	0	0	*36*	0	0	0	0	0	*0*	**157**
6:45 AM	0	0	45	22	0	*67*	0	1	1	32	0	*34*	0	2	57	0	0	*59*	0	0	0	0	0	*0*	**160**
Hourly Total	0	0	245	72	0	*317*	0	8	1	84	0	*93*	0	4	139	0	0	*143*	0	0	0	0	0	*0*	**553**
7:00 AM	0	0	63	24	0	*87*	0	4	0	12	0	*16*	0	0	43	0	0	*43*	0	0	0	0	0	*0*	**146**
7:15 AM	0	0	55	26	0	*81*	0	2	0	23	1	*25*	0	2	40	0	0	*42*	0	0	0	0	0	*0*	**148**
7:30 AM	0	0	65	25	0	*90*	0	4	1	22	0	*27*	0	2	41	0	0	*43*	0	0	0	0	0	*0*	**160**
7:45 AM	0	0	44	19	0	*63*	0	5	0	35	0	*40*	0	1	48	0	0	*49*	0	0	0	0	0	*0*	**152**
Hourly Total	0	0	227	94	0	*321*	0	15	1	92	1	*108*	0	5	172	0	0	*177*	0	0	0	0	0	*0*	**606**

04 HWY 10 North Ramps and Armstorng Blvd
Ramsey MN
Thursday, October 15, 2020

Time	Southbound Armstrong Blvd						Westbound HWY 10 Off Ramp						Northbound Armstrong Blvd						Eastbound HWY 10 On Ramp						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	
8:00 AM	0	0	63	25	0	*88*	0	4	1	43	0	*48*	0	3	30	0	0	*33*	0	0	0	0	0	*0*	**169**
8:15 AM	0	0	50	18	0	*68*	0	9	0	22	0	*31*	1	6	24	0	0	*31*	0	0	0	0	0	*0*	**130**
8:30 AM	0	0	40	17	0	*57*	0	8	0	21	0	*29*	0	4	22	0	0	*26*	0	0	0	0	0	*0*	**112**
8:45 AM	0	0	36	20	0	*56*	0	8	0	29	1	*37*	0	2	27	0	0	*29*	0	0	0	0	0	*0*	**122**
Hourly Total	0	0	189	80	0	*269*	0	29	1	115	1	*145*	1	15	103	0	0	*119*	0	0	0	0	0	*0*	**533**
9:00 AM	0	0	37	22	0	*59*	0	6	0	22	0	*28*	0	2	13	0	0	*15*	0	0	0	0	0	*0*	**102**
9:15 AM	0	0	44	28	0	*72*	0	7	0	24	0	*31*	0	7	23	0	0	*30*	0	0	0	0	0	*0*	**133**
9:30 AM	0	0	34	26	0	*60*	0	6	0	21	0	*27*	0	5	15	0	0	*20*	0	0	0	0	0	*0*	**107**
9:45 AM	0	0	56	26	0	*82*	0	7	0	27	0	*34*	0	3	30	0	0	*33*	0	0	0	0	0	*0*	**149**
Hourly Total	0	0	171	102	0	*273*	0	26	0	94	0	*120*	0	17	81	0	0	*98*	0	0	0	0	0	*0*	**491**
10:00 AM	0	0	35	18	0	*53*	0	6	0	25	1	*31*	0	3	20	0	0	*23*	0	0	0	0	0	*0*	**107**
10:15 AM	0	0	43	31	0	*74*	0	9	1	30	0	*40*	0	7	27	0	0	*34*	0	0	0	0	0	*0*	**148**
10:30 AM	0	0	41	31	0	*72*	0	7	1	24	0	*32*	0	5	25	0	0	*30*	0	0	0	0	0	*0*	**134**
10:45 AM	0	0	35	24	0	*59*	0	7	0	30	0	*37*	0	2	34	0	0	*36*	0	0	0	0	0	*0*	**132**
Hourly Total	0	0	154	104	0	*258*	0	29	2	109	1	*140*	0	17	106	0	0	*123*	0	0	0	0	0	*0*	**521**
11:00 AM	0	0	46	32	0	*78*	0	12	0	42	0	*54*	1	5	25	0	0	*31*	0	0	0	0	0	*0*	**163**
11:15 AM	0	0	35	26	0	*61*	0	4	0	38	0	*42*	0	0	29	0	0	*29*	0	0	0	0	0	*0*	**132**
11:30 AM	0	0	32	25	0	*57*	0	5	0	51	0	*56*	0	10	33	0	0	*43*	0	0	0	0	0	*0*	**156**
11:45 AM	0	0	32	29	0	*61*	0	7	0	36	0	*43*	0	5	23	0	0	*28*	0	0	0	0	0	*0*	**132**
Hourly Total	0	0	145	112	0	*257*	0	28	0	167	0	*195*	1	20	110	0	0	*131*	0	0	0	0	0	*0*	**583**
12:00 PM	0	0	52	30	0	*82*	0	10	0	42	0	*52*	0	5	31	0	0	*36*	0	0	0	0	0	*0*	**170**
12:15 PM	0	0	41	31	0	*72*	0	9	0	51	1	*60*	0	2	34	0	0	*36*	0	0	0	0	0	*0*	**168**
12:30 PM	0	0	47	34	0	*81*	0	15	0	39	0	*54*	0	5	35	0	0	*40*	0	0	0	0	0	*0*	**175**
12:45 PM	0	0	41	28	0	*69*	0	8	0	46	0	*54*	0	10	34	0	0	*44*	0	0	0	0	0	*0*	**167**
Hourly Total	0	0	181	123	0	*304*	0	42	0	178	1	*220*	0	22	134	0	0	*156*	0	0	0	0	0	*0*	**680**
1:00 PM	0	0	40	36	0	*76*	0	10	0	38	0	*48*	0	2	25	0	0	*27*	0	0	0	0	0	*0*	**151**
1:15 PM	0	0	36	20	0	*56*	0	7	0	46	0	*53*	0	1	27	0	0	*28*	0	0	0	0	0	*0*	**137**
1:30 PM	0	0	30	23	0	*53*	0	3	0	45	0	*48*	0	5	28	0	0	*33*	0	0	0	0	0	*0*	**134**
1:45 PM	0	0	48	34	0	*82*	0	9	0	63	0	*72*	0	3	28	0	0	*31*	0	0	0	0	0	*0*	**185**
Hourly Total	0	0	154	113	0	*267*	0	29	0	192	0	*221*	0	11	108	0	0	*119*	0	0	0	0	0	*0*	**607**
2:00 PM	0	0	45	23	0	*68*	0	9	1	47	0	*57*	0	8	28	0	0	*36*	0	0	0	0	0	*0*	**161**
2:15 PM	0	0	36	32	0	*68*	0	7	0	50	0	*57*	0	5	38	0	0	*43*	0	0	0	0	0	*0*	**168**
2:30 PM	1	0	26	44	0	*71*	0	7	0	44	0	*51*	0	4	41	0	0	*45*	0	0	0	0	0	*0*	**167**
2:45 PM	0	0	35	46	0	*81*	0	12	0	66	0	*78*	0	2	37	0	0	*39*	0	0	0	0	0	*0*	**198**
Hourly Total	1	0	142	145	0	*288*	0	35	1	207	0	*243*	0	19	144	0	0	*163*	0	0	0	0	0	*0*	**694**
3:00 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
3:15 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
3:30 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
3:45 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
Hourly Total	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**

04 HWY 10 North Ramps and Armstorng Blvd
Ramsey MN
Thursday, October 15, 2020

Time	Southbound Armstrong Blvd						Westbound HWY 10 Off Ramp						Northbound Armstrong Blvd						Eastbound HWY 10 On Ramp						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	
4:00 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
4:15 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
4:30 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
4:45 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
Hourly Total	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
5:00 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
5:15 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
5:30 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
5:45 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
Hourly Total	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
6:00 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
6:15 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
6:30 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
6:45 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
Hourly Total	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
7:00 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
7:15 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
7:30 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
7:45 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
Hourly Total	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
8:00 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
8:15 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
8:30 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
8:45 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
Hourly Total	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
9:00 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
9:15 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
9:30 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
9:45 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
Hourly Total	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
10:00 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
10:15 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
10:30 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
10:45 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
Hourly Total	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
11:00 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
11:15 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
11:30 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
11:45 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
Hourly Total	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
DAILY TOTAL	**1**	**0**	**1868**	**1010**	**0**	***2879***	**0**	**247**	**6**	**1315**	**4**	***1568***	**3**	**136**	**1222**	**0**	**0**	***1361***	**0**	**0**	**0**	**0**	**0**	***0***	**5808**
Cars	1	0	1797	979	0	*2777*	0	222	3	1240	3	*1465*	3	128	1193	0	0	*1324*	0	0	0	0	0	*0*	**5566**
Heavy Vehicles	0	0	71	31	0	*102*	0	25	3	75	1	*103*	0	8	29	0	0	*37*	0	0	0	0	0	*0*	**242**
Heavy Vehicle %	0.00%	0.00%	3.80%	3.07%	0.00%	*3.54%*	0.00%	10.12%	50.00%	5.70%	25.00%	*6.57%*	0.00%	5.88%	2.37%	0.00%	0.00%	*2.72%*	0.00%	0.00%	0.00%	0.00%	0.00%	*0.00%*	**4.17%**

04 HWY 10 North Ramps and Armstorng Blvd
Ramsey MN
Thursday, October 15, 2020

AM Peak Hour

Time	Southbound						Westbound						Northbound						Eastbound						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	
7:15 AM	0	0	55	26	0	*81*	0	2	0	23	1	*25*	0	2	40	0	0	*42*	0	0	0	0	0	*0*	**148**
7:30 AM	0	0	65	25	0	*90*	0	4	1	22	0	*27*	0	2	41	0	0	*43*	0	0	0	0	0	*0*	**160**
7:45 AM	0	0	44	19	0	*63*	0	5	0	35	0	*40*	0	1	48	0	0	*49*	0	0	0	0	0	*0*	**152**
8:00 AM	0	0	63	25	0	*88*	0	4	1	43	0	*48*	0	3	30	0	0	*33*	0	0	0	0	0	*0*	**169**
Peak Hour Total	0	0	227	95	0	*322*	0	15	2	123	1	*140*	0	8	159	0	0	*167*	0	0	0	0	0	*0*	**629**
PHF	0.000	0.000	0.873	0.913	0.000	*0.894*	0.000	0.750	0.500	0.715	0.250	*0.729*	0.000	0.667	0.828	0.000	0.000	*0.852*	0.000	0.000	0.000	0.000	0.000	*0.000*	**0.930**

PM Peak Hour

Time	Southbound						Westbound						Northbound						Eastbound						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	
2:00 PM	0	0	45	23	0	*68*	0	9	1	47	0	*57*	0	8	28	0	0	*36*	0	0	0	0	0	*0*	**161**
2:15 PM	0	0	36	32	0	*68*	0	7	0	50	0	*57*	0	5	38	0	0	*43*	0	0	0	0	0	*0*	**168**
2:30 PM	1	0	26	44	0	*71*	0	7	0	44	0	*51*	0	4	41	0	0	*45*	0	0	0	0	0	*0*	**167**
2:45 PM	0	0	35	46	0	*81*	0	12	0	66	0	*78*	0	2	37	0	0	*39*	0	0	0	0	0	*0*	**198**
Peak Hour Total	1	0	142	145	0	*288*	0	35	1	207	0	*243*	0	19	144	0	0	*163*	0	0	0	0	0	*0*	**694**
PHF	0.250	0.000	0.789	0.788	0.000	*0.889*	0.000	0.729	0.250	0.784	0.000	*0.779*	0.000	0.594	0.878	0.000	0.000	*0.906*	0.000	0.000	0.000	0.000	0.000	*0.000*	**0.876**

Total Vehicles On Leg 5417					
Vehicles Entering Intersection 2879			Vehicles Exiting Intersection 2538		
Southbound					
Cars	979	1797	0	1	0
Heavy	31	71	0	0	0
Total	**1010**	**1868**	**0**	**1**	**0**

Total Vehicles on Leg 1152	Vehicles Entering Intersection 0	**Eastbound**	Cars	Heavy	**Total**
			0	0	**0**
			0	0	**0**
	Vehicles Exiting Intersection 1152		0	0	**0**
			0	0	**0**
			0	0	**0**

Daily Volumes

Cars	Heavy	**Total**	**Westbound**	Vehicles Entering Intersection 1568	Total Vehicles on Leg 1568
1240	75	**1315**			
3	3	**6**			
222	25	**247**		Vehicles Exiting Intersection 0	
0	0	**0**			
3	1	**4**			

Cars	0	3	128	1193	0
Heavy	0	0	8	29	0
Total	**0**	**3**	**136**	**1222**	**0**
Northbound					
Vehicles Entering Intersection 1361			Vehicles Exiting Intersection 2118		
Total Vehicles On Leg 3479					

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Forecast Trip Generation - ITE

Gross Volumes

LAND USE	ITE CODE #	DEVELOPMENT UNITS	QUANTITY	DAILY			AM PEAK HOUR			PM PEAK HOUR		
				TOTAL	ENTER	EXIT	TOTAL	ENTER	EXIT	TOTAL	ENTER	EXIT
Single Family Detached Housing	210	DU	165.0	1,558	779	779	122	31	92	163	103	60
Single Family Detached Housing	210	DU	78.0	736	368	368	58	14	43	77	49	29
TOTAL				2294	1147	1147	180	45	135	241	152	89

Trips After Internal Reductions

LAND USE	ITE CODE #	DEVELOPMENT UNITS	QUANTITY	DAILY			AM PEAK HOUR			PM PEAK HOUR		
				TOTAL	ENTER	EXIT	TOTAL	ENTER	EXIT	TOTAL	ENTER	EXIT
Single Family Detached Housing	210	DU	165.0	1,558	779	779	122	31	92	163	103	60
Single Family Detached Housing	210	DU	78.0	736	368	368	58	14	43	77	49	29
TOTAL				2294	1147	1147	180	45	135	241	152	89

Internal Reduction
0.00%
0.00%
0.00%
0.00%
0.00%
0.00%
0.00%

Trips After Internal & Pass-By Reductions (Net New)

LAND USE	ITE CODE #	DEVELOPMENT UNITS	QUANTITY	DAILY			AM PEAK HOUR			PM PEAK HOUR		
				TOTAL	ENTER	EXIT	TOTAL	ENTER	EXIT	TOTAL	ENTER	EXIT
Single Family Detached Housing	210	DU	165.0	1,558	779	779	122	31	92	163	103	60
Single Family Detached Housing	210	DU	78.0	736	368	368	58	14	43	77	49	29
TOTAL				2294	1147	1147	180	45	135	241	152	89

NOTES:

1. KSF2 = 1,000 square feet. DU = dwelling units. VFP = Vehicle Fueling Positions, the number of vehicles able to fill at one time.
2. All trip generation rates based on "Trip Generation", Institute of Transportation Engineers, 10th Edition unless otherwise noted.
3. Reduction for pass-by and internal trips are based on "Trip Generation Handbook", Institute of Transportation Engineers, 3rd Edition.
4. A.M. Trip Generation is for the peak hour of adjacent street traffic (one hour between 7 and 9 a.m.).
5. P.M. Trip Generation is for the peak hour of adjacent street traffic (one hour between 4 and 6 p.m.).

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Forecast Trip Generation - Local

Gross Volumes

LAND USE	DEVELOPMENT UNITS	QUANTITY	DAILY			AM PEAK HOUR			PM PEAK HOUR		
			TOTAL	ENTER	EXIT	TOTAL	ENTER	EXIT	TOTAL	ENTER	EXIT
Single Family Detached Housing	Units	165.0	1,487	744	744	104	29	75	145	83	62
Townhomes	Units	78.0	423	212	212	36	9	27	41	26	15
TOTAL			1910	956	956	140	38	102	186	109	77

Trips After Internal Reductions

LAND USE	DEVELOPMENT UNITS	QUANTITY	DAILY			AM PEAK HOUR			PM PEAK HOUR		
			TOTAL	ENTER	EXIT	TOTAL	ENTER	EXIT	TOTAL	ENTER	EXIT
Single Family Detached Housing	Units	165.0	1,487	744	744	104	29	75	145	83	62
Townhomes	Units	78.0	423	212	212	36	9	27	41	26	15
TOTAL			1910	956	956	140	38	102	186	109	77

Internal Reduction
0.00%
0.00%
0.00%
0.00%
0.00%
0.00%
0.00%

Trips After Internal & Pass-By Reductions (Net New)

LAND USE	DEVELOPMENT UNITS	QUANTITY	DAILY			AM PEAK HOUR			PM PEAK HOUR		
			TOTAL	ENTER	EXIT	TOTAL	ENTER	EXIT	TOTAL	ENTER	EXIT
Single Family Detached Housing	Units	165.0	1,487	744	744	104	29	75	145	83	62
Townhomes	Units	78.0	423	212	212	36	9	27	41	26	15
TOTAL			1910	956	956	140	38	102	186	109	77

NOTES:

1. KSF2 = 1,000 square feet. DU = dwelling units. VFP = Vehicle Fueling Positions, the number of vehicles able to fill at one time.
2. All trip generation rates based on data collected by Spack Solutions unless otherwise noted.
3. Reduction for pass-by and internal trips are based on "Trip Generation Handbook", Institute of Transportation Engineers, 3rd Edition.
4. A.M. Trip Generation is for the peak hour of adjacent street traffic (one hour between 7 and 9 a.m.).
5. P.M. Trip Generation is for the peak hour of adjacent street traffic (one hour between 4 and 6 p.m.).

Level of Service (LOS)

Level of Service (LOS) is a qualitative description, similar to typical school grades, that traffic engineers use to communicate how good or bad traffic operations are on a corridor, intersection, or interchange.

Common Factors

Traffic can be a hard thing to quantify as everyone has a different tolerance for congestion. What seems excessively long to one person may seem good enough for another. These differences are readily apparent when comparing small towns or rural areas, where five cars an hour can be the norm, to big cities or downtowns, where less than hundred cars an hour, even in the middle of night, is rare.

To combat this issue and provide a consistent measuring tool for traffic studies, a "Level of Service" rating was developed. Level of Service ratings are based on the roadway or intersection characteristics and the amount of traffic. Just like grade school, LOS A represents the best traffic operations, where traffic flows freely. LOS F, on the other hand, represents failing operations, where the road or intersection is congested and running beyond maximum capacity. LOS E is typically considered "at capacity" which means the amount of traffic is right at the level the roadway or intersection can adequately accommodate. Using Level of Service letter grades provides an easy way to convey road operations to the general public and has been adopted across the United States.

Common Factors Impacting Level of Service

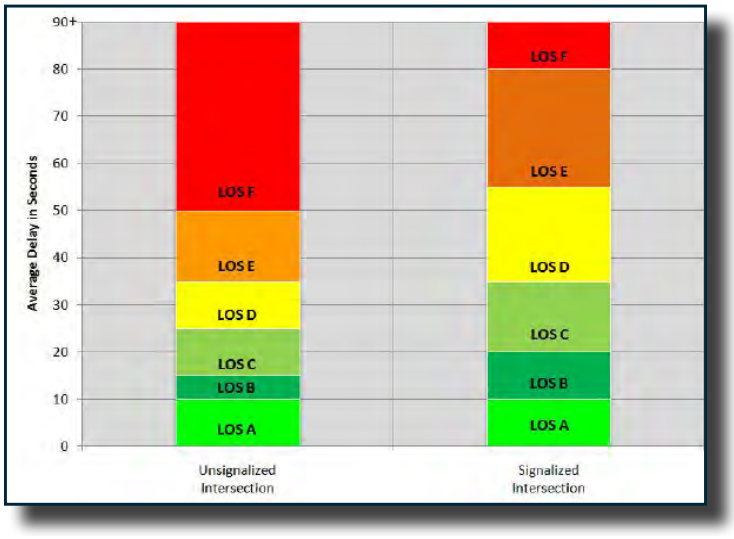
- **Number of Lanes.**
- **Traffic Volumes.**
- **Intersection Control (stop sign, signal, roundabout, interchange.)**
- **Amount of access on a corridor.**
- **Percentage of turning traffic.**
- **Traffic signal cycle length (green time devoted to each approach) and phasing (one green for all approach movements or separate green arrows.)**
- **Percentage of heavy trucks.**
- **Roadway Grades.**
- **Distribution of traffic within a peak hour as well as over the course of a day.**
- **Pedestrian activity.**
- **Bicycle activity.**

Level of Service criteria have been developed for multiple types of traffic operations including:

- Intersections
- Urban Corridors
- Freeways
- Transit Service
- Bicycle Operations
- Pedestrian Operations

The most common LOS criteria used is for car operations at intersections; both signalized and unsignalized. For an intersection Level of Service analysis, average delay for cars travelling through the intersection is used to determine the appropriate grade. A high delay results in a poor LOS rating and equates to poor operations. Similarly, low delay results in a good LOS rating and equates to good or great operations.

LOS can be determined for the intersection as a whole, or for individual movements. It is common during peak periods in major population areas for an intersection to have an acceptable overall LOS rating, but fail to achieve a good grade for individual movements.



LOS A

LOS C

LOS D = Acceptable

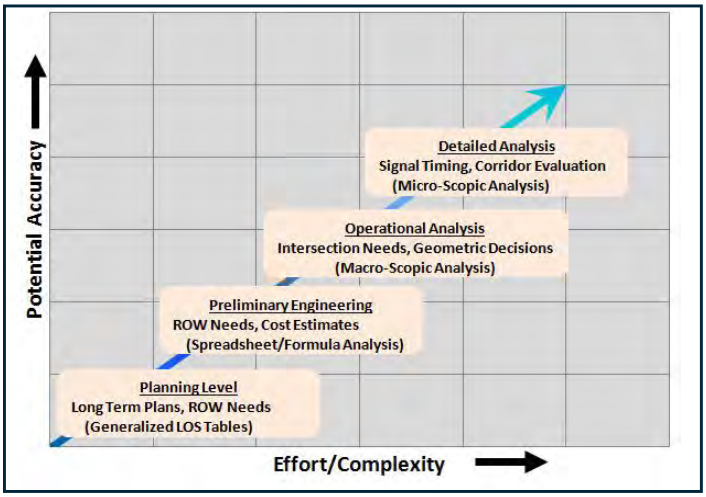
LOS F = Unacceptable

Source: City of San Jose, CA.

Although a Level of Service rating of A represents the best traffic operations, it is not always the most desirable. Providing LOS A for all corridors and all operations at all times would require a significant amount of land to be devoted to the road infrastructure, which makes it extremely costly to build and maintain. During non-peak times, like overnight, much of that infrastructure would sit unused.

On the opposite side of the spectrum, a Level of Service rating of E and F represent traffic operations close to breaking down, or that already have. These ratings mean high delays, long queues, and slow speeds, not to mention driver frustration. Instead of trying to achieve one or the other, government agencies try to strike a balance between providing acceptable operations, neither falling nor flowing too freely. Because of this, **LOS D is typically considered the lowest LOS acceptable by government agencies** and is reflective of a balanced approach between cost and benefit.

There are many tools and guidelines used to determine a roads Level of Service rating. Simple tools like generalized roadway capacities allow for planning-level efforts. While inexpensive and quick to complete, they are not as accurate as other options. More complicated tools, such as micro-simulations, provide more accurate results, but cost more and take more time. It is important to understand the trade-offs between the analysis types as well as the purpose of the study.



Source: Florida Deptarment of Transportation

Resources

- Highway Capacity Manual, fifth edition
- Nation Cooperative Highway Research Program Report 616; Multimodal Level of Service Analysis for Urban Streets
- http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_rpt_616.pdf
- Florida Department of Transportation Quality/Level of Service Handbook
- http://www.dot.state.fl.us/planning/systems/programs/sm/los/pdfs/2009FDOTQLOS_Handbook.pdf

About This Brief

Spack Solutions prepared this brief as part of our company's vision to significantly improve the practice of traffic engineering and transportation planning. Transportation professionals from around the world have assisted us in developing this document. We are providing this brief under the Creative Commons Attribution License. Feel free to use-modify-share this guide, but please give us some credit in your document. To request our whole series of Design Briefs and to be included on our distribution list for new materials, please email mspack@spacksolutions.com. And please reach out if you have any comments or questions related to this Design Brief.

Vistro File: C:\...\Ramsey Model.vistro
Report File: C:\...\Exist AM.pdf

Scenario 1 AM Exist
11/9/2020

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	HWY 10 and Bowers Drive	Two-way stop	HCM 6th Edition	NB Left	0.160	130.3	F
2	Riverdale Drive and Llama Street	Two-way stop	HCM 6th Edition	WB Left	0.004	7.2	A
3	Riverdale Drive/Armostrong Boulevard and EB Hwy 10 Ramp	Two-way stop	HCM 6th Edition	NWB Thru	0.007	11.1	B
4	Armstrong Boulevard and WB Hwy 10 Ramp	Signalized	HCM 6th Edition	NB Left	0.144	10.3	B

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

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Version 2020 (SP 0-3)

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Intersection Level Of Service Report
Intersection 1: HWY 10 and Bowers Drive

Control Type:	Two-way stop	Delay (sec / veh):	130.3
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.160

Intersection Setup

Name								
Approach	Northbound		Eastbound			Westbound		
Lane Configuration								
Turning Movement	Left	Right	U-turn	Thru	Right	U-turn	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	325.00	100.00	225.00	360.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		65.00			65.00		
Grade [%]	0.00		0.00			0.00		
Crosswalk	Yes		Yes			Yes		

Volumes

Name								
Base Volume Input [veh/h]	5	16	1	1736	2	0	4	895
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	5	16	1	1736	2	0	4	895
Peak Hour Factor	0.9470	0.9470	0.9470	0.9470	0.9470	0.9470	0.9470	0.9470
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	4	0	458	1	0	1	236
Total Analysis Volume [veh/h]	5	17	1	1833	2	0	4	945
Pedestrian Volume [ped/h]	0		0			0		

Appendix F - Capacity Analysis Backup

Generated with PTV VISTRO
Version 2020 (SP 0-3)

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Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.16	0.06	0.00	0.02	0.00	0.00	0.01	0.01
d_M, Delay for Movement [s/veh]	130.31	28.19	18.22	0.00	0.00	62.20	16.10	0.00
Movement LOS	F	D	C	A	A	F	C	A
95th-Percentile Queue Length [veh/ln]	0.79	0.79	0.01	0.00	0.00	0.04	0.04	0.00
95th-Percentile Queue Length [ft/ln]	19.78	19.78	0.28	0.00	0.00	0.92	0.92	0.00
d_A, Approach Delay [s/veh]	51.40		0.01			0.07		
Approach LOS	F		A			A		
d_I, Intersection Delay [s/veh]	0.43							
Intersection LOS	F							

Generated with PTV VISTRO
Version 2020 (SP 0-3)

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Intersection Level Of Service Report
Intersection 2: Riverdale Drive and Llama Street

Control Type:	Two-way stop	Delay (sec / veh):	7.2
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.004

Intersection Setup

Name											
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	0	0	0	0	0	0	6	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	0	0	0	0	0	0	6	0	0
Peak Hour Factor	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	0	0	0	0	0	0	2	0	0
Total Analysis Volume [veh/h]	0	0	0	0	0	0	0	0	0	7	0	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	8.60	9.11	8.32	8.60	9.11	8.32	7.22	0.00	0.00	7.23	0.00	0.00
Movement LOS	A	A	A	A	A	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.32	0.32	0.32
d_A, Approach Delay [s/veh]	8.68			8.68			2.41			7.23		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	7.23											
Intersection LOS	A											

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Version 2020 (SP 0-3)

Spack SOLUTIONS

Intersection Level Of Service Report
Intersection 3: Riverdale Drive/Armostrong Boulevard and EB Hwy 10 Ramp

Control Type:	Two-way stop	Delay (sec / veh):	11.1
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.007

Intersection Setup

Name												
Approach	Southbound				Northeastbound				Southwestbound			
Lane Configuration												
Turning Movement	Left	Thru	Right	Right	Left	Left	Thru	Right	Left	Thru	Right	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	1	0	0	1	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	300.00	100.00	100.00	300.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00				35.00				35.00			
Grade [%]	0.00				0.00				0.00			
Crosswalk	Yes				Yes				Yes			

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	0	1	0	2	1	18	13	0	243
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	0	1	0	2	1	18	13	0	243
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	0.9430	1.0000	0.9430	0.9430	0.9430	0.9430	1.0000	0.9430
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	0	0	0	1	0	5	3	0	64
Total Analysis Volume [veh/h]	0	0	0	0	1	0	2	1	19	14	0	258
Pedestrian Volume [ped/h]	0				0				0			

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Version 2020 (SP 0-3)

Spack SOLUTIONS

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	7.79	0.00	0.00	0.00	7.25	0.00	0.00	0.00
Movement LOS					A		A	A	A	A		A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.89	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.00				1.95				0.47			
Approach LOS	A				A				A			
d_I, Intersection Delay [s/veh]	4.67											
Intersection LOS	B											

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Intersection Setup

Name								
Approach	Northwestbound				Southeastbound			
Lane Configuration								
Turning Movement	Left	Thru	Thru	Right	Left	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	1	0	0	1
Entry Pocket Length [ft]	225.00	100.00	100.00	290.00	280.00	100.00	100.00	280.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00				30.00			
Grade [%]	0.00				0.00			
Crosswalk	Yes				Yes			

Volumes

Name								
Base Volume Input [veh/h]	2	4	0	14	187	0	7	10
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	2	4	0	14	187	0	7	10
Peak Hour Factor	0.9430	0.9430	1.0000	0.9430	0.9430	1.0000	0.9430	0.9430
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	1	0	4	50	0	2	3
Total Analysis Volume [veh/h]	2	4	0	15	198	0	7	11
Pedestrian Volume [ped/h]	0				0			

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Intersection Settings

Priority Scheme	Stop	Stop
Flared Lane		
Storage Area [veh]	0	0
Two-Stage Gap Acceptance	No	No
Number of Storage Spaces in Median	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.01	0.00	0.01	0.22	0.00	0.01	0.01
d_M, Delay for Movement [s/veh]	9.84	11.10	0.00	8.37	10.04	0.00	9.41	8.41
Movement LOS	A	B		A	B		A	A
95th-Percentile Queue Length [veh/ln]	0.01	0.02	0.00	0.04	0.83	0.00	0.03	0.03
95th-Percentile Queue Length [ft/ln]	0.20	0.51	0.00	1.05	20.63	0.00	0.64	0.78
d_A, Approach Delay [s/veh]	9.03				9.94			
Approach LOS	A				A			
d_I, Intersection Delay [s/veh]	4.67							
Intersection LOS	B							

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Version 2020 (SP 0-3)

Spack SOLUTIONS

Intersection Level Of Service Report
Intersection 4: Armstrong Boulevard and WB Hwy 10 Ramp

Control Type:	Signalized	Delay (sec / veh):	10.3
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.144

Intersection Setup

Name													
Approach	Northbound			Southbound				Eastbound			Westbound		
Lane Configuration													
Turning Movement	Left	Thru	Right	U-tu	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	0	0	0	1	0	0	0	1	0	1
Entry Pocket Length [ft]	395.00	100.00	100.00	100.0	100.0	100.0	315.0	100.00	100.00	100.00	685.00	100.00	685.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00				30.00			30.00		
Grade [%]	0.00			0.00				0.00			0.00		
Curb Present	No			No							No		
Crosswalk	No			No				No			Yes		

Volumes

Name													
Base Volume Input [veh/h]	10	220	0	1	0	238	96	0	0	0	20	2	134
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	10	220	0	1	0	238	96	0	0	0	20	2	134
Peak Hour Factor	0.9310	0.9310	1.0000	0.931	1.000	0.931	0.931	1.0000	1.0000	1.0000	0.9310	0.9310	0.9310
Other Adjustment Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	59	0	0	0	64	26	0	0	0	5	1	36
Total Analysis Volume [veh/h]	11	236	0	1	0	256	103	0	0	0	21	2	144
Presence of On-Street Parking	No		No	No			No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0				0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0				0			0		
v_co, Outbound Pedestrian Volume crossing	0			0				0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0				0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0				0			0		
Bicycle Volume [bicycles/h]	0			0				0			0		

Appendix F - Capacity Analysis Backup

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Version 2020 (SP 0-3)

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Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permi	Permi	Permi	Permi	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	5	2	0	0	0	6	0	0	0	0	0	8	0
Auxiliary Signal Groups													
Lead / Lag	Lead	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	7	10	0	0	0	10	0	0	0	0	0	10	0
Maximum Green [s]	20	35	0	0	0	35	0	0	0	0	0	30	0
Amber [s]	3.0	5.0	0.0	0.0	0.0	5.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0
All red [s]	2.5	1.5	0.0	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	3.5	0.0
Split [s]	0	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	20	0	0	0	0	0	0	0	0	0	0	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No				No						No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	3.5	4.5	0.0	0.0	0.0	4.5	0.0	0.0	0.0	0.0	0.0	4.5	0.0
Minimum Recall	No	Yes				Yes						No	
Maximum Recall	No	No				No						No	
Pedestrian Recall	No	No				No						No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	C	R		C	R
C, Cycle Length [s]	38	38	38	38	38		38	38
L, Total Lost Time per Cycle [s]	5.50	6.50	6.50	6.50	6.50		6.50	6.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	2.00	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	3.50	4.50	4.50	4.50	4.50		4.50	4.50
g_i, Effective Green Time [s]	1	16	10	10	10		8	8
g / C, Green / Cycle	0.02	0.43	0.27	0.27	0.27		0.22	0.22
(v / s)_i Volume / Saturation Flow Rate	0.01	0.07	0.08	0.08	0.07		0.01	0.06
s, saturation flow rate [veh/h]	1603	3204	1656	1532	1431		1610	2532
c, Capacity [veh/h]	35	1393	532	410	383		357	562
d1, Uniform Delay [s]	18.24	6.53	11.03	11.04	10.94		11.63	12.15
k, delay calibration	0.11	0.11	0.11	0.11	0.11		0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	5.00	0.06	0.24	0.41	0.37		0.07	0.24
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00		0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00		1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00

Lane Group Results

X, volume / capacity	0.31	0.17	0.25	0.30	0.27		0.06	0.26
d, Delay for Lane Group [s/veh]	23.24	6.59	11.28	11.45	11.32		11.70	12.39
Lane Group LOS	C	A	B	B	B		B	B
Critical Lane Group	Yes	No	No	Yes	No		No	Yes
50th-Percentile Queue Length [veh/ln]	0.13	0.37	0.70	0.66	0.55		0.13	0.42
50th-Percentile Queue Length [ft/ln]	3.20	9.24	17.47	16.47	13.66		3.27	10.54
95th-Percentile Queue Length [veh/ln]	0.23	0.67	1.26	1.19	0.98		0.24	0.76
95th-Percentile Queue Length [ft/ln]	5.75	16.64	31.45	29.65	24.59		5.88	18.98

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Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	23.24	6.59	0.00	11.28	0.00	11.36	11.32	0.00	0.00	0.00	11.70	11.70	12.39
Movement LOS	C	A		B		B	B				B	B	B
d_A, Approach Delay [s/veh]	7.33			11.35				0.00			12.30		
Approach LOS	A			B				A			B		
d_I, Intersection Delay [s/veh]	10.27												
Intersection LOS	B												
Intersection V/C	0.144												

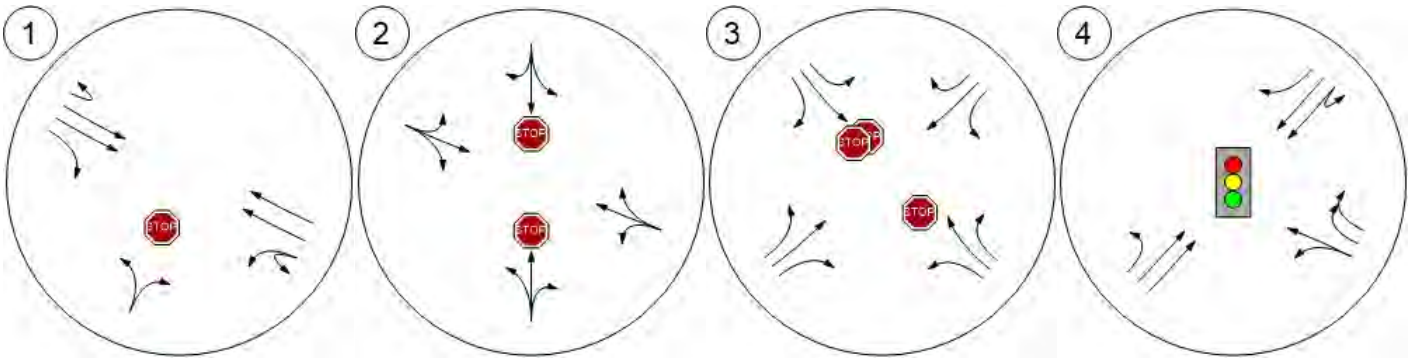
Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	34.67
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	1.994
Crosswalk LOS	F	F	F	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	778	778	0	667
d_b, Bicycle Delay [s]	16.81	16.81	45.00	20.00
l_b,int, Bicycle LOS Score for Intersection	1.763	1.857	4.132	1.835
Bicycle LOS	A	A	D	A

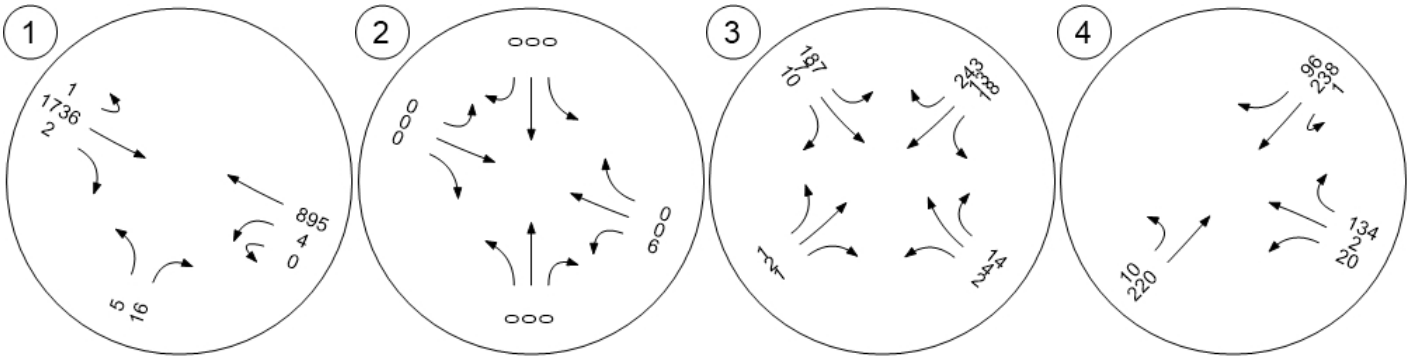
Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Lane Configuration and Traffic Control



Traffic Volume - Base Volume



Vistro File: C:\...\Ramsey Model.vistro
Report File: C:\...\Exist PM.pdf

Scenario 2 PM Exist
11/9/2020

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	HWY 10 and Bowers Drive	Two-way stop	HCM 6th Edition	NB Left	0.298	208.9	F
2	Riverdale Drive and Llama Street	Two-way stop	HCM 6th Edition	SB Left	0.003	8.6	A
3	Riverdale Drive/Armostrong Boulevard and EB Hwy 10 Ramp	Two-way stop	HCM 6th Edition	NWB Thru	0.023	11.5	B
4	Armstrong Boulevard and WB Hwy 10 Ramp	Signalized	HCM 6th Edition	NB Left	0.359	13.4	B

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

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Intersection Level Of Service Report
Intersection 1: HWY 10 and Bowers Drive

Control Type:	Two-way stop	Delay (sec / veh):	208.9
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.298

Intersection Setup

Name								
Approach	Northbound		Eastbound			Westbound		
Lane Configuration								
Turning Movement	Left	Right	U-turn	Thru	Right	U-turn	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	325.00	100.00	225.00	360.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		65.00			65.00		
Grade [%]	0.00		0.00			0.00		
Crosswalk	Yes		Yes			Yes		

Volumes

Name								
Base Volume Input [veh/h]	6	17	1	1367	7	1	16	2051
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	6	17	1	1367	7	1	16	2051
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	4	0	360	2	0	4	540
Total Analysis Volume [veh/h]	6	18	1	1439	7	1	17	2159
Pedestrian Volume [ped/h]	0		0			0		

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.30	0.05	0.03	0.01	0.00	0.01	0.04	0.02
d_M, Delay for Movement [s/veh]	208.91	40.04	97.90	0.00	0.00	35.45	13.17	0.00
Movement LOS	F	E	F	A	A	E	B	A
95th-Percentile Queue Length [veh/ln]	1.29	1.29	0.08	0.00	0.00	0.14	0.14	0.00
95th-Percentile Queue Length [ft/ln]	32.33	32.33	1.91	0.00	0.00	3.52	3.52	0.00
d_A, Approach Delay [s/veh]	82.26		0.07			0.12		
Approach LOS	F		A			A		
d_I, Intersection Delay [s/veh]	0.64							
Intersection LOS	F							

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Version 2020 (SP 0-3)

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Intersection Level Of Service Report
Intersection 2: Riverdale Drive and Llama Street

Control Type:	Two-way stop	Delay (sec / veh):	8.6
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.003

Intersection Setup

Name													
Approach	Northbound			Southbound			Eastbound			Westbound			
Lane Configuration													
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	U-tu	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			35.00			
Grade [%]	0.00			0.00			0.00			0.00			
Crosswalk	Yes			Yes			Yes			Yes			

Volumes

Name													
Base Volume Input [veh/h]	0	0	1	3	0	0	0	0	0	1	1	0	4
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	1	3	0	0	0	0	0	1	1	0	4
Peak Hour Factor	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.900	0.900	0.900	0.900
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	0	0	0	1	0	0	0	0	0	0	0	0	1
Total Analysis Volume [veh/h]	0	0	1	3	0	0	0	0	0	1	1	0	4
Pedestrian Volume [ped/h]	0			0			0			0			

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Version 2020 (SP 0-3)

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Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	8.55	9.07	8.32	8.56	9.06	8.34	7.23	0.00	0.00	8.12	7.22	0.00	0.00
Movement LOS	A	A	A	A	A	A	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.07	0.07	0.07	0.22	0.22	0.22	0.00	0.00	0.00	0.11	0.11	0.11	0.11
d_A, Approach Delay [s/veh]	8.32			8.56			2.41			2.56			
Approach LOS	A			A			A			A			
d_I, Intersection Delay [s/veh]	4.93												
Intersection LOS	A												

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Version 2020 (SP 0-3)

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Intersection Level Of Service Report
Intersection 3: Riverdale Drive/Armostrong Boulevard and EB Hwy 10 Ramp

Control Type:	Two-way stop	Delay (sec / veh):	11.5
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.023

Intersection Setup

Name													
Approach	Southbound				Northeastbound				Southwestbound				
Lane Configuration													
Turning Movement	Left	Thru	Right	Right	Left	Left	Thru	Right	U-turn	Left	Thru	Right	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	1	0	0	1	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	300.00	100.00	100.00	300.00	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00				35.00				35.00				
Grade [%]	0.00				0.00				0.00				
Crosswalk	Yes				Yes				Yes				

Volumes

Name													
Base Volume Input [veh/h]	0	0	0	0	10	0	16	3	1	22	5	0	208
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	0	10	0	16	3	1	22	5	0	208
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	0.8610	1.0000	0.8610	0.8610	0.861	0.861	0.861	1.000	0.861
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	0	0	0	0	3	0	5	1	0	6	1	0	60
Total Analysis Volume [veh/h]	0	0	0	0	12	0	19	3	1	26	6	0	242
Pedestrian Volume [ped/h]	0				0				0				

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Version 2020 (SP 0-3)

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	7.76	0.00	0.00	0.00	8.42	7.30	0.00	0.00	0.00
Movement LOS					A		A	A	A	A	A		A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.05	0.05	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.69	0.00	0.00	0.00	1.32	1.32	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.00				2.74				0.72				
Approach LOS	A				A				A				
d_I, Intersection Delay [s/veh]	5.81												
Intersection LOS	B												

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Intersection Setup

Name									
Approach	Northwestbound					Southeastbound			
Lane Configuration									
Turning Movement	U-turn	Left	Thru	Thru	Right	Left	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	0	1	1	0	0	1
Entry Pocket Length [ft]	225.00	100.00	100.00	100.00	290.00	280.00	100.00	100.00	280.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00					30.00			
Grade [%]	0.00					0.00			
Crosswalk	Yes					Yes			

Volumes

Name									
Base Volume Input [veh/h]	1	1	11	0	46	193	0	8	4
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	1	11	0	46	193	0	8	4
Peak Hour Factor	0.8610	0.8610	0.8610	1.0000	0.8610	0.8610	1.0000	0.8610	0.8610
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	3	0	13	56	0	2	1
Total Analysis Volume [veh/h]	1	1	13	0	53	224	0	9	5
Pedestrian Volume [ped/h]	0					0			

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Version 2020 (SP 0-3)

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Intersection Settings

Priority Scheme	Stop	Stop
Flared Lane		
Storage Area [veh]	0	0
Two-Stage Gap Acceptance	No	No
Number of Storage Spaces in Median	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.02	0.00	0.05	0.28	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	10.14	10.14	11.55	0.00	8.58	11.29	0.00	9.77	8.36
Movement LOS	B	B	B		A	B		A	A
95th-Percentile Queue Length [veh/ln]	0.01	0.01	0.07	0.00	0.16	1.16	0.00	0.04	0.01
95th-Percentile Queue Length [ft/ln]	0.21	0.21	1.77	0.00	3.95	28.94	0.00	0.89	0.35
d_A, Approach Delay [s/veh]	9.19					11.17			
Approach LOS	A					B			
d_I, Intersection Delay [s/veh]	5.81								
Intersection LOS	B								

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Version 2020 (SP 0-3)

Spack SOLUTIONS

Intersection Level Of Service Report
Intersection 4: Armstrong Boulevard and WB Hwy 10 Ramp

Control Type:	Signalized	Delay (sec / veh):	13.4
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.359

Intersection Setup

Name													
Approach	Northbound				Southbound			Eastbound			Westbound		
Lane Configuration													
Turning Movement	U-tu	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	0	0	0	1	0	0	0	1	0	1
Entry Pocket Length [ft]	395.0	100.0	100.0	100.0	100.00	100.00	315.00	100.00	100.00	100.00	685.00	100.00	685.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00				35.00			30.00			30.00		
Grade [%]	0.00				0.00			0.00			0.00		
Curb Present	No				No						No		
Crosswalk	No				No			No			Yes		

Volumes

Name													
Base Volume Input [veh/h]	2	34	248	0	0	210	257	0	0	0	19	2	320
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	2	34	248	0	0	210	257	0	0	0	19	2	320
Peak Hour Factor	0.916	0.916	0.916	1.000	1.0000	0.9160	0.9160	1.0000	1.0000	1.0000	0.9160	0.9160	0.9160
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	9	68	0	0	57	70	0	0	0	5	1	87
Total Analysis Volume [veh/h]	2	37	271	0	0	229	281	0	0	0	21	2	349
Presence of On-Street Parking	No			No	No		No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0				0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0				0			0			0		
v_co, Outbound Pedestrian Volume crossing	0				0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0				0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0				0			0			0		
Bicycle Volume [bicycles/h]	0				0			0			0		

Appendix F - Capacity Analysis Backup

Generated with PTV VISTRO
Version 2020 (SP 0-3)

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Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permi	Prote	Permi	Permi	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	5	2	0	0	6	0	0	0	0	0	8	0
Auxiliary Signal Groups													
Lead / Lag	-	Lead	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	7	10	0	0	10	0	0	0	0	0	10	0
Maximum Green [s]	0	20	35	0	0	35	0	0	0	0	0	30	0
Amber [s]	0.0	3.0	5.0	0.0	0.0	5.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0
All red [s]	0.0	2.5	1.5	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	3.5	0.0
Split [s]	0	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Extension [s]	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0
Walk [s]	0	0	7	0	0	0	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	0	20	0	0	0	0	0	0	0	0	0	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk			No			No						No	
I1, Start-Up Lost Time [s]	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	3.5	4.5	0.0	0.0	4.5	0.0	0.0	0.0	0.0	0.0	4.5	0.0
Minimum Recall		No	Yes			Yes						No	
Maximum Recall		No	No			No						No	
Pedestrian Recall		No	No			No						No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	R		C	R
C, Cycle Length [s]	42	42	42	42		42	42
L, Total Lost Time per Cycle [s]	5.50	6.50	6.50	6.50		6.50	6.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	3.50	4.50	4.50	4.50		4.50	4.50
g_i, Effective Green Time [s]	3	19	11	11		10	10
g / C, Green / Cycle	0.06	0.45	0.26	0.26		0.24	0.24
(v / s)_i Volume / Saturation Flow Rate	0.02	0.08	0.07	0.20		0.01	0.14
s, saturation flow rate [veh/h]	1603	3204	3204	1431		1610	2532
c, Capacity [veh/h]	99	1452	832	371		380	598
d1, Uniform Delay [s]	18.87	6.84	12.35	14.28		12.38	14.15
k, delay calibration	0.11	0.11	0.11	0.11		0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	2.50	0.06	0.18	3.16		0.07	0.90
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00		0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00		1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00		1.00	1.00

Lane Group Results

X, volume / capacity	0.39	0.19	0.28	0.76		0.06	0.58
d, Delay for Lane Group [s/veh]	21.37	6.90	12.53	17.44		12.45	15.06
Lane Group LOS	C	A	B	B		B	B
Critical Lane Group	Yes	No	No	Yes		No	Yes
50th-Percentile Queue Length [veh/ln]	0.38	0.49	0.70	2.25		0.15	1.28
50th-Percentile Queue Length [ft/ln]	9.50	12.32	17.43	56.13		3.66	32.11
95th-Percentile Queue Length [veh/ln]	0.68	0.89	1.25	4.04		0.26	2.31
95th-Percentile Queue Length [ft/ln]	17.10	22.17	31.37	101.04		6.59	57.79

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Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	21.37	21.37	6.90	0.00	0.00	12.53	17.44	0.00	0.00	0.00	12.45	12.45	15.06
Movement LOS	C	C	A			B	B				B	B	B
d_A, Approach Delay [s/veh]	8.72				15.24			0.00			14.90		
Approach LOS	A				B			A			B		
d_I, Intersection Delay [s/veh]	13.44												
Intersection LOS	B												
Intersection V/C	0.359												

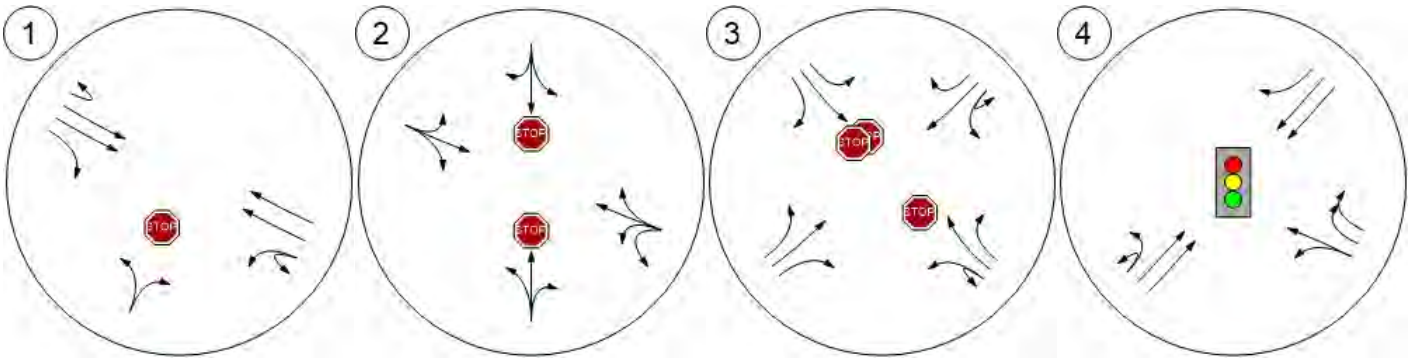
Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	34.67
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	2.061
Crosswalk LOS	F	F	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	778	778	0	667
d_b, Bicycle Delay [s]	16.81	16.81	45.00	20.00
I_b,int, Bicycle LOS Score for Intersection	1.785	1.980	4.132	2.173
Bicycle LOS	A	A	D	B

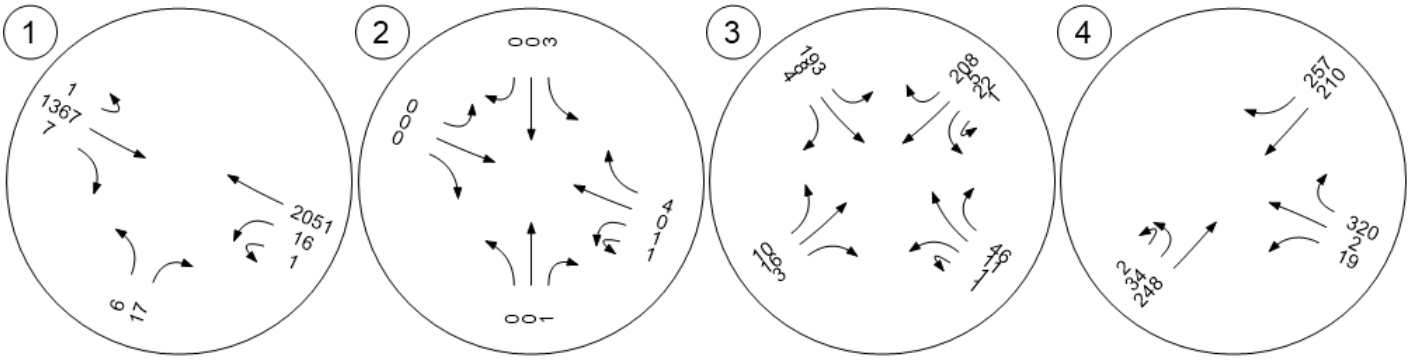
Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Lane Configuration and Traffic Control



Traffic Volume - Base Volume



Vistro File: C:\...\Ramsey Model.vistro
Report File: C:\...\2022 AM nobuild.pdf

Scenario 3 2022 AM No-Build
11/9/2020

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	HWY 10 and Bowers Drive	Two-way stop	HCM 6th Edition	NB Left	0.185	151.6	F
2	Riverdale Drive and Llama Street	Two-way stop	HCM 6th Edition	WB Left	0.004	7.2	A
3	Riverdale Drive/Armostrong Boulevard and EB Hwy 10 Ramp	Two-way stop	HCM 6th Edition	NWB Thru	0.007	11.2	B
4	Armstrong Boulevard and WB Hwy 10 Ramp	Signalized	HCM 6th Edition	NB Left	0.149	10.3	B

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

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Intersection Level Of Service Report
Intersection 1: HWY 10 and Bowers Drive

Control Type:	Two-way stop	Delay (sec / veh):	151.6
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.185

Intersection Setup

Name								
Approach	Northbound		Eastbound			Westbound		
Lane Configuration								
Turning Movement	Left	Right	U-turn	Thru	Right	U-turn	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	325.00	100.00	225.00	360.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		65.00			65.00		
Grade [%]	0.00		0.00			0.00		
Crosswalk	Yes		Yes			Yes		

Volumes

Name								
Base Volume Input [veh/h]	5	16	1	1736	2	0	4	895
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	5	17	1	1805	2	0	4	931
Peak Hour Factor	0.9470	0.9470	0.9470	0.9470	0.9470	0.9470	0.9470	0.9470
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	4	0	477	1	0	1	246
Total Analysis Volume [veh/h]	5	18	1	1906	2	0	4	983
Pedestrian Volume [ped/h]	0		0			0		

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Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.19	0.07	0.00	0.02	0.00	0.00	0.01	0.01
d_M, Delay for Movement [s/veh]	151.57	31.98	19.02	0.00	0.00	69.83	16.86	0.00
Movement LOS	F	D	C	A	A	F	C	A
95th-Percentile Queue Length [veh/ln]	0.92	0.92	0.01	0.00	0.00	0.04	0.04	0.00
95th-Percentile Queue Length [ft/ln]	23.09	23.09	0.29	0.00	0.00	0.99	0.99	0.00
d_A, Approach Delay [s/veh]	57.98		0.01			0.07		
Approach LOS	F		A			A		
d_I, Intersection Delay [s/veh]	0.49							
Intersection LOS	F							

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Intersection Level Of Service Report
Intersection 2: Riverdale Drive and Llama Street

Control Type:	Two-way stop	Delay (sec / veh):	7.2
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.004

Intersection Setup

Name											
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	0	0	0	0	0	0	6	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	0	0	0	0	0	0	6	0	0
Peak Hour Factor	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	0	0	0	0	0	0	2	0	0
Total Analysis Volume [veh/h]	0	0	0	0	0	0	0	0	0	7	0	0
Pedestrian Volume [ped/h]	0			0			0			0		

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Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	8.60	9.11	8.32	8.60	9.11	8.32	7.22	0.00	0.00	7.23	0.00	0.00
Movement LOS	A	A	A	A	A	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.32	0.32	0.32
d_A, Approach Delay [s/veh]	8.68			8.68			2.41			7.23		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	7.23											
Intersection LOS	A											

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Intersection Level Of Service Report
Intersection 3: Riverdale Drive/Armostrong Boulevard and EB Hwy 10 Ramp

Control Type:	Two-way stop	Delay (sec / veh):	11.2
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.007

Intersection Setup

Name												
Approach	Southbound				Northeastbound				Southwestbound			
Lane Configuration												
Turning Movement	Left	Thru	Right	Right	Left	Left	Thru	Right	Left	Thru	Right	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	1	0	0	1	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	300.00	100.00	100.00	300.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00				35.00				35.00			
Grade [%]	0.00				0.00				0.00			
Crosswalk	Yes				Yes				Yes			

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	0	1	0	2	1	18	13	0	243
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0400	1.0000	1.0400	1.0400	1.0400	1.0400	1.0000	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	0	1	0	2	1	19	14	0	253
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	0.9430	1.0000	0.9430	0.9430	0.9430	0.9430	1.0000	0.9430
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	0	0	0	1	0	5	4	0	67
Total Analysis Volume [veh/h]	0	0	0	0	1	0	2	1	20	15	0	268
Pedestrian Volume [ped/h]	0				0				0			

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Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	7.82	0.00	0.00	0.00	7.25	0.00	0.00	0.00
Movement LOS					A		A	A	A	A		A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.94	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.00				1.95				0.48			
Approach LOS	A				A				A			
d_I, Intersection Delay [s/veh]	4.70											
Intersection LOS	B											

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Intersection Setup

Name								
Approach	Northwestbound				Southeastbound			
Lane Configuration								
Turning Movement	Left	Thru	Thru	Right	Left	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	1	0	0	1
Entry Pocket Length [ft]	225.00	100.00	100.00	290.00	280.00	100.00	100.00	280.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00				30.00			
Grade [%]	0.00				0.00			
Crosswalk	Yes				Yes			

Volumes

Name								
Base Volume Input [veh/h]	2	4	0	14	187	0	7	10
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0000	1.0400	1.0400	1.0000	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	2	4	0	15	194	0	7	10
Peak Hour Factor	0.9430	0.9430	1.0000	0.9430	0.9430	1.0000	0.9430	0.9430
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	1	0	4	51	0	2	3
Total Analysis Volume [veh/h]	2	4	0	16	206	0	7	11
Pedestrian Volume [ped/h]	0				0			

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Intersection Settings

Priority Scheme	Stop	Stop
Flared Lane		
Storage Area [veh]	0	0
Two-Stage Gap Acceptance	No	No
Number of Storage Spaces in Median	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.01	0.00	0.01	0.23	0.00	0.01	0.01
d_M, Delay for Movement [s/veh]	9.90	11.21	0.00	8.38	10.14	0.00	9.43	8.42
Movement LOS	A	B		A	B		A	A
95th-Percentile Queue Length [veh/ln]	0.01	0.02	0.00	0.05	0.87	0.00	0.03	0.03
95th-Percentile Queue Length [ft/ln]	0.20	0.52	0.00	1.13	21.86	0.00	0.65	0.78
d_A, Approach Delay [s/veh]	9.03				10.03			
Approach LOS	A				B			
d_I, Intersection Delay [s/veh]	4.70							
Intersection LOS	B							

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Intersection Level Of Service Report
Intersection 4: Armstrong Boulevard and WB Hwy 10 Ramp

Control Type:	Signalized	Delay (sec / veh):	10.3
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.149

Intersection Setup

Name													
Approach	Northbound			Southbound				Eastbound			Westbound		
Lane Configuration													
Turning Movement	Left	Thru	Right	U-tu	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	0	0	0	1	0	0	0	1	0	1
Entry Pocket Length [ft]	395.00	100.00	100.00	100.0	100.0	100.0	315.0	100.00	100.00	100.00	685.00	100.00	685.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00				30.00			30.00		
Grade [%]	0.00			0.00				0.00			0.00		
Curb Present	No			No							No		
Crosswalk	No			No				No			Yes		

Volumes

Name													
Base Volume Input [veh/h]	10	220	0	1	0	238	96	0	0	0	20	2	134
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0000	1.040	1.000	1.040	1.040	1.0000	1.0000	1.0000	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	10	229	0	1	0	248	100	0	0	0	21	2	139
Peak Hour Factor	0.9310	0.9310	1.0000	0.931	1.000	0.931	0.931	1.0000	1.0000	1.0000	0.9310	0.9310	0.9310
Other Adjustment Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	61	0	0	0	67	27	0	0	0	6	1	37
Total Analysis Volume [veh/h]	11	246	0	1	0	266	107	0	0	0	23	2	149
Presence of On-Street Parking	No		No	No			No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing		0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m		0			0			0			0		
v_co, Outbound Pedestrian Volume crossing		0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi		0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]		0			0			0			0		
Bicycle Volume [bicycles/h]		0			0			0			0		

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permi	Permi	Permi	Permi	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	5	2	0	0	0	6	0	0	0	0	0	8	0
Auxiliary Signal Groups													
Lead / Lag	Lead	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	7	10	0	0	0	10	0	0	0	0	0	10	0
Maximum Green [s]	20	35	0	0	0	35	0	0	0	0	0	30	0
Amber [s]	3.0	5.0	0.0	0.0	0.0	5.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0
All red [s]	2.5	1.5	0.0	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	3.5	0.0
Split [s]	0	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	20	0	0	0	0	0	0	0	0	0	0	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No				No						No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	3.5	4.5	0.0	0.0	0.0	4.5	0.0	0.0	0.0	0.0	0.0	4.5	0.0
Minimum Recall	No	Yes				Yes						No	
Maximum Recall	No	No				No						No	
Pedestrian Recall	No	No				No						No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	C	R		C	R
C, Cycle Length [s]	38	38	38	38	38		38	38
L, Total Lost Time per Cycle [s]	5.50	6.50	6.50	6.50	6.50		6.50	6.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	2.00	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	3.50	4.50	4.50	4.50	4.50		4.50	4.50
g_i, Effective Green Time [s]	1	16	10	10	10		8	8
g / C, Green / Cycle	0.02	0.43	0.27	0.27	0.27		0.22	0.22
(v / s)_i Volume / Saturation Flow Rate	0.01	0.08	0.08	0.08	0.07		0.02	0.06
s, saturation flow rate [veh/h]	1603	3204	1656	1532	1431		1609	2532
c, Capacity [veh/h]	35	1391	532	410	383		361	568
d1, Uniform Delay [s]	18.33	6.60	11.12	11.13	11.02		11.63	12.17
k, delay calibration	0.11	0.11	0.11	0.11	0.11		0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	5.02	0.06	0.26	0.43	0.39		0.08	0.24
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00		0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00		1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00

Lane Group Results

X, volume / capacity	0.31	0.18	0.26	0.31	0.28		0.07	0.26
d, Delay for Lane Group [s/veh]	23.35	6.66	11.37	11.56	11.42		11.71	12.41
Lane Group LOS	C	A	B	B	B		B	B
Critical Lane Group	Yes	No	No	Yes	No		No	Yes
50th-Percentile Queue Length [veh/ln]	0.13	0.39	0.73	0.69	0.57		0.14	0.44
50th-Percentile Queue Length [ft/ln]	3.21	9.80	18.37	17.32	14.36		3.57	10.97
95th-Percentile Queue Length [veh/ln]	0.23	0.71	1.32	1.25	1.03		0.26	0.79
95th-Percentile Queue Length [ft/ln]	5.79	17.63	33.07	31.18	25.84		6.42	19.74

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Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	23.35	6.66	0.00	11.37	0.00	11.46	11.42	0.00	0.00	0.00	11.71	11.71	12.41
Movement LOS	C	A		B		B	B				B	B	B
d_A, Approach Delay [s/veh]	7.37			11.45				0.00			12.31		
Approach LOS	A			B				A			B		
d_I, Intersection Delay [s/veh]	10.34												
Intersection LOS	B												
Intersection V/C	0.149												

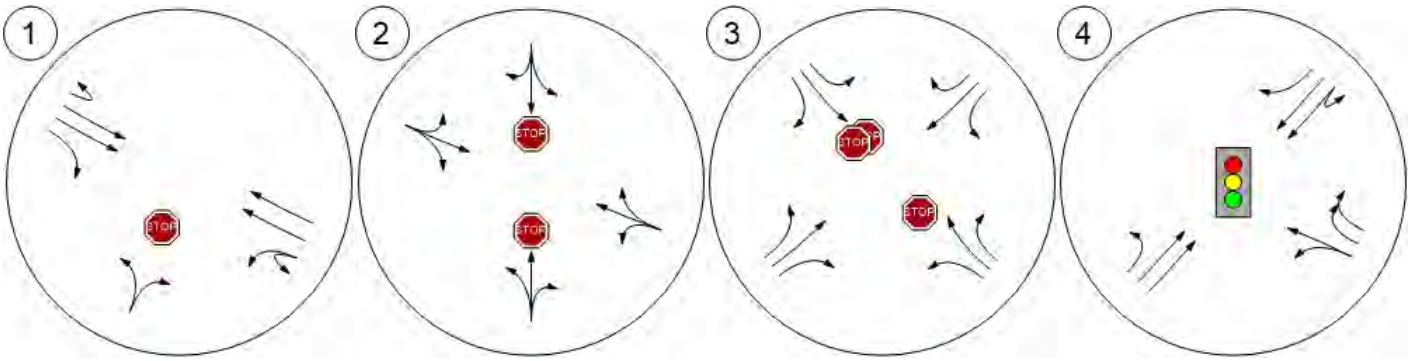
Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	34.67
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	1.996
Crosswalk LOS	F	F	F	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	778	778	0	667
d_b, Bicycle Delay [s]	16.81	16.81	45.00	20.00
l_b,int, Bicycle LOS Score for Intersection	1.772	1.868	4.132	1.847
Bicycle LOS	A	A	D	A

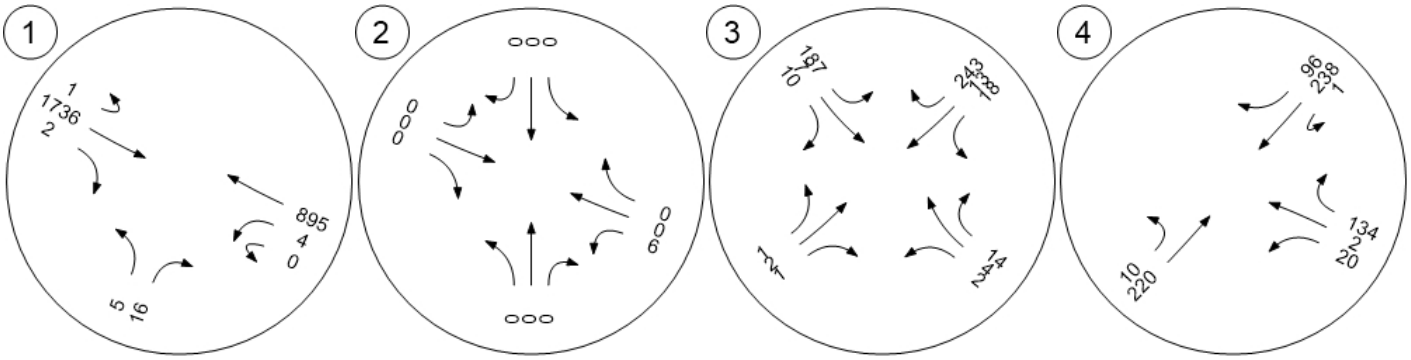
Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

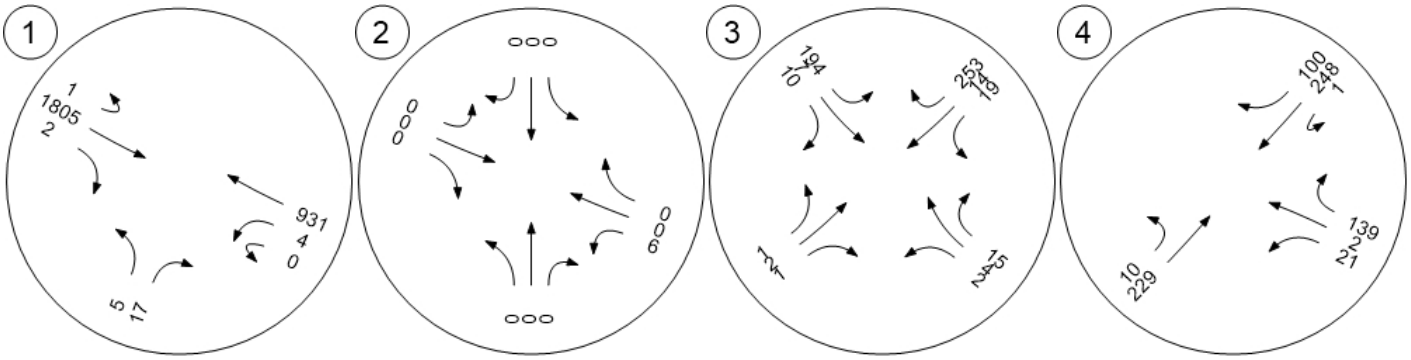
Lane Configuration and Traffic Control



Traffic Volume - Base Volume



Traffic Volume - Future Total Volume



Vistro File: C:\...\Ramsey Model.vistro
Report File: C:\...\2022 PM nobuild.pdf

Scenario 4 2022 PM No-Build
11/9/2020

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	HWY 10 and Bowers Drive	Two-way stop	HCM 6th Edition	NB Left	0.354	253.2	F
2	Riverdale Drive and Llama Street	Two-way stop	HCM 6th Edition	SB Left	0.003	8.6	A
3	Riverdale Drive/Armostrong Boulevard and EB Hwy 10 Ramp	Two-way stop	HCM 6th Edition	NWB Thru	0.023	11.7	B
4	Armstrong Boulevard and WB Hwy 10 Ramp	Signalized	HCM 6th Edition	NB Left	0.372	13.6	B

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

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Intersection Level Of Service Report
Intersection 1: HWY 10 and Bowers Drive

Control Type:	Two-way stop	Delay (sec / veh):	253.2
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.354

Intersection Setup

Name								
Approach	Northbound		Eastbound			Westbound		
Lane Configuration								
Turning Movement	Left	Right	U-turn	Thru	Right	U-turn	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	325.00	100.00	225.00	360.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		65.00			65.00		
Grade [%]	0.00		0.00			0.00		
Crosswalk	Yes		Yes			Yes		

Volumes

Name								
Base Volume Input [veh/h]	6	17	1	1367	7	1	16	2051
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	6	18	1	1422	7	1	17	2133
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	5	0	374	2	0	4	561
Total Analysis Volume [veh/h]	6	19	1	1497	7	1	18	2245
Pedestrian Volume [ped/h]	0		0			0		

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Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.35	0.05	0.03	0.01	0.00	0.01	0.04	0.02
d_M, Delay for Movement [s/veh]	253.15	50.80	112.24	0.00	0.00	38.59	13.66	0.00
Movement LOS	F	F	F	A	A	E	B	A
95th-Percentile Queue Length [veh/ln]	1.54	1.54	0.09	0.00	0.00	0.16	0.16	0.00
95th-Percentile Queue Length [ft/ln]	38.54	38.54	2.19	0.00	0.00	3.93	3.93	0.00
d_A, Approach Delay [s/veh]	99.37		0.07			0.13		
Approach LOS	F		A			A		
d_I, Intersection Delay [s/veh]	0.76							
Intersection LOS	F							

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Intersection Level Of Service Report
Intersection 2: Riverdale Drive and Llama Street

Control Type:	Two-way stop	Delay (sec / veh):	8.6
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.003

Intersection Setup

Name													
Approach	Northbound			Southbound			Eastbound			Westbound			
Lane Configuration													
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	U-tu	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			35.00			
Grade [%]	0.00			0.00			0.00			0.00			
Crosswalk	Yes			Yes			Yes			Yes			

Volumes

Name													
Base Volume Input [veh/h]	0	0	1	3	0	0	0	0	0	1	1	0	4
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.040	1.040	1.040	1.040
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	1	3	0	0	0	0	0	1	1	0	4
Peak Hour Factor	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.900	0.900	0.900	0.900
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	0	0	0	1	0	0	0	0	0	0	0	0	1
Total Analysis Volume [veh/h]	0	0	1	3	0	0	0	0	0	1	1	0	4
Pedestrian Volume [ped/h]	0			0			0			0			

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Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	8.55	9.07	8.32	8.56	9.06	8.34	7.23	0.00	0.00	8.12	7.22	0.00	0.00
Movement LOS	A	A	A	A	A	A	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.07	0.07	0.07	0.22	0.22	0.22	0.00	0.00	0.00	0.11	0.11	0.11	0.11
d_A, Approach Delay [s/veh]	8.32			8.56			2.41			2.56			
Approach LOS	A			A			A			A			
d_I, Intersection Delay [s/veh]	4.93												
Intersection LOS	A												

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Intersection Level Of Service Report
Intersection 3: Riverdale Drive/Armostrong Boulevard and EB Hwy 10 Ramp

Control Type:	Two-way stop	Delay (sec / veh):	11.7
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.023

Intersection Setup

Name													
Approach	Southbound				Northeastbound				Southwestbound				
Lane Configuration													
Turning Movement	Left	Thru	Right	Right	Left	Left	Thru	Right	U-turn	Left	Thru	Right	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	1	0	0	1	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	300.00	100.00	100.00	300.00	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00				35.00				35.00				
Grade [%]	0.00				0.00				0.00				
Crosswalk	Yes				Yes				Yes				

Volumes

Name													
Base Volume Input [veh/h]	0	0	0	0	10	0	16	3	1	22	5	0	208
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0400	1.0000	1.0400	1.0400	1.040	1.040	1.040	1.000	1.040
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	0	10	0	17	3	1	23	5	0	216
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	0.8610	1.0000	0.8610	0.8610	0.861	0.861	0.861	1.000	0.861
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	0	0	0	0	3	0	5	1	0	7	1	0	63
Total Analysis Volume [veh/h]	0	0	0	0	12	0	20	3	1	27	6	0	251
Pedestrian Volume [ped/h]	0				0				0				

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Version 2020 (SP 0-3)

Spack SOLUTIONS

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	7.78	0.00	0.00	0.00	8.43	7.30	0.00	0.00	0.00
Movement LOS					A		A	A	A	A	A		A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.05	0.05	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.69	0.00	0.00	0.00	1.37	1.37	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.00				2.67				0.72				
Approach LOS	A				A				A				
d_I, Intersection Delay [s/veh]	5.88												
Intersection LOS	B												

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Version 2020 (SP 0-3)

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Intersection Setup

Name									
Approach	Northwestbound					Southeastbound			
Lane Configuration									
Turning Movement	U-turn	Left	Thru	Thru	Right	Left	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	0	1	1	0	0	1
Entry Pocket Length [ft]	225.00	100.00	100.00	100.00	290.00	280.00	100.00	100.00	280.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00					30.00			
Grade [%]	0.00					0.00			
Crosswalk	Yes					Yes			

Volumes

Name									
Base Volume Input [veh/h]	1	1	11	0	46	193	0	8	4
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0000	1.0400	1.0400	1.0000	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	1	11	0	48	201	0	8	4
Peak Hour Factor	0.8610	0.8610	0.8610	1.0000	0.8610	0.8610	1.0000	0.8610	0.8610
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	3	0	14	58	0	2	1
Total Analysis Volume [veh/h]	1	1	13	0	56	233	0	9	5
Pedestrian Volume [ped/h]	0					0			

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Version 2020 (SP 0-3)

Intersection Settings

Priority Scheme	Stop	Stop
Flared Lane		
Storage Area [veh]	0	0
Two-Stage Gap Acceptance	No	No
Number of Storage Spaces in Median	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.02	0.00	0.05	0.30	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	10.21	10.21	11.66	0.00	8.59	11.47	0.00	9.79	8.36
Movement LOS	B	B	B		A	B		A	A
95th-Percentile Queue Length [veh/ln]	0.01	0.01	0.07	0.00	0.17	1.24	0.00	0.04	0.01
95th-Percentile Queue Length [ft/ln]	0.22	0.22	1.80	0.00	4.19	30.90	0.00	0.90	0.35
d_A, Approach Delay [s/veh]	9.20					11.34			
Approach LOS	A					B			
d_I, Intersection Delay [s/veh]	5.88								
Intersection LOS	B								

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Intersection Level Of Service Report
Intersection 4: Armstrong Boulevard and WB Hwy 10 Ramp

Control Type:	Signalized	Delay (sec / veh):	13.6
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.372

Intersection Setup

Name													
Approach	Northbound				Southbound			Eastbound			Westbound		
Lane Configuration													
Turning Movement	U-tu	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	0	0	0	1	0	0	0	1	0	1
Entry Pocket Length [ft]	395.0	100.0	100.0	100.0	100.00	100.00	315.00	100.00	100.00	100.00	685.00	100.00	685.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00				35.00			30.00			30.00		
Grade [%]	0.00				0.00			0.00			0.00		
Curb Present	No				No						No		
Crosswalk	No				No			No			Yes		

Volumes

Name													
Base Volume Input [veh/h]	2	34	248	0	0	210	257	0	0	0	19	2	320
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.040	1.040	1.040	1.000	1.0000	1.0400	1.0400	1.0000	1.0000	1.0000	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	2	35	258	0	0	218	267	0	0	0	20	2	333
Peak Hour Factor	0.916	0.916	0.916	1.000	1.0000	0.9160	0.9160	1.0000	1.0000	1.0000	0.9160	0.9160	0.9160
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	10	70	0	0	59	73	0	0	0	5	1	91
Total Analysis Volume [veh/h]	2	38	282	0	0	238	291	0	0	0	22	2	364
Presence of On-Street Parking	No			No	No		No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0				0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0				0			0			0		
v_co, Outbound Pedestrian Volume crossing	0				0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0				0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0				0			0			0		
Bicycle Volume [bicycles/h]	0				0			0			0		

Appendix F - Capacity Analysis Backup

Generated with PTV VISTRO
Version 2020 (SP 0-3)

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Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permi	Prote	Permi	Permi	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	5	2	0	0	6	0	0	0	0	0	8	0
Auxiliary Signal Groups													
Lead / Lag	-	Lead	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	7	10	0	0	10	0	0	0	0	0	10	0
Maximum Green [s]	0	20	35	0	0	35	0	0	0	0	0	30	0
Amber [s]	0.0	3.0	5.0	0.0	0.0	5.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0
All red [s]	0.0	2.5	1.5	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	3.5	0.0
Split [s]	0	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Extension [s]	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0
Walk [s]	0	0	7	0	0	0	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	0	20	0	0	0	0	0	0	0	0	0	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk			No			No						No	
I1, Start-Up Lost Time [s]	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	3.5	4.5	0.0	0.0	4.5	0.0	0.0	0.0	0.0	0.0	4.5	0.0
Minimum Recall		No	Yes			Yes						No	
Maximum Recall		No	No			No						No	
Pedestrian Recall		No	No			No						No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	R		C	R
C, Cycle Length [s]	42	42	42	42		42	42
L, Total Lost Time per Cycle [s]	5.50	6.50	6.50	6.50		6.50	6.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	3.50	4.50	4.50	4.50		4.50	4.50
g_i, Effective Green Time [s]	3	19	11	11		10	10
g / C, Green / Cycle	0.06	0.46	0.27	0.27		0.23	0.23
(v / s)_i Volume / Saturation Flow Rate	0.02	0.09	0.07	0.20		0.01	0.14
s, saturation flow rate [veh/h]	1603	3204	3204	1431		1609	2532
c, Capacity [veh/h]	101	1472	854	381		377	593
d1, Uniform Delay [s]	19.08	6.79	12.32	14.32		12.62	14.52
k, delay calibration	0.11	0.11	0.11	0.11		0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	2.49	0.06	0.18	3.20		0.07	1.04
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00		0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00		1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00		1.00	1.00

Lane Group Results

X, volume / capacity	0.40	0.19	0.28	0.76		0.06	0.61
d, Delay for Lane Group [s/veh]	21.57	6.86	12.50	17.51		12.69	15.56
Lane Group LOS	C	A	B	B		B	B
Critical Lane Group	Yes	No	No	Yes		No	Yes
50th-Percentile Queue Length [veh/ln]	0.39	0.52	0.73	2.35		0.16	1.39
50th-Percentile Queue Length [ft/ln]	9.86	12.89	18.25	58.85		3.91	34.63
95th-Percentile Queue Length [veh/ln]	0.71	0.93	1.31	4.24		0.28	2.49
95th-Percentile Queue Length [ft/ln]	17.74	23.21	32.86	105.93		7.03	62.33

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Version 2020 (SP 0-3)

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Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	21.57	21.57	6.86	0.00	0.00	12.50	17.51	0.00	0.00	0.00	12.69	12.69	15.56
Movement LOS	C	C	A			B	B				B	B	B
d_A, Approach Delay [s/veh]	8.69				15.26			0.00			15.39		
Approach LOS	A				B			A			B		
d_I, Intersection Delay [s/veh]	13.59												
Intersection LOS	B												
Intersection V/C	0.372												

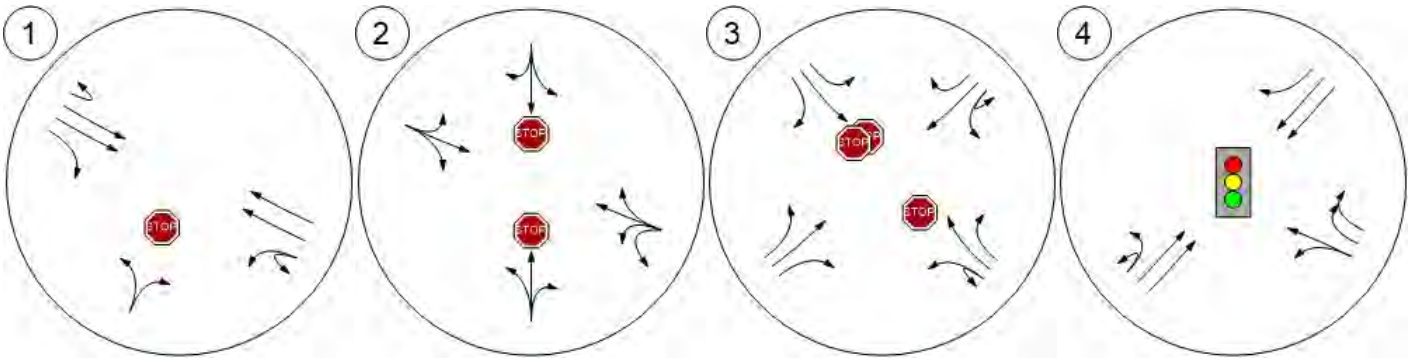
Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	34.67
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	2.066
Crosswalk LOS	F	F	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	778	778	0	667
d_b, Bicycle Delay [s]	16.81	16.81	45.00	20.00
l_b,int, Bicycle LOS Score for Intersection	1.794	1.996	4.132	2.200
Bicycle LOS	A	A	D	B

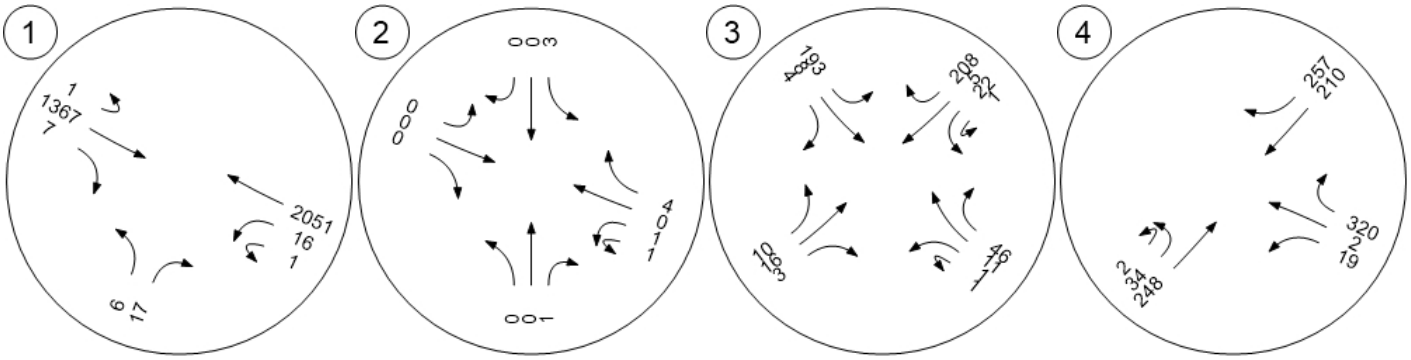
Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

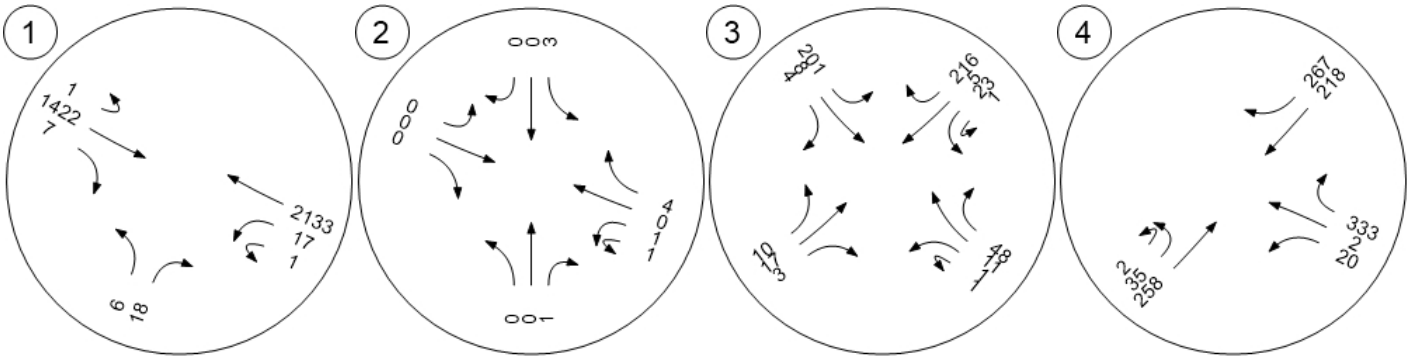
Lane Configuration and Traffic Control



Traffic Volume - Base Volume



Traffic Volume - Future Total Volume



Vistro File: C:\...\Ramsey Model.vistro
Report File: C:\...\2040 AM nobuild.pdf

Scenario 5 2040 AM No-Build
11/9/2020

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	HWY 10 and Bowers Drive	Two-way stop	HCM 6th Edition	NB Left	1.449	1,285.7	F
2	Riverdale Drive and Llama Street	Two-way stop	HCM 6th Edition	WB Left	0.006	7.2	A
3	Riverdale Drive/Armostrong Boulevard and EB Hwy 10 Ramp	Two-way stop	HCM 6th Edition	NWB Thru	0.012	12.5	B
4	Armstrong Boulevard and WB Hwy 10 Ramp	Signalized	HCM 6th Edition	NB Left	0.215	11.2	B

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

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Intersection Level Of Service Report
Intersection 1: HWY 10 and Bowers Drive

Control Type:	Two-way stop	Delay (sec / veh):	1,285.7
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.449

Intersection Setup

Name								
Approach	Northbound		Eastbound			Westbound		
Lane Configuration								
Turning Movement	Left	Right	U-turn	Thru	Right	U-turn	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	325.00	100.00	225.00	360.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		65.00			65.00		
Grade [%]	0.00		0.00			0.00		
Crosswalk	Yes		Yes			Yes		

Volumes

Name								
Base Volume Input [veh/h]	5	16	1	1736	2	0	4	895
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	7	24	1	2587	3	0	6	1334
Peak Hour Factor	0.9470	0.9470	0.9470	0.9470	0.9470	0.9470	0.9470	0.9470
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	6	0	683	1	0	2	352
Total Analysis Volume [veh/h]	7	25	1	2732	3	0	6	1409
Pedestrian Volume [ped/h]	0		0			0		

Generated with PTV VISTRO
Version 2020 (SP 0-3)

Intersection Settings

Priority Scheme	Stop		Free			Free		
Flared Lane	No							
Storage Area [veh]	0		0			0		
Two-Stage Gap Acceptance	No							
Number of Storage Spaces in Median	0		0			0		

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	1.45	0.18	0.01	0.03	0.00	0.00	0.04	0.01
d_M, Delay for Movement [s/veh]	1285.71	566.88	32.45	0.00	0.00	289.15	30.99	0.00
Movement LOS	F	F	D	A	A	F	D	A
95th-Percentile Queue Length [veh/ln]	4.32	4.32	0.02	0.00	0.00	0.13	0.13	0.00
95th-Percentile Queue Length [ft/ln]	108.09	108.09	0.57	0.00	0.00	3.22	3.22	0.00
d_A, Approach Delay [s/veh]	724.13		0.01			0.13		
Approach LOS	F		A			A		
d_I, Intersection Delay [s/veh]	5.59							
Intersection LOS	F							

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Intersection Level Of Service Report
Intersection 2: Riverdale Drive and Llama Street

Control Type:	Two-way stop	Delay (sec / veh):	7.2
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.006

Intersection Setup

Name											
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	0	0	0	0	0	0	6	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	0	0	0	0	0	0	9	0	0
Peak Hour Factor	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	0	0	0	0	0	0	3	0	0
Total Analysis Volume [veh/h]	0	0	0	0	0	0	0	0	0	10	0	0
Pedestrian Volume [ped/h]	0			0			0			0		

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Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00
d_M, Delay for Movement [s/veh]	8.64	9.15	8.32	8.64	9.15	8.32	7.22	0.00	0.00	7.23	0.00	0.00
Movement LOS	A	A	A	A	A	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.02	0.02
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.46	0.46	0.46
d_A, Approach Delay [s/veh]	8.70			8.70			2.41			7.23		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	7.23											
Intersection LOS	A											

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Intersection Level Of Service Report
Intersection 3: Riverdale Drive/Armostrong Boulevard and EB Hwy 10 Ramp

Control Type:	Two-way stop	Delay (sec / veh):	12.5
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.012

Intersection Setup

Name												
Approach	Southbound				Northeastbound				Southwestbound			
Lane Configuration												
Turning Movement	Left	Thru	Right	Right	Left	Left	Thru	Right	Left	Thru	Right	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	1	0	0	1	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	300.00	100.00	100.00	300.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00				35.00				35.00			
Grade [%]	0.00				0.00				0.00			
Crosswalk	Yes				Yes				Yes			

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	0	1	0	2	1	18	13	0	243
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.4900	1.0000	1.4900	1.4900	1.4900	1.4900	1.0000	1.4900
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	0	1	0	3	1	27	19	0	362
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	0.9430	1.0000	0.9430	0.9430	0.9430	0.9430	1.0000	0.9430
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	0	0	0	1	0	7	5	0	96
Total Analysis Volume [veh/h]	0	0	0	0	1	0	3	1	29	20	0	384
Pedestrian Volume [ped/h]	0				0				0			

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Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	8.12	0.00	0.00	0.00	7.27	0.00	0.00	0.00
Movement LOS					A		A	A	A	A		A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.00	1.37	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.00				1.62				0.49			
Approach LOS	A				A				A			
d_I, Intersection Delay [s/veh]	5.20											
Intersection LOS	B											

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Intersection Setup

Name								
Approach	Northwestbound				Southeastbound			
Lane Configuration								
Turning Movement	Left	Thru	Thru	Right	Left	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	1	0	0	1
Entry Pocket Length [ft]	225.00	100.00	100.00	290.00	280.00	100.00	100.00	280.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00				30.00			
Grade [%]	0.00				0.00			
Crosswalk	Yes				Yes			

Volumes

Name								
Base Volume Input [veh/h]	2	4	0	14	187	0	7	10
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.4900	1.4900	1.0000	1.4900	1.4900	1.0000	1.4900	1.4900
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	3	6	0	21	279	0	10	15
Peak Hour Factor	0.9430	0.9430	1.0000	0.9430	0.9430	1.0000	0.9430	0.9430
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	2	0	6	74	0	3	4
Total Analysis Volume [veh/h]	3	6	0	22	296	0	11	16
Pedestrian Volume [ped/h]	0				0			

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Intersection Settings

Priority Scheme	Stop	Stop
Flared Lane		
Storage Area [veh]	0	0
Two-Stage Gap Acceptance	No	No
Number of Storage Spaces in Median	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.01	0.00	0.02	0.34	0.00	0.01	0.02
d_M, Delay for Movement [s/veh]	10.67	12.53	0.00	8.40	11.36	0.00	9.62	8.46
Movement LOS	B	B		A	B		A	A
95th-Percentile Queue Length [veh/ln]	0.01	0.04	0.00	0.06	1.54	0.00	0.04	0.05
95th-Percentile Queue Length [ft/ln]	0.35	0.94	0.00	1.56	38.50	0.00	1.06	1.15
d_A, Approach Delay [s/veh]	9.42				11.16			
Approach LOS	A				B			
d_I, Intersection Delay [s/veh]	5.20							
Intersection LOS	B							

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Intersection Level Of Service Report
Intersection 4: Armstrong Boulevard and WB Hwy 10 Ramp

Control Type:	Signalized	Delay (sec / veh):	11.2
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.215

Intersection Setup

Name													
Approach	Northbound			Southbound				Eastbound			Westbound		
Lane Configuration													
Turning Movement	Left	Thru	Right	U-tu	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	0	0	0	1	0	0	0	1	0	1
Entry Pocket Length [ft]	395.00	100.00	100.00	100.0	100.0	100.0	315.0	100.00	100.00	100.00	685.00	100.00	685.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00				30.00			30.00		
Grade [%]	0.00			0.00				0.00			0.00		
Curb Present	No			No							No		
Crosswalk	No			No				No			Yes		

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Volumes

Name													
Base Volume Input [veh/h]	10	220	0	1	0	238	96	0	0	0	20	2	134
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.4900	1.4900	1.0000	1.490	1.000	1.490	1.490	1.0000	1.0000	1.0000	1.4900	1.4900	1.4900
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	15	328	0	1	0	355	143	0	0	0	30	3	200
Peak Hour Factor	0.9310	0.9310	1.0000	0.931	1.000	0.931	0.931	1.0000	1.0000	1.0000	0.9310	0.9310	0.9310
Other Adjustment Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	88	0	0	0	95	38	0	0	0	8	1	54
Total Analysis Volume [veh/h]	16	352	0	1	0	381	154	0	0	0	32	3	215
Presence of On-Street Parking	No		No	No			No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0				0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0				0			0		
v_co, Outbound Pedestrian Volume crossing	0			0				0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0				0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0				0			0		
Bicycle Volume [bicycles/h]	0			0				0			0		

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permi	Permi	Permi	Permi	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	5	2	0	0	0	6	0	0	0	0	0	8	0
Auxiliary Signal Groups													
Lead / Lag	Lead	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	7	10	0	0	0	10	0	0	0	0	0	10	0
Maximum Green [s]	20	35	0	0	0	35	0	0	0	0	0	30	0
Amber [s]	3.0	5.0	0.0	0.0	0.0	5.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0
All red [s]	2.5	1.5	0.0	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	3.5	0.0
Split [s]	0	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	20	0	0	0	0	0	0	0	0	0	0	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No				No						No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	3.5	4.5	0.0	0.0	0.0	4.5	0.0	0.0	0.0	0.0	0.0	4.5	0.0
Minimum Recall	No	Yes				Yes						No	
Maximum Recall	No	No				No						No	
Pedestrian Recall	No	No				No						No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	C	R		C	R
C, Cycle Length [s]	40	40	40	40	40		40	40
L, Total Lost Time per Cycle [s]	5.50	6.50	6.50	6.50	6.50		6.50	6.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	2.00	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	3.50	4.50	4.50	4.50	4.50		4.50	4.50
g_i, Effective Green Time [s]	1	17	11	11	11		9	9
g / C, Green / Cycle	0.03	0.44	0.27	0.27	0.27		0.24	0.24
(v / s)_i Volume / Saturation Flow Rate	0.01	0.11	0.12	0.12	0.11		0.02	0.08
s, saturation flow rate [veh/h]	1603	3204	1645	1532	1431		1609	2532
c, Capacity [veh/h]	51	1404	524	412	385		382	602
d1, Uniform Delay [s]	18.99	7.11	12.13	12.16	11.99		11.91	12.73
k, delay calibration	0.11	0.11	0.11	0.11	0.11		0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	3.51	0.09	0.45	0.76	0.67		0.10	0.36
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00		0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00		1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00

Lane Group Results

X, volume / capacity	0.32	0.25	0.38	0.45	0.40		0.09	0.36
d, Delay for Lane Group [s/veh]	22.50	7.20	12.58	12.92	12.66		12.01	13.09
Lane Group LOS	C	A	B	B	B		B	B
Critical Lane Group	Yes	No	No	Yes	No		No	Yes
50th-Percentile Queue Length [veh/ln]	0.17	0.64	1.18	1.13	0.93		0.21	0.68
50th-Percentile Queue Length [ft/ln]	4.32	15.90	29.61	28.26	23.32		5.26	17.12
95th-Percentile Queue Length [veh/ln]	0.31	1.15	2.13	2.03	1.68		0.38	1.23
95th-Percentile Queue Length [ft/ln]	7.78	28.63	53.30	50.87	41.97		9.46	30.82

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Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	22.50	7.20	0.00	12.58	0.00	12.74	12.66	0.00	0.00	0.00	12.01	12.01	13.09
Movement LOS	C	A		B		B	B				B	B	B
d_A, Approach Delay [s/veh]	7.87			12.72				0.00			12.94		
Approach LOS	A			B				A			B		
d_I, Intersection Delay [s/veh]	11.22												
Intersection LOS	B												
Intersection V/C	0.215												

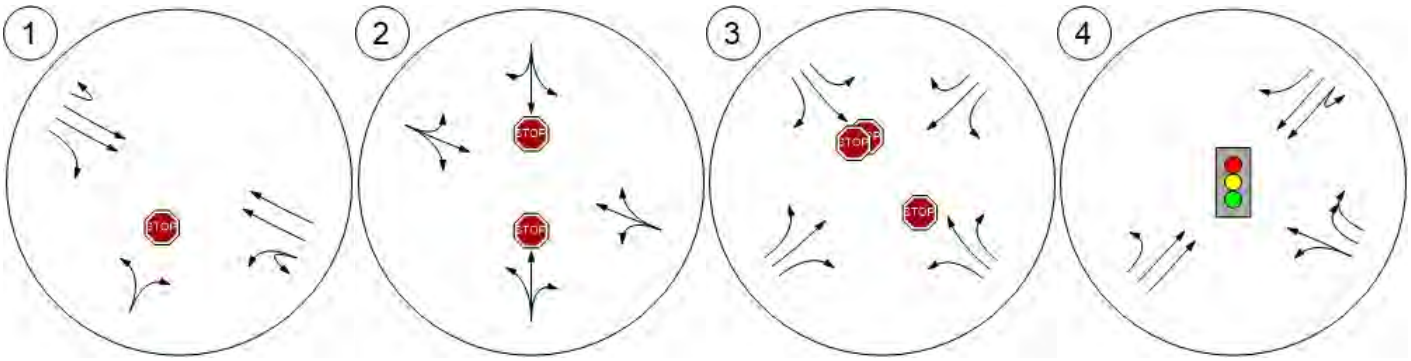
Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	34.67
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	2.021
Crosswalk LOS	F	F	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	778	778	0	667
d_b, Bicycle Delay [s]	16.81	16.81	45.00	20.00
l_b,int, Bicycle LOS Score for Intersection	1.863	2.002	4.132	1.972
Bicycle LOS	A	B	D	A

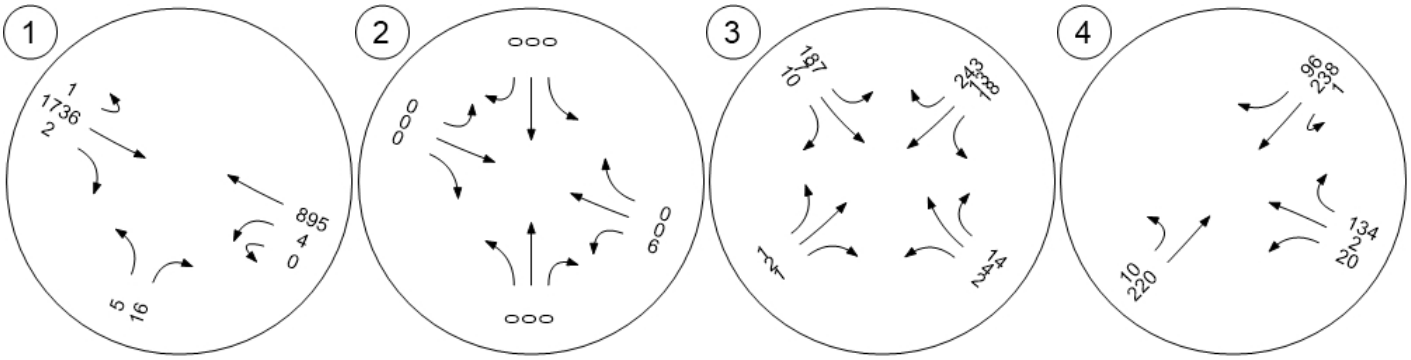
Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

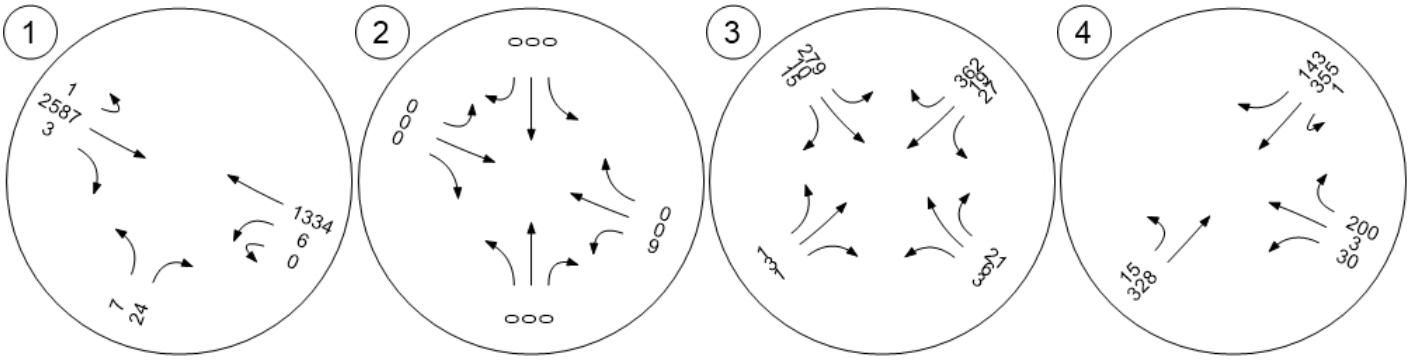
Lane Configuration and Traffic Control



Traffic Volume - Base Volume



Traffic Volume - Future Total Volume



Vistro File: C:\...\Ramsey Model.vistro
Report File: C:\...\2040 PM nobuild.pdf

Scenario 6 2040 PM No-Build
11/9/2020

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	HWY 10 and Bowers Drive	Two-way stop	HCM 6th Edition	NB Left	4.293	3,711.8	F
2	Riverdale Drive and Llama Street	Two-way stop	HCM 6th Edition	SB Left	0.004	8.6	A
3	Riverdale Drive/Armostrong Boulevard and EB Hwy 10 Ramp	Two-way stop	HCM 6th Edition	SEB Left	0.477	14.7	B
4	Armstrong Boulevard and WB Hwy 10 Ramp	Signalized	HCM 6th Edition	NB Left	0.535	17.3	B

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

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Intersection Level Of Service Report
Intersection 1: HWY 10 and Bowers Drive

Control Type:	Two-way stop	Delay (sec / veh):	3,711.8
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	4.293

Intersection Setup

Name								
Approach	Northbound		Eastbound			Westbound		
Lane Configuration								
Turning Movement	Left	Right	U-turn	Thru	Right	U-turn	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	325.00	100.00	225.00	360.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		65.00			65.00		
Grade [%]	0.00		0.00			0.00		
Crosswalk	Yes		Yes			Yes		

Volumes

Name								
Base Volume Input [veh/h]	6	17	1	1367	7	1	16	2051
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	9	25	1	2037	10	1	24	3056
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	7	0	536	3	0	6	804
Total Analysis Volume [veh/h]	9	26	1	2144	11	1	25	3217
Pedestrian Volume [ped/h]	0		0			0		

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Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	4.29	0.12	0.14	0.02	0.00	0.03	0.10	0.03
d_M, Delay for Movement [s/veh]	3711.85	2011.10	596.59	0.00	0.00	108.14	22.29	0.00
Movement LOS	F	F	F	A	A	F	C	A
95th-Percentile Queue Length [veh/ln]	5.69	5.69	0.34	0.00	0.00	0.44	0.44	0.00
95th-Percentile Queue Length [ft/ln]	142.26	142.26	8.62	0.00	0.00	10.95	10.95	0.00
d_A, Approach Delay [s/veh]	2448.43		0.28			0.21		
Approach LOS	F		A			A		
d_I, Intersection Delay [s/veh]	16.00							
Intersection LOS	F							

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Intersection Level Of Service Report
Intersection 2: Riverdale Drive and Llama Street

Control Type:	Two-way stop	Delay (sec / veh):	8.6
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.004

Intersection Setup

Name													
Approach	Northbound			Southbound			Eastbound			Westbound			
Lane Configuration													
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	U-tu	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			35.00			
Grade [%]	0.00			0.00			0.00			0.00			
Crosswalk	Yes			Yes			Yes			Yes			

Volumes

Name													
Base Volume Input [veh/h]	0	0	1	3	0	0	0	0	0	1	1	0	4
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900	1.490	1.490	1.490	1.490
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	1	4	0	0	0	0	0	1	1	0	6
Peak Hour Factor	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.900	0.900	0.900	0.900
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	0	0	0	1	0	0	0	0	0	0	0	0	2
Total Analysis Volume [veh/h]	0	0	1	4	0	0	0	0	0	1	1	0	7
Pedestrian Volume [ped/h]	0			0			0			0			

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Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	8.55	9.08	8.32	8.57	9.08	8.35	7.23	0.00	0.00	8.12	7.22	0.00	0.00
Movement LOS	A	A	A	A	A	A	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.07	0.07	0.07	0.30	0.30	0.30	0.00	0.00	0.00	0.11	0.11	0.11	0.11
d_A, Approach Delay [s/veh]	8.32			8.57			2.41			1.71			
Approach LOS	A			A			A			A			
d_I, Intersection Delay [s/veh]	4.14												
Intersection LOS	A												

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Intersection Level Of Service Report
Intersection 3: Riverdale Drive/Armostrong Boulevard and EB Hwy 10 Ramp

Control Type:	Two-way stop	Delay (sec / veh):	14.7
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.477

Intersection Setup

Name													
Approach	Southbound				Northeastbound				Southwestbound				
Lane Configuration													
Turning Movement	Left	Thru	Right	Right	Left	Left	Thru	Right	U-turn	Left	Thru	Right	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	1	0	0	1	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	300.00	100.00	100.00	300.00	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00				35.00				35.00				
Grade [%]	0.00				0.00				0.00				
Crosswalk	Yes				Yes				Yes				

Volumes

Name													
Base Volume Input [veh/h]	0	0	0	0	10	0	16	3	1	22	5	0	208
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.4900	1.0000	1.4900	1.4900	1.490	1.490	1.490	1.000	1.490
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	0	15	0	24	4	1	33	7	0	310
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	0.8610	1.0000	0.8610	0.8610	0.861	0.861	0.861	1.000	0.861
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	0	0	0	0	4	0	7	1	0	10	2	0	90
Total Analysis Volume [veh/h]	0	0	0	0	17	0	28	5	1	38	8	0	360
Pedestrian Volume [ped/h]	0				0				0				

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Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	8.07	0.00	0.00	0.00	8.58	7.34	0.00	0.00	0.00
Movement LOS					A		A	A	A	A	A		A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.08	0.08	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	1.09	0.00	0.00	0.00	1.93	1.93	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.00				2.74				0.71				
Approach LOS	A				A				A				
d_I, Intersection Delay [s/veh]	7.14												
Intersection LOS	B												

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Intersection Setup

Name									
Approach	Northwestbound					Southeastbound			
Lane Configuration									
Turning Movement	U-turn	Left	Thru	Thru	Right	Left	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	0	1	1	0	0	1
Entry Pocket Length [ft]	225.00	100.00	100.00	100.00	290.00	280.00	100.00	100.00	280.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00					30.00			
Grade [%]	0.00					0.00			
Crosswalk	Yes					Yes			

Volumes

Name									
Base Volume Input [veh/h]	1	1	11	0	46	193	0	8	4
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.4900	1.4900	1.4900	1.0000	1.4900	1.4900	1.0000	1.4900	1.4900
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	1	16	0	69	288	0	12	6
Peak Hour Factor	0.8610	0.8610	0.8610	1.0000	0.8610	0.8610	1.0000	0.8610	0.8610
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	5	0	20	84	0	3	2
Total Analysis Volume [veh/h]	1	1	19	0	80	334	0	14	7
Pedestrian Volume [ped/h]	0					0			

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Intersection Settings

Priority Scheme	Stop	Stop
Flared Lane		
Storage Area [veh]	0	0
Two-Stage Gap Acceptance	No	No
Number of Storage Spaces in Median	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.04	0.00	0.08	0.48	0.00	0.02	0.01
d_M, Delay for Movement [s/veh]	11.16	11.16	13.36	0.00	8.72	14.72	0.00	10.17	8.37
Movement LOS	B	B	B		A	B		B	A
95th-Percentile Queue Length [veh/ln]	0.01	0.01	0.13	0.00	0.25	2.59	0.00	0.06	0.02
95th-Percentile Queue Length [ft/ln]	0.26	0.26	3.30	0.00	6.19	64.64	0.00	1.51	0.49
d_A, Approach Delay [s/veh]	9.64					14.42			
Approach LOS	A					B			
d_I, Intersection Delay [s/veh]	7.14								
Intersection LOS	B								

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Intersection Level Of Service Report
Intersection 4: Armstrong Boulevard and WB Hwy 10 Ramp

Control Type:	Signalized	Delay (sec / veh):	17.3
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.535

Intersection Setup

Name													
Approach	Northbound				Southbound			Eastbound			Westbound		
Lane Configuration													
Turning Movement	U-tu	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	0	0	0	1	0	0	0	1	0	1
Entry Pocket Length [ft]	395.0	100.0	100.0	100.0	100.00	100.00	315.00	100.00	100.00	100.00	685.00	100.00	685.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00				35.00			30.00			30.00		
Grade [%]	0.00				0.00			0.00			0.00		
Curb Present	No				No						No		
Crosswalk	No				No			No			Yes		

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Volumes

Name													
Base Volume Input [veh/h]	2	34	248	0	0	210	257	0	0	0	19	2	320
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.490	1.490	1.490	1.000	1.0000	1.4900	1.4900	1.0000	1.0000	1.0000	1.4900	1.4900	1.4900
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	3	51	370	0	0	313	383	0	0	0	28	3	477
Peak Hour Factor	0.916	0.916	0.916	1.000	1.0000	0.9160	0.9160	1.0000	1.0000	1.0000	0.9160	0.9160	0.9160
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	14	101	0	0	85	105	0	0	0	8	1	130
Total Analysis Volume [veh/h]	3	56	404	0	0	342	418	0	0	0	31	3	521
Presence of On-Street Parking	No			No	No		No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0				0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0				0			0			0		
v_co, Outbound Pedestrian Volume crossing	0				0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0				0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0				0			0			0		
Bicycle Volume [bicycles/h]	0				0			0			0		

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permi	Prote	Permi	Permi	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	5	2	0	0	6	0	0	0	0	0	8	0
Auxiliary Signal Groups													
Lead / Lag	-	Lead	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	7	10	0	0	10	0	0	0	0	0	10	0
Maximum Green [s]	0	20	35	0	0	35	0	0	0	0	0	30	0
Amber [s]	0.0	3.0	5.0	0.0	0.0	5.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0
All red [s]	0.0	2.5	1.5	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	3.5	0.0
Split [s]	0	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Extension [s]	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0
Walk [s]	0	0	7	0	0	0	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	0	20	0	0	0	0	0	0	0	0	0	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk			No			No						No	
I1, Start-Up Lost Time [s]	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	3.5	4.5	0.0	0.0	4.5	0.0	0.0	0.0	0.0	0.0	4.5	0.0
Minimum Recall		No	Yes			Yes						No	
Maximum Recall		No	No			No						No	
Pedestrian Recall		No	No			No						No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	R		C	R
C, Cycle Length [s]	57	57	57	57		57	57
L, Total Lost Time per Cycle [s]	5.50	6.50	6.50	6.50		6.50	6.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	3.50	4.50	4.50	4.50		4.50	4.50
g_i, Effective Green Time [s]	4	29	19	19		14	14
g / C, Green / Cycle	0.08	0.51	0.34	0.34		0.26	0.26
(v / s)_i Volume / Saturation Flow Rate	0.04	0.13	0.11	0.29		0.02	0.21
s, saturation flow rate [veh/h]	1603	3204	3204	1431		1610	2532
c, Capacity [veh/h]	121	1649	1097	490		412	649
d1, Uniform Delay [s]	25.18	7.65	13.73	17.33		16.03	19.75
k, delay calibration	0.11	0.11	0.11	0.11		0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	3.04	0.08	0.16	4.35		0.08	2.38
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00		0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00		1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00		1.00	1.00

Lane Group Results

X, volume / capacity	0.49	0.25	0.31	0.85		0.08	0.80
d, Delay for Lane Group [s/veh]	28.22	7.72	13.90	21.68		16.11	22.13
Lane Group LOS	C	A	B	C		B	C
Critical Lane Group	Yes	No	No	Yes		No	Yes
50th-Percentile Queue Length [veh/ln]	0.80	1.06	1.41	4.86		0.32	3.10
50th-Percentile Queue Length [ft/ln]	20.04	26.56	35.22	121.54		7.89	77.58
95th-Percentile Queue Length [veh/ln]	1.44	1.91	2.54	8.48		0.57	5.59
95th-Percentile Queue Length [ft/ln]	36.07	47.82	63.39	211.94		14.20	139.65

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Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	28.22	28.22	7.72	0.00	0.00	13.90	21.68	0.00	0.00	0.00	16.11	16.11	22.13
Movement LOS	C	C	A			B	C				B	B	C
d_A, Approach Delay [s/veh]	10.34				18.18			0.00			21.76		
Approach LOS	B				B			A			C		
d_I, Intersection Delay [s/veh]	17.25												
Intersection LOS	B												
Intersection V/C	0.535												

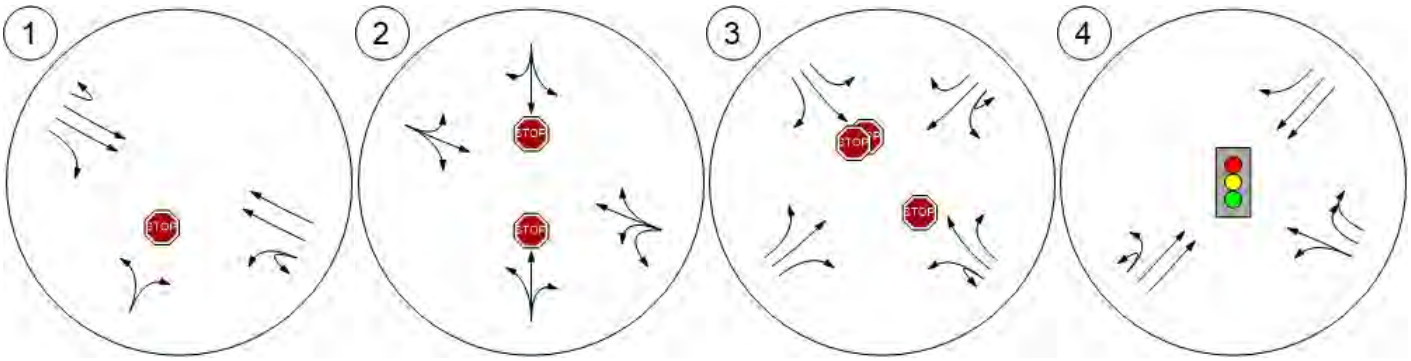
Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	34.67
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	2.120
Crosswalk LOS	F	F	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	778	778	0	667
d_b, Bicycle Delay [s]	16.81	16.81	45.00	20.00
l_b,int, Bicycle LOS Score for Intersection	1.895	2.187	4.132	2.475
Bicycle LOS	A	B	D	B

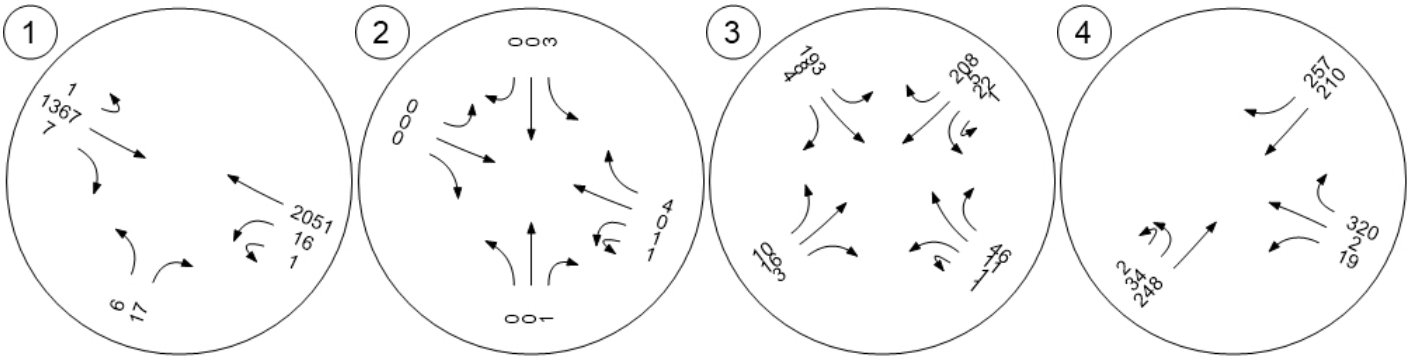
Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

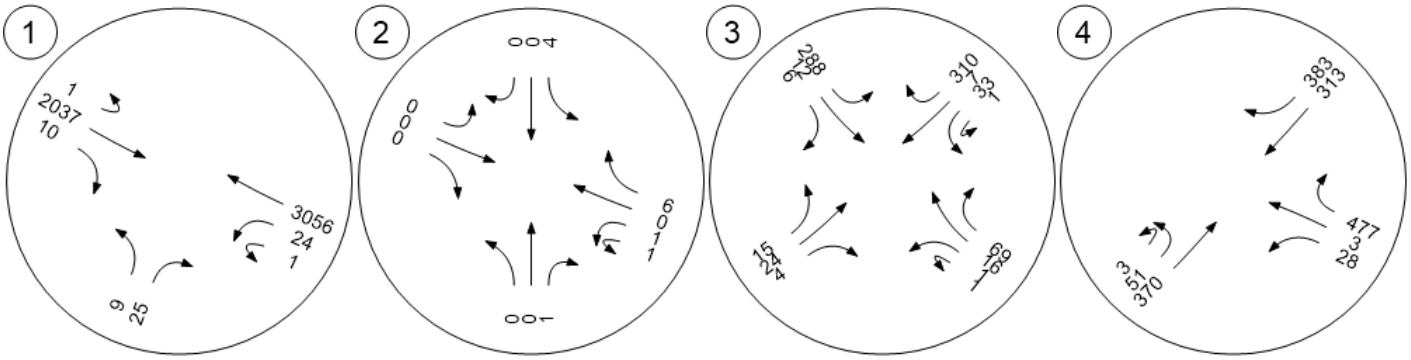
Lane Configuration and Traffic Control



Traffic Volume - Base Volume



Traffic Volume - Future Total Volume



Vistro File: C:\...\Ramsey Model.vistro
Report File: C:\...\2022 AM Build.pdf

Scenario 7 2022 AM Build
11/9/2020

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	HWY 10 and Bowers Drive	Two-way stop	HCM 6th Edition	NB Left	1.179	438.7	F
2	Riverdale Drive and Llama Street	Two-way stop	HCM 6th Edition	WB Left	0.005	7.3	A
3	Riverdale Drive/Armostrong Boulevard and EB Hwy 10 Ramp	Two-way stop	HCM 6th Edition	NWB Thru	0.008	12.2	B
4	Armstrong Boulevard and WB Hwy 10 Ramp	Signalized	HCM 6th Edition	NB Left	0.166	11.2	B
8	Bower Dr and Riverdale Dr	Two-way stop	HCM 6th Edition	EB Left	0.025	9.0	A
9	Riverdale Drive and Western Site Access	Two-way stop	HCM 6th Edition	NB Left	0.020	9.0	A
10	Riverdale Drive and Eastern Site Access	Two-way stop	HCM 6th Edition	NB Left	0.031	9.1	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

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Intersection Level Of Service Report
Intersection 1: HWY 10 and Bowers Drive

Control Type:	Two-way stop	Delay (sec / veh):	438.7
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.179

Intersection Setup

Name								
Approach	Northbound		Eastbound			Westbound		
Lane Configuration								
Turning Movement	Left	Right	U-turn	Thru	Right	U-turn	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	325.00	100.00	225.00	360.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		65.00			65.00		
Grade [%]	0.00		0.00			0.00		
Crosswalk	Yes		Yes			Yes		

Volumes

Name								
Base Volume Input [veh/h]	5	16	1	1736	2	0	4	895
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	23	23	0	0	17	0	5	23
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	28	40	1	1805	19	0	9	954
Peak Hour Factor	0.9470	0.9470	0.9470	0.9470	0.9470	0.9470	0.9470	0.9470
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	11	0	477	5	0	2	252
Total Analysis Volume [veh/h]	30	42	1	1906	20	0	10	1007
Pedestrian Volume [ped/h]	0		0			0		

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Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	1.18	0.16	0.00	0.02	0.00	0.00	0.03	0.01
d_M, Delay for Movement [s/veh]	438.67	311.00	19.56	0.00	0.00	77.21	17.31	0.00
Movement LOS	F	F	C	A	A	F	C	A
95th-Percentile Queue Length [veh/ln]	6.47	6.47	0.01	0.00	0.00	0.10	0.10	0.00
95th-Percentile Queue Length [ft/ln]	161.64	161.64	0.30	0.00	0.00	2.56	2.56	0.00
d_A, Approach Delay [s/veh]	364.20		0.01			0.17		
Approach LOS	F		A			A		
d_I, Intersection Delay [s/veh]	8.76							
Intersection LOS	F							

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Intersection Level Of Service Report
Intersection 2: Riverdale Drive and Llama Street

Control Type:	Two-way stop	Delay (sec / veh):	7.3
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.005

Intersection Setup

Name											
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	0	0	0	0	0	0	6	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	57	0	0	16	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	0	0	0	0	57	0	6	16	0
Peak Hour Factor	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	0	0	0	0	16	0	2	4	0
Total Analysis Volume [veh/h]	0	0	0	0	0	0	0	63	0	7	18	0
Pedestrian Volume [ped/h]	0			0			0			0		

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Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	9.07	9.55	8.59	9.07	9.55	8.39	7.25	0.00	0.00	7.35	0.00	0.00
Movement LOS	A	A	A	A	A	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34	0.34	0.34
d_A, Approach Delay [s/veh]	9.07			9.00			0.00			2.06		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	0.58											
Intersection LOS	A											

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Intersection Level Of Service Report
Intersection 3: Riverdale Drive/Armostrong Boulevard and EB Hwy 10 Ramp

Control Type:	Two-way stop	Delay (sec / veh):	12.2
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.008

Intersection Setup

Name												
Approach	Southbound				Northeastbound				Southwestbound			
Lane Configuration												
Turning Movement	Left	Thru	Right	Right	Left	Left	Thru	Right	Left	Thru	Right	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	1	0	0	1	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	300.00	100.00	100.00	300.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00				35.00				35.00			
Grade [%]	0.00				0.00				0.00			
Crosswalk	Yes				Yes				Yes			

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	0	1	0	2	1	18	13	0	243
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0400	1.0000	1.0400	1.0400	1.0400	1.0400	1.0000	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	23	0	34	1	0	16	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	0	24	0	36	2	19	30	0	253
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	0.9430	1.0000	0.9430	0.9430	0.9430	0.9430	1.0000	0.9430
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	0	6	0	10	1	5	8	0	67
Total Analysis Volume [veh/h]	0	0	0	0	25	0	38	2	20	32	0	268
Pedestrian Volume [ped/h]	0				0				0			

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Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.01	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	7.91	0.00	0.00	0.00	7.32	0.00	0.00	0.00
Movement LOS					A		A	A	A	A		A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.04	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	1.52	0.00	0.00	0.00	0.97	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.00				3.04				0.46			
Approach LOS	A				A				A			
d_I, Intersection Delay [s/veh]	4.86											
Intersection LOS	B											

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Intersection Setup

Name								
Approach	Northwestbound				Southeastbound			
Lane Configuration								
Turning Movement	Left	Thru	Thru	Right	Left	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	1	0	0	1
Entry Pocket Length [ft]	225.00	100.00	100.00	290.00	280.00	100.00	100.00	280.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00				30.00			
Grade [%]	0.00				0.00			
Crosswalk	Yes				Yes			

Volumes

Name								
Base Volume Input [veh/h]	2	4	0	14	187	0	7	10
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0000	1.0400	1.0400	1.0000	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	2	4	0	15	194	0	7	10
Peak Hour Factor	0.9430	0.9430	1.0000	0.9430	0.9430	1.0000	0.9430	0.9430
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	1	0	4	51	0	2	3
Total Analysis Volume [veh/h]	2	4	0	16	206	0	7	11
Pedestrian Volume [ped/h]	0				0			

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Intersection Settings

Priority Scheme	Stop	Stop
Flared Lane		
Storage Area [veh]	0	0
Two-Stage Gap Acceptance	No	No
Number of Storage Spaces in Median	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.01	0.00	0.02	0.27	0.00	0.01	0.01
d_M, Delay for Movement [s/veh]	10.81	12.22	0.00	8.54	11.43	0.00	10.14	8.49
Movement LOS	B	B		A	B		B	A
95th-Percentile Queue Length [veh/ln]	0.01	0.02	0.00	0.05	1.09	0.00	0.03	0.03
95th-Percentile Queue Length [ft/ln]	0.24	0.60	0.00	1.18	27.20	0.00	0.75	0.80
d_A, Approach Delay [s/veh]	9.41				11.24			
Approach LOS	A				B			
d_I, Intersection Delay [s/veh]	4.86							
Intersection LOS	B							

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Intersection Level Of Service Report
Intersection 4: Armstrong Boulevard and WB Hwy 10 Ramp

Control Type:	Signalized	Delay (sec / veh):	11.2
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.166

Intersection Setup

Name													
Approach	Northbound			Southbound				Eastbound			Westbound		
Lane Configuration													
Turning Movement	Left	Thru	Right	U-tu	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	0	0	0	1	0	0	0	1	0	1
Entry Pocket Length [ft]	395.00	100.00	100.00	100.0	100.0	100.0	315.0	100.00	100.00	100.00	685.00	100.00	685.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00				30.00			30.00		
Grade [%]	0.00			0.00				0.00			0.00		
Curb Present	No			No							No		
Crosswalk	No			No				No			Yes		

Volumes

Name													
Base Volume Input [veh/h]	10	220	0	1	0	238	96	0	0	0	20	2	134
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0000	1.040	1.000	1.040	1.040	1.0000	1.0000	1.0000	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	23	11	0	0	0	4	0	0	0	0	12	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	33	240	0	1	0	252	100	0	0	0	33	2	139
Peak Hour Factor	0.9310	0.9310	1.0000	0.931	1.000	0.931	0.931	1.0000	1.0000	1.0000	0.9310	0.9310	0.9310
Other Adjustment Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	9	64	0	0	0	68	27	0	0	0	9	1	37
Total Analysis Volume [veh/h]	35	258	0	1	0	271	107	0	0	0	35	2	149
Presence of On-Street Parking	No		No	No			No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0				0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0				0			0		
v_co, Outbound Pedestrian Volume crossing	0			0				0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0				0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0				0			0		
Bicycle Volume [bicycles/h]	0			0				0			0		

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permi	Permi	Permi	Permi	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	5	2	0	0	0	6	0	0	0	0	0	8	0
Auxiliary Signal Groups													
Lead / Lag	Lead	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	7	10	0	0	0	10	0	0	0	0	0	10	0
Maximum Green [s]	20	35	0	0	0	35	0	0	0	0	0	30	0
Amber [s]	3.0	5.0	0.0	0.0	0.0	5.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0
All red [s]	2.5	1.5	0.0	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	3.5	0.0
Split [s]	0	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	20	0	0	0	0	0	0	0	0	0	0	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No				No						No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	3.5	4.5	0.0	0.0	0.0	4.5	0.0	0.0	0.0	0.0	0.0	4.5	0.0
Minimum Recall	No	Yes				Yes						No	
Maximum Recall	No	No				No						No	
Pedestrian Recall	No	No				No						No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	C	R		C	R
C, Cycle Length [s]	40	40	40	40	40		40	40
L, Total Lost Time per Cycle [s]	5.50	6.50	6.50	6.50	6.50		6.50	6.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	2.00	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	3.50	4.50	4.50	4.50	4.50		4.50	4.50
g_i, Effective Green Time [s]	2	18	10	10	10		9	9
g / C, Green / Cycle	0.06	0.45	0.26	0.26	0.26		0.22	0.22
(v / s)_i Volume / Saturation Flow Rate	0.02	0.08	0.09	0.09	0.07		0.02	0.06
s, saturation flow rate [veh/h]	1603	3204	1641	1532	1431		1607	2532
c, Capacity [veh/h]	97	1455	501	393	367		357	563
d1, Uniform Delay [s]	18.13	6.51	12.11	12.14	12.00		12.43	12.90
k, delay calibration	0.11	0.11	0.11	0.11	0.11		0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	2.26	0.06	0.30	0.50	0.44		0.13	0.25
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00		0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00		1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00

Lane Group Results

X, volume / capacity	0.36	0.18	0.28	0.33	0.29		0.10	0.26
d, Delay for Lane Group [s/veh]	20.38	6.57	12.42	12.63	12.43		12.55	13.15
Lane Group LOS	C	A	B	B	B		B	B
Critical Lane Group	Yes	No	No	Yes	No		No	Yes
50th-Percentile Queue Length [veh/ln]	0.32	0.43	0.83	0.79	0.64		0.23	0.47
50th-Percentile Queue Length [ft/ln]	8.07	10.66	20.78	19.77	15.96		5.76	11.87
95th-Percentile Queue Length [veh/ln]	0.58	0.77	1.50	1.42	1.15		0.41	0.85
95th-Percentile Queue Length [ft/ln]	14.53	19.19	37.41	35.58	28.72		10.37	21.37

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Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	20.38	6.57	0.00	12.42	0.00	12.52	12.43	0.00	0.00	0.00	12.55	12.55	13.15
Movement LOS	C	A		B		B	B				B	B	B
d_A, Approach Delay [s/veh]	8.22			12.50				0.00			13.03		
Approach LOS	A			B				A			B		
d_I, Intersection Delay [s/veh]	11.15												
Intersection LOS	B												
Intersection V/C	0.166												

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	34.67
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	2.000
Crosswalk LOS	F	F	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	778	778	0	667
d_b, Bicycle Delay [s]	16.81	16.81	45.00	20.00
l_b,int, Bicycle LOS Score for Intersection	1.801	1.872	4.132	1.867
Bicycle LOS	A	A	D	A

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Intersection Level Of Service Report
Intersection 8: Bower Dr and Riverdale Dr

Control Type:	Two-way stop	Delay (sec / veh):	9.0
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.025

Intersection Setup

Name						
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	0	0	0	6	21	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	45	22	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	45	22	6	22	0
Peak Hour Factor	0.9470	0.9470	0.9470	0.9470	0.9470	0.9470
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	12	6	2	6	0
Total Analysis Volume [veh/h]	0	48	23	6	23	0
Pedestrian Volume [ped/h]	0		0		0	

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Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.02	0.00
d_M, Delay for Movement [s/veh]	7.27	0.00	0.00	0.00	8.97	8.53
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.08	0.08
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	1.90	1.90
d_A, Approach Delay [s/veh]	0.00		0.00		8.97	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	2.06					
Intersection LOS	A					

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Intersection Level Of Service Report
Intersection 9: Riverdale Drive and Western Site Access

Control Type:	Two-way stop	Delay (sec / veh):	9.0
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.020

Intersection Setup

Name						
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0400	1.0000	1.0000	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	18	23	13	9	4	27
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	18	23	13	9	4	27
Peak Hour Factor	0.9470	0.9470	0.9470	0.9470	0.9470	0.9470
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	5	6	3	2	1	7
Total Analysis Volume [veh/h]	19	24	14	10	4	29
Pedestrian Volume [ped/h]	0		0		0	

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Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.02	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	8.95	8.56	0.00	0.00	7.27	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.13	0.13	0.00	0.00	0.01	0.01
95th-Percentile Queue Length [ft/ln]	3.34	3.34	0.00	0.00	0.19	0.19
d_A, Approach Delay [s/veh]	8.73		0.00		0.88	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	4.05					
Intersection LOS	A					

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Intersection Level Of Service Report
Intersection 10: Riverdale Drive and Eastern Site Access

Control Type:	Two-way stop	Delay (sec / veh):	9.1
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.031

Intersection Setup

Name						
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0400	1.0000	1.0000	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	27	34	23	13	12	4
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	27	34	23	13	12	4
Peak Hour Factor	0.9470	0.9470	0.9470	0.9470	0.9470	0.9470
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	9	6	3	3	1
Total Analysis Volume [veh/h]	29	36	24	14	13	4
Pedestrian Volume [ped/h]	0		0		0	

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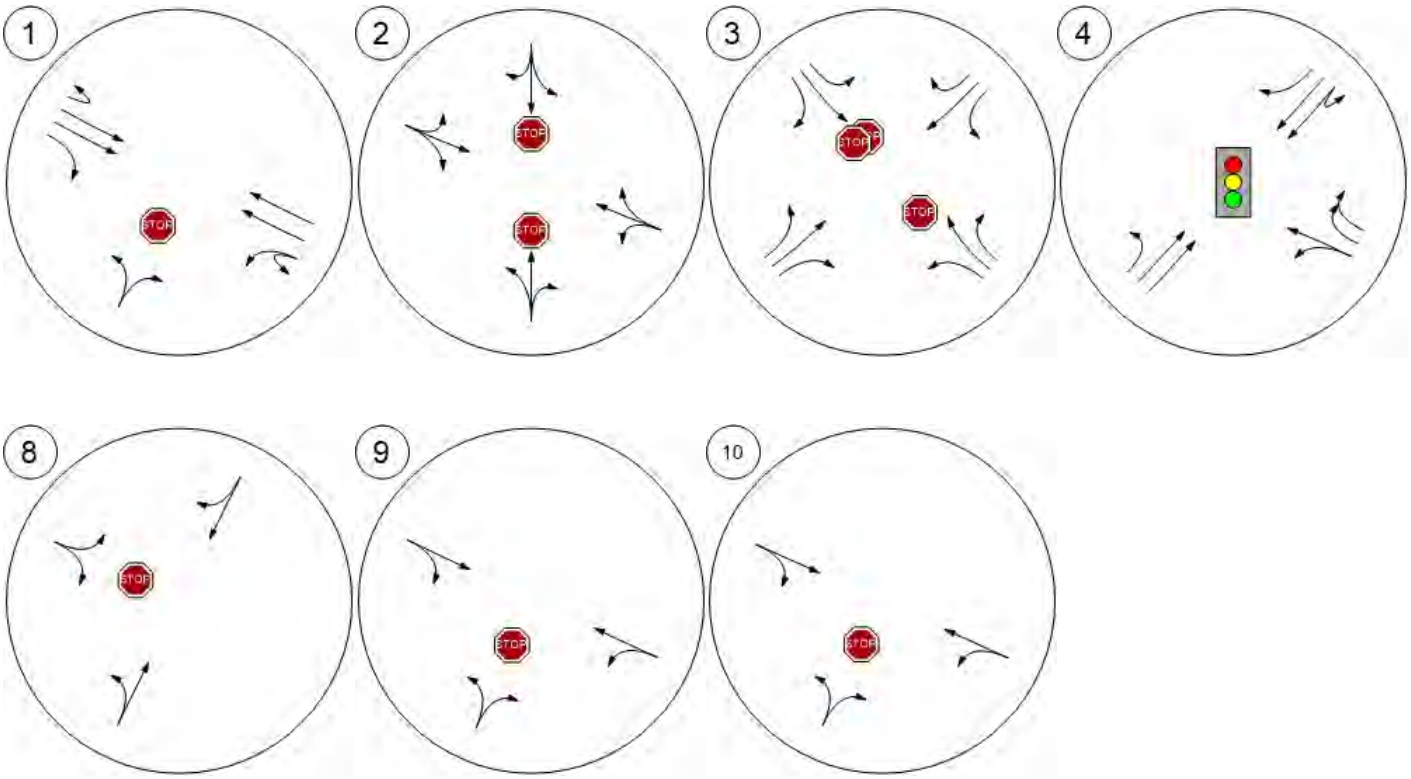
Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

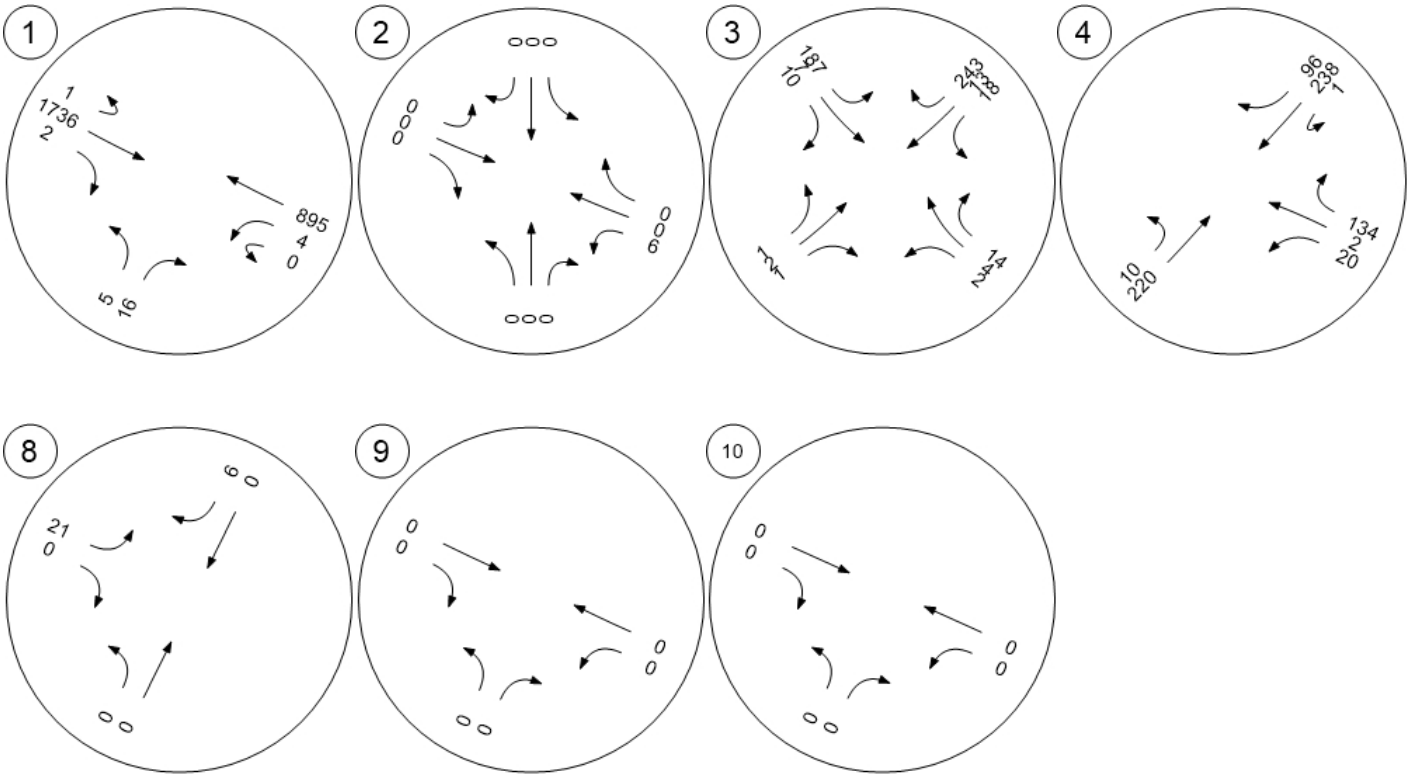
Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.03	0.03	0.00	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	9.09	8.70	0.00	0.00	7.31	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.21	0.21	0.00	0.00	0.03	0.03
95th-Percentile Queue Length [ft/ln]	5.24	5.24	0.00	0.00	0.63	0.63
d_A, Approach Delay [s/veh]	8.88		0.00		5.59	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	5.60					
Intersection LOS	A					

Lane Configuration and Traffic Control



Traffic Volume - Base Volume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5
16
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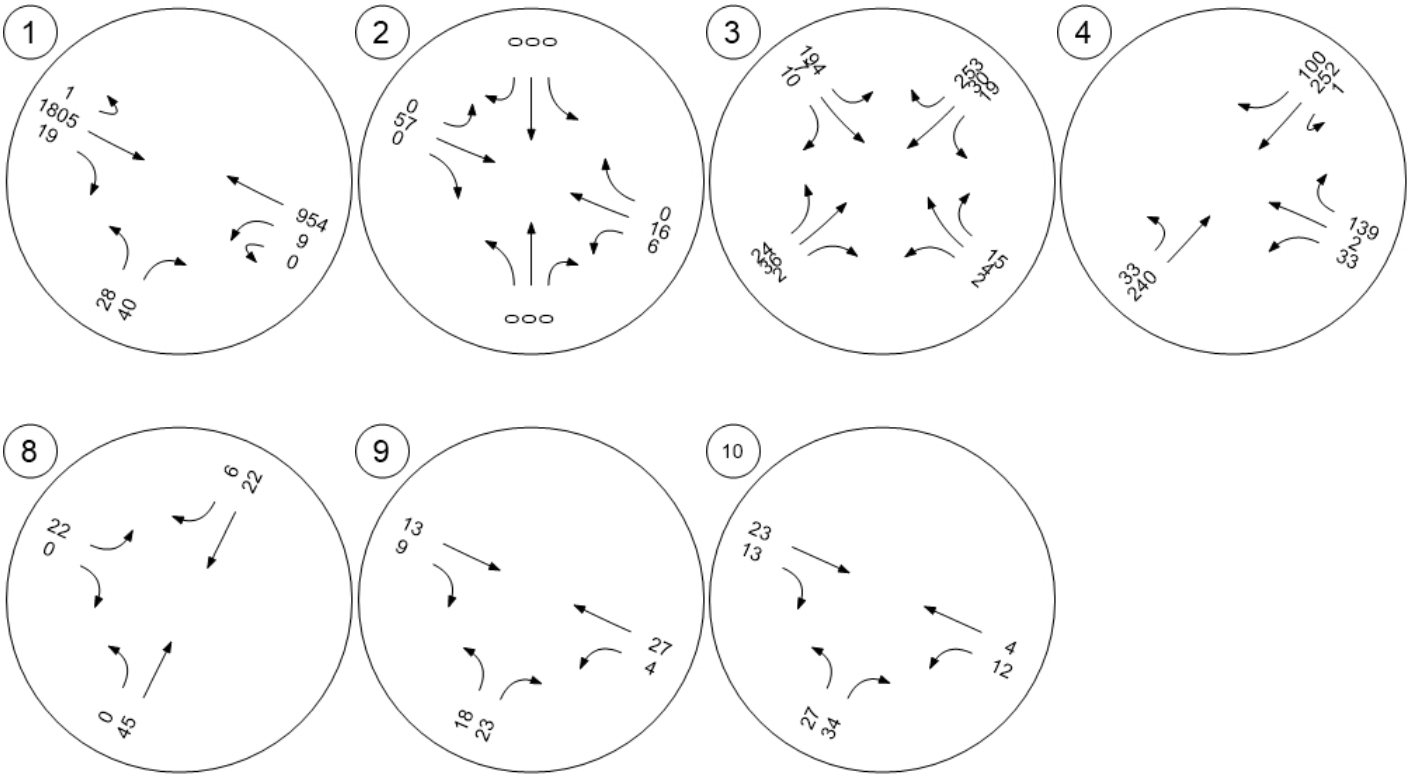
0
3
187
10
243
14
4
4
4

Traffic Volume - Future Total Volume



Vistro File: C:\...\Ramsey Model.vistro
Report File: C:\...\2022 PM Build.pdf

Scenario 8 2022 PM Build
11/9/2020

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	HWY 10 and Bowers Drive	Two-way stop	HCM 6th Edition	NB Left	1.572	705.4	F
2	Riverdale Drive and Llama Street	Two-way stop	HCM 6th Edition	SB Left	0.003	9.1	A
3	Riverdale Drive/Armostrong Boulevard and EB Hwy 10 Ramp	Two-way stop	HCM 6th Edition	SEB Left	0.361	13.7	B
4	Armstrong Boulevard and WB Hwy 10 Ramp	Signalized	HCM 6th Edition	NB Left	0.384	14.1	B
8	Bower Dr and Riverdale Dr	Two-way stop	HCM 6th Edition	EB Left	0.028	9.2	A
9	Riverdale Drive and Western Site Access	Two-way stop	HCM 6th Edition	NB Left	0.017	9.2	A
10	Riverdale Drive and Eastern Site Access	Two-way stop	HCM 6th Edition	NB Left	0.025	9.4	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

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Intersection Level Of Service Report
Intersection 1: HWY 10 and Bowers Drive

Control Type:	Two-way stop	Delay (sec / veh):	705.4
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.572

Intersection Setup

Name								
Approach	Northbound		Eastbound			Westbound		
Lane Configuration								
Turning Movement	Left	Right	U-turn	Thru	Right	U-turn	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	325.00	100.00	225.00	360.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		65.00			65.00		
Grade [%]	0.00		0.00			0.00		
Crosswalk	Yes		Yes			Yes		

Volumes

Name								
Base Volume Input [veh/h]	6	17	1	1367	7	1	16	2051
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	17	17	0	0	48	0	14	17
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	23	35	1	1422	55	1	31	2150
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	9	0	374	14	0	8	566
Total Analysis Volume [veh/h]	24	37	1	1497	58	1	33	2263
Pedestrian Volume [ped/h]	0		0			0		

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Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	1.57	0.10	0.03	0.01	0.00	0.01	0.08	0.02
d_M, Delay for Movement [s/veh]	705.43	479.84	115.52	0.00	0.00	40.86	14.43	0.00
Movement LOS	F	F	F	A	A	E	B	A
95th-Percentile Queue Length [veh/ln]	6.56	6.56	0.09	0.00	0.00	0.29	0.29	0.00
95th-Percentile Queue Length [ft/ln]	164.04	164.04	2.25	0.00	0.00	7.19	7.19	0.00
d_A, Approach Delay [s/veh]	568.59		0.07			0.23		
Approach LOS	F		A			A		
d_I, Intersection Delay [s/veh]	9.02							
Intersection LOS	F							

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Intersection Level Of Service Report
Intersection 2: Riverdale Drive and Llama Street

Control Type:	Two-way stop	Delay (sec / veh):	9.1
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.003

Intersection Setup

Name													
Approach	Northbound			Southbound			Eastbound			Westbound			
Lane Configuration													
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	U-tu	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			35.00			
Grade [%]	0.00			0.00			0.00			0.00			
Crosswalk	Yes			Yes			Yes			Yes			

Volumes

Name													
Base Volume Input [veh/h]	0	0	1	3	0	0	0	0	0	1	1	0	4
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.040	1.040	1.040	1.040
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	43	0	0	0	47	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	1	3	0	0	0	43	0	1	1	47	4
Peak Hour Factor	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.900	0.900	0.900	0.900
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	0	0	0	1	0	0	0	12	0	0	0	13	1
Total Analysis Volume [veh/h]	0	0	1	3	0	0	0	48	0	1	1	52	4
Pedestrian Volume [ped/h]	0			0			0			0			

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Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	9.12	9.61	8.53	9.14	9.61	8.57	7.32	0.00	0.00	8.36	7.31	0.00	0.00
Movement LOS	A	A	A	A	A	A	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.07	0.07	0.07	0.26	0.26	0.26	0.00	0.00	0.00	0.12	0.12	0.12	0.12
d_A, Approach Delay [s/veh]	8.53			9.14			0.00			0.27			
Approach LOS	A			A			A			A			
d_I, Intersection Delay [s/veh]	0.47												
Intersection LOS	A												

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Intersection Level Of Service Report
Intersection 3: Riverdale Drive/Armostrong Boulevard and EB Hwy 10 Ramp

Control Type:	Two-way stop	Delay (sec / veh):	13.7
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.361

Intersection Setup

Name													
Approach	Southbound				Northeastbound				Southwestbound				
Lane Configuration													
Turning Movement	Left	Thru	Right	Right	Left	Left	Thru	Right	U-turn	Left	Thru	Right	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	1	0	0	1	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	300.00	100.00	100.00	300.00	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00				35.00				35.00				
Grade [%]	0.00				0.00				0.00				
Crosswalk	Yes				Yes				Yes				

Volumes

Name													
Base Volume Input [veh/h]	0	0	0	0	10	0	16	3	1	22	5	0	208
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0400	1.0000	1.0400	1.0400	1.040	1.040	1.040	1.000	1.040
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	17	0	25	1	0	0	46	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	0	27	0	42	4	1	23	51	0	216
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	0.8610	1.0000	0.8610	0.8610	0.861	0.861	0.861	1.000	0.861
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	0	0	0	0	8	0	12	1	0	7	15	0	63
Total Analysis Volume [veh/h]	0	0	0	0	31	0	49	5	1	27	59	0	251
Pedestrian Volume [ped/h]	0				0				0				

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Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	7.95	0.00	0.00	0.00	8.59	7.36	0.00	0.00	0.00
Movement LOS					A		A	A	A	A	A		A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.06	0.06	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	1.91	0.00	0.00	0.00	1.40	1.40	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.00				2.90				0.61				
Approach LOS	A				A				A				
d_I, Intersection Delay [s/veh]	6.03												
Intersection LOS	B												

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Intersection Setup

Name									
Approach	Northwestbound					Southeastbound			
Lane Configuration									
Turning Movement	U-turn	Left	Thru	Thru	Right	Left	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	0	1	1	0	0	1
Entry Pocket Length [ft]	225.00	100.00	100.00	100.00	290.00	280.00	100.00	100.00	280.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00					30.00			
Grade [%]	0.00					0.00			
Crosswalk	Yes					Yes			

Volumes

Name									
Base Volume Input [veh/h]	1	1	11	0	46	193	0	8	4
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0000	1.0400	1.0400	1.0000	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	1	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	2	11	0	48	201	0	8	4
Peak Hour Factor	0.8610	0.8610	0.8610	1.0000	0.8610	0.8610	1.0000	0.8610	0.8610
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	1	3	0	14	58	0	2	1
Total Analysis Volume [veh/h]	1	2	13	0	56	233	0	9	5
Pedestrian Volume [ped/h]	0					0			

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Intersection Settings

Priority Scheme	Stop	Stop
Flared Lane		
Storage Area [veh]	0	0
Two-Stage Gap Acceptance	No	No
Number of Storage Spaces in Median	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.03	0.00	0.05	0.36	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	11.35	11.35	12.94	0.00	8.74	13.69	0.00	10.70	8.59
Movement LOS	B	B	B		A	B		B	A
95th-Percentile Queue Length [veh/ln]	0.02	0.02	0.09	0.00	0.17	1.64	0.00	0.04	0.01
95th-Percentile Queue Length [ft/ln]	0.40	0.40	2.15	0.00	4.35	41.02	0.00	1.07	0.37
d_A, Approach Delay [s/veh]	9.60					13.47			
Approach LOS	A					B			
d_I, Intersection Delay [s/veh]	6.03								
Intersection LOS	B								

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Intersection Level Of Service Report
Intersection 4: Armstrong Boulevard and WB Hwy 10 Ramp

Control Type:	Signalized	Delay (sec / veh):	14.1
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.384

Intersection Setup

Name													
Approach	Northbound				Southbound			Eastbound			Westbound		
Lane Configuration													
Turning Movement	U-tu	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	0	0	0	1	0	0	0	1	0	1
Entry Pocket Length [ft]	395.0	100.0	100.0	100.0	100.00	100.00	315.00	100.00	100.00	100.00	685.00	100.00	685.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00				35.00			30.00			30.00		
Grade [%]	0.00				0.00			0.00			0.00		
Curb Present	No				No						No		
Crosswalk	No				No			No			Yes		

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Volumes

Name													
Base Volume Input [veh/h]	2	34	248	0	0	210	257	0	0	0	19	2	320
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.040	1.040	1.040	1.000	1.0000	1.0400	1.0400	1.0000	1.0000	1.0000	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	17	8	0	0	12	0	0	0	0	34	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	2	52	266	0	0	230	267	0	0	0	54	2	333
Peak Hour Factor	0.916	0.916	0.916	1.000	1.0000	0.9160	0.9160	1.0000	1.0000	1.0000	0.9160	0.9160	0.9160
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	14	73	0	0	63	73	0	0	0	15	1	91
Total Analysis Volume [veh/h]	2	57	290	0	0	251	291	0	0	0	59	2	364
Presence of On-Street Parking	No			No	No		No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0				0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0				0			0			0		
v_co, Outbound Pedestrian Volume crossing	0				0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0				0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0				0			0			0		
Bicycle Volume [bicycles/h]	0				0			0			0		

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permi	Prote	Permi	Permi	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	5	2	0	0	6	0	0	0	0	0	8	0
Auxiliary Signal Groups													
Lead / Lag	-	Lead	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	7	10	0	0	10	0	0	0	0	0	10	0
Maximum Green [s]	0	20	35	0	0	35	0	0	0	0	0	30	0
Amber [s]	0.0	3.0	5.0	0.0	0.0	5.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0
All red [s]	0.0	2.5	1.5	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	3.5	0.0
Split [s]	0	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Extension [s]	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0
Walk [s]	0	0	7	0	0	0	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	0	20	0	0	0	0	0	0	0	0	0	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk			No			No						No	
I1, Start-Up Lost Time [s]	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	3.5	4.5	0.0	0.0	4.5	0.0	0.0	0.0	0.0	0.0	4.5	0.0
Minimum Recall		No	Yes			Yes						No	
Maximum Recall		No	No			No						No	
Pedestrian Recall		No	No			No						No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	R		C	R
C, Cycle Length [s]	44	44	44	44		44	44
L, Total Lost Time per Cycle [s]	5.50	6.50	6.50	6.50		6.50	6.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	3.50	4.50	4.50	4.50		4.50	4.50
g_i, Effective Green Time [s]	4	21	12	12		10	10
g / C, Green / Cycle	0.08	0.47	0.26	0.26		0.23	0.23
(v / s)_i Volume / Saturation Flow Rate	0.04	0.09	0.08	0.20		0.04	0.14
s, saturation flow rate [veh/h]	1603	3204	3204	1431		1605	2532
c, Capacity [veh/h]	133	1520	850	379		366	578
d1, Uniform Delay [s]	19.07	6.64	12.79	14.80		13.53	15.20
k, delay calibration	0.11	0.11	0.11	0.11		0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	2.30	0.06	0.19	3.27		0.21	1.14
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00		0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00		1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00		1.00	1.00

Lane Group Results

X, volume / capacity	0.44	0.19	0.30	0.77		0.17	0.63
d, Delay for Lane Group [s/veh]	21.37	6.70	12.98	18.07		13.74	16.34
Lane Group LOS	C	A	B	B		B	B
Critical Lane Group	Yes	No	No	Yes		No	Yes
50th-Percentile Queue Length [veh/ln]	0.57	0.53	0.81	2.46		0.43	1.46
50th-Percentile Queue Length [ft/ln]	14.37	13.33	20.29	61.53		10.78	36.61
95th-Percentile Queue Length [veh/ln]	1.03	0.96	1.46	4.43		0.78	2.64
95th-Percentile Queue Length [ft/ln]	25.87	24.00	36.52	110.76		19.40	65.90

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Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	21.37	21.37	6.70	0.00	0.00	12.98	18.07	0.00	0.00	0.00	13.74	13.74	16.34
Movement LOS	C	C	A			B	B				B	B	B
d_A, Approach Delay [s/veh]	9.18				15.72			0.00			15.96		
Approach LOS	A				B			A			B		
d_I, Intersection Delay [s/veh]	14.06												
Intersection LOS	B												
Intersection V/C	0.384												

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	34.67
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	2.078
Crosswalk LOS	F	F	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	778	778	0	667
d_b, Bicycle Delay [s]	16.81	16.81	45.00	20.00
l_b,int, Bicycle LOS Score for Intersection	1.801	2.007	4.132	2.261
Bicycle LOS	A	B	D	B

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Intersection Level Of Service Report
Intersection 8: Bower Dr and Riverdale Dr

Control Type:	Two-way stop	Delay (sec / veh):	9.2
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.028

Intersection Setup

Name						
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	0	0	0	23	23	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	34	62	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	34	62	24	24	0
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	9	16	6	6	0
Total Analysis Volume [veh/h]	0	36	65	25	25	0
Pedestrian Volume [ped/h]	0		0		0	

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Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.03	0.00
d_M, Delay for Movement [s/veh]	7.39	0.00	0.00	0.00	9.20	8.78
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.09	0.09
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	2.18	2.18
d_A, Approach Delay [s/veh]	0.00		0.00		9.20	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	1.52					
Intersection LOS	A					

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Intersection Level Of Service Report
Intersection 9: Riverdale Drive and Western Site Access

Control Type:	Two-way stop	Delay (sec / veh):	9.2
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.017

Intersection Setup

Name						
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0400	1.0000	1.0000	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	14	17	36	26	13	20
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	14	17	36	26	13	20
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	4	9	7	3	5
Total Analysis Volume [veh/h]	15	18	38	27	14	21
Pedestrian Volume [ped/h]	0		0		0	

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Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.02	0.00	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	9.18	8.68	0.00	0.00	7.36	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.11	0.11	0.00	0.00	0.03	0.03
95th-Percentile Queue Length [ft/ln]	2.68	2.68	0.00	0.00	0.69	0.69
d_A, Approach Delay [s/veh]	8.91		0.00		2.95	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	2.98					
Intersection LOS	A					

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Intersection Level Of Service Report
Intersection 10: Riverdale Drive and Eastern Site Access

Control Type:	Two-way stop	Delay (sec / veh):	9.4
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.025

Intersection Setup

Name						
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0400	1.0000	1.0000	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	20	26	17	36	34	13
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	20	26	17	36	34	13
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	5	7	4	9	9	3
Total Analysis Volume [veh/h]	21	27	18	38	36	14
Pedestrian Volume [ped/h]	0		0		0	

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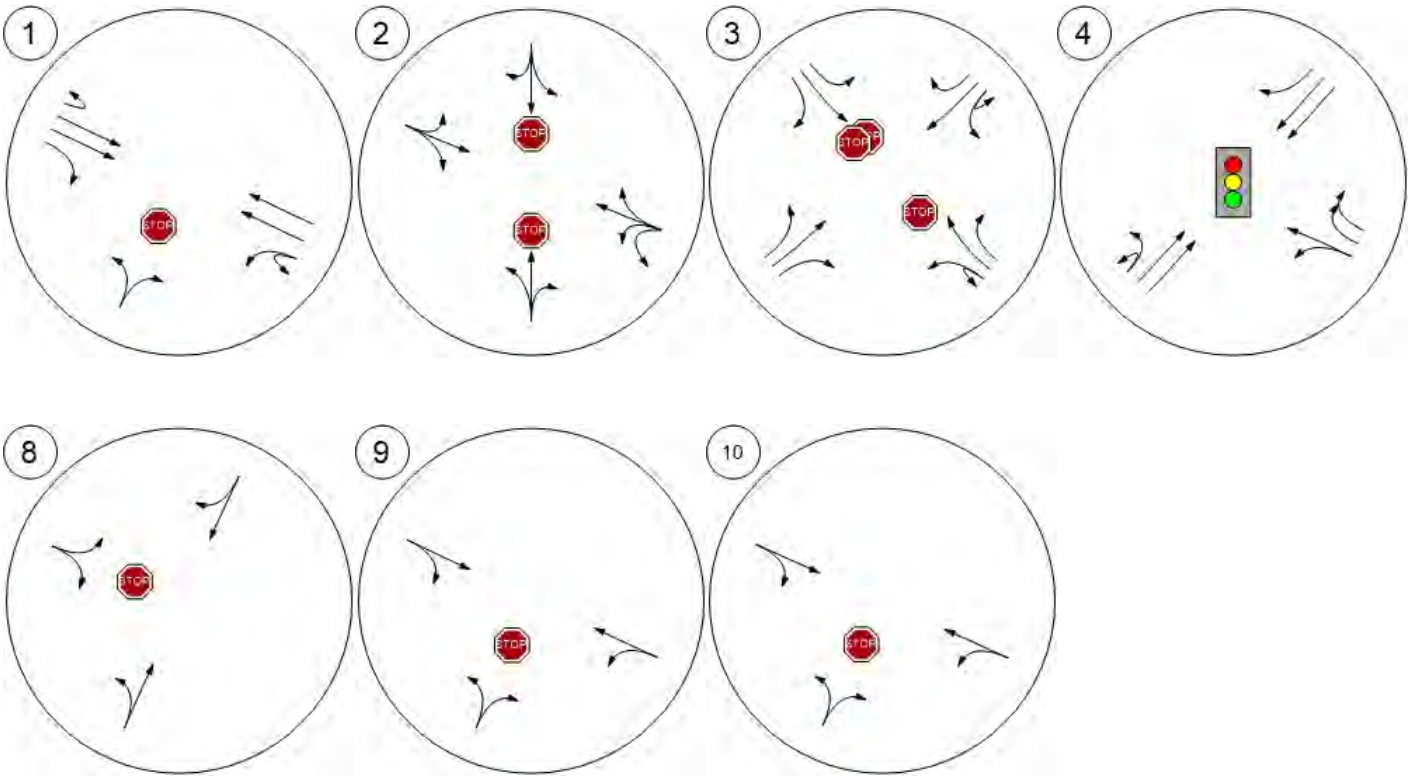
Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

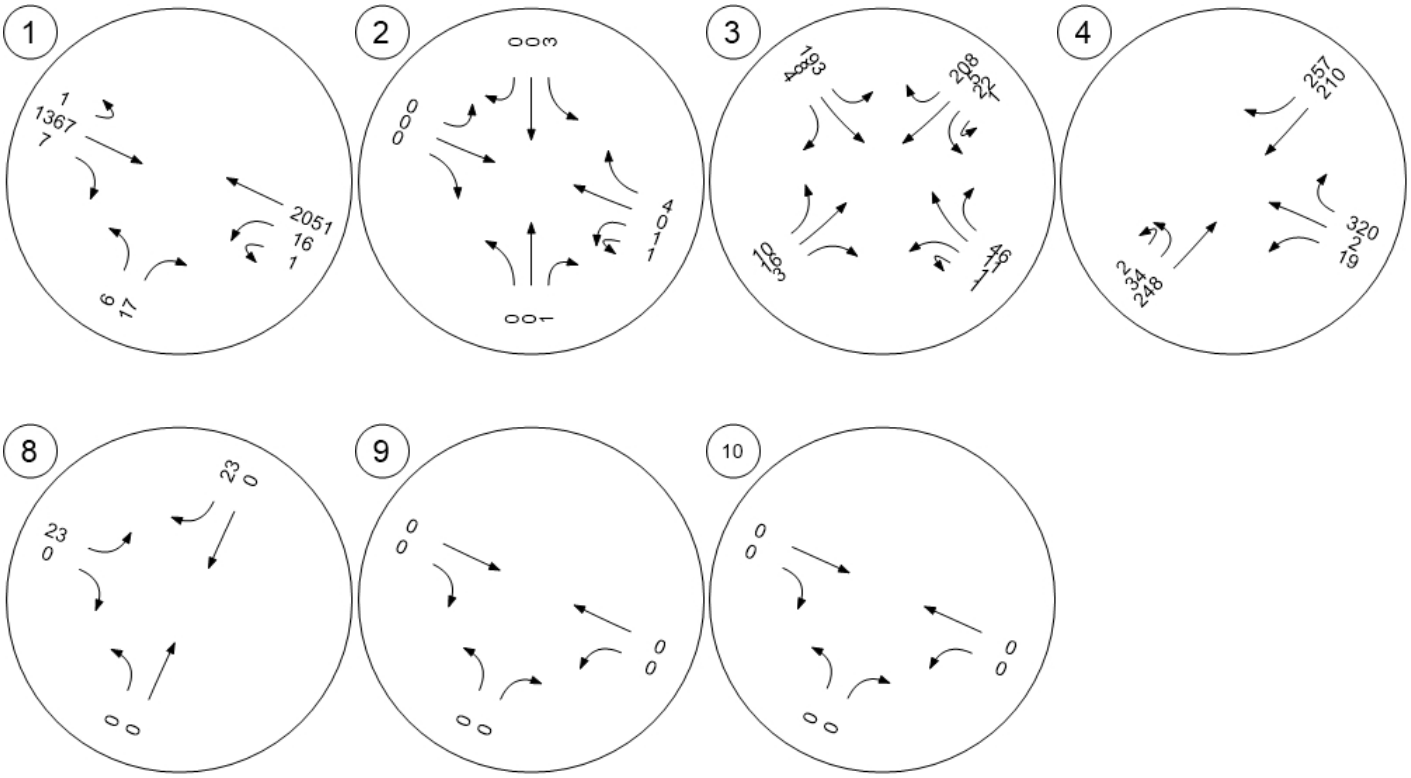
Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.03	0.00	0.00	0.02	0.00
d_M, Delay for Movement [s/veh]	9.43	8.68	0.00	0.00	7.38	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.16	0.16	0.00	0.00	0.07	0.07
95th-Percentile Queue Length [ft/ln]	4.00	4.00	0.00	0.00	1.78	1.78
d_A, Approach Delay [s/veh]	9.01		0.00		5.31	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	4.53					
Intersection LOS	A					

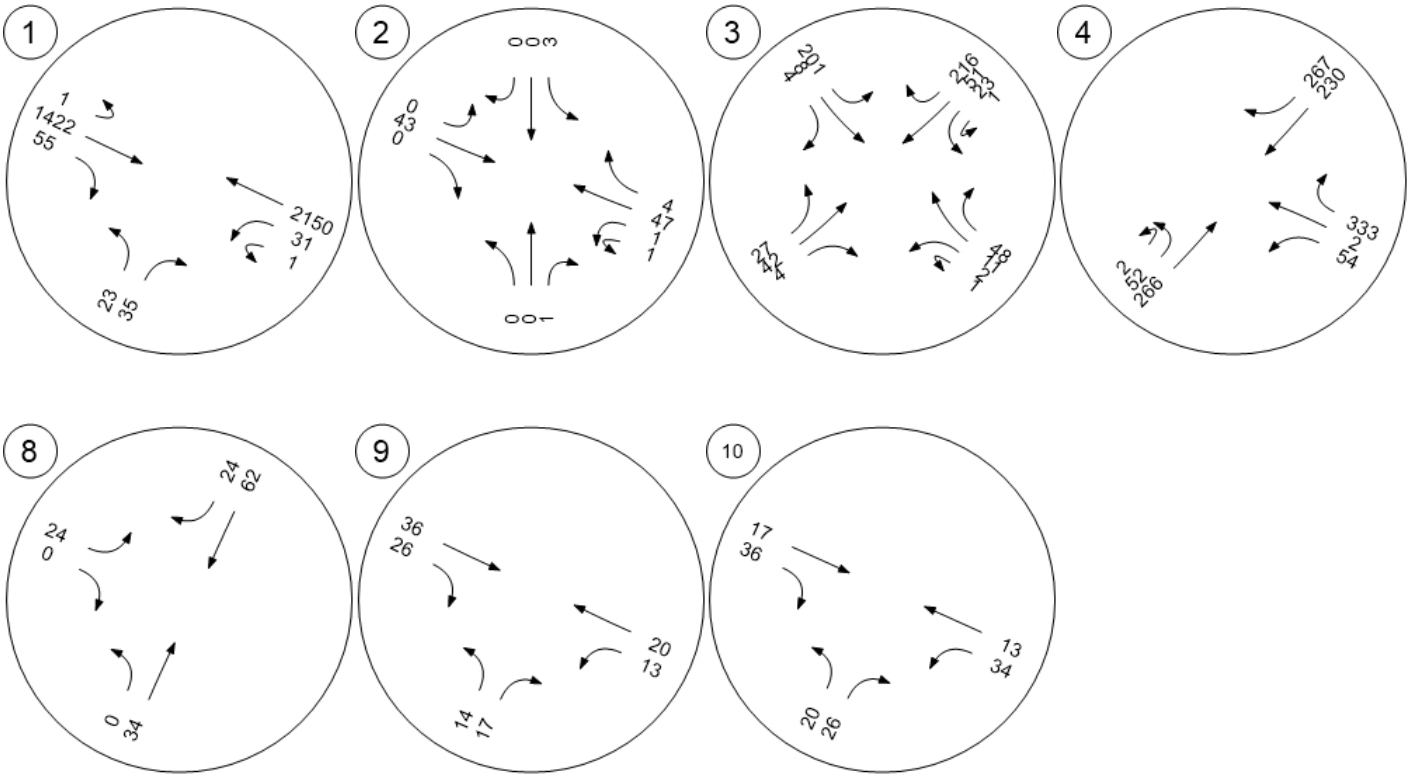
Lane Configuration and Traffic Control



Traffic Volume - Base Volume



Traffic Volume - Future Total Volume



Vistro File: C:\...\Ramsey Model.vistro
Report File: C:\...\2040 AM Build.pdf

Scenario 9 2040 AM Build
11/9/2020

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	HWY 10 and Bowers Drive	Two-way stop	HCM 6th Edition	NB Left	7.215	4,121.2	F
2	Riverdale Drive and Llama Street	Two-way stop	HCM 6th Edition	WB Left	0.006	7.4	A
3	Riverdale Drive/Armostrong Boulevard and EB Hwy 10 Ramp	Two-way stop	HCM 6th Edition	NWB Thru	0.014	13.8	B
4	Armstrong Boulevard and WB Hwy 10 Ramp	Signalized	HCM 6th Edition	NB Left	0.232	11.9	B
8	Bower Dr and Riverdale Dr	Two-way stop	HCM 6th Edition	EB Left	0.036	9.0	A
9	Riverdale Drive and Western Site Access	Two-way stop	HCM 6th Edition	NB Left	0.020	9.0	A
10	Riverdale Drive and Eastern Site Access	Two-way stop	HCM 6th Edition	NB Left	0.031	9.1	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

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Intersection Level Of Service Report
Intersection 1: HWY 10 and Bowers Drive

Control Type:	Two-way stop	Delay (sec / veh):	4,121.2
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	7.215

Intersection Setup

Name								
Approach	Northbound		Eastbound			Westbound		
Lane Configuration								
Turning Movement	Left	Right	U-turn	Thru	Right	U-turn	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	325.00	100.00	225.00	360.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		65.00			65.00		
Grade [%]	0.00		0.00			0.00		
Crosswalk	Yes		Yes			Yes		

Volumes

Name								
Base Volume Input [veh/h]	5	16	1	1736	2	0	4	895
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	23	23	0	0	17	0	5	23
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	30	47	1	2587	20	0	11	1357
Peak Hour Factor	0.9470	0.9470	0.9470	0.9470	0.9470	0.9470	0.9470	0.9470
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	8	12	0	683	5	0	3	358
Total Analysis Volume [veh/h]	32	50	1	2732	21	0	12	1433
Pedestrian Volume [ped/h]	0		0			0		

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Version 2020 (SP 0-3)

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	7.21	0.36	0.01	0.03	0.00	0.00	0.08	0.01
d_M, Delay for Movement [s/veh]	4121.16	3335.75	33.52	0.00	0.00	371.73	32.65	0.00
Movement LOS	F	F	D	A	A	F	D	A
95th-Percentile Queue Length [veh/ln]	11.56	11.56	0.02	0.00	0.00	0.27	0.27	0.00
95th-Percentile Queue Length [ft/ln]	288.95	288.95	0.59	0.00	0.00	6.80	6.80	0.00
d_A, Approach Delay [s/veh]	3642.25		0.01			0.27		
Approach LOS	F		A			A		
d_I, Intersection Delay [s/veh]	69.86							
Intersection LOS	F							

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Intersection Level Of Service Report
Intersection 2: Riverdale Drive and Llama Street

Control Type:	Two-way stop	Delay (sec / veh):	7.4
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.006

Intersection Setup

Name											
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	0	0	0	0	0	0	6	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	57	0	0	16	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	0	0	0	0	57	0	9	16	0
Peak Hour Factor	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	0	0	0	0	16	0	3	4	0
Total Analysis Volume [veh/h]	0	0	0	0	0	0	0	63	0	10	18	0
Pedestrian Volume [ped/h]	0			0			0			0		

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Version 2020 (SP 0-3)

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Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00
d_M, Delay for Movement [s/veh]	9.11	9.59	8.59	9.11	9.59	8.39	7.25	0.00	0.00	7.35	0.00	0.00
Movement LOS	A	A	A	A	A	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.02	0.02
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49	0.49	0.49
d_A, Approach Delay [s/veh]	9.10			9.03			0.00			2.63		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	0.81											
Intersection LOS	A											

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Version 2020 (SP 0-3)

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Intersection Level Of Service Report
Intersection 3: Riverdale Drive/Armostrong Boulevard and EB Hwy 10 Ramp

Control Type:	Two-way stop	Delay (sec / veh):	13.8
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.014

Intersection Setup

Name												
Approach	Southbound				Northeastbound				Southwestbound			
Lane Configuration												
Turning Movement	Left	Thru	Right	Right	Left	Left	Thru	Right	Left	Thru	Right	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	1	0	0	1	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	300.00	100.00	100.00	300.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00				35.00				35.00			
Grade [%]	0.00				0.00				0.00			
Crosswalk	Yes				Yes				Yes			

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	0	1	0	2	1	18	13	0	243
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.4900	1.0000	1.4900	1.4900	1.4900	1.4900	1.0000	1.4900
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	23	0	34	1	0	16	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	0	24	0	37	2	27	35	0	362
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	0.9430	1.0000	0.9430	0.9430	0.9430	0.9430	1.0000	0.9430
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	0	6	0	10	1	7	9	0	96
Total Analysis Volume [veh/h]	0	0	0	0	25	0	39	2	29	37	0	384
Pedestrian Volume [ped/h]	0				0				0			

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Version 2020 (SP 0-3)

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.02	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	8.23	0.00	0.00	0.00	7.34	0.00	0.00	0.00
Movement LOS					A		A	A	A	A		A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.06	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	1.68	0.00	0.00	0.00	1.41	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.00				3.12				0.47			
Approach LOS	A				A				A			
d_I, Intersection Delay [s/veh]	5.66											
Intersection LOS	B											

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Intersection Setup

Name								
Approach	Northwestbound				Southeastbound			
Lane Configuration								
Turning Movement	Left	Thru	Thru	Right	Left	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	1	0	0	1
Entry Pocket Length [ft]	225.00	100.00	100.00	290.00	280.00	100.00	100.00	280.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00				30.00			
Grade [%]	0.00				0.00			
Crosswalk	Yes				Yes			

Volumes

Name								
Base Volume Input [veh/h]	2	4	0	14	187	0	7	10
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.4900	1.4900	1.0000	1.4900	1.4900	1.0000	1.4900	1.4900
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	3	6	0	21	279	0	10	15
Peak Hour Factor	0.9430	0.9430	1.0000	0.9430	0.9430	1.0000	0.9430	0.9430
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	2	0	6	74	0	3	4
Total Analysis Volume [veh/h]	3	6	0	22	296	0	11	16
Pedestrian Volume [ped/h]	0				0			

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Version 2020 (SP 0-3)

Intersection Settings

Priority Scheme	Stop	Stop
Flared Lane		
Storage Area [veh]	0	0
Two-Stage Gap Acceptance	No	No
Number of Storage Spaces in Median	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.01	0.00	0.02	0.41	0.00	0.02	0.02
d_M, Delay for Movement [s/veh]	11.74	13.80	0.00	8.56	13.35	0.00	10.38	8.53
Movement LOS	B	B		A	B		B	A
95th-Percentile Queue Length [veh/ln]	0.02	0.04	0.00	0.07	2.00	0.00	0.05	0.05
95th-Percentile Queue Length [ft/ln]	0.42	1.10	0.00	1.63	49.92	0.00	1.23	1.18
d_A, Approach Delay [s/veh]	9.88				13.01			
Approach LOS	A				B			
d_I, Intersection Delay [s/veh]	5.66							
Intersection LOS	B							

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Version 2020 (SP 0-3)

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Intersection Level Of Service Report
Intersection 4: Armstrong Boulevard and WB Hwy 10 Ramp

Control Type:	Signalized	Delay (sec / veh):	11.9
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.232

Intersection Setup

Name													
Approach	Northbound			Southbound				Eastbound			Westbound		
Lane Configuration													
Turning Movement	Left	Thru	Right	U-tu	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	0	0	0	1	0	0	0	1	0	1
Entry Pocket Length [ft]	395.00	100.00	100.00	100.0	100.0	100.0	315.0	100.00	100.00	100.00	685.00	100.00	685.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00				30.00			30.00		
Grade [%]	0.00			0.00				0.00			0.00		
Curb Present	No			No							No		
Crosswalk	No			No				No			Yes		

Volumes

Name													
Base Volume Input [veh/h]	10	220	0	1	0	238	96	0	0	0	20	2	134
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.4900	1.4900	1.0000	1.490	1.000	1.490	1.490	1.0000	1.0000	1.0000	1.4900	1.4900	1.4900
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	23	11	0	0	0	4	0	0	0	0	12	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	38	339	0	1	0	359	143	0	0	0	42	3	200
Peak Hour Factor	0.9310	0.9310	1.0000	0.931	1.000	0.931	0.931	1.0000	1.0000	1.0000	0.9310	0.9310	0.9310
Other Adjustment Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	10	91	0	0	0	96	38	0	0	0	11	1	54
Total Analysis Volume [veh/h]	41	364	0	1	0	386	154	0	0	0	45	3	215
Presence of On-Street Parking	No		No	No			No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0				0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0				0			0		
v_co, Outbound Pedestrian Volume crossing	0			0				0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0				0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0				0			0		
Bicycle Volume [bicycles/h]	0			0				0			0		

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permi	Permi	Permi	Permi	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	5	2	0	0	0	6	0	0	0	0	0	8	0
Auxiliary Signal Groups													
Lead / Lag	Lead	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	7	10	0	0	0	10	0	0	0	0	0	10	0
Maximum Green [s]	20	35	0	0	0	35	0	0	0	0	0	30	0
Amber [s]	3.0	5.0	0.0	0.0	0.0	5.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0
All red [s]	2.5	1.5	0.0	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	3.5	0.0
Split [s]	0	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	20	0	0	0	0	0	0	0	0	0	0	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No				No						No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	3.5	4.5	0.0	0.0	0.0	4.5	0.0	0.0	0.0	0.0	0.0	4.5	0.0
Minimum Recall	No	Yes				Yes						No	
Maximum Recall	No	No				No						No	
Pedestrian Recall	No	No				No						No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	C	R		C	R
C, Cycle Length [s]	42	42	42	42	42		42	42
L, Total Lost Time per Cycle [s]	5.50	6.50	6.50	6.50	6.50		6.50	6.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	2.00	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	3.50	4.50	4.50	4.50	4.50		4.50	4.50
g_i, Effective Green Time [s]	3	19	11	11	11		10	10
g / C, Green / Cycle	0.07	0.46	0.26	0.26	0.26		0.23	0.23
(v / s)_i Volume / Saturation Flow Rate	0.03	0.11	0.12	0.12	0.11		0.03	0.08
s, saturation flow rate [veh/h]	1603	3204	1645	1532	1431		1608	2532
c, Capacity [veh/h]	108	1467	503	396	370		372	585
d1, Uniform Delay [s]	18.65	6.93	13.03	13.07	12.86		12.73	13.49
k, delay calibration	0.11	0.11	0.11	0.11	0.11		0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	2.20	0.09	0.51	0.87	0.75		0.16	0.39
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00		0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00		1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00

Lane Group Results

X, volume / capacity	0.38	0.25	0.40	0.47	0.42		0.13	0.37
d, Delay for Lane Group [s/veh]	20.85	7.02	13.54	13.93	13.61		12.88	13.88
Lane Group LOS	C	A	B	B	B		B	B
Critical Lane Group	Yes	No	No	Yes	No		No	Yes
50th-Percentile Queue Length [veh/ln]	0.39	0.67	1.31	1.25	1.02		0.31	0.74
50th-Percentile Queue Length [ft/ln]	9.73	16.69	32.81	31.33	25.44		7.83	18.41
95th-Percentile Queue Length [veh/ln]	0.70	1.20	2.36	2.26	1.83		0.56	1.33
95th-Percentile Queue Length [ft/ln]	17.51	30.04	59.05	56.39	45.78		14.09	33.15

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Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	20.85	7.02	0.00	13.54	0.00	13.73	13.61	0.00	0.00	0.00	12.88	12.88	13.88
Movement LOS	C	A		B		B	B				B	B	B
d_A, Approach Delay [s/veh]	8.42			13.69				0.00			13.70		
Approach LOS	A			B				A			B		
d_I, Intersection Delay [s/veh]	11.93												
Intersection LOS	B												
Intersection V/C	0.232												

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	34.67
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	2.025
Crosswalk LOS	F	F	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	778	778	0	667
d_b, Bicycle Delay [s]	16.81	16.81	45.00	20.00
l_b,int, Bicycle LOS Score for Intersection	1.894	2.006	4.132	1.994
Bicycle LOS	A	B	D	A

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Intersection Level Of Service Report
Intersection 8: Bower Dr and Riverdale Dr

Control Type:	Two-way stop	Delay (sec / veh):	9.0
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.036

Intersection Setup

Name						
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	0	0	0	6	21	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	45	22	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	45	22	9	31	0
Peak Hour Factor	0.9470	0.9470	0.9470	0.9470	0.9470	0.9470
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	12	6	2	8	0
Total Analysis Volume [veh/h]	0	48	23	10	33	0
Pedestrian Volume [ped/h]	0		0		0	

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Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.04	0.00
d_M, Delay for Movement [s/veh]	7.28	0.00	0.00	0.00	9.03	8.58
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.11	0.11
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	2.77	2.77
d_A, Approach Delay [s/veh]	0.00		0.00		9.03	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	2.61					
Intersection LOS	A					

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Intersection Level Of Service Report
Intersection 9: Riverdale Drive and Western Site Access

Control Type:	Two-way stop	Delay (sec / veh):	9.0
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.020

Intersection Setup

Name						
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.4900	1.0000	1.0000	1.4900
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	18	23	13	9	4	27
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	18	23	13	9	4	27
Peak Hour Factor	0.9470	0.9470	0.9470	0.9470	0.9470	0.9470
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	5	6	3	2	1	7
Total Analysis Volume [veh/h]	19	24	14	10	4	29
Pedestrian Volume [ped/h]	0		0		0	

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Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.02	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	8.95	8.56	0.00	0.00	7.27	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.13	0.13	0.00	0.00	0.01	0.01
95th-Percentile Queue Length [ft/ln]	3.34	3.34	0.00	0.00	0.19	0.19
d_A, Approach Delay [s/veh]	8.73		0.00		0.88	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	4.05					
Intersection LOS	A					

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Intersection Level Of Service Report
Intersection 10: Riverdale Drive and Eastern Site Access

Control Type:	Two-way stop	Delay (sec / veh):	9.1
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.031

Intersection Setup

Name						
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.4900	1.0000	1.0000	1.4900
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	27	34	23	13	12	4
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	27	34	23	13	12	4
Peak Hour Factor	0.9470	0.9470	0.9470	0.9470	0.9470	0.9470
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	9	6	3	3	1
Total Analysis Volume [veh/h]	29	36	24	14	13	4
Pedestrian Volume [ped/h]	0		0		0	

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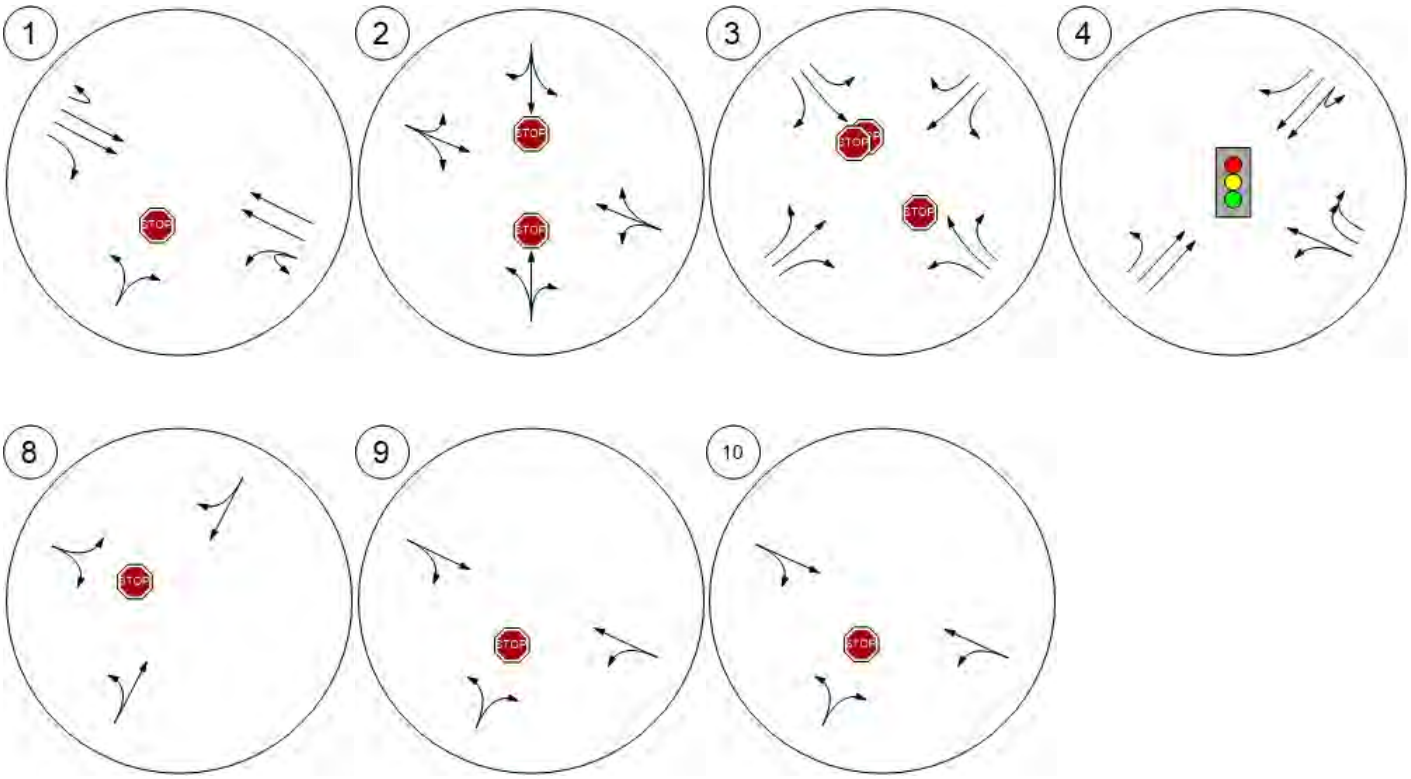
Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

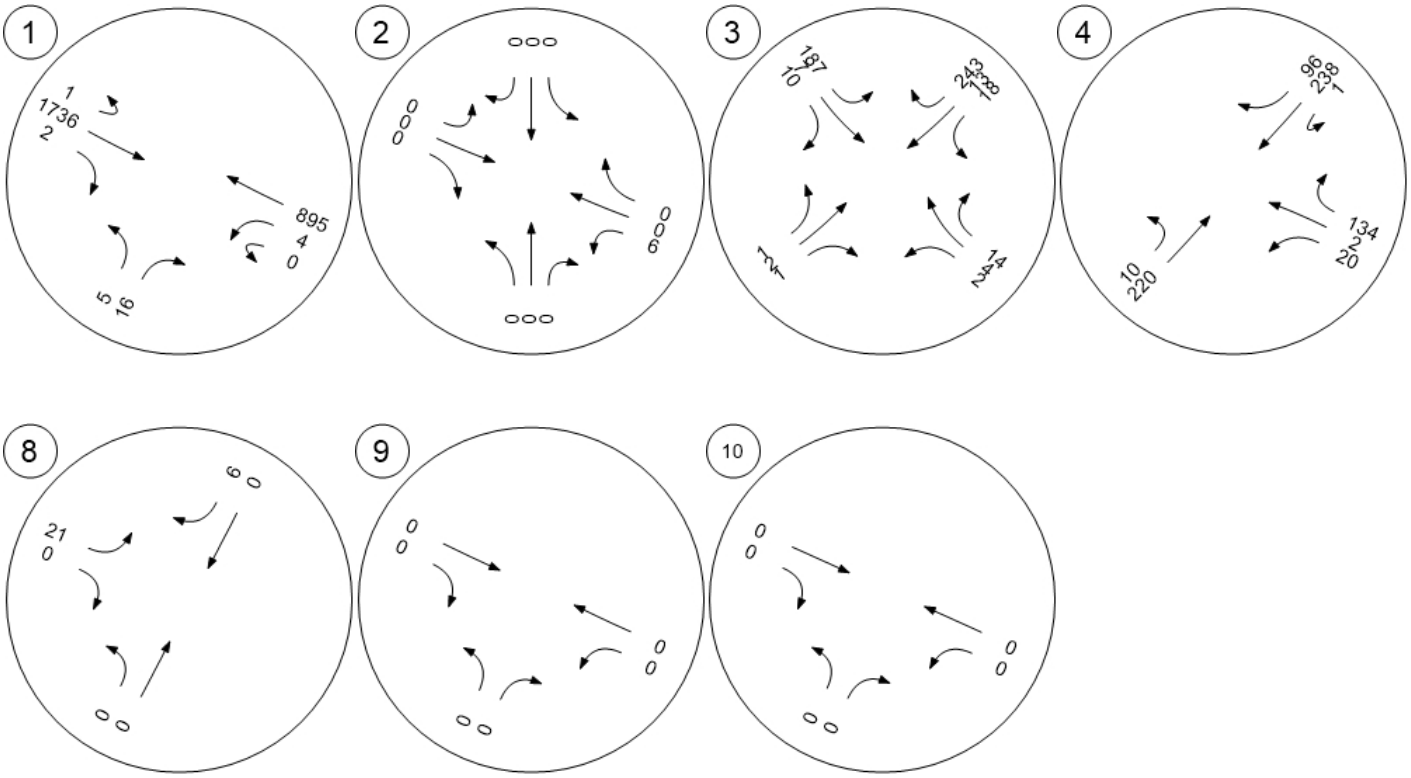
Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.03	0.03	0.00	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	9.09	8.70	0.00	0.00	7.31	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.21	0.21	0.00	0.00	0.03	0.03
95th-Percentile Queue Length [ft/ln]	5.24	5.24	0.00	0.00	0.63	0.63
d_A, Approach Delay [s/veh]	8.88		0.00		5.59	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	5.60					
Intersection LOS	A					

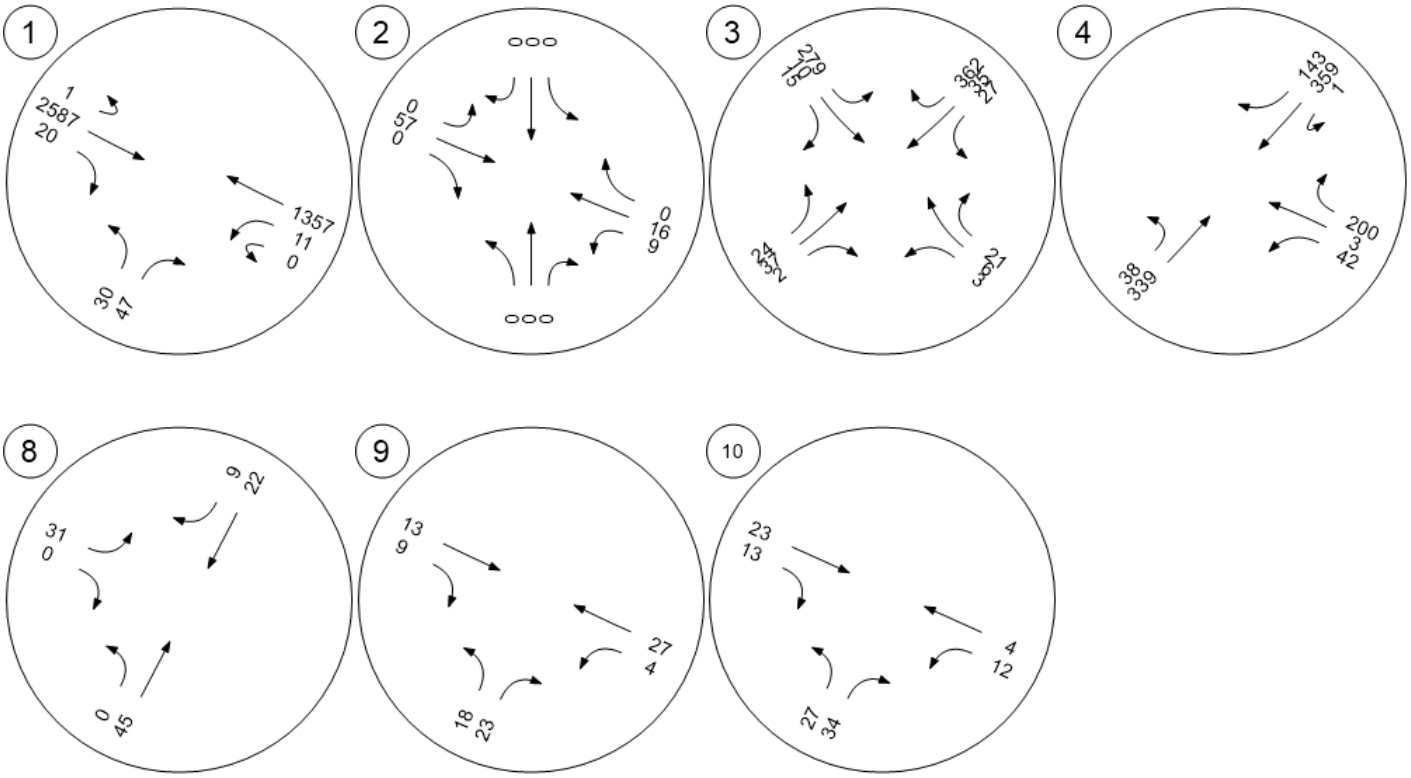
Lane Configuration and Traffic Control



Traffic Volume - Base Volume



Traffic Volume - Future Total Volume



Vistro File: C:\...\Ramsey Model.vistro
Report File: C:\...\2040 PM Build.pdf

Scenario 10 2040 PM Build
11/9/2020

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	HWY 10 and Bowers Drive	Two-way stop	HCM 6th Edition	NB Left	14.494	8,908.8	F
2	Riverdale Drive and Llama Street	Two-way stop	HCM 6th Edition	SB Left	0.005	9.1	A
3	Riverdale Drive/Armostrong Boulevard and EB Hwy 10 Ramp	Two-way stop	HCM 6th Edition	SEB Left	0.585	19.8	C
4	Armstrong Boulevard and WB Hwy 10 Ramp	Signalized	HCM 6th Edition	NB Left	0.545	17.7	B
8	Bower Dr and Riverdale Dr	Two-way stop	HCM 6th Edition	EB Left	0.041	9.3	A
9	Riverdale Drive and Western Site Access	Two-way stop	HCM 6th Edition	NB Left	0.016	9.2	A
10	Riverdale Drive and Eastern Site Access	Two-way stop	HCM 6th Edition	NB Left	0.023	9.4	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

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Intersection Level Of Service Report
Intersection 1: HWY 10 and Bowers Drive

Control Type:	Two-way stop	Delay (sec / veh):	8,908.8
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	14.494

Intersection Setup

Name								
Approach	Northbound		Eastbound			Westbound		
Lane Configuration								
Turning Movement	Left	Right	U-turn	Thru	Right	U-turn	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	325.00	100.00	225.00	360.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		65.00			65.00		
Grade [%]	0.00		0.00			0.00		
Crosswalk	Yes		Yes			Yes		

Volumes

Name								
Base Volume Input [veh/h]	6	17	1	1367	7	1	16	2051
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	16	16	0	0	48	0	14	16
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	25	41	1	2037	58	1	38	3072
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	11	0	536	15	0	10	808
Total Analysis Volume [veh/h]	26	43	1	2144	61	1	40	3234
Pedestrian Volume [ped/h]	0		0			0		

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Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	14.49	0.20	0.15	0.02	0.00	0.03	0.17	0.03
d_M, Delay for Movement [s/veh]	8908.80	6918.55	615.50	0.00	0.00	119.73	24.70	0.00
Movement LOS	F	F	F	A	A	F	C	A
95th-Percentile Queue Length [veh/ln]	10.50	10.50	0.35	0.00	0.00	0.73	0.73	0.00
95th-Percentile Queue Length [ft/ln]	262.55	262.55	8.77	0.00	0.00	18.20	18.20	0.00
d_A, Approach Delay [s/veh]	7668.50		0.28			0.34		
Approach LOS	F		A			A		
d_I, Intersection Delay [s/veh]	95.65							
Intersection LOS	F							

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Intersection Level Of Service Report
Intersection 2: Riverdale Drive and Llama Street

Control Type:	Two-way stop	Delay (sec / veh):	9.1
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.005

Intersection Setup

Name													
Approach	Northbound			Southbound			Eastbound			Westbound			
Lane Configuration													
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	U-tu	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			35.00			
Grade [%]	0.00			0.00			0.00			0.00			
Crosswalk	Yes			Yes			Yes			Yes			

Volumes

Name													
Base Volume Input [veh/h]	0	0	1	3	0	0	0	0	0	1	1	0	4
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900	1.490	1.490	1.490	1.490
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	41	0	0	0	47	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	1	4	0	0	0	41	0	1	1	47	6
Peak Hour Factor	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.900	0.900	0.900	0.900
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	0	0	0	1	0	0	0	11	0	0	0	13	2
Total Analysis Volume [veh/h]	0	0	1	4	0	0	0	46	0	1	1	52	7
Pedestrian Volume [ped/h]	0			0			0			0			

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Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	9.11	9.62	8.52	9.14	9.61	8.58	7.33	0.00	0.00	8.35	7.31	0.00	0.00
Movement LOS	A	A	A	A	A	A	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.07	0.07	0.07	0.34	0.34	0.34	0.00	0.00	0.00	0.12	0.12	0.12	0.12
d_A, Approach Delay [s/veh]	8.52			9.14			0.00			0.26			
Approach LOS	A			A			A			A			
d_I, Intersection Delay [s/veh]	0.54												
Intersection LOS	A												

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Intersection Level Of Service Report
Intersection 3: Riverdale Drive/Armostrong Boulevard and EB Hwy 10 Ramp

Control Type:	Two-way stop	Delay (sec / veh):	19.8
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.585

Intersection Setup

Name													
Approach	Southbound				Northeastbound				Southwestbound				
Lane Configuration													
Turning Movement	Left	Thru	Right	Right	Left	Left	Thru	Right	U-turn	Left	Thru	Right	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	1	0	0	1	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	300.00	100.00	100.00	300.00	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00				35.00				35.00				
Grade [%]	0.00				0.00				0.00				
Crosswalk	Yes				Yes				Yes				

Volumes

Name													
Base Volume Input [veh/h]	0	0	0	0	10	0	16	3	1	22	5	0	208
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.4900	1.0000	1.4900	1.4900	1.490	1.490	1.490	1.000	1.490
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	16	0	24	1	0	0	46	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	0	31	0	48	5	1	33	53	0	310
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	0.8610	1.0000	0.8610	0.8610	0.861	0.861	0.861	1.000	0.861
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	0	0	0	0	9	0	14	1	0	10	15	0	90
Total Analysis Volume [veh/h]	0	0	0	0	36	0	56	6	1	38	62	0	360
Pedestrian Volume [ped/h]	0				0				0				

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Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	8.27	0.00	0.00	0.00	8.74	7.40	0.00	0.00	0.00
Movement LOS					A		A	A	A	A	A		A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.10	0.00	0.00	0.00	0.08	0.08	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	2.45	0.00	0.00	0.00	1.98	1.98	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.00				3.04				0.63				
Approach LOS	A				A				A				
d_I, Intersection Delay [s/veh]	8.32												
Intersection LOS	C												

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Intersection Setup

Name									
Approach	Northwestbound					Southeastbound			
Lane Configuration									
Turning Movement	U-turn	Left	Thru	Thru	Right	Left	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	0	1	1	0	0	1
Entry Pocket Length [ft]	225.00	100.00	100.00	100.00	290.00	280.00	100.00	100.00	280.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00					30.00			
Grade [%]	0.00					0.00			
Crosswalk	Yes					Yes			

Volumes

Name									
Base Volume Input [veh/h]	1	1	11	0	46	193	0	8	4
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.4900	1.4900	1.4900	1.0000	1.4900	1.4900	1.0000	1.4900	1.4900
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	1	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	2	16	0	69	288	0	12	6
Peak Hour Factor	0.8610	0.8610	0.8610	1.0000	0.8610	0.8610	1.0000	0.8610	0.8610
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	1	5	0	20	84	0	3	2
Total Analysis Volume [veh/h]	1	2	19	0	80	334	0	14	7
Pedestrian Volume [ped/h]	0					0			

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Intersection Settings

Priority Scheme	Stop	Stop
Flared Lane		
Storage Area [veh]	0	0
Two-Stage Gap Acceptance	No	No
Number of Storage Spaces in Median	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.05	0.00	0.08	0.58	0.00	0.02	0.01
d_M, Delay for Movement [s/veh]	12.55	12.55	15.05	0.00	8.87	19.80	0.00	11.17	8.61
Movement LOS	B	B	C		A	C		B	A
95th-Percentile Queue Length [veh/ln]	0.02	0.02	0.16	0.00	0.26	3.75	0.00	0.07	0.02
95th-Percentile Queue Length [ft/ln]	0.47	0.47	3.97	0.00	6.43	93.80	0.00	1.80	0.53
d_A, Approach Delay [s/veh]	10.13					19.24			
Approach LOS	B					C			
d_I, Intersection Delay [s/veh]	8.32								
Intersection LOS	C								

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Intersection Level Of Service Report
Intersection 4: Armstrong Boulevard and WB Hwy 10 Ramp

Control Type:	Signalized	Delay (sec / veh):	17.7
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.545

Intersection Setup

Name													
Approach	Northbound				Southbound			Eastbound			Westbound		
Lane Configuration													
Turning Movement	U-tu	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	0	0	0	1	0	0	0	1	0	1
Entry Pocket Length [ft]	395.0	100.0	100.0	100.0	100.00	100.00	315.00	100.00	100.00	100.00	685.00	100.00	685.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00				35.00			30.00			30.00		
Grade [%]	0.00				0.00			0.00			0.00		
Curb Present	No				No						No		
Crosswalk	No				No			No			Yes		

Volumes

Name													
Base Volume Input [veh/h]	2	34	248	0	0	210	257	0	0	0	19	2	320
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.490	1.490	1.490	1.000	1.0000	1.4900	1.4900	1.0000	1.0000	1.0000	1.4900	1.4900	1.4900
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	16	8	0	0	12	0	0	0	0	34	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	3	67	378	0	0	325	383	0	0	0	62	3	477
Peak Hour Factor	0.916	0.916	0.916	1.000	1.0000	0.9160	0.9160	1.0000	1.0000	1.0000	0.9160	0.9160	0.9160
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	18	103	0	0	89	105	0	0	0	17	1	130
Total Analysis Volume [veh/h]	3	73	413	0	0	355	418	0	0	0	68	3	521
Presence of On-Street Parking	No			No	No		No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0				0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0				0			0			0		
v_co, Outbound Pedestrian Volume crossing	0				0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0				0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0				0			0			0		
Bicycle Volume [bicycles/h]	0				0			0			0		

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Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permi	Prote	Permi	Permi	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	5	2	0	0	6	0	0	0	0	0	8	0
Auxiliary Signal Groups													
Lead / Lag	-	Lead	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	7	10	0	0	10	0	0	0	0	0	10	0
Maximum Green [s]	0	20	35	0	0	35	0	0	0	0	0	30	0
Amber [s]	0.0	3.0	5.0	0.0	0.0	5.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0
All red [s]	0.0	2.5	1.5	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	3.5	0.0
Split [s]	0	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Extension [s]	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0
Walk [s]	0	0	7	0	0	0	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	0	20	0	0	0	0	0	0	0	0	0	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk			No			No						No	
I1, Start-Up Lost Time [s]	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	3.5	4.5	0.0	0.0	4.5	0.0	0.0	0.0	0.0	0.0	4.5	0.0
Minimum Recall		No	Yes			Yes						No	
Maximum Recall		No	No			No						No	
Pedestrian Recall		No	No			No						No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	R		C	R
C, Cycle Length [s]	58	58	58	58		58	58
L, Total Lost Time per Cycle [s]	5.50	6.50	6.50	6.50		6.50	6.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	3.50	4.50	4.50	4.50		4.50	4.50
g_i, Effective Green Time [s]	5	30	20	20		15	15
g / C, Green / Cycle	0.09	0.52	0.34	0.34		0.26	0.26
(v / s)_i Volume / Saturation Flow Rate	0.05	0.13	0.11	0.29		0.04	0.21
s, saturation flow rate [veh/h]	1603	3204	3204	1431		1606	2532
c, Capacity [veh/h]	137	1670	1093	488		411	648
d1, Uniform Delay [s]	25.58	7.67	14.23	17.87		16.88	20.31
k, delay calibration	0.11	0.11	0.11	0.11		0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	3.47	0.08	0.17	4.45		0.20	2.40
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00		0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00		1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00		1.00	1.00

Lane Group Results

X, volume / capacity	0.55	0.25	0.32	0.86		0.17	0.80
d, Delay for Lane Group [s/veh]	29.05	7.75	14.40	22.33		17.08	22.71
Lane Group LOS	C	A	B	C		B	C
Critical Lane Group	Yes	No	No	Yes		No	Yes
50th-Percentile Queue Length [veh/ln]	1.06	1.11	1.53	5.05		0.70	3.21
50th-Percentile Queue Length [ft/ln]	26.55	27.87	38.26	126.36		17.53	80.32
95th-Percentile Queue Length [veh/ln]	1.91	2.01	2.75	8.74		1.26	5.78
95th-Percentile Queue Length [ft/ln]	47.79	50.16	68.86	218.54		31.56	144.57

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Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	29.05	29.05	7.75	0.00	0.00	14.40	22.33	0.00	0.00	0.00	17.08	17.08	22.71
Movement LOS	C	C	A			B	C				B	B	C
d_A, Approach Delay [s/veh]	11.06				18.69			0.00			22.03		
Approach LOS	B				B			A			C		
d_I, Intersection Delay [s/veh]	17.74												
Intersection LOS	B												
Intersection V/C	0.545												

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	34.67
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	2.132
Crosswalk LOS	F	F	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	778	778	0	667
d_b, Bicycle Delay [s]	16.81	16.81	45.00	20.00
l_b,int, Bicycle LOS Score for Intersection	1.903	2.197	4.132	2.536
Bicycle LOS	A	B	D	B

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Intersection Level Of Service Report
Intersection 8: Bower Dr and Riverdale Dr

Control Type:	Two-way stop	Delay (sec / veh):	9.3
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.041

Intersection Setup

Name						
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	0	0	0	23	23	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	32	62	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	32	62	34	34	0
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	8	16	9	9	0
Total Analysis Volume [veh/h]	0	34	65	36	36	0
Pedestrian Volume [ped/h]	0		0		0	

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Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.04	0.00
d_M, Delay for Movement [s/veh]	7.41	0.00	0.00	0.00	9.27	8.86
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.13	0.13
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	3.20	3.20
d_A, Approach Delay [s/veh]	0.00		0.00		9.27	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	1.95					
Intersection LOS	A					

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Intersection Level Of Service Report
Intersection 9: Riverdale Drive and Western Site Access

Control Type:	Two-way stop	Delay (sec / veh):	9.2
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.016

Intersection Setup

Name						
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.4900	1.0000	1.0000	1.4900
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	13	16	36	26	13	19
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	13	16	36	26	13	19
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	4	9	7	3	5
Total Analysis Volume [veh/h]	14	17	38	27	14	20
Pedestrian Volume [ped/h]	0		0		0	

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Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.02	0.00	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	9.17	8.67	0.00	0.00	7.36	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.10	0.10	0.00	0.00	0.03	0.03
95th-Percentile Queue Length [ft/ln]	2.51	2.51	0.00	0.00	0.69	0.69
d_A, Approach Delay [s/veh]	8.89		0.00		3.03	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	2.91					
Intersection LOS	A					

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Intersection Level Of Service Report
Intersection 10: Riverdale Drive and Eastern Site Access

Control Type:	Two-way stop	Delay (sec / veh):	9.4
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.023

Intersection Setup

Name						
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.4900	1.0000	1.0000	1.4900
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	19	24	16	36	34	13
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	19	24	16	36	34	13
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	5	6	4	9	9	3
Total Analysis Volume [veh/h]	20	25	17	38	36	14
Pedestrian Volume [ped/h]	0		0		0	

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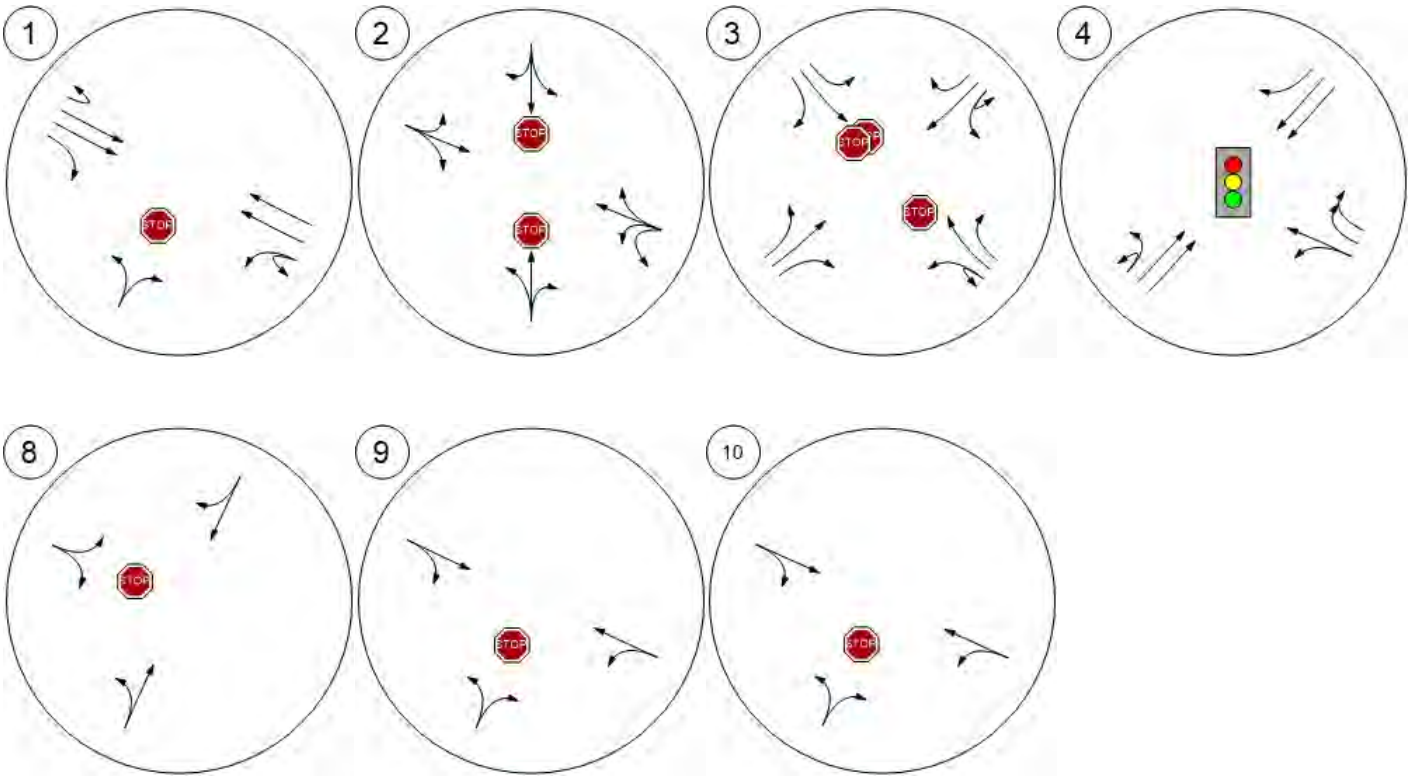
Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

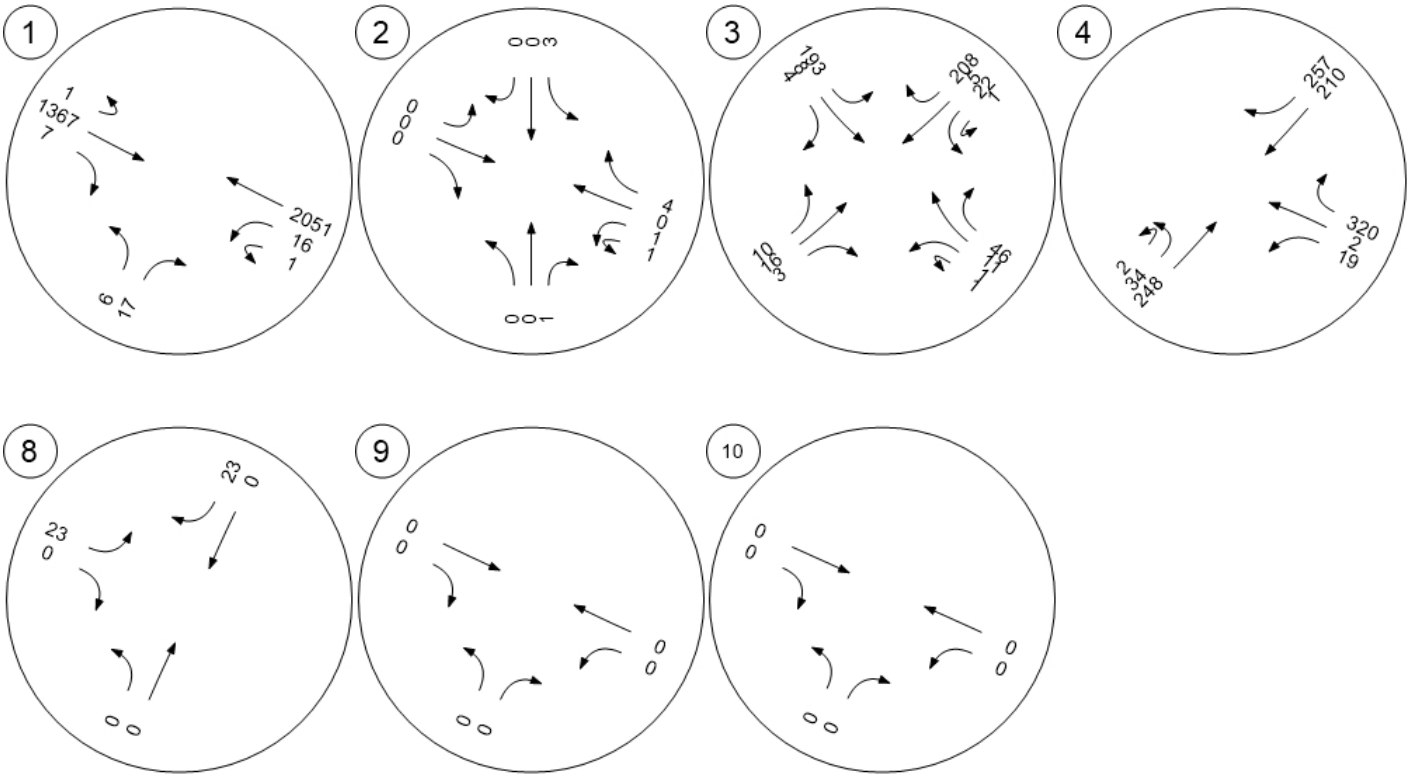
Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.02	0.00	0.00	0.02	0.00
d_M, Delay for Movement [s/veh]	9.41	8.66	0.00	0.00	7.38	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.15	0.15	0.00	0.00	0.07	0.07
95th-Percentile Queue Length [ft/ln]	3.74	3.74	0.00	0.00	1.78	1.78
d_A, Approach Delay [s/veh]	9.00		0.00		5.31	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	4.47					
Intersection LOS	A					

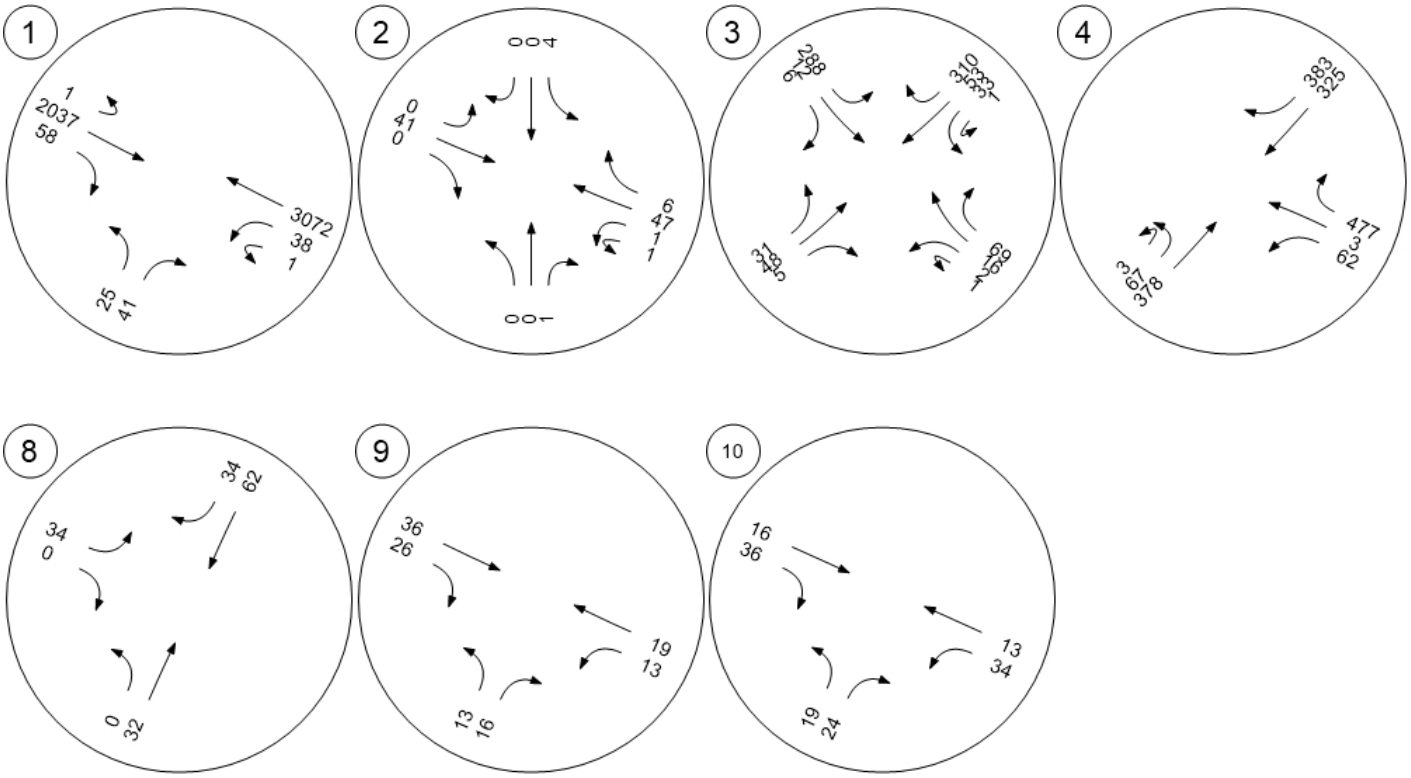
Lane Configuration and Traffic Control



Traffic Volume - Base Volume



Traffic Volume - Future Total Volume



Vistro File: C:\...\Ramsey Model.vistro
Report File: C:\...\Mitigated 2040 AM Build.pdf

Scenario 11 Mitigated 2040 AM Build
11/9/2020

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	HWY 10 and Bowers Drive	Two-way stop	HCM 6th Edition	NB Right	0.365	45.7	E
2	Riverdale Drive and Llama Street	Two-way stop	HCM 6th Edition	WB Left	0.007	7.4	A
3	Riverdale Drive/Armostrong Boulevard and EB Hwy 10 Ramp	Two-way stop	HCM 6th Edition	NWB Thru	0.015	14.2	B
4	Armstrong Boulevard and WB Hwy 10 Ramp	Signalized	HCM 6th Edition	NB Left	0.252	12.6	B
8	Bower Dr and Riverdale Dr	Two-way stop	HCM 6th Edition	NB Thru	0.028	9.3	A
9	Riverdale Drive and Western Site Access	Two-way stop	HCM 6th Edition	NB Left	0.010	8.9	A
10	Riverdale Drive and Eastern Site Access	Two-way stop	HCM 6th Edition	NB Left	0.016	9.2	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

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Intersection Level Of Service Report
Intersection 1: HWY 10 and Bowers Drive

Control Type:	Two-way stop	Delay (sec / veh):	45.7
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.365

Intersection Setup

Name								
Approach	Northbound		Eastbound			Westbound		
Lane Configuration								
Turning Movement	Left	Right	U-turn	Thru	Right	U-turn	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	325.00	100.00	225.00	360.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		65.00			65.00		
Grade [%]	0.00		0.00			0.00		
Crosswalk	Yes		Yes			Yes		

Volumes

Name								
Base Volume Input [veh/h]	5	16	1	1736	2	0	4	895
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	23	0	0	17	0	5	45
Diverted Trips [veh/h]	-7	0	0	0	0	0	0	7
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	47	1	2587	20	0	11	1386
Peak Hour Factor	0.9470	0.9470	0.9470	0.9470	0.9470	0.9470	0.9470	0.9470
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	12	0	683	5	0	3	366
Total Analysis Volume [veh/h]	0	50	1	2732	21	0	12	1464
Pedestrian Volume [ped/h]	0		0			0		

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Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.36	0.01	0.03	0.00	0.00	0.08	0.01
d_M, Delay for Movement [s/veh]	852.38	45.66	34.97	0.00	0.00	371.73	32.65	0.00
Movement LOS	F	E	D	A	A	F	D	A
95th-Percentile Queue Length [veh/ln]	1.51	1.51	0.02	0.00	0.00	0.27	0.27	0.00
95th-Percentile Queue Length [ft/ln]	37.84	37.84	0.62	0.00	0.00	6.80	6.80	0.00
d_A, Approach Delay [s/veh]	45.66		0.01			0.27		
Approach LOS	E		A			A		
d_I, Intersection Delay [s/veh]	0.63							
Intersection LOS	E							

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Intersection Level Of Service Report
Intersection 2: Riverdale Drive and Llama Street

Control Type:	Two-way stop	Delay (sec / veh):	7.4
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.007

Intersection Setup

Name											
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	0	0	0	0	0	0	6	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	80	0	0	16	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	7	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	0	0	0	0	87	0	9	16	0
Peak Hour Factor	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	0	0	0	0	24	0	3	4	0
Total Analysis Volume [veh/h]	0	0	0	0	0	0	0	97	0	10	18	0
Pedestrian Volume [ped/h]	0			0			0			0		

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Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00
d_M, Delay for Movement [s/veh]	9.33	9.80	8.75	9.33	9.80	8.39	7.25	0.00	0.00	7.42	0.00	0.00
Movement LOS	A	A	A	A	A	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.02	0.02
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50	0.50	0.50
d_A, Approach Delay [s/veh]	9.29			9.17			0.00			2.65		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	0.59											
Intersection LOS	A											

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Intersection Level Of Service Report
Intersection 3: Riverdale Drive/Armostrong Boulevard and EB Hwy 10 Ramp

Control Type:	Two-way stop	Delay (sec / veh):	14.2
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.015

Intersection Setup

Name												
Approach	Southbound				Northeastbound				Southwestbound			
Lane Configuration												
Turning Movement	Left	Thru	Right	Right	Left	Left	Thru	Right	Left	Thru	Right	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	1	0	0	1	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	300.00	100.00	100.00	300.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00				35.00				35.00			
Grade [%]	0.00				0.00				0.00			
Crosswalk	Yes				Yes				Yes			

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	0	1	0	2	1	18	13	0	243
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.4900	1.0000	1.4900	1.4900	1.4900	1.4900	1.0000	1.4900
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	23	0	56	1	0	16	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	7	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	0	24	0	66	2	27	35	0	362
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	0.9430	1.0000	0.9430	0.9430	0.9430	0.9430	1.0000	0.9430
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	0	6	0	17	1	7	9	0	96
Total Analysis Volume [veh/h]	0	0	0	0	25	0	70	2	29	37	0	384
Pedestrian Volume [ped/h]	0				0				0			

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Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.02	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	8.23	0.00	0.00	0.00	7.40	0.00	0.00	0.00
Movement LOS					A		A	A	A	A		A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.06	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	1.68	0.00	0.00	0.00	1.45	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.00				2.12				0.48			
Approach LOS	A				A				A			
d_I, Intersection Delay [s/veh]	5.72											
Intersection LOS	B											

Appendix F - Capacity Analysis Backup

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Intersection Setup

Name								
Approach	Northwestbound				Southeastbound			
Lane Configuration								
Turning Movement	Left	Thru	Thru	Right	Left	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	1	0	0	1
Entry Pocket Length [ft]	225.00	100.00	100.00	290.00	280.00	100.00	100.00	280.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00				30.00			
Grade [%]	0.00				0.00			
Crosswalk	Yes				Yes			

Volumes

Name								
Base Volume Input [veh/h]	2	4	0	14	187	0	7	10
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.4900	1.4900	1.0000	1.4900	1.4900	1.0000	1.4900	1.4900
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	3	6	0	21	279	0	10	15
Peak Hour Factor	0.9430	0.9430	1.0000	0.9430	0.9430	1.0000	0.9430	0.9430
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	2	0	6	74	0	3	4
Total Analysis Volume [veh/h]	3	6	0	22	296	0	11	16
Pedestrian Volume [ped/h]	0				0			

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Intersection Settings

Priority Scheme	Stop	Stop
Flared Lane		
Storage Area [veh]	0	0
Two-Stage Gap Acceptance	No	No
Number of Storage Spaces in Median	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.02	0.00	0.02	0.43	0.00	0.02	0.02
d_M, Delay for Movement [s/veh]	12.08	14.17	0.00	8.71	14.07	0.00	10.60	8.53
Movement LOS	B	B		A	B		B	A
95th-Percentile Queue Length [veh/ln]	0.02	0.05	0.00	0.07	2.16	0.00	0.05	0.05
95th-Percentile Queue Length [ft/ln]	0.44	1.15	0.00	1.70	53.91	0.00	1.28	1.18
d_A, Approach Delay [s/veh]	10.09				13.68			
Approach LOS	B				B			
d_I, Intersection Delay [s/veh]	5.72							
Intersection LOS	B							

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Intersection Level Of Service Report
Intersection 4: Armstrong Boulevard and WB Hwy 10 Ramp

Control Type:	Signalized	Delay (sec / veh):	12.6
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.252

Intersection Setup

Name													
Approach	Northbound			Southbound				Eastbound			Westbound		
Lane Configuration													
Turning Movement	Left	Thru	Right	U-tu	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	0	0	0	1	0	0	0	1	0	1
Entry Pocket Length [ft]	395.00	100.00	100.00	100.0	100.0	100.0	315.0	100.00	100.00	100.00	685.00	100.00	685.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00				30.00			30.00		
Grade [%]	0.00			0.00				0.00			0.00		
Curb Present	No			No							No		
Crosswalk	No			No				No			Yes		

Volumes

Name													
Base Volume Input [veh/h]	10	220	0	1	0	238	96	0	0	0	20	2	134
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.4900	1.4900	1.0000	1.490	1.000	1.490	1.490	1.0000	1.0000	1.0000	1.4900	1.4900	1.4900
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	45	11	0	0	0	4	0	0	0	0	12	0	0
Diverted Trips [veh/h]	7	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	67	339	0	1	0	359	143	0	0	0	42	3	200
Peak Hour Factor	0.9310	0.9310	1.0000	0.931	1.000	0.931	0.931	1.0000	1.0000	1.0000	0.9310	0.9310	0.9310
Other Adjustment Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	18	91	0	0	0	96	38	0	0	0	11	1	54
Total Analysis Volume [veh/h]	72	364	0	1	0	386	154	0	0	0	45	3	215
Presence of On-Street Parking	No		No	No			No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0				0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0				0			0		
v_co, Outbound Pedestrian Volume crossing	0			0				0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0				0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0				0			0		
Bicycle Volume [bicycles/h]	0			0				0			0		

Appendix F - Capacity Analysis Backup

Generated with PTV VISTRO
Version 2020 (SP 0-3)

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Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permi	Permi	Permi	Permi	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	5	2	0	0	0	6	0	0	0	0	0	8	0
Auxiliary Signal Groups													
Lead / Lag	Lead	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	7	10	0	0	0	10	0	0	0	0	0	10	0
Maximum Green [s]	20	35	0	0	0	35	0	0	0	0	0	30	0
Amber [s]	3.0	5.0	0.0	0.0	0.0	5.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0
All red [s]	2.5	1.5	0.0	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	3.5	0.0
Split [s]	0	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	20	0	0	0	0	0	0	0	0	0	0	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No				No						No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	3.5	4.5	0.0	0.0	0.0	4.5	0.0	0.0	0.0	0.0	0.0	4.5	0.0
Minimum Recall	No	Yes				Yes						No	
Maximum Recall	No	No				No						No	
Pedestrian Recall	No	No				No						No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	C	R		C	R
C, Cycle Length [s]	43	43	43	43	43		43	43
L, Total Lost Time per Cycle [s]	5.50	6.50	6.50	6.50	6.50		6.50	6.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	2.00	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	3.50	4.50	4.50	4.50	4.50		4.50	4.50
g_i, Effective Green Time [s]	4	20	11	11	11		10	10
g / C, Green / Cycle	0.10	0.47	0.25	0.25	0.25		0.22	0.22
(v / s)_i Volume / Saturation Flow Rate	0.04	0.11	0.12	0.12	0.11		0.03	0.08
s, saturation flow rate [veh/h]	1603	3204	1645	1532	1431		1608	2532
c, Capacity [veh/h]	156	1522	486	383	358		361	568
d1, Uniform Delay [s]	18.43	6.72	13.80	13.84	13.62		13.40	14.21
k, delay calibration	0.11	0.11	0.11	0.11	0.11		0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	2.11	0.08	0.56	0.96	0.82		0.17	0.42
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00		0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00		1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00

Lane Group Results

X, volume / capacity	0.46	0.24	0.41	0.49	0.43		0.13	0.38
d, Delay for Lane Group [s/veh]	20.54	6.80	14.36	14.79	14.44		13.57	14.63
Lane Group LOS	C	A	B	B	B		B	B
Critical Lane Group	Yes	No	No	Yes	No		No	Yes
50th-Percentile Queue Length [veh/ln]	0.67	0.67	1.41	1.34	1.09		0.33	0.78
50th-Percentile Queue Length [ft/ln]	16.79	16.73	35.20	33.62	27.29		8.32	19.60
95th-Percentile Queue Length [veh/ln]	1.21	1.20	2.53	2.42	1.96		0.60	1.41
95th-Percentile Queue Length [ft/ln]	30.23	30.12	63.36	60.51	49.11		14.98	35.28

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Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	20.54	6.80	0.00	14.36	0.00	14.57	14.44	0.00	0.00	0.00	13.57	13.57	14.63
Movement LOS	C	A		B		B	B				B	B	B
d_A, Approach Delay [s/veh]	9.07			14.53				0.00			14.43		
Approach LOS	A			B				A			B		
d_I, Intersection Delay [s/veh]	12.59												
Intersection LOS	B												
Intersection V/C	0.252												

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	34.67
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	2.025
Crosswalk LOS	F	F	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	778	778	0	667
d_b, Bicycle Delay [s]	16.81	16.81	45.00	20.00
l_b,int, Bicycle LOS Score for Intersection	1.919	2.006	4.132	1.994
Bicycle LOS	A	B	D	A

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Intersection Level Of Service Report
Intersection 8: Bower Dr and Riverdale Dr

Control Type:	Two-way stop	Delay (sec / veh):	9.3
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.028

Intersection Setup

Name						
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	0	0	0	6	21	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	23	22	0	0	0
Diverted Trips [veh/h]	0	0	0	0	-5	5
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	23	22	9	26	5
Peak Hour Factor	0.9470	0.9470	0.9470	0.9470	0.9470	0.9470
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	6	6	2	7	1
Total Analysis Volume [veh/h]	0	24	23	10	27	5
Pedestrian Volume [ped/h]	0		0		0	

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Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.03	0.01	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	8.94	9.29	7.31	0.00	0.00	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.09	0.09	0.06	0.06	0.00	0.00
95th-Percentile Queue Length [ft/ln]	2.14	2.14	1.60	1.60	0.00	0.00
d_A, Approach Delay [s/veh]	9.29		5.09		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	4.39					
Intersection LOS	A					

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Intersection Level Of Service Report
Intersection 9: Riverdale Drive and Western Site Access

Control Type:	Two-way stop	Delay (sec / veh):	8.9
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.010

Intersection Setup

Name						
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.4900	1.0000	1.0000	1.4900
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	9	32	13	9	4	14
Diverted Trips [veh/h]	0	0	7	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	9	32	20	9	4	14
Peak Hour Factor	0.9470	0.9470	0.9470	0.9470	0.9470	0.9470
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	8	5	2	1	4
Total Analysis Volume [veh/h]	10	34	21	10	4	15
Pedestrian Volume [ped/h]	0		0		0	

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Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.03	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	8.92	8.59	0.00	0.00	7.28	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.13	0.13	0.00	0.00	0.01	0.01
95th-Percentile Queue Length [ft/ln]	3.35	3.35	0.00	0.00	0.19	0.19
d_A, Approach Delay [s/veh]	8.66		0.00		1.53	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	4.36					
Intersection LOS	A					

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Version 2020 (SP 0-3)

Intersection Level Of Service Report
Intersection 10: Riverdale Drive and Eastern Site Access

Control Type:	Two-way stop	Delay (sec / veh):	9.2
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.016

Intersection Setup

Name						
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.4900	1.0000	1.0000	1.4900
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	14	48	32	13	12	4
Diverted Trips [veh/h]	0	0	7	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	14	48	39	13	12	4
Peak Hour Factor	0.9470	0.9470	0.9470	0.9470	0.9470	0.9470
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	13	10	3	3	1
Total Analysis Volume [veh/h]	15	51	41	14	13	4
Pedestrian Volume [ped/h]	0		0		0	

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Version 2020 (SP 0-3)

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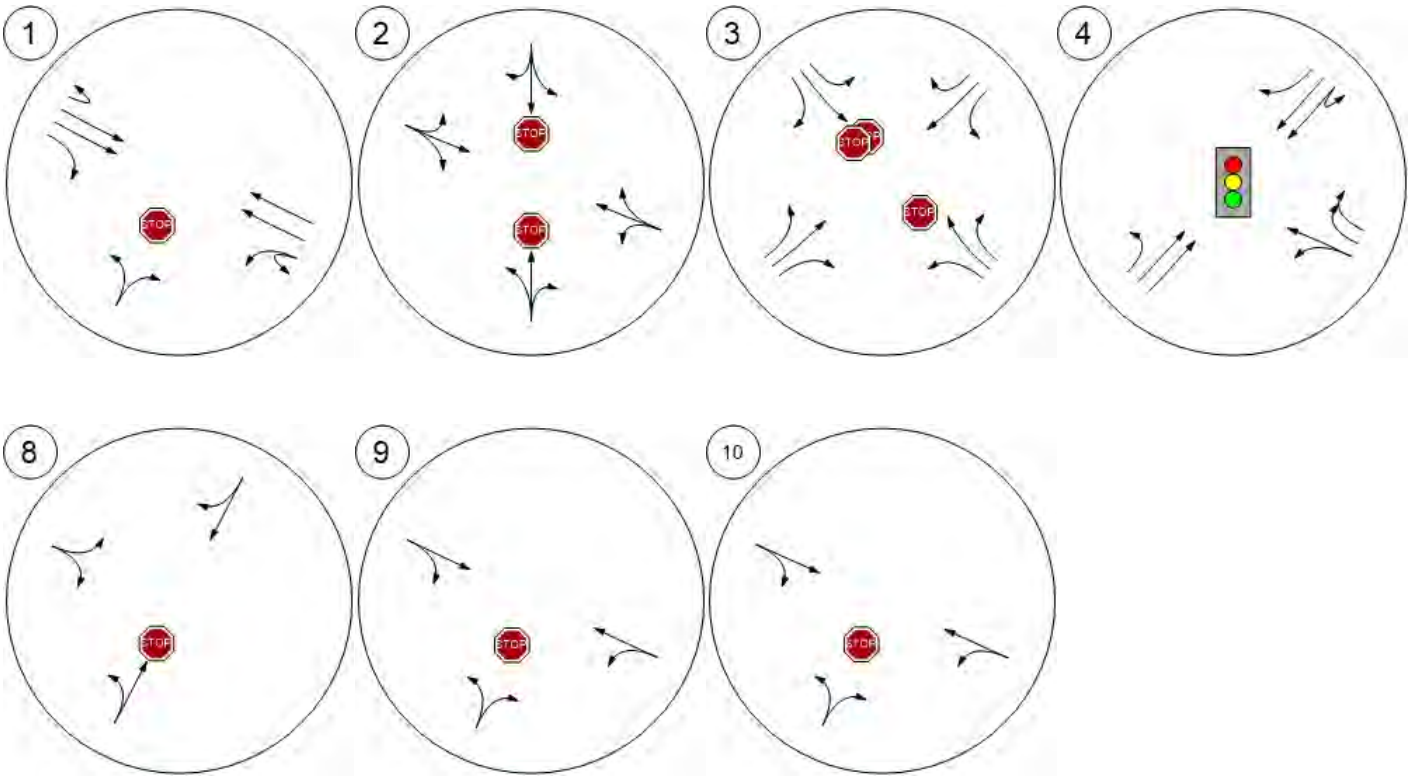
Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

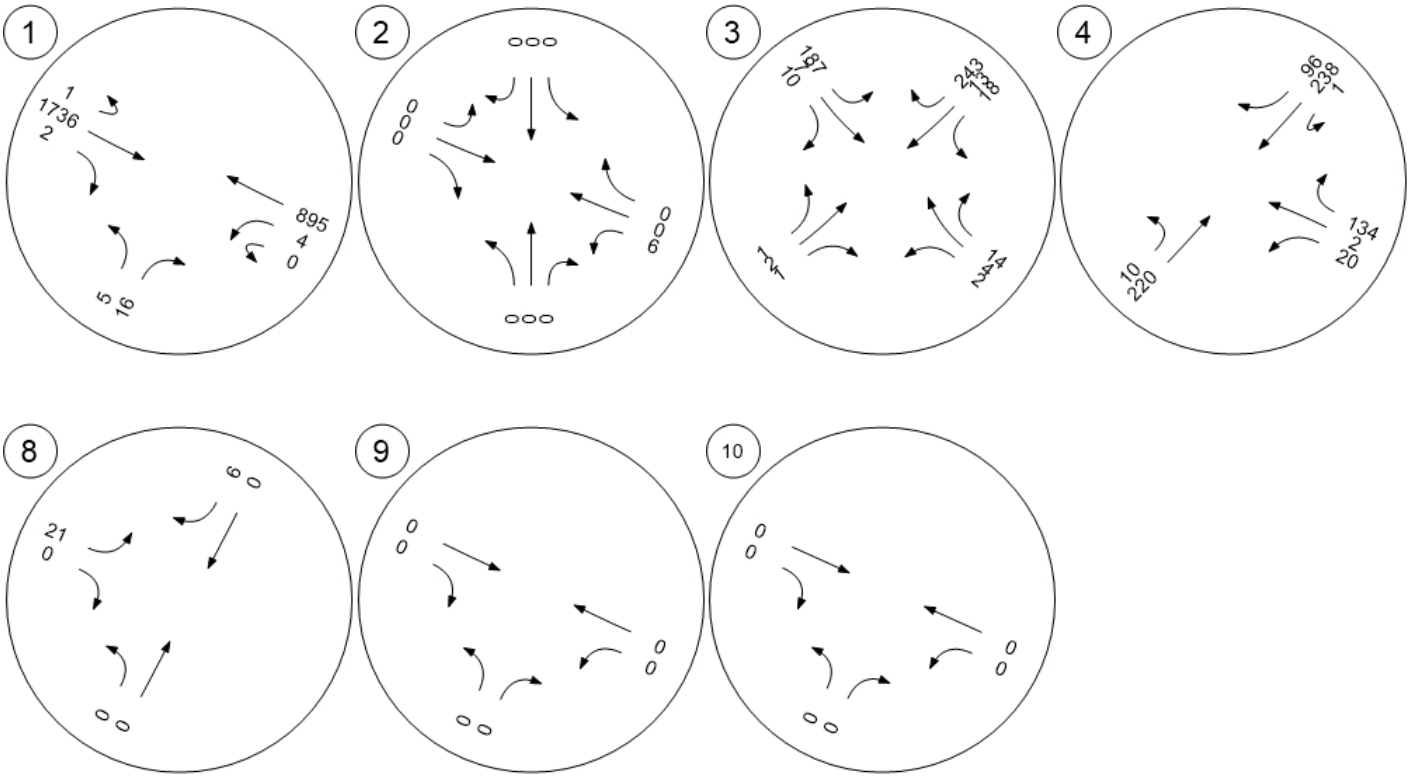
Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.05	0.00	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	9.18	8.78	0.00	0.00	7.34	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.21	0.21	0.00	0.00	0.03	0.03
95th-Percentile Queue Length [ft/ln]	5.32	5.32	0.00	0.00	0.63	0.63
d_A, Approach Delay [s/veh]	8.87		0.00		5.61	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	4.94					
Intersection LOS	A					

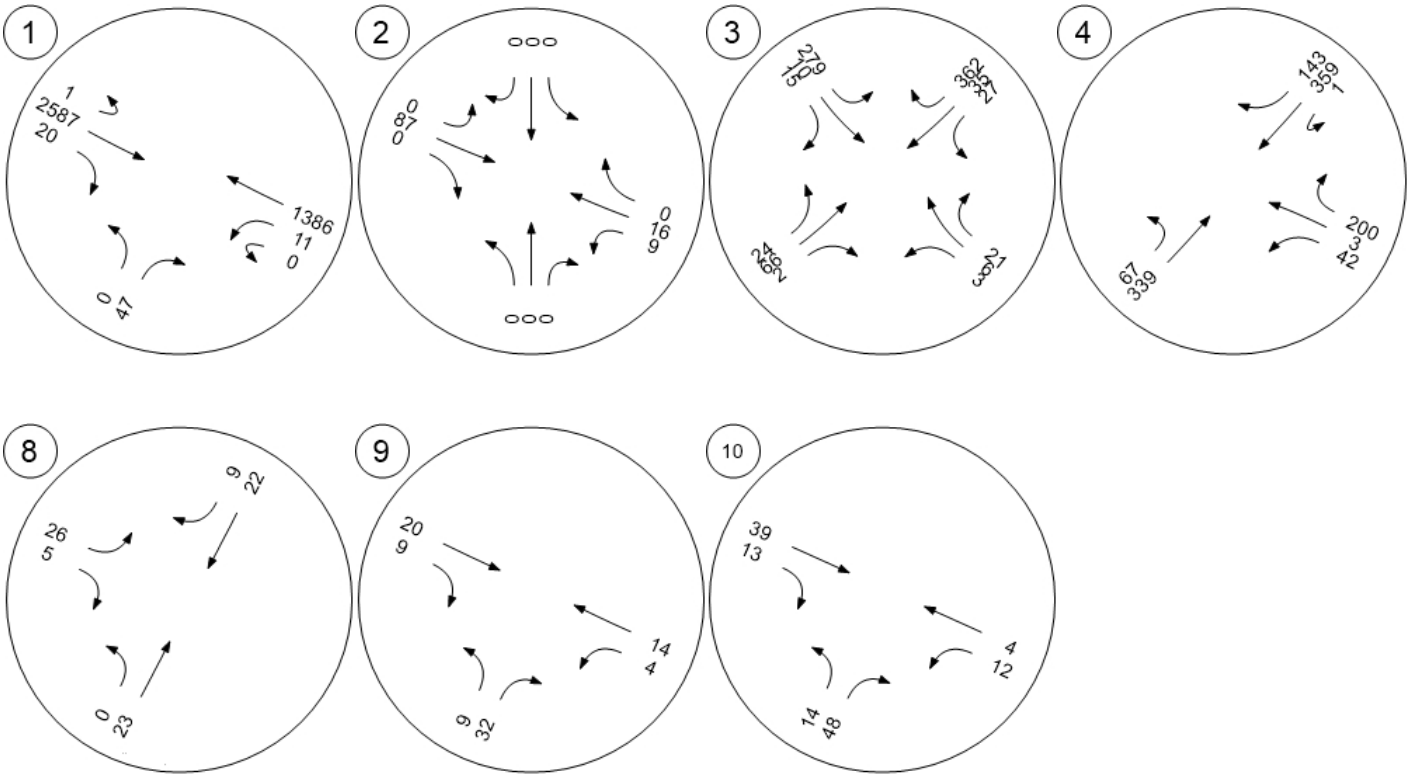
Lane Configuration and Traffic Control



Traffic Volume - Base Volume



Traffic Volume - Future Total Volume



Vistro File: C:\...\Ramsey Model.vistro
Report File: C:\...\Mitigated 2040 PM Build.pdf

Scenario 12 Mitigated 2040 PM Build
11/9/2020

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	HWY 10 and Bowers Drive	Two-way stop	HCM 6th Edition	EB U-T	0.155	645.6	F
2	Riverdale Drive and Llama Street	Two-way stop	HCM 6th Edition	SB Left	0.005	9.3	A
3	Riverdale Drive/Armostrong Boulevard and EB Hwy 10 Ramp	Two-way stop	HCM 6th Edition	SEB Left	0.614	21.6	C
4	Armstrong Boulevard and WB Hwy 10 Ramp	Signalized	HCM 6th Edition	NB Left	0.562	18.4	B
8	Bower Dr and Riverdale Dr	Two-way stop	HCM 6th Edition	NB Thru	0.020	9.3	A
9	Riverdale Drive and Western Site Access	Two-way stop	HCM 6th Edition	NB Left	0.007	9.1	A
10	Riverdale Drive and Eastern Site Access	Two-way stop	HCM 6th Edition	NB Left	0.011	9.5	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

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Intersection Level Of Service Report
Intersection 1: HWY 10 and Bowers Drive

Control Type:	Two-way stop	Delay (sec / veh):	645.6
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.155

Intersection Setup

Name								
Approach	Northbound		Eastbound			Westbound		
Lane Configuration								
Turning Movement	Left	Right	U-turn	Thru	Right	U-turn	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	325.00	100.00	225.00	360.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		65.00			65.00		
Grade [%]	0.00		0.00			0.00		
Crosswalk	Yes		Yes			Yes		

Volumes

Name								
Base Volume Input [veh/h]	6	17	1	1367	7	1	16	2051
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	16	0	0	48	0	14	32
Diverted Trips [veh/h]	-9	0	0	0	0	0	0	9
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	41	1	2037	58	1	38	3097
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	11	0	536	15	0	10	815
Total Analysis Volume [veh/h]	0	43	1	2144	61	1	40	3260
Pedestrian Volume [ped/h]	0		0			0		

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Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.20	0.15	0.02	0.00	0.03	0.17	0.03
d_M, Delay for Movement [s/veh]	2079.43	25.74	645.64	0.00	0.00	119.73	24.70	0.00
Movement LOS	F	D	F	A	A	F	C	A
95th-Percentile Queue Length [veh/ln]	0.72	0.72	0.36	0.00	0.00	0.73	0.73	0.00
95th-Percentile Queue Length [ft/ln]	18.02	18.02	8.99	0.00	0.00	18.20	18.20	0.00
d_A, Approach Delay [s/veh]	25.74		0.29			0.34		
Approach LOS	D		A			A		
d_I, Intersection Delay [s/veh]	0.52							
Intersection LOS	F							

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Intersection Level Of Service Report
Intersection 2: Riverdale Drive and Llama Street

Control Type:	Two-way stop	Delay (sec / veh):	9.3
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.005

Intersection Setup

Name													
Approach	Northbound			Southbound			Eastbound			Westbound			
Lane Configuration													
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	U-tu	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			35.00			
Grade [%]	0.00			0.00			0.00			0.00			
Crosswalk	Yes			Yes			Yes			Yes			

Volumes

Name													
Base Volume Input [veh/h]	0	0	1	3	0	0	0	0	0	1	1	0	4
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900	1.490	1.490	1.490	1.490
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	57	0	0	0	47	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	9	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	1	4	0	0	0	66	0	1	1	47	6
Peak Hour Factor	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.900	0.900	0.900	0.900
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	0	0	0	1	0	0	0	18	0	0	0	13	2
Total Analysis Volume [veh/h]	0	0	1	4	0	0	0	73	0	1	1	52	7
Pedestrian Volume [ped/h]	0			0			0			0			

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Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	9.28	9.78	8.64	9.31	9.78	8.58	7.33	0.00	0.00	8.48	7.36	0.00	0.00
Movement LOS	A	A	A	A	A	A	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.08	0.08	0.08	0.36	0.36	0.36	0.00	0.00	0.00	0.12	0.12	0.12	0.12
d_A, Approach Delay [s/veh]	8.64			9.31			0.00			0.26			
Approach LOS	A			A			A			A			
d_I, Intersection Delay [s/veh]	0.44												
Intersection LOS	A												

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Intersection Level Of Service Report
Intersection 3: Riverdale Drive/Armostrong Boulevard and EB Hwy 10 Ramp

Control Type:	Two-way stop	Delay (sec / veh):	21.6
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.614

Intersection Setup

Name													
Approach	Southbound				Northeastbound				Southwestbound				
Lane Configuration													
Turning Movement	Left	Thru	Right	Right	Left	Left	Thru	Right	U-turn	Left	Thru	Right	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	1	0	0	1	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	300.00	100.00	100.00	300.00	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00				35.00				35.00				
Grade [%]	0.00				0.00				0.00				
Crosswalk	Yes				Yes				Yes				

Volumes

Name													
Base Volume Input [veh/h]	0	0	0	0	10	0	16	3	1	22	5	0	208
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.4900	1.0000	1.4900	1.4900	1.490	1.490	1.490	1.000	1.490
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	16	0	40	1	0	0	46	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	9	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	0	31	0	73	5	1	33	53	0	310
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	0.8610	1.0000	0.8610	0.8610	0.861	0.861	0.861	1.000	0.861
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	0	0	0	0	9	0	21	1	0	10	15	0	90
Total Analysis Volume [veh/h]	0	0	0	0	36	0	85	6	1	38	62	0	360
Pedestrian Volume [ped/h]	0				0				0				

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Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	8.27	0.00	0.00	0.00	8.92	7.46	0.00	0.00	0.00
Movement LOS					A		A	A	A	A	A		A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.10	0.00	0.00	0.00	0.08	0.08	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	2.45	0.00	0.00	0.00	2.03	2.03	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.00				2.34				0.63				
Approach LOS	A				A				A				
d_I, Intersection Delay [s/veh]	8.69												
Intersection LOS	C												

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Intersection Setup

Name									
Approach	Northwestbound					Southeastbound			
Lane Configuration									
Turning Movement	U-turn	Left	Thru	Thru	Right	Left	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	0	1	1	0	0	1
Entry Pocket Length [ft]	225.00	100.00	100.00	100.00	290.00	280.00	100.00	100.00	280.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00					30.00			
Grade [%]	0.00					0.00			
Crosswalk	Yes					Yes			

Volumes

Name									
Base Volume Input [veh/h]	1	1	11	0	46	193	0	8	4
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.4900	1.4900	1.4900	1.0000	1.4900	1.4900	1.0000	1.4900	1.4900
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	1	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	2	16	0	69	288	0	12	6
Peak Hour Factor	0.8610	0.8610	0.8610	1.0000	0.8610	0.8610	1.0000	0.8610	0.8610
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	1	5	0	20	84	0	3	2
Total Analysis Volume [veh/h]	1	2	19	0	80	334	0	14	7
Pedestrian Volume [ped/h]	0					0			

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Intersection Settings

Priority Scheme	Stop	Stop
Flared Lane		
Storage Area [veh]	0	0
Two-Stage Gap Acceptance	No	No
Number of Storage Spaces in Median	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.05	0.00	0.08	0.61	0.00	0.02	0.01
d_M, Delay for Movement [s/veh]	12.90	12.90	15.47	0.00	9.03	21.60	0.00	11.42	8.61
Movement LOS	B	B	C		A	C		B	A
95th-Percentile Queue Length [veh/ln]	0.02	0.02	0.17	0.00	0.27	4.13	0.00	0.07	0.02
95th-Percentile Queue Length [ft/ln]	0.49	0.49	4.13	0.00	6.70	103.22	0.00	1.87	0.53
d_A, Approach Delay [s/veh]	10.34					20.94			
Approach LOS	B					C			
d_I, Intersection Delay [s/veh]	8.69								
Intersection LOS	C								

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Intersection Level Of Service Report
Intersection 4: Armstrong Boulevard and WB Hwy 10 Ramp

Control Type:	Signalized	Delay (sec / veh):	18.4
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.562

Intersection Setup

Name													
Approach	Northbound				Southbound			Eastbound			Westbound		
Lane Configuration													
Turning Movement	U-tu	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	0	0	0	1	0	0	0	1	0	1
Entry Pocket Length [ft]	395.0	100.0	100.0	100.0	100.00	100.00	315.00	100.00	100.00	100.00	685.00	100.00	685.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00				35.00			30.00			30.00		
Grade [%]	0.00				0.00			0.00			0.00		
Curb Present	No				No						No		
Crosswalk	No				No			No			Yes		

Volumes

Name													
Base Volume Input [veh/h]	2	34	248	0	0	210	257	0	0	0	19	2	320
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.490	1.490	1.490	1.000	1.0000	1.4900	1.4900	1.0000	1.0000	1.0000	1.4900	1.4900	1.4900
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	32	8	0	0	12	0	0	0	0	34	0	0
Diverted Trips [veh/h]	0	9	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	3	92	378	0	0	325	383	0	0	0	62	3	477
Peak Hour Factor	0.916	0.916	0.916	1.000	1.0000	0.9160	0.9160	1.0000	1.0000	1.0000	0.9160	0.9160	0.9160
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	25	103	0	0	89	105	0	0	0	17	1	130
Total Analysis Volume [veh/h]	3	100	413	0	0	355	418	0	0	0	68	3	521
Presence of On-Street Parking	No			No	No		No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0				0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0				0			0			0		
v_co, Outbound Pedestrian Volume crossing	0				0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0				0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0				0			0			0		
Bicycle Volume [bicycles/h]	0				0			0			0		

Intersection Settings

Located in CBD	Yes
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permi	Prote	Permi	Permi	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	5	2	0	0	6	0	0	0	0	0	8	0
Auxiliary Signal Groups													
Lead / Lag	-	Lead	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	7	10	0	0	10	0	0	0	0	0	10	0
Maximum Green [s]	0	20	35	0	0	35	0	0	0	0	0	30	0
Amber [s]	0.0	3.0	5.0	0.0	0.0	5.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0
All red [s]	0.0	2.5	1.5	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	3.5	0.0
Split [s]	0	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Extension [s]	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0
Walk [s]	0	0	7	0	0	0	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	0	20	0	0	0	0	0	0	0	0	0	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk			No			No						No	
I1, Start-Up Lost Time [s]	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	3.5	4.5	0.0	0.0	4.5	0.0	0.0	0.0	0.0	0.0	4.5	0.0
Minimum Recall		No	Yes			Yes						No	
Maximum Recall		No	No			No						No	
Pedestrian Recall		No	No			No						No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	R		C	R
C, Cycle Length [s]	60	60	60	60		60	60
L, Total Lost Time per Cycle [s]	5.50	6.50	6.50	6.50		6.50	6.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	3.50	4.50	4.50	4.50		4.50	4.50
g_i, Effective Green Time [s]	6	31	20	20		15	15
g / C, Green / Cycle	0.10	0.53	0.34	0.34		0.25	0.25
(v / s)_i Volume / Saturation Flow Rate	0.06	0.13	0.11	0.29		0.04	0.21
s, saturation flow rate [veh/h]	1603	3204	3204	1431		1606	2532
c, Capacity [veh/h]	154	1692	1088	486		409	644
d1, Uniform Delay [s]	26.08	7.64	14.66	18.41		17.38	20.91
k, delay calibration	0.11	0.11	0.11	0.11		0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	4.88	0.07	0.17	4.59		0.20	2.48
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00		0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00		1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00		1.00	1.00

Lane Group Results

X, volume / capacity	0.67	0.24	0.33	0.86		0.17	0.81
d, Delay for Lane Group [s/veh]	30.96	7.72	14.83	23.00		17.58	23.39
Lane Group LOS	C	A	B	C		B	C
Critical Lane Group	Yes	No	No	Yes		No	Yes
50th-Percentile Queue Length [veh/ln]	1.51	1.13	1.59	5.25		0.73	3.33
50th-Percentile Queue Length [ft/ln]	37.87	28.35	39.75	131.18		18.16	83.21
95th-Percentile Queue Length [veh/ln]	2.73	2.04	2.86	9.00		1.31	5.99
95th-Percentile Queue Length [ft/ln]	68.17	51.04	71.56	225.09		32.68	149.77

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Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	30.96	30.96	7.72	0.00	0.00	14.83	23.00	0.00	0.00	0.00	17.58	17.58	23.39
Movement LOS	C	C	A			B	C				B	B	C
d_A, Approach Delay [s/veh]	12.36				19.25			0.00			22.69		
Approach LOS	B				B			A			C		
d_I, Intersection Delay [s/veh]	18.44												
Intersection LOS	B												
Intersection V/C	0.562												

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	34.67
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	2.132
Crosswalk LOS	F	F	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	778	778	0	667
d_b, Bicycle Delay [s]	16.81	16.81	45.00	20.00
l_b,int, Bicycle LOS Score for Intersection	1.903	2.197	4.132	2.536
Bicycle LOS	A	B	D	B

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Intersection Level Of Service Report
Intersection 8: Bower Dr and Riverdale Dr

Control Type:	Two-way stop	Delay (sec / veh):	9.3
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.020

Intersection Setup

Name						
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	0	0	0	23	23	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.4900	1.4900	1.4900	1.4900	1.4900	1.4900
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	16	62	0	0	0
Diverted Trips [veh/h]	0	0	0	0	-9	9
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	16	62	34	25	9
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	4	16	9	7	2
Total Analysis Volume [veh/h]	0	17	65	36	26	9
Pedestrian Volume [ped/h]	0		0		0	

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Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.02	0.04	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	9.26	9.26	7.37	0.00	0.00	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.06	0.06	0.20	0.20	0.00	0.00
95th-Percentile Queue Length [ft/ln]	1.51	1.51	5.11	5.11	0.00	0.00
d_A, Approach Delay [s/veh]	9.26		4.74		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	4.16					
Intersection LOS	A					

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Intersection Level Of Service Report
Intersection 9: Riverdale Drive and Western Site Access

Control Type:	Two-way stop	Delay (sec / veh):	9.1
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.007

Intersection Setup

Name						
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.4900	1.0000	1.0000	1.4900
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	6	23	36	26	13	9
Diverted Trips [veh/h]	0	0	9	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	6	23	45	26	13	9
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	6	12	7	3	2
Total Analysis Volume [veh/h]	6	24	47	27	14	9
Pedestrian Volume [ped/h]	0		0		0	

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Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.02	0.00	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	9.15	8.70	0.00	0.00	7.38	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.09	0.09	0.00	0.00	0.03	0.03
95th-Percentile Queue Length [ft/ln]	2.37	2.37	0.00	0.00	0.69	0.69
d_A, Approach Delay [s/veh]	8.79		0.00		4.49	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	2.89					
Intersection LOS	A					

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Intersection Level Of Service Report
Intersection 10: Riverdale Drive and Eastern Site Access

Control Type:	Two-way stop	Delay (sec / veh):	9.5
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.011

Intersection Setup

Name						
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.4900	1.0000	1.0000	1.4900
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	9	34	23	36	34	13
Diverted Trips [veh/h]	0	0	9	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	9	34	32	36	34	13
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	9	8	9	9	3
Total Analysis Volume [veh/h]	9	36	34	38	36	14
Pedestrian Volume [ped/h]	0		0		0	

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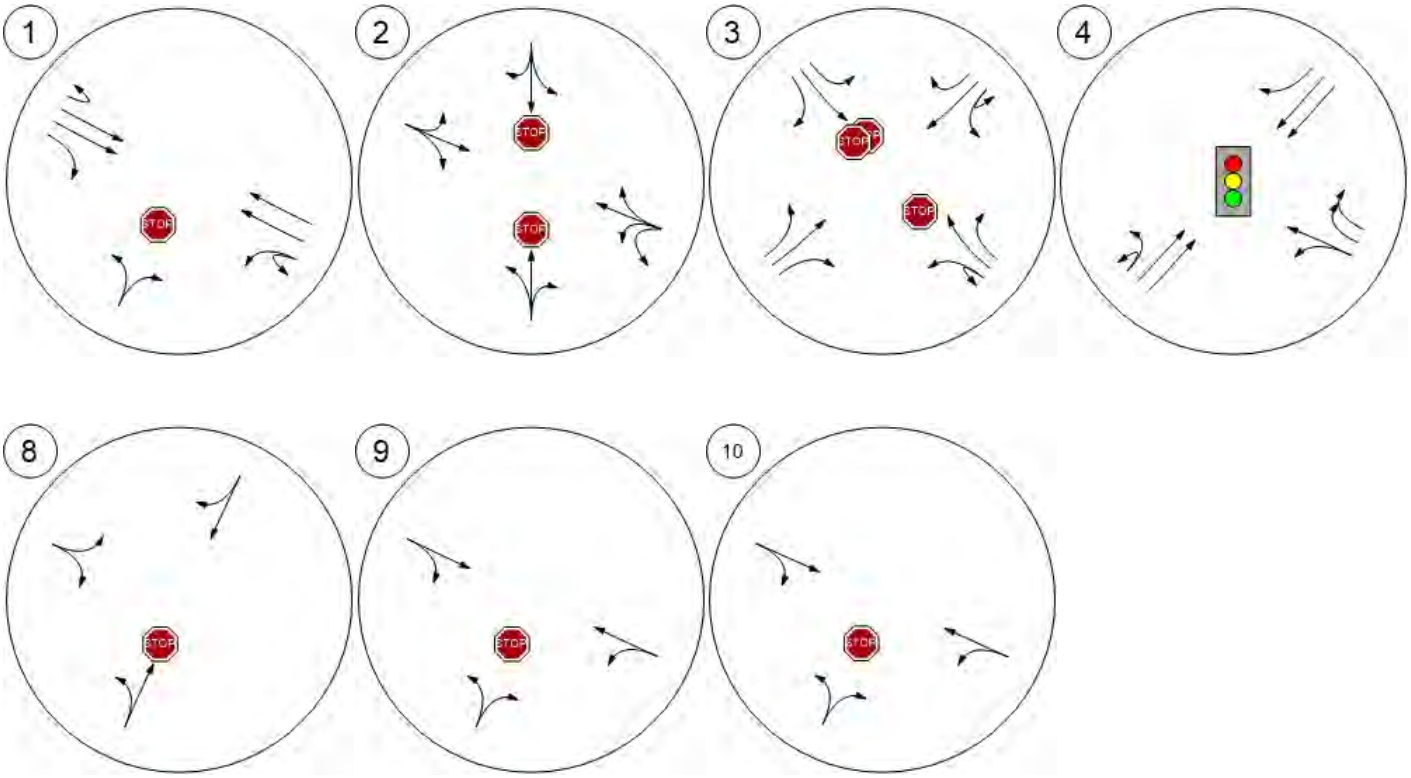
Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

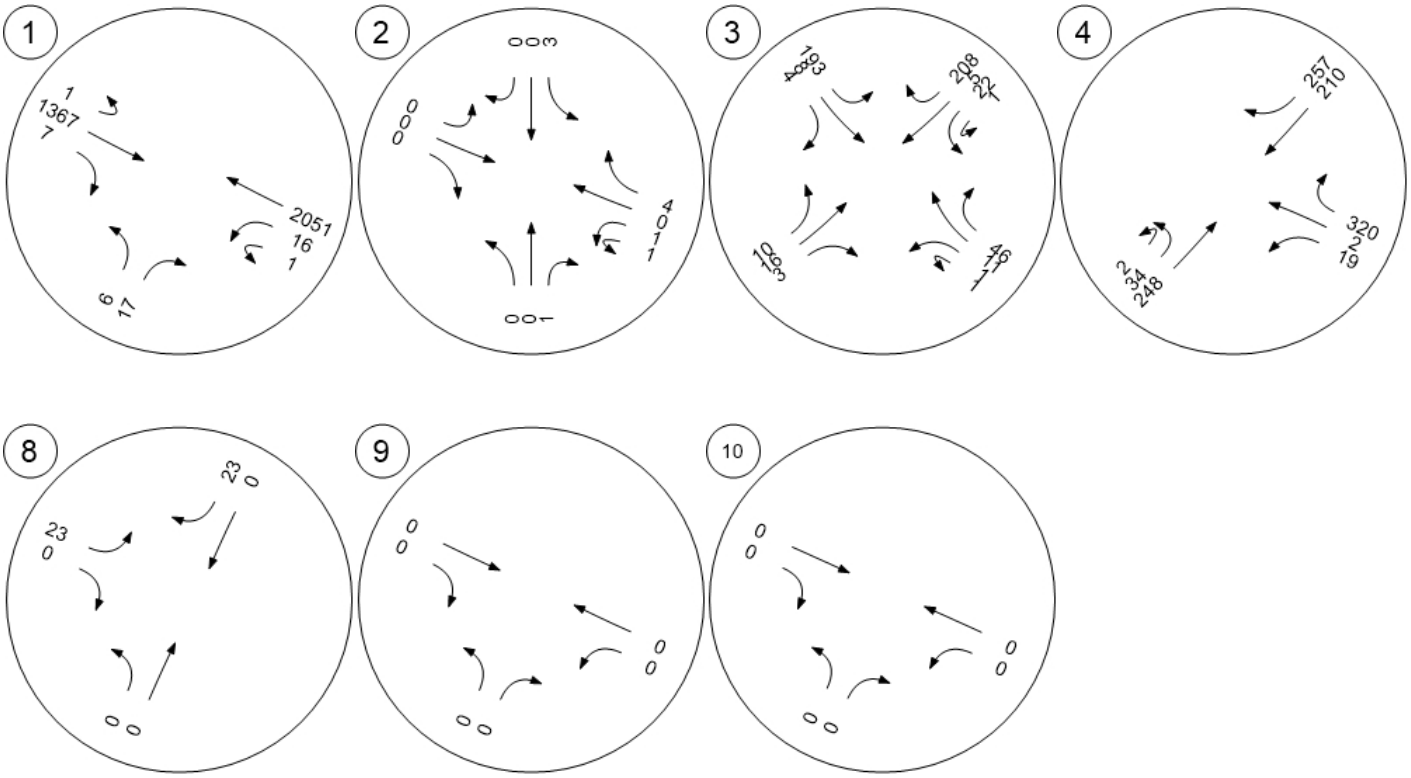
Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.04	0.00	0.00	0.02	0.00
d_M, Delay for Movement [s/veh]	9.50	8.73	0.00	0.00	7.41	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.15	0.15	0.00	0.00	0.07	0.07
95th-Percentile Queue Length [ft/ln]	3.64	3.64	0.00	0.00	1.81	1.81
d_A, Approach Delay [s/veh]	8.88		0.00		5.34	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	3.99					
Intersection LOS	A					

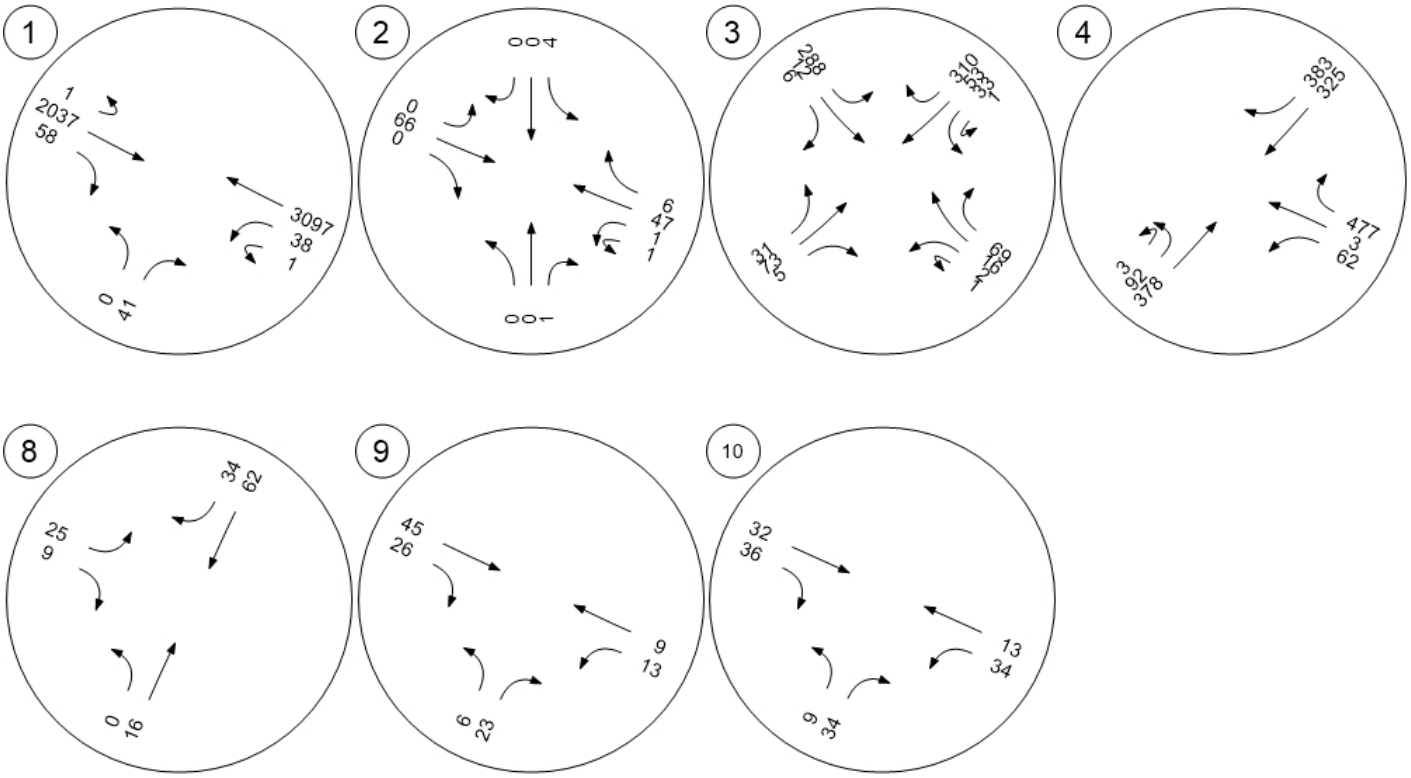
Lane Configuration and Traffic Control



Traffic Volume - Base Volume



Traffic Volume - Future Total Volume



Phase I Archaeological Survey of Proposed Housing Development in Ramsey, Anoka County, Minnesota

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Final Report
October 27, 2020

Phase I Archaeological Survey of Proposed Capstone Homes Housing Development in Ramsey, Anoka County, Minnesota

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Final Report
October 27, 2020

Management Summary

Capstone Homes is proposing to build a residential development in the City of Ramsey, Anoka County, Minnesota. The project area, approximately 78.63 acres in size, is located in the E ½ of Section 30 and W ¼ of Section 29 of Township 32N, Range 25W in Archaeological Region 4e: Central Lakes Deciduous East. Historically and recently the majority of the project area was cultivated with a long wooded patch along the southwestern edge. The project area is bordered by Highway 10 approximately 500 feet to the north, the Mississippi River approximately 600 to 700 feet to the south, Bowers Drive approximately 200 feet to the west, and a solar farm on the east. Planned development includes a tree preservation area within the existing stretch of woods, 243 detached residential units, residential streets, and single-acre public park at the center.

Nienow Cultural Consultants LLC (NCC) was contracted to complete a Phase I Archaeological Survey in October of 2020. NCC's Principal Investigators for this project were Jeremy Nienow, PhD., RPA, who is licensed for Phase I archaeological work in Minnesota (20-042, Appendix A), and Laura Koski, MSc, RPA. Work began with a literature review October 7 followed by fieldwork completed October 9, 14-15, 2020. Fieldwork consisted of surface survey of corn fields and a cabbage and pumpkin patch, and shovel testing of the wooded area. Surface visibility in the agricultural fields ranged between 0 and 80%. Surface survey transects were spaced on a maximum of a five-meter interval. Fifty-two shovel tests were excavated. Shovel tests were typically 35-40 centimeters (cm) wide and at least 80cm deep. All soils were screened through ¼" mesh screen, detailed profile notes completed, photographs taken, and GPS points collected for each shovel test. No prehistoric cultural materials were encountered. Recent historic materials (i.e. shotgun shells, whiteware sherds) and modern debris (i.e. plastics, aluminum cans) were encountered, but not collected.

Shovel test profiles documented consistent ancient floodplain soils. No prehistoric cultural material or archaeological features were identified during the field survey. Based on these results, Nienow Cultural Consultants recommends no further archaeological work be completed, and the project continues as planned. With any project there is the chance of unanticipated discovery. Should archaeological materials surface during any future construction, it is advised a professional archaeologist be consulted. Minnesota Statute 307.08 protects unplatted cemeteries (including burial mounds) and issues guidelines for dealing with unexpected finds. Should human remains be encountered during earth moving activity, all work must stop and local law enforcement must be called.

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1.0 INTRODUCTION

Capstone Homes is proposing to build a residential development in the City of Ramsey, Anoka County, Minnesota. The project area, approximately 78.63 acres in size, is located in the E ½ of Section 30 and W ¼ of Section 29 of Township 32N, Range 25W in Archaeological Region 4e: Central Lakes Deciduous East (Figure 1). Historically and recently the majority of the project area was cultivated with a long wooded patch along the southwestern edge. The project area is bordered by Highway 10 approximately 500 feet to the north, the Mississippi River approximately 600 to 700 feet to the south, Bowers Drive approximately 200 feet to the west, and a solar farm on the east. Planned development includes a tree preservation area within the existing stretch of woods, 243 detached residential units, residential streets, and single-acre public park at the center (Figure 2).

Nienow Cultural Consultants LLC (NCC) was contracted to complete a Phase I Archaeological Survey in October of 2020. NCC's Principal Investigators for this project were Jeremy Nienow, PhD., RPA who is licensed for Phase I archaeological work in Minnesota (20-042, Appendix A), and Laura Koski, MSc, RPA. NCC subcontracted six individuals to assist in completing research, fieldwork, and lab processing for the project: Alexandra Hedquist (Hedquist Archaeological Consulting, LLC), Anastasia Walhovd (Makoons Consulting, LLC), Chris Rico (Rico Cultural Resource Management Services, LLC), Fred Sutherland (Sutherland Relics and Rust LLC), John Strot (John's Archaeological Consulting), and Laura Koski (Zooarchaeo Consulting). The investigation was guided by the Secretary of Interior's Standards and Guidelines for Archaeology and Historic Preservation (48FR44716), the State Historic Preservation Office's (SHPO) Manual for Archaeological Projects in Minnesota (Anfinson 2005), and the State Archaeologist's Manual for Archaeological Projects in Minnesota (Minnesota Office of the State Archaeologist 2011). Research and report preparation were accomplished by professional archaeologists meeting the standards set forth in 35CFR61.

Work began with a literature review October 7 followed by fieldwork completed October 9, 14, and 15, 2020. Fieldwork consisted of surface surveying corn fields, a cabbage, and pumpkin patch, and shovel testing the wooded area. Surface visibility in the agricultural fields ranged between 0 and 80%. Surface survey transects were spaced on four to five-meter intervals. Fifty-two shovel tests were excavated. Shovel tests were typically 35-40 centimeters (cm) wide and at least 80cm deep. All soils were screened through ¼" mesh screen, detailed profile notes completed, photographs taken, and GPS points collected for each shovel test. No prehistoric cultural materials were encountered. Recent historic materials (i.e. shotgun shells, whiteware sherds) and modern debris (i.e. plastics, aluminum cans) were encountered, but not collected.

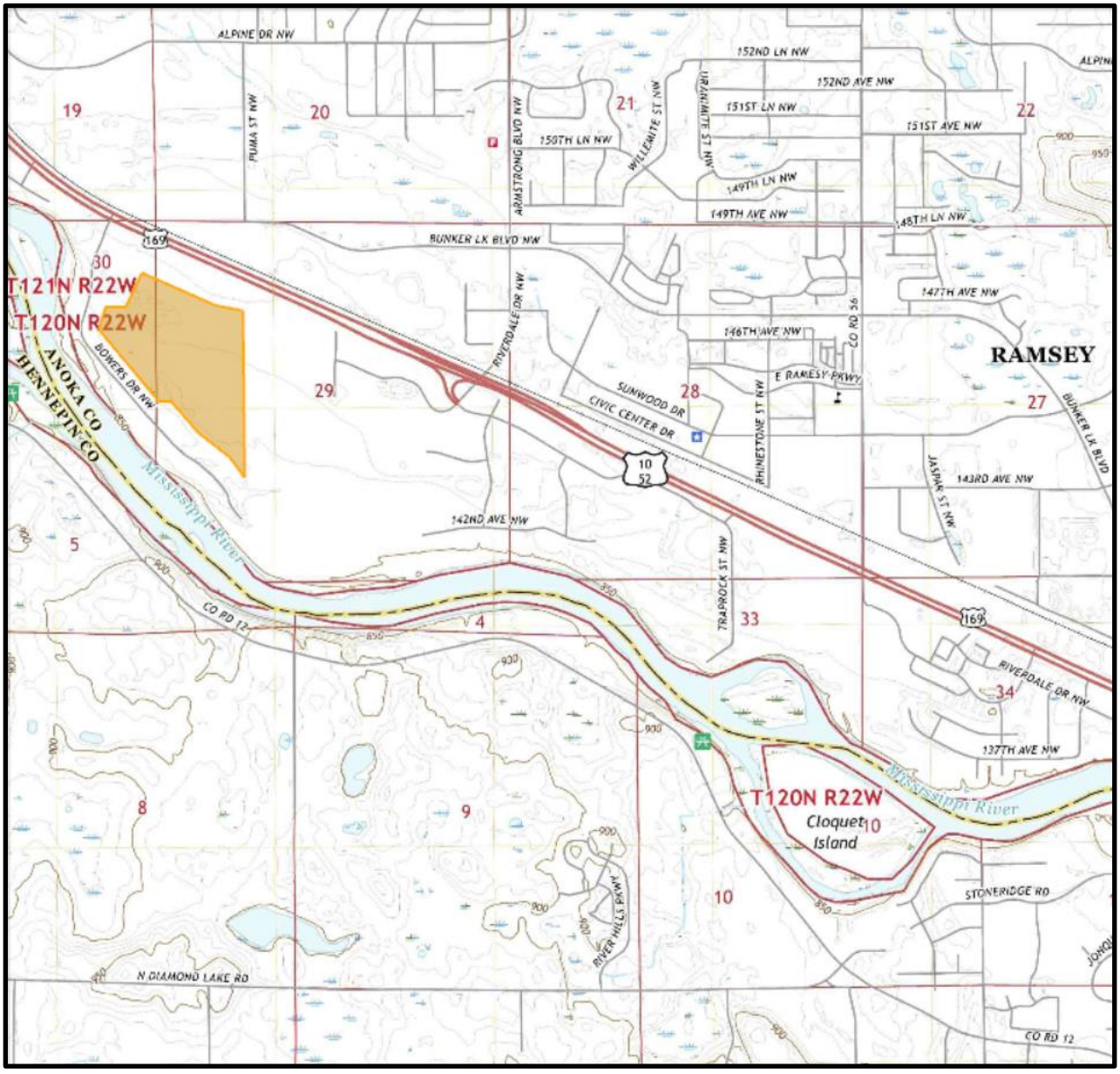

Figure 1: USGS Topographic Map Illustrating Project Area (orange polygon).
(USGS 7.5' Topographic Map, Anoka Quadrangle, 2019, 1:24,000)

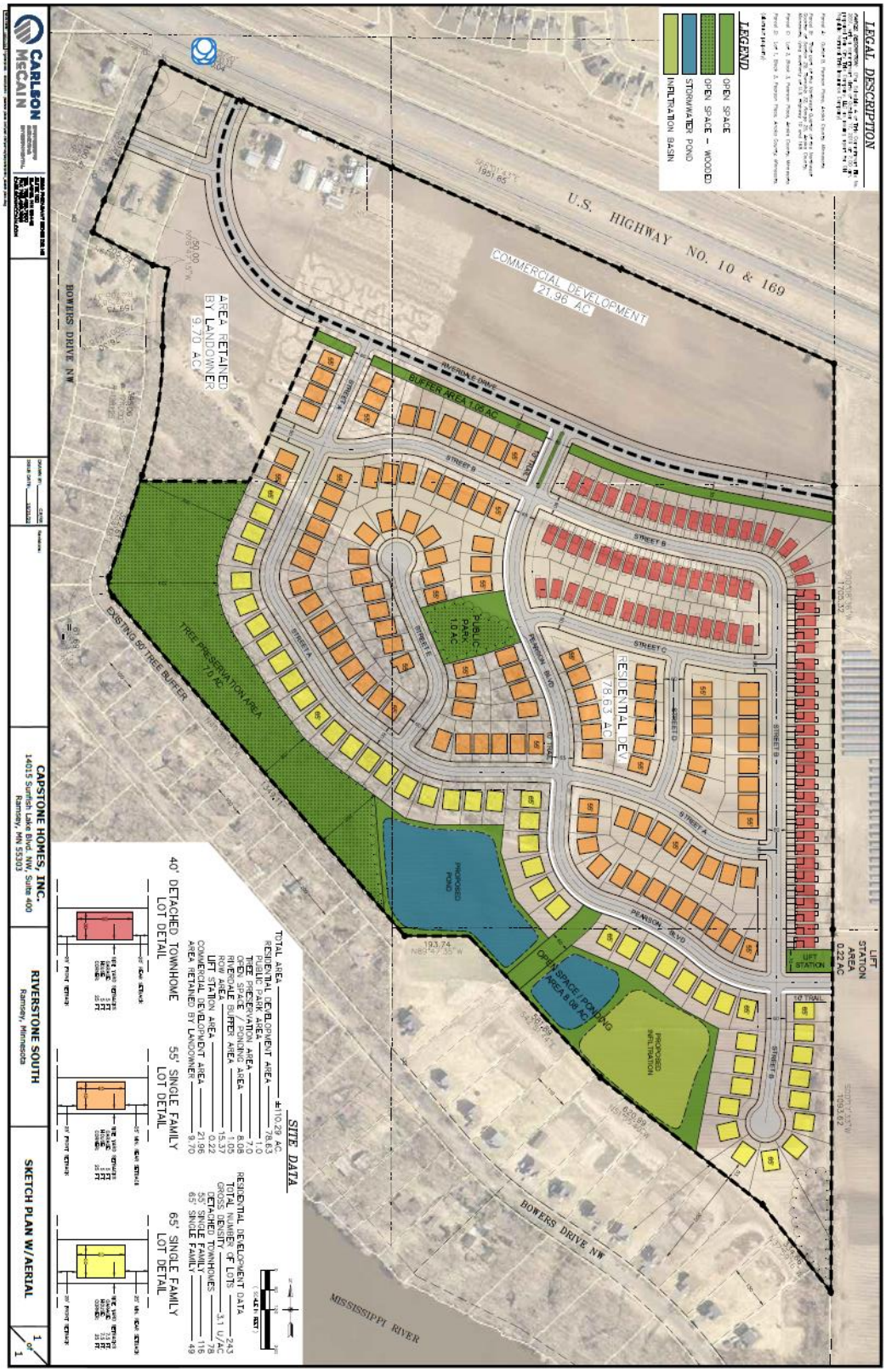

Figure 2: Engineering Sketch Plan of Project Area.
(Provided by Capstone Homes, Inc.)

2.0 RESEARCH DESIGN AND METHODOLOGY

2.1 Literature Review

A literature review was completed on October 7, 2020. Typically, the literature review would be completed by visiting the Office of the State Archaeologist and the State Historic Preservation Office. Unfortunately, both of these offices were closed due to safety precautions surrounding SARS-CoV-2 spread prevention. Instead, previously identified archaeological sites were noted for a two-mile radius surrounding the project area using the online Minnesota Office of the State Archaeologist archaeological sites portal (OSA Portal). In addition, the Township/Range/Sections within the two-mile radius were sent to the State Historic Preservation Office to generate an internal database search. The Township/Range/Section search did not yield any additional sites not included on the OSA Portal. Archaeological survey reports from nearby sites were also requested to determine whether survey had already been completed within the project area. All resulting previously identified sites and requested surveys were reviewed as a part of this project.

2.2 Fieldwork

Fieldwork was completed on October 9, 14, and 15, 2020. Fieldwork included surface survey and shovel testing within the project area (Figure 2). Surface surveyed areas consisted of cultivated corn fields, a cabbage patch, and a pumpkin patch. Ground visibility in all surface-surveyed areas ranged between 0 and 80% (see Appendix B for example surface visibility photographs). These areas were surface surveyed on a four to five-meter interval between cultivated rows. Considering the wooded area contained dense vegetation and fallen leaves preventing surface survey, along with the fact this area lies closest to the Mississippi and is therefore the most likely location within the project area to contain prehistoric cultural materials, the wooded area was tested in three shovel test transects. The first transect was laid in on a 15-meter interval, approximately 15-meters northeast and parallel to the southwestern project boundary. The second transect was laid in 30-meters northeast of and parallel to the first, but considering the negative tests in the first transect, and the clearly documented ancient floodplain soils, shovel tests in this transect were excavated on a 30-meter interval. A third transect was placed on a ridge along the northwestern edge of the wooded area with the intent of targeting what was in the past a high point along the historic Mississippi River's edge. Fifty-two shovel tests were excavated in total. Shovel tests were typically 35-40 centimeters (cm) wide and at least 100cm deep. All soils were screened through ¼" mesh screen, detailed profile notes completed, photographs taken, and GPS points collected for each shovel test.

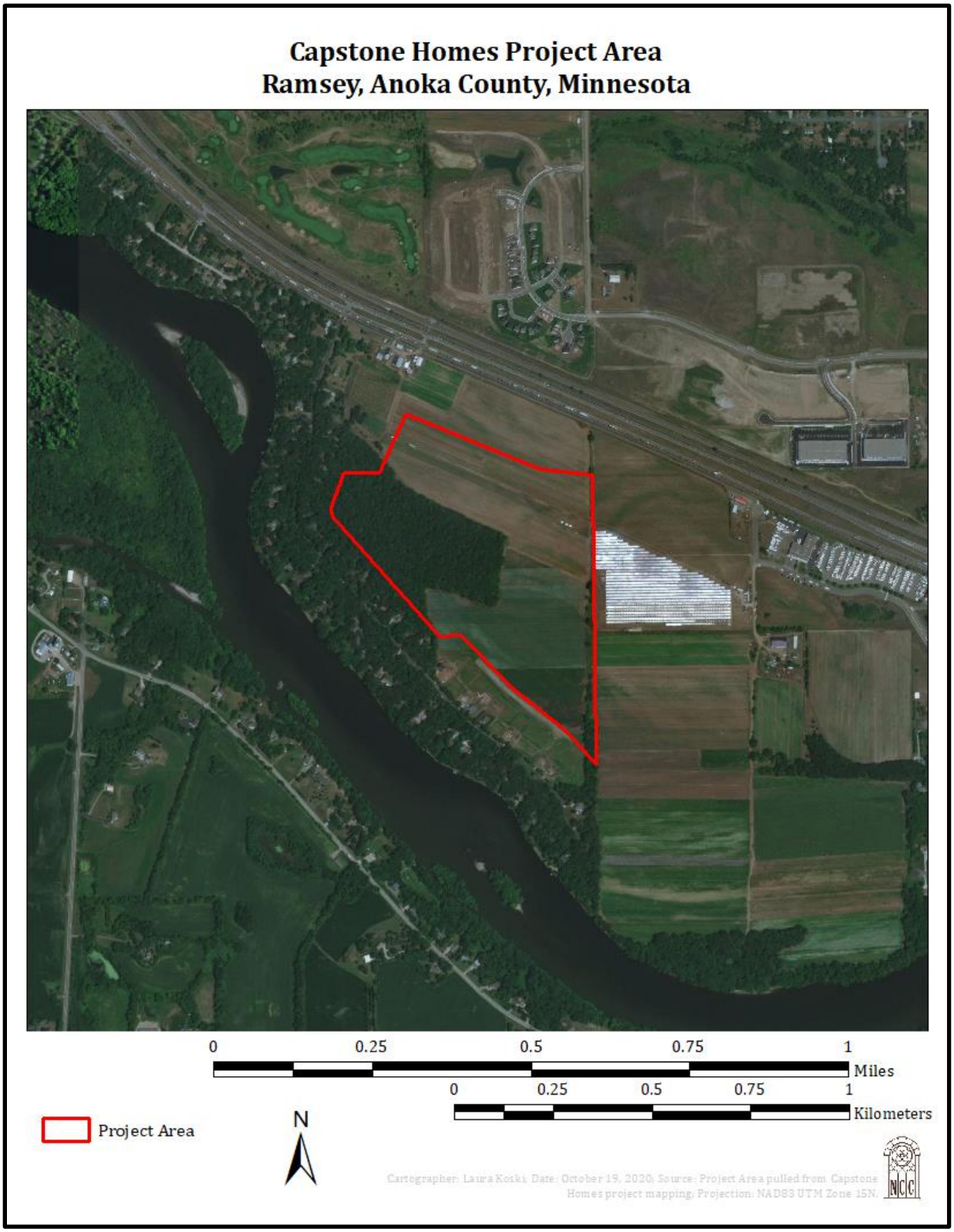

Figure 3: Illustration of Project Area Boundary (red border).
(Basemap provided by 2016 Google Satellite Imagery)

3.0 ENVIRONMENTAL SETTING

3.1 Geological Background and Soils

In his 1990 publication *Archaeological Regions in Minnesota and the Woodland Period,* former State Archaeologist Scott Anfinson divides the state of Minnesota into nine environmental-archaeological regions based on natural resources available within each region. This classification allows archaeologists to research and analyze prehistoric environments in the state, as well as predict where archaeological sites may be located.

The Capstone Homes Development project area falls within the southeastern portion of Anfinson's region 4e: Central Lakes Deciduous East Sub-Region. The region sits within east-central to central Minnesota, spanning Dakota to Becker Counties. Topographically, the region consists of a mixture of moraines, till plains, and outwash plains, and is heavily spotted with lakes, some over 30 meters (m) deep. Major rivers include the Mississippi and Minnesota Rivers flowing along the western boundary of the region, and the St. Croix River along the region's eastern boundary. Streams draining the western part of the region flow in a western direction to the Red River (Anfinson 1990). River formation was the result of a complex glacial history including several episodes of advancing and retreating glacial lobes.

The Central Lakes Deciduous East Sub-Region is located directly west of the Mississippi River, but could arguably incorporate portions of western Wisconsin. The regional topography consists of moraines, glacial till, and outwash plains, as well as a large variety of lakes, streams, and wetlands (Gibbon et al. 2002). Average precipitation ranges from 21 to 32 inches (Grimes 1968). Average high winter temperatures range from 12 to 24 degrees Fahrenheit (F) while average high summer temperatures range from 78 to 82 degrees F. The frost-free season ranges from 140 to 160 days (Gibbon et al. 2002).

Soils in the region reflect a diverse history of glacial and vegetation activity. Soil texture ranges from medium to course, with prairie soils more commonly found in the southern and western portions of the region and forest soils found mostly in the north and east portions (Anfinson 1990). Bedrock outcrops are mainly located along the region's central and eastern edge, and are comprised of mainly granite outcroppings along river banks (Gibbon et al. 2002).

All soil source material was deposited during the Wisconsin stage of the Pleistocene epoch. Two main types of glacial drift were deposited over the county when the Superior Lobe retreated from the area around 13,500 years ago. The Superior Lobe, which flowed into the area from the north, deposited coarse textured material, reddish brown in color, with pebbles of basalt, gabbro, and red sandstone. At a later date, the Grantsburg Sub-lobe, an extension of the Des Moines Lobe, advanced into Sherburne County. This lobe brought in what is commonly called "gray till" or "buff till." During the retreat of the Grantsburg Lobe around 12,500 years ago, the ice stagnated in the northern and eastern parts of the county and melt water left intermixed outwash gravel and sand from both of the previous lobes. Additionally, when the Grantsburg Lobe retreated westward, it uncovered the Mississippi Valley, and melt water from the wasting Des Moines Lobe filled the

valley throughout the county with coarse alluvium, which underlies two broad terraces parallel to the Mississippi River, an example of which is notable in the Capstone Homes project area. The sand in these areas are course in texture near the river and become increasingly finer in texture the further the distance from the river. In various places, it is underlain by strata of calcareous gravel, which was representative of what was found during the current archaeological survey (Grimes 1968).

The project area is comprised of Hubbard loamy sand ranging between 0 to 2 percent and 2 to 12 percent slopes, Dickman sandy loam ranging between 0 to 2 percent and 2 to 6 percent slopes, and Nymore loamy coarse sand on 12 to 25 percent slopes. The Hubbard loamy sand series consists of excessively drained sandy floodplain outwash found on stream terraces and hillslopes. The typical soil profile for the series consists of loamy sand from 0 to 20 centimeters, loamy sand from 20 to 50 centimeters, loamy sand from 50 to 82 centimeters, and sand from 82 to 200 centimeters. The Dickman sandy loam series consists of somewhat excessively drained floodplain outwash found on stream terraces. The typical soil profile for the series consists of sandy loam from 0 to 30 centimeters, sandy loam from 30 to 45 centimeters, and sand from 45 to 152 centimeters. The Nymore loamy coarse sand series consists of excessively drained floodplain outwash found on stream terraces. The typical soil profile for the series consists of loamy coarse sand from 0 to 18 centimeters, loamy sand from 18 to 66 centimeters, and sand from 66 to 152 centimeters (NRCS 2020).

3.2 Regional Flora and Fauna

Vegetation in the area at the time of Euro-American settlement consisted of Big Wood species in both the south and west portions of the region. Most specifically, the trees were deciduous hardwood species, primarily oak, mixed with deciduous-coniferous forest in the northern part of the region (Anfinson 1990) which also contained maple, basswood, and hickory. As Euro-American settlers moved through the area and cleared portions of forest, prairie land became more abundant. White-tailed deer, bison, elk, beaver, bear, prairie chickens, and a variety of fish and waterfowl would have been commonly available resources (Anfinson 1990). Specific to the site area, the majority of the trees on the sand plain consisted of bur oak and northern pin oak, as well as mixed hardwoods which grow in areas of glacial till, specifically in the areas where the Hayden soil series is prominent (Grimes 1968). Large areas of hardwoods invaded areas of native grasses in the outwash plains along the Mississippi River. The Hubbard series discussed above developed in these areas.

4.0 CULTURAL HISTORY

The Minnesota State Historic Preservation Office (SHPO) has developed statewide contexts examining Minnesota's Prehistoric through recent past. These contexts are laid out on the Minnesota Archaeological Site Form (Minnesota Office of the State Archaeologist 2016). Generally, they describe the history of the state and assist in predicting where specific types of sites may occur.

Native American contexts are commonly divided into three major traditions: Paleoindian, Archaic, and Woodland. Late Woodland is further subdivided into Plains Village, Mississippian, and Oneota Traditions. These divisions are based on significant changes in how these communities lived, with a special focus on subsistence strategies. Historic contexts are generally divided into Contact and Post-Contact periods. The Contact period begins with early European exploration and continues through the Post-Contact period including Euro-American settlement and Minnesota statehood. The following is a general summary of these traditions using the Author's general knowledge and various disseminated sources for information including the OSA's website, Elden Johnson's 1988 *The Prehistoric Peoples of Minnesota*, Gibbon and Anfinson's 2008 *Minnesota Archaeology: The First 13,000 Years*, and Gibbon's 2012 *Archaeology of Minnesota: The Prehistory of the Upper Mississippi River Region*.

4.1 Pre-Contact Period

4.1.1 Paleoindian Tradition (11,500 to 7,500 B.C.)

The Paleoindian Tradition in Minnesota is divided into two periods: Early Paleoindian and Late Paleoindian/Early Archaic (Gibbon and Anfinson 2008). Throughout the Paleoindian, Native American communities were small, mobile, and focused on hunting. However, between the early and late periods, the environment and available food resources changed dramatically. The beginning of the Early Paleoindian Tradition is characterized by retreat of glacial ice and the growth of spruce forests. During this time, now extinct megafauna like mastodon, mammoth, and large bison were available for hunting. The Early Paleoindian period is poorly understood in Minnesota because most evidence for Paleoindian lifeways comes from isolated finds of large fluted projectile points (Gibbon and Anfinson 2008). Based on more plentiful sites in the southeastern and southwestern portions of the United States, it is generally assumed Native American populations were small, consisting of highly-mobile hunters and foragers who followed large game throughout the landscape (Gibbon and Anfinson 2008).

By the Late Paleoindian period, modern vegetation zones had established themselves in Minnesota. Modern animal species like white tail deer, grouse, and fish were available for Native American communities to hunt and fish. Lithic tool evidence from Late Paleoindian sites in Minnesota take the form of stemmed rather than fluted points and a wider range of tool types including groundstone tools (Gibbon and Anfinson 2008). Again, lifeways during this time are poorly understood, but based on three well-documented sites found in Minnesota (Cedar Creek-21AK58, Bradbury Brook-21ML42, and Browns Valley-21TR5), communities are still small, highly-mobile and focused on hunting larger animals and foraging for wild plants. However, stone toolkits did diversify and communities began exploiting smaller territories. It is also likely populations started to increase (Gibbon and Anfinson 2008).

4.1.2 Archaic Tradition (7,500 to 800 B.C.)

The Archaic Tradition continues the trend of resource diversification started in the Late Paleoindian period. Native American communities developed broader toolkits, used a wider array of foods, and became less mobile over the course of the Archaic. Additionally, by the end of the Archaic, communities were using communal burial sites. Stemmed and notched points, groundstone tools, particularly those for woodworking, and cold-hammered copper tools are hallmarks of the Archaic Tradition in the archaeological record (Anfinson 1997; Gibbon and Anfinson 2008). By the end of this period the climate shifted to a cooler, wetter pattern up until the strong, human-driven, warmer climates of the modern era. Resource gathering technologies during the Archaic included the aforementioned hunting, as well as trapping, fishing, foraging, woodworking and plant processing. Many of the larger, documented sites in the central portion of the state likely began during the end of this period.

4.1.3 Woodland Tradition (800 B.C. to European Contact)

In the Midwest region, archaeologists tend to divide the Woodland Tradition into three periods: Early, Middle, and Late. However, Anfinson (1987) and Gibbon (2012) suggest in Minnesota it is more appropriate to divide the era into Initial and Terminal Woodland periods. This view is not as widespread as research would at first suggest, with work including Arzigian's *Statewide Multiple Property Documentation Form for the Woodland Tradition* (2008), and Buhta et. al. *On the Periphery?: Archaeological Investigations of the Woodland Tradition in West- Central Minnesota* (2014), retaining the more traditional use of Early, Middle, and Late designations. Beginning approximately 2,800 years ago, peoples in the region experienced increases in population with the advent of first horticultural and then agricultural subsistence strategies to augment already extant systems of hunting, gathering, etc. As populations increased, settlements near favorable transportation and resource corridors shifted from seasonal to year-round occupations as they made forays to collect necessary resources (Johnson 1988; Anfinson 1987:222).

The period also witnessed the technical transition from spear/atlatl to bow and arrow weaponry useful for both hunting and warfare. This change in technology lead to the use of smaller projectile points or arrow heads. Similarly, the period also saw the invention of ceramic vessels and it is these vessels and their change over time, from thick walled, grit tempered, conoidal vessels, to thinner walled, shell tempered, globular vessels, which has greatly assisted the archaeological community in further refining their understanding of group identity, cohesion, and integration throughout the region. Indeed, there are more than ten major recognized ceramic complexes for the state with many temporal overlaps, often based more on location than visual representation. A final example representing not only identity and permanence on the landscape, but also religious practices, was the use of earthen burial mounds. Although community size was likely similar between the Early Woodland and Late Archaic periods, by the Late Woodland period, populations were certainly on the rise.

4.2 Contact/Post-Contact Period (1630 A.D. to Present)

This period generally refers to the span of time extending from the first European explorations until intensive Euro-American settlement of the region. Minnesota's historic period began in 1673 when French explorers Marquette and Joliet discovered the upper portion of the Mississippi River. Ten years later, Catholic Missionary Father Louis Hennepin told his story of exploring Minnesota and being held captive by Dakota Indians in the first book written about Minnesota, *Description de la Louisiane* (Hennepin 1683).

The territory containing modern-day Minnesota was claimed at various periods of time by Spain, France, Great Britain, and the United States. Lieutenant Zebulon Montgomery Pike led the first United States expedition through the area in 1805, which would ultimately become Minnesota in 1858. Fort St. Anthony (later Ft. Snelling) was completed between 1819 and 1824, and in 1836 the Wisconsin Territory, including a portion of Minnesota, was formed. Just one year later, on September 29th, 1837, during treaty negotiations in Washington, D.C., Dakota leaders ceded their lands between the Mississippi and St. Croix Rivers.

The fur trade drove much of European exploration and settlement into Minnesota prior to territorial frontier settlement in the mid-1800s. While the fur trade impacted Native American communities throughout all of Minnesota, the heaviest impacts came with later Euro-American settlement. Intensive settlement and agriculture dramatically transformed the landscape, displacing large numbers of Native Americans and their communities. In 1862 tensions between white settlers and Native Americans resulted in the Dakota War. Ultimately, this war left 462 whites and "an unknown but substantial number" of Native Americans dead (Anderson and Woolworth 1988). The conflict concluded with the largest mass execution in United States history with the hanging of 38 Dakota on December 26, 1862 at Mankato and the deportation of remaining tribal members to Santee, Nebraska.

Native American archaeological site types associated with this period are generally consistent with those of earlier periods, but European and Euro-American traders, missionaries, settlers, and industries affected the locations of these sites. This period also includes Euro-American immigrant settlement patterns, subsistence activities, and economic strategies. Sites associated with Euro-American immigrants appear in the mid-nineteenth century. Associated archaeological and historic site types categorized in the Contact/Post-Contact period include standing structures as well as archaeological sites.

5.0 LITERATURE REVIEW

Fourteen previously identified archaeological sites and four alpha sites are located within two miles of the project area (Table 1). Alpha sites are versions of archaeological sites which have been reported as *potential* sites based on mentions in literature, historic mapping (i.e. the 1874 Andreas Atlas), or by individuals reporting casually finding cultural materials; these sites have yet to be field verified through systematic archaeological research and survey.

Table 1. Previously Identified Archaeological Sites Within Two Miles

Site Number	Site Name	Site Description	Cultural Affiliation	Miles from Project Area	TRS
21AN0044	Winnebago Enclosure	Enclosure and Earthworks	Historic: Native American	0.1 Miles	T32N, R25W, S30 NW ¼, NE ¼, NE ¼
21HE0090	Dayton Mounds	Six Burial Mounds	Pre-Contact: Woodland	0.73 Miles	T121N, R22W, S31 SE ¼, S ½ And SW ¼, S ½
21HE0326	Dayton A	Habitation, Lithic Workshop	Pre-Contact	1 Mile	T120N, R22W, S9 NE ¼, NW ¼, NE ¼
21AN0136	No Name	Lithic Scatter	Pre-Contact	1 Mile	T32N, R25W, S19 SW ¼, NW ¼, NE ¼
21AN0135	No Name	Lithic Scatter	Pre-Contact	1.23 Miles	T32N, R25W, S18 SW ¼, SW ¼, SE ¼
21HE0327	Dayton B	Single Artifact	Pre-Contact	1.24 Miles	T120N, R22W, S29 SE ¼, NE ¼, SW ¼
21HE0189	Cloquet Island Scenic Overlook	Artifact Scatter	Pre-Contact, Contact, Post-Contact	1.33 Miles	T120N, R22W, S10 NW ¼, W ½
21WR0043	Crow River Scenic Overlook	Habitation	Pre-Contact	1.47 Miles	T121N, R23W, S36 SW ¼, SE ¼, NE ¼
21HE0335	No Name	Habitation	Pre-Contact: Woodland	1.54 Miles	T120N, R22W, S10 NW ¼, SW ¼, NW ¼
21HE0328	Dayton D	Habitation	Lithic Workshop	1.6 Miles	T120N, R22W, S9 NE ¼, SE ¼, SE ¼
21AN0184	No Name	Habitation	Pre-Contact: Habitation	1.7 Miles	T32N, R25W, S33 NW ¼, SE ¼, NE ¼
21WR0027	No Name	Single Burial Mound	Pre-Contact: Woodland	1.98 Miles	T120N, R23W, S1 SE ¼, SE ¼, NW ¼
21WR0125	No Name	Artifact Scatter	Pre-Contact and Post-Contact: Euro-American	1.99 Miles	T120N, R23W, S1 NW ¼, SE ¼, NW ¼
21WR0130	Dayton Quarry Burial	Human Remains	Presumably Pre-Contact	1.99 Miles	T120N, R23W, S1 NE ¼, NW ¼, SE ¼
21ANu	Itasca Village	Ghost Town	Historic: Euro-American	0.63 Miles	T32N, R25W, S19 SE ¼, NE ¼, SW ¼
21WRbp	Dayton city	Historic Documentation	Historic: Euro-American	1.19 Miles	T121N, R23W, S36
21WRbo	Waterville	Ghost Town	Historic: Euro-American	1.19 Miles	T121N, R23W, S36
21WRo	Lahn	Artifact Scatter	Pre-Contact	1.2 Miles	T120N, R23W, S12

No previously identified archaeological sites are located within the project area. Sites located within two miles comprise a mixture of pre-contact and historic activities including pre-contact lithic and artifact scatters, habitations, and burial mounds; as well as historic ghost towns and an earthwork enclosure. Of the pre-contact sites, only a few could be attributed to a cultural tradition,

all of them being of the Woodland Tradition, due to either diagnostic artifacts or archaeological features (i.e. burial mounds).

The relatively high volume of pre-contact sites within two miles of the project area, as well as the project's proximity to the Mississippi River, indicate the project area exhibits reasonable potential to contain pre-contact cultural material. LiDAR data (provided by MNDNR) was examined in an attempt to identify any visible above-ground features with a potentially archaeological origin. These features were not identified, but viewing the LiDAR hillshade revealed the project area had been submerged in the Mississippi River floodplain in the past. The old river cut is distinct to the point at least two major previous river edges can be identified in the project area hillshade imagery, accompanied by clear sandbar deposits between the current river path and the previous flooded edge (Figure 3).

6.0 RESULTS

Fieldwork was completed on October 9, 14, and 15, 2020. This began with surface survey of the cornfields, cabbage patch, and pumpkin patch on a four to five-meter interval. Surface visibility within all surface-surveyed areas varied between 0 and 80% (see Appendix B for example surface visibility photographs). No cultural materials or archaeological features were identified during the surface survey.

Shovel testing was completed along three separate transects within the wooded portion of the project area. The first transect was located 15-meters northeast and parallel to the southwestern edge of the project area (the closest edge to the Mississippi River), and consisted of 25 shovel tests excavated at 15-meter intervals. All shovel tests were negative for cultural materials. Due to the non-cultural nature of the first transect, the second transect, placed 30-meters northeast and parallel to the first, contained 11 shovel tests excavated on a 30-meter interval. This transect was also negative for cultural material. Acknowledging this tested portion of the wooded area landed at times in the past floodplain, a third transect was placed on the highest ridge at the northeastern edge of the wooded area in an attempt to capture where the cultural activity may have been focused while this area was previously flooded (see the middle flooded river edge noted in the LiDAR Hillshade imagery in Figure 3). This transect consisted of sixteen shovel tests excavated on a 15-meter interval and was also negative for cultural material. See Figure 4 for an illustration of shovel tested and surface surveyed locations.

All shovel tests were excavated to at least 80 centimeters below surface (cmbs), well into subsoils. Soil profiles were notably consistent across the shovel tested areas with the average profile containing 10YR 3/2 silty sandy loam 0 to approximately 20-30cmbs, followed by 10YR 3/3 to 10YR 3/6 sand from 20-30cmbs through shovel test termination at 80cmbs. Soils typically became more compact beginning around 50cmbs continuing through 80cmbs. Recorded soils exhibited no signs of human-related disturbance, and reflect the sandy soils deposition expected of the ancient floodplain terrace on which this portion of the project area is located. Considering the depth

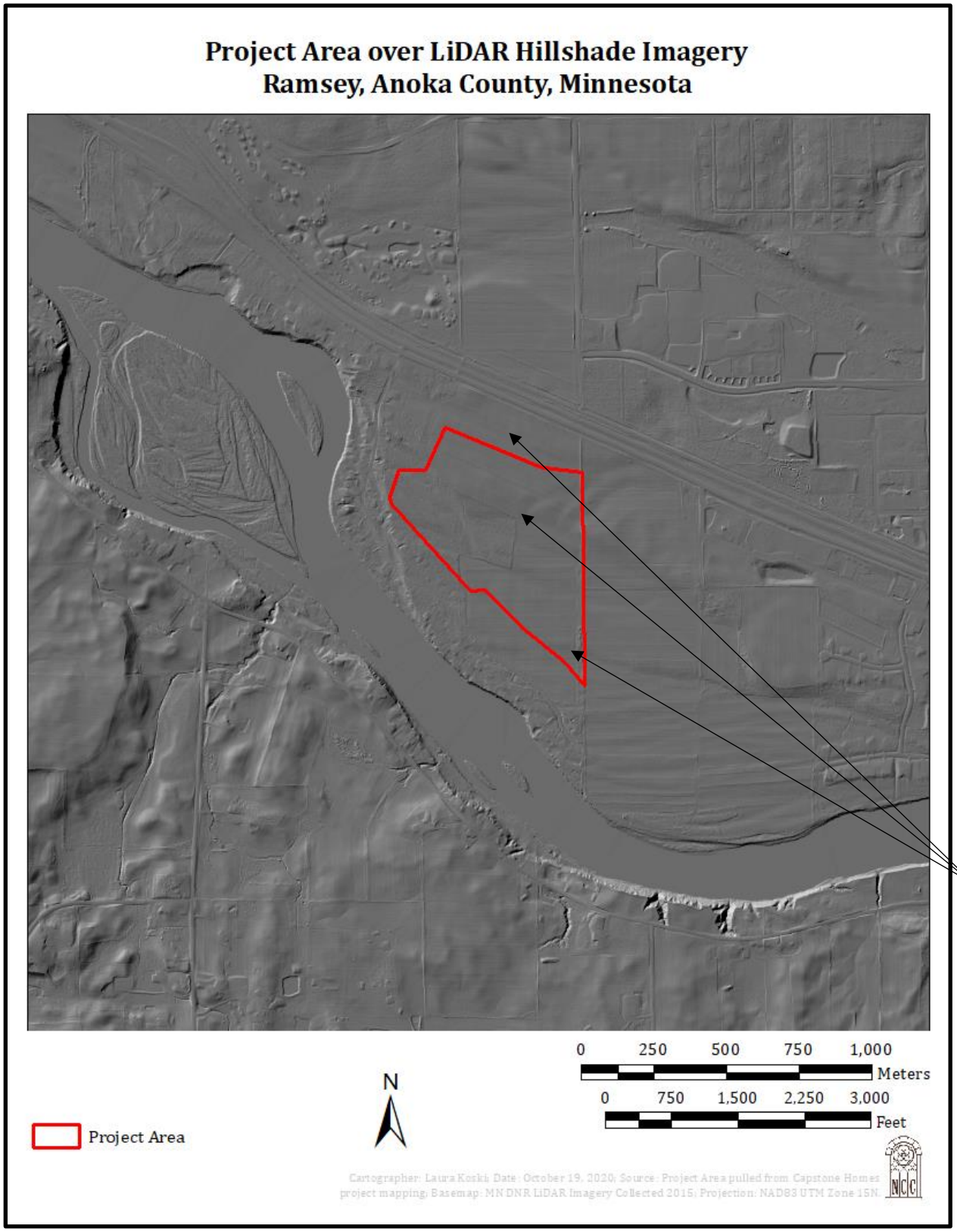

Figure 4: Map of Project Area over LiDAR Hillshade Imagery.

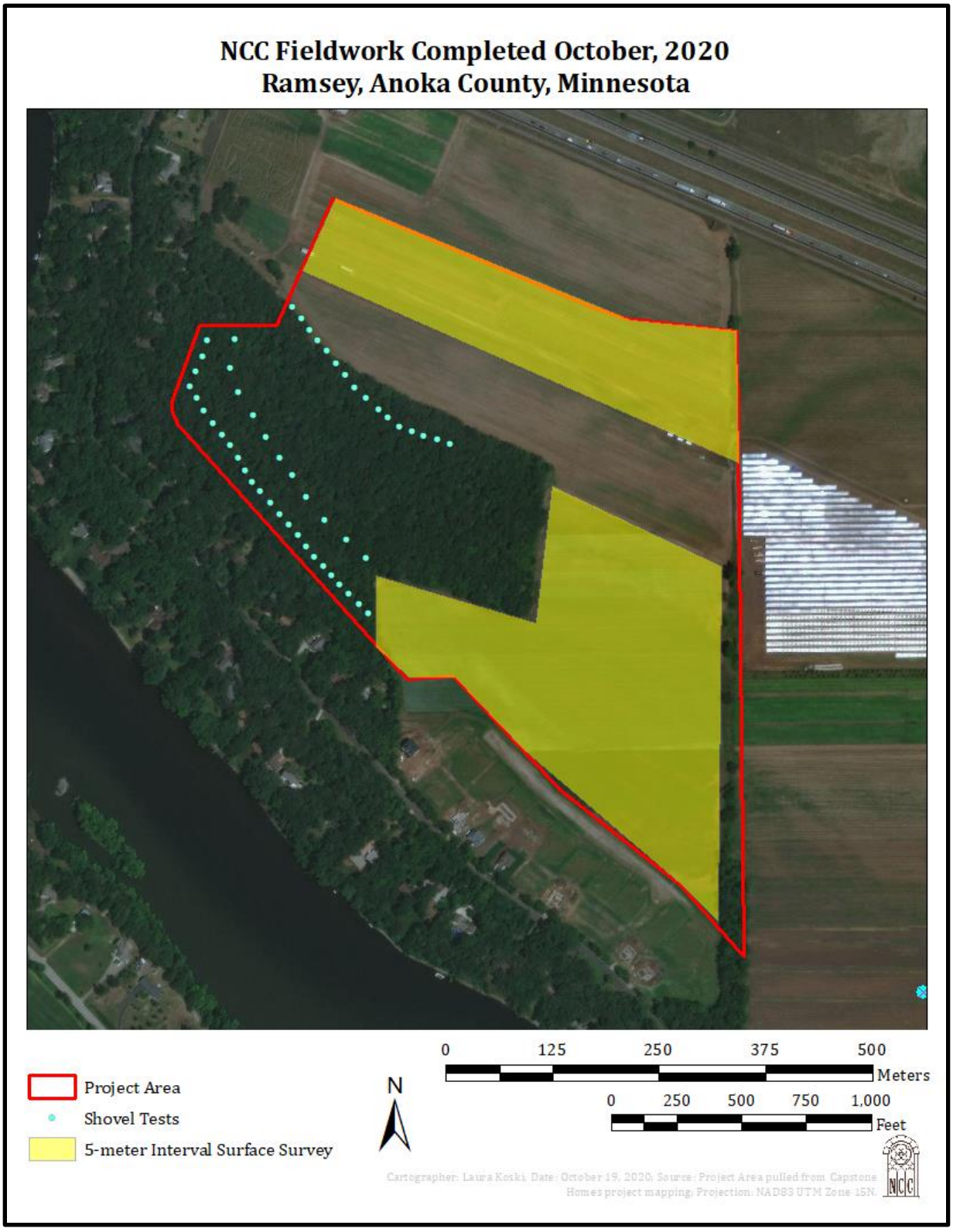

Figure 5: Map of surface surveyed areas and shovel test locations within greater project area. (Basemap provided by 2016 Google Satellite Imagery)

and compaction of these floodplain soils, it is likely this area was flooded consistently enough in the past it was not an attractive location for settlements or camps.

7.0 CONCLUSION AND RECOMMENDATIONS

Capstone Homes is proposing to build a residential development in the City of Ramsey, Anoka County, Minnesota. The project area, approximately 78.63 acres in size, is located in the E ½ of Section 30 and W ¼ of Section 29 of Township 32N, Range 25W in Archaeological Region 4e: Central Lakes Deciduous East. Historically and recently the majority of the project area was cultivated with a long wooded patch along the southwestern edge. The project area is bordered by Highway 10 approximately 500 feet to the north, the Mississippi River approximately 600 to 700 feet to the south, Bowers Drive approximately 200 feet to the west, and a solar farm on the east. Planned development includes a tree preservation area within the existing stretch of woods, 243 detached residential units, residential streets, and single-acre public park at the center.

Work began with a literature review October 7 followed by fieldwork completed October 9, 14, and 15, 2020. Fieldwork consisted of surface surveying corn fields, a cabbage, and pumpkin patch, and shovel testing the wooded area. Surface visibility in the agricultural fields ranged between 0 and 80%. Surface survey transects were spaced on a four to five-meter interval. Fifty-two shovel tests were excavated. Shovel tests were typically 35-40 centimeters (cm) wide and at least 80cm deep. All soils were screened through ¼" mesh screen, detailed profile notes completed, photographs taken, and GPS points collected for each shovel test. No prehistoric cultural materials were encountered. Recent historic materials (i.e. shotgun shells, whiteware sherds) and modern debris (i.e. plastics, aluminum cans) were encountered, but not collected.

Shovel test profiles documented consistent ancient floodplain soils. No prehistoric cultural material or archaeological features were identified during the field survey. Based on these results, Nienow Cultural Consultants recommends no further archaeological work be completed, and the project continues as planned. With any project there is the chance of unanticipated discovery. Should archaeological materials surface during any future construction, it is advised a professional archaeologist be consulted. Minnesota Statute 307.08 protects unplatted cemeteries (including burial mounds) and issues guidelines for dealing with unexpected finds. Should human remains be encountered during earth moving activity, all work must stop and local law enforcement must be called.

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APPENDIX A:

ARCHAEOLOGICAL LICENSE

APPLICATION FOR MINNESOTA ANNUAL ARCHAEOLOGICAL SURVEY LICENSE

This license only applies to reconnaissance (Phase I) surveys conducted under Minnesota Statutes 138.31-.42 during calendar year 2020. Separate licenses must be obtained for monitoring, evaluations/ Phase II and major investigation/Phase III work, and burial site work under Minnesota Statute. This license must be renewed annually. Only the individual indicated below is licensed as principal investigator. The licensed individual is required to comply with all the conditions attached to this license.

Name: Jeremy Loren Nienow

Institution/Agency/Company Affiliation: Nienow Cultural Consultants LLC

Title/Position: Owner / Principal

Address: 200 E. Plato Blvd. St. Paul, MN 55107

Work Phone: 651-295-3744 E-Mail: Jeremy.Nienow@gmail.com

Name of Advanced Degree Institution: U of Minnesota Year: 1997

Department Name: Anthropology Degree: ☐ MA/MS ☑ PhD

Type of Land: (check all that may apply)

☑ State Owned ☑ County Owned ☑ Township/City Owned

☑ Other non-federal public List:

Purpose: (check all that may apply)

☑ CRM ☑ Academic Research ☐ Institutional Field School

Required Documentation:

☑ 1) Curriculum Vita

☑ 2) Documentation of Appropriate Experience

Most Recent License Year 2019 Type I and II *(e.g. Annual, evaluation, mitigation)*

MHS Curation #: 896 Other Approved Facility: RCHS

Signed (applicant): Date: 3/4/20

Submit one copy of this form and attachments to:
Office of the State Archaeologist, 328 West Kellogg Blvd, St. Paul, MN 55102
651-201-2263 651.201.2264 email: mn.osa@state.mn.us

Minnesota Historical Society Approval: Date: 3-9-20

State Archaeologist Approval: Date: 3/5/20

License Number: 20-042

02/28/2019

APPENDIX B:

FIELDWORK PHOTOGRAPHS

Image 1: Of Typical Surface Visibility within Cabbage Patch.

Image 2: Of Field Crew Surveying Cabbage Patch (facing NE).

Image 3: Of Typical Surface Visibility within Corn Fields.

Image 4: Of Field Crew Surveying Pumpkin Patch (Facing SW).
Note Surface Visibility.

Councilmember introduced the following resolution and moved for its adoption:

RESOLUTION #21-015

RESOLUTION GRANTING COMPREHENSIVE PLAN AMENDMENT APPROVAL, PRELIMINARY PLAT APPROVAL, AND DETERMINING THAT AN ENVIRONMENTAL IMPACT STATEMENT (EIS) IS NOT NECESSARY FOR RIVERSTONE ADDITION

WHEREAS, Riverstone Development LLC, hereafter referred to as "Developer", properly applied for Preliminary Plat approval of the following described property located in the City of Ramsey:

That part of Northwest Quarter of Northwest Quarter, Section 29, Township 32, Range 25 lying northeaster of northeasterly right of way line of Burlington Northern Rail Road and lying westerly and southerly of the north 60 feet of east 40 feet of said Quarter Quarter, except road subject to easement of record, Anoka County, Minnesota

-and-

The Northwest Quarter of Southwest Quarter of Section 20, township 32, Range 25 except east 40 feet of said Quarter Quarter lying southerly of southerly right of way line of Alpine Drive NW and except north 40 feet of south 100 feet of west 40 feet of east 80 feet of said Quarter Quarter, except road subject to easement of record, Anoka County, Minnesota

-and-

The Southwest Quarter of Southwest Quarter of Section 20, Township 32, Range 25 lying west of east 40 feet thereof, except road subject to easement of record, Anoka County, Minnesota

(the 'Subject Property');

WHEREAS, the City and Developer have been working on a long-range land use plan for the Subject Property since the end of 2019; and

WHEREAS, the City approved a cost share framework in concept for the extension of Riverdale Drive on March 24, 2020; and

WHEREAS, the City approved a planning framework for the Subject Property on June 23, 2020; and

WHEREAS, the City reviewed the Sketch Plan for the project on August 6, 2020; and

WHEREAS, the City received an Application for Preliminary Plat Approval for Riverstone South Addition on December 3, 2020, which includes 242 detached single-family homes; and

WHEREAS, Minnesota Rules 4410.4300, Subp. 19.C, requires that an EAW be prepared for this project as the project requires a Comprehensive Plan Amendment; and

WHEREAS, the Planning Commission held a Public Hearing and reviewed the Preliminary Plat on January 7, 2021.

NOW THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF RAMSEY, ANOKA COUNTY, STATE OF MINNESOTA, as follows:

1. That the Ramsey City Council hereby authorizes Staff to submit a Comprehensive Plan Amendment to the Metropolitan Council from Low Density Residential to Medium Density Residential for the detached townhome (40 foot wide lots) section.
2. That the Ramsey City Council hereby establishes the following contingencies attached to future preliminary plat approval, but not including actual Preliminary Plat Approval until requirements of the Mandatory EAW are satisfied:
    a. Address any comments contained within the Official EAW Review Record when available
    b. Plans subject to current Staff Review Comments and final approval by City Engineer
    c. Approval of a contract for the Riverdale Drive Extension along with the REVISED Cost Share Agreement (January, 2021)
        i. Must also include an Assessment/Petition and Waiver Agreement to assess the Property Owner and Developer shares back to benefiting properties
    d. Securing $350,000 for the acquisition of the Tree Preservation Area
    e. Architectural Approval for Detached Townhomes - Shall include all of the following minimum requirements:
        i. Garage may not extend closer to the front property line than the covered front porch/stoop – garage must be even with or behind
        ii. Garage must be tucked under second level – second level should extend over the entire garage
        iii. Front façade must have at least 3 materials (exception ‘farm house’ design) – should not be dominated by horizontal siding
        iv. Stoop/front porch must be covered
        v. Plans must include the minimum number of windows shown on the approved master plans
    f. Architectural approval is limited to those models included in the review record. Any significant changes from these models shall require City Council approval.
    g. Completion of a Noise Study if confirmed to be required by MnDOT
    h. Post-Preliminary Plat Approvals Required
        i. Comprehensive Plan Amendment Approval by Metropolitan Council
        ii. Critical Area Overlay District Amendment by Minnesota DNR
        iii. City Approval of Zoning Amendment
        iv. Approval of the Environmental Assessment Worksheet (EAW)

The motion for the adoption of the foregoing resolution was duly seconded by Councilmember, and upon vote being taken thereon, the following voted in favor thereof:

and the following voted against the same:

and the following abstained:

and the following were absent:

whereupon said resolution was declared duly passed and adopted by the Ramsey City Council this 26th day of January, 2021.

_____
Mayor

ATTEST:

_____
City Clerk

ORDINANCE #21-03

CITY OF RAMSEY
ANOKA COUNTY
STATE OF MINNESOTA

AN AMENDMENT TO CHAPTER 117 WHICH IS KNOWN AS THE ZONING AND SUBDIVISIONS CHAPTER OF THE CITY CODE OF RAMSEY, MINNESOTA.

AN ORDINANCE AMENDING SECTION 117-90 "MAP" OF CHAPTER 117 OF THE CITY CODE OF RAMSEY, MINNESOTA.

SECTION 1. AMENDMENT

The following legally described properties, or portions thereof, generally known as Anoka County PID 20-32-25-31-0002 are hereby rezoned from R-1 Residential (MUSA - 80) District to a mix of R-1 Residential (MUSA - 65) District, R-2 Residential (MUSA – 50) District and R-2 Residential (Detached Townhome) District.

That part of Northwest Quarter of Northwest Quarter, Section 29, Township 32, Range 25 lying northeaster of northeasterly right of way line of Burlington Northern Rail Road and lying westerly and southerly of the north 60 feet of east 40 feet of said Quarter Quarter, except road subject to easement of record, Anoka County, Minnesota

-and-

The Northwest Quarter of Southwest Quarter of Section 20, township 32, Range 25 except east 40 feet of said Quarter Quarter lying southerly of southerly right of way line of Alpine Drive NW and except north 40 feet of south 100 feet of west 40 feet of east 80 feet of said Quarter Quarter, except road subject to easement of record, Anoka County, Minnesota

-and-

The Southwest Quarter of Southwest Quarter of Section 20, Township 32, Range 25 lying west of east 40 feet thereof, except road subject to easement of record, Anoka County, Minnesota

(The "Subject Property")

SECTION 2. MAP

The City is hereby instructed to cause this amendment to be shown on the "City of Ramsey Zoning Map", which map was adopted pursuant to Section 117-90 of the Ramsey City Code.

SECTION 3. EFFECTIVE DATE

This ordinance becomes effective 30 days after its passage and publication, subject to City Charter Section 5.04.

PASSED by the City Council of the City of Ramsey, Minnesota the _____ day of _____, 2021.

Mayor

ATTEST:

City Clerk

Introduction date:
Posting dates:
Adoption date:
Publication date:
Effective date:

Motion carried.

Chairperson Bauer closed the public hearing closed at 8:16 p.m.

Commission Business

Motion by Commissioner Gengler, seconded by Commissioner VanScoy, to recommend that City Council adopt Ordinance #21-02 amending City Code Section 117-148 (Mississippi River Corridor Critical Area).

Further discussion

Councilmember Musgrove asked if these changes could result in more project opportunities, such as riverbank stabilization and whether there would be additional funding opportunities for river property owners. Deputy City Administrator Gladhill stated that changing the zoning ordinance may not directly result in that action but having compliant regulations will assist. He advised of work that was done through the EPB that reviewed the condition of the shoreline and could result in additional funding opportunities for residents.

A roll call vote was performed:

Commissioner Gengler	aye
Commissioner Peters	aye
Commissioner Anderson	aye
Commissioner VanScoy	aye
Chairperson Bauer	aye

Motion carried.

6.04: Public Hearing: Consider Recommendations Related to Riverstone South; Case of Capstone Homes/Riverstone Development

1. **Adopt Resolution #21-015 Approving Comprehensive Plan Amendment from Low Density Residential to Medium Density Residential for Detached Townhome Section and Preliminary Plat for Riverstone South**
2. **Adopt Ordinance #21-03 Approving Zoning Amendment from R-1 Residential (MUSA – 80) District to R-1 Residential (MUSA – 65) District, R-1 Residential MUSA – 50) District and R-2 Residential (Detached Townhome) District**

Public Hearing

Chairperson Bauer called the public hearing to order at 8:20 p.m.

Presentation

Deputy City Administrator Gladhill presented the staff report stating staff recommends approval of the project with the contingencies noted in the staff report.

Commissioner VanScoy stated that in general he likes the plan but is concerned with the safety of the residents on Bowers Drive. He recognized that those residents do not like the concept of an additional access but stated that he believes that is critical for safety and without that he cannot support this request.

Deputy City Administrator commented that originally staff proposed that connection, but it did not move forward. He stated that he would not want to tie that to this project as the developer is not responsible for that.

Chairperson Bauer commented that this development has nothing to do with a second access for Bowers Drive, as that will continue to be an issue regardless of this proposal.

Commissioner Anderson asked if this development would have an HOA and private streets. He commented that the street width seems narrow.

Deputy City Administrator Gladhill commented that he would let the developer speak to whether there would be an HOA. He stated that in terms of road widths there is a menu of options that can be selected with different levels of parking allowed. He stated that a 32-foot width road would allow parking on both sides of the street, whereas parking would only be allowed on one side of the street for the road width proposed. He stated that the main street that goes through this development would be a little wider, whereas the spur roads would be 29 feet in width with no parking on one side of the street.

Commissioner Anderson commented that he has been plowing snow for the City this season and the narrower roads can be tough, therefore he would support wider streets where possible.

Councilmember Musgrove commented that she would also prefer a wider road. She asked if there would be sidewalks, and whether that would be on one side or both sides. She also asked if there would be fencing between the homes and solar garden.

Deputy City Administrator Gladhill replied that sidewalks would be along one side of the road, as required by the City. He stated that the smaller lot homes will be adjacent to the solar garden and noted that he would allow the developer to provide details on the buffering between those homes and solar garden.

Citizen Input

Tom Bakritges, Capstone Homes, acknowledged the landowners noting that the Pearson family has trusted them with developing a project to preserve their legacy. He also expressed appreciation to City staff, the Commissions and City Council for the communication and cooperation throughout the past year of planning. He stated that the overall site is about 78 acres and it was

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important for them to figure out the right transition of density transitioning throughout the site. He noted that the larger lots are proposed on the south side, adjacent the existing homes and preserved trees, transitioning to smaller lots as you move towards the solar garden. He stated that there would be a landscaping buffer along the length of Riverdale Drive. He stated that as you enter into the site onto Pearson Drive, people would pass the preserved area of trees and park area. He commented that there will be seven acres of tree preservation that will be dedicated to the City along with another eight acres of open space and ponding. He stated that they have created a 15-acre area to act as a buffer between this development and adjacent development. He stated that they developed this plan after receiving input from City staff, the City Council and advisory groups, and residents. He stated that the townhomes will have a lawn maintenance HOA while the single-family homes would be under a master that includes the buffer area along Riverdale Drive. He stated that the street widths proposed match the road width in Riverstone North and has worked very well. He stated that they are required to provide sidewalks on one side of the road and have those proposed on the plans. He stated that there is vegetation on the other side of the existing fence around the solar garden site. He noted that with the existing vegetation they would not propose additional screening for that area.

Steve Bona, Capstone Homes, stated that throughout the site they would have homes similar to Riverstone North but noted that they would have more of the larger homes in this development. He commented that there will a great variety of homes throughout the development. He provided details on the townhome product offerings that they would propose for this development in order to match the desires of home buyers. He stated that there is a large variety of front elevations and home plans included in the preliminary plat for the detached townhome product, noting that they have been selling extremely well in their other developments. He commented that the 29-foot width for streets has worked well in Riverstone North, noting that this would be similar with amenities provided in return for the 29-foot-wide streets. He commented that Unicorn is proposed for a street name. He recognized that the City has a street naming policy but asked that a different name be selected for that roadway in order to assist in marketing.

Commissioner Peters stated that he lives in the Brookfield development, in a Capstone home, and asked if the front porches would be wood or concrete.

Mr. Bona replied that they do wood front porches because they continue building in the winter and therefore concrete cannot be poured in the winter months.

Commissioner Peters asked if the wood would be treated or left raw.

Mr. Bona was unsure but noted that he could follow up on that.

Commissioner Peters stated that in his neighborhood some of the homeowners were not aware of how to treat a porch and used paint, which does not hold up well. He suggested that the porches be stained/treated to ensure they look the same.

Mr. Bona commented that he would be happy to pass those comments on and can recommend that to their production team. He stated that it is a significant process to make a change to every home but would be happy to share the comment and get feedback.

Commissioner Anderson referenced the northeast corner, specifically lots 16 through 20, noting that those lots appear to be less than 40 feet in width and asked for details.

Mr. Bakritges stated that those lots are not less than 40 feet, as they are measured at the setback and not the right-of-way.

Chairperson Bauer commented that he lives in Riverstone North and has not had a problem with the 29-foot width.

Mr. Bona commented that the narrower road provides a benefit to calming traffic, as traffic travels at higher speeds on wider roads.

John Dionne, 14806 Bowers Drive, stated that he was previously a member of the Ramsey City Council before transitioning to being a District Court Judge. He commented that virtually no one along Bowers Drive likes the density higher than it needs to be. He recognized the concept that if someone does not want something to be built next to them, they should purchase the land themselves. He commented that with the required amendments, it is an ability for the City to follow the plan that was set forth before them. He asked why the number of houses is being packed in above what is allowed by the Comprehensive Plan and zoning. He used the example of 29-foot roads, which developers like because they are less costly and allow more lots, but they are not good for cities and maintenance. He believed that higher density housing should continue to be concentrated around The COR rather than increasing the density in this area. He stated that often sidewalks are setback into yards with tree planting between the road and sidewalk while other times sidewalks are against the road and asked which option this plan would propose. He stated that this is an opportunity for the Commission to require the developer to follow the guidance of the Comprehensive Plan and not increase the density in this more rural area. He appreciated the architectural considerations included in this plan to ensure that all the homes would not look the same. He commented that developers will come and go but residents often remain in the community for longer terms. He asked the Commission to deny the amendment to the Comprehensive Plan and require the developer to rework its plan to meet the guidance of the Comprehensive Plan.

Dave Nathe, 14453 Llama Street, stated that he owns the adjoining property. He asked what would happen with Lazy Dayz RV, as that business parks on both sides of the street. He asked if there would be a buffer zone or fence buffering his property. He asked if the ponding area on the site would be increased or whether another ponding area would be added.

Deputy City Administrator Gladhill commented that he will work with Lazy Dayz to evaluate the parking as he believed the intent was to only allow parking on one side of the street. He commented that as the connection for this development is made that parking issue will become more important. He stated that the Nathe property is undeveloped and abuts 65-foot lots. He

stated that he could follow up with Mr. Nathe to speak in further detail. He stated that this development will need to treat its own stormwater and its plans will be reviewed by the City and Lower Rum River Water Management Organization and confirmed that new ponds will be created on the site.

Mr. Dionne commented that anyone coming out of Bowers Drive would need to travel one mile down onto Armstrong to get onto Highway 10 to head west to Elk River, which would dramatically change the access to the highway for those residents.

Deputy City Administrator Gladhill commented that is not a Capstone improvement but a highway planning process for the City and encouraged residents to continue to provide input as they continue to walk through the design for Riverdale Drive.

Eric Nathe, 14453 Llama Street, asked for clarification on the lift station on the east. He stated that the plot shows Pearson Drive almost coming into their property and commented that he would love to see a buffer zone between this development and his property. He stated that people from Bowers Drive often come onto their property and believed that additional residents in this area would only increase this problem.

Deputy City Administrator Gladhill commented that the lift station is the sanitary sewer connection for wastewater and provided details on that system. He stated that the connection is shown in order to provide a connection in the case the property to the east is developed. He stated that pavement could be put in or a sign could be placed stating of a possible connection in the future, noting that it is important for residents to know of a possible road connection to prevent issues in the future.

John Jacobson, 14691 Bowers Drive, stated that he is concerned with vehicles entering Highway 10 to go towards Anoka from Bowers Drive, noting a slight turn to the northwest which makes it difficult to see if cars are coming from the Elk River direction. He asked if there would be a way to add an acceleration lane to allow Bowers Drive traffic to reach the traveling speed.

Deputy City Administrator Gladhill provided details on the Riverdale Drive project which would be setup before new motorists are added to the area. He noted that the City would develop plans and specifications which would be reviewed and approved by MnDOT. He agreed that an at grade acceleration lane could be considered, as there is right-of-way available. He stated that the constraining factor will be the distance between Bowers Drive and Armstrong on Highway 10. He stated that staff will discuss that option as the Riverdale Drive process moves forward and hoped that process would begin later this year.

Gretchen Morris, 14820 Bowers Drive, commented that she believes the issue of density was previously discussed. She stated that while she is not a fan of ten feet between townhouses, she recognizes that there is a return on investment that is necessary to make a project feasible. She asked the number of homes that would be needed to make the development work.

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Deputy City Administrator Gladhill commented that there were multiple open houses for the project, which incorporated a lot of input from residents on Bowers Drive. He stated that changes were made to the design to increase the lots sizes for the properties nearest Bowers Drive along with the additional buffer in order to provide a compromise. He stated that this is the model that the Planning Commission and City Council agreed to move forward in terms of neighborhood design and variety of housing products.

Mr. Bona stated that they have been working on this process for one year with six or more meetings with neighbors on the design along with concept design meetings with the Planning Commission and City Council. He stated that the tree preservation land and buffer area was provided as a compromise, removing 21 lots, in order to address the input received from the Bowers Drive residents. He stated that the five-foot side yard setback is the typical setback for detached townhome products. He noted that he would be willing to meet with the Nathe family to discuss buffering concerns. He noted that they do not have buffering proposed in that area because of existing vegetation and the tree preservation and landscaping that would be provided on the overall plan.

Motion by Commissioner VanScoy, seconded by Commissioner Peters, to close the public hearing.

A roll call vote was performed:

Commissioner Gengler	aye
Commissioner Anderson	aye
Commissioner VanScoy	aye
Commissioner Peters	aye
Chairperson Bauer	aye

Motion carried.

Chairperson Bauer closed the public hearing closed at 9:31 p.m.

Commission Business

Commissioner VanScoy stated that he expressed his concern with the disregard for public safety and feeling very strongly about that. He stated that staff made the comment that the issue is not related to this case and asked for clarification.

Deputy City Administrator Gladhill stated that the Commission could take action on this proposal, and if desired could provide a second motion asking the City Council to reconsider a second access for Bowers Drive.

Chairperson Bauer commented that a second access for Bowers Drive is a separate issue from this specific development. He noted that although that connection was part of one of the original sketch plans, it was removed as a result of the input from the Bowers Drive residents and not the position of Capstone.

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Motion by Commissioner Gengler, seconded by Commissioner Peters, to recommend that City Council adopt Ordinance #21-03 and Resolution #21-015 approving actions related to the Riverstone South Preliminary Plat.

Further discussion

Commissioner Anderson asked for a friendly amendment to the motion to request the Council to review the second access to Bowers Drive as he is also opposed to not having a second access for that neighborhood. Chairperson Bauer asked for input from the Council discussion on that topic. Councilmember Musgrove commented that the consensus was divided, but overall, the Council respected the concerns from the Bowers Drive residents related to safety concerns that would arise from adding additional traffic onto the narrow Bowers Drive. Deputy City Administrator Gladhill commented that the was a strong consensus from the Council to not have that connection. He noted that there were even concerns from the Bowers Drive neighborhood with a pedestrian connection because of the narrow road and lack of sidewalk. He stated that while one or two members of the Council may have still favored the connection, the strong majority opposed that. Chairperson Bauer stated that the issue of a second access to Bowers Drive is separate of this request and stated that this action should first be considered and then a separate action could be taken related to a secondary access for Bowers Drive.

A roll call vote was performed:

Commissioner Gengler	aye
Commissioner Peters	aye
Commissioner Anderson	nay
Commissioner VanScoy	aye
Chairperson Bauer	aye

Motion carried.

Motion by Commissioner VanScoy, seconded by Commissioner Anderson, to recommend that City Council reconsider the connection to Bowers Drive, at some form, for public safety reasons.

Further discussion

Commissioner Peters stated that he thought he recalled different ways to manage an emergency pathway for vehicles and asked what happened with that. Deputy City Administrator Gladhill stated that option was discussed internally but there was not enough support to move anything forward that would allow pedestrians or vehicles.

A roll call vote was performed:

Commissioner Anderson	aye
Commissioner VanScoy	aye

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Commissioner Gengler	nay
Commissioner Peters	nay
Chairperson Bauer	aye

Motion carried.

Chairperson Bauer asked that Councilmember Musgrove share the input from the Commission when the issue is considered by the Council.

7. COMMISSION BUSINESS

7.01: Center Street Framework and Policy Plan

Presentation

Parks and Assistant Public Works Superintendent Riverblood presented the Staff Report and highlighted the Center Street Area Framework and Policy Plan and welcomed any comments or feedback the Commission may have on draft plans or its elements.

Commission Business

Commissioner Gengler commented that this is a great plan and appreciated the thought and details that went into the plan. She stated that the pumphouse treatment stands out as being something that will add so much value to the center of the city. She also appreciated the thoughtful amenities and stormwater treatments. She asked where public art might come into this as it could be an additional amenity that could attract more visitors.

Parks and Assistant Public Works Superintendent Riverblood provided an example of public art/display. He stated that he appreciated the notion of more traditional public art and identified concrete placeholders that could be foundational elements for public sculpture that could become wayfinding areas and provide a sense of community. He stated that he is excited about public art in this location as well as throughout the park system. He recognized that there would need to be additional discussion on possible funding for public art elements in the parks.

Commissioner Anderson stated that he also likes the plan. He stated that if he were asked to prioritize, he would suggest beginning with the pumphouse and then Municipal Plaza as that was promised to Affinity. He stated that the remaining items could fall in line after those two items.

Chairperson Bauer commented that some of the projects within The COR are on hold right now with the challenges of the past year and stated that perhaps this would be the right time to begin on these elements which would continue to attract people to this area. He stated that housing in this area continues to fill up as soon as it is built and that increase in population will continue to attract the interest of retailers when the economy opens up more and restrictions are lifted.

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CC Regular Session **7. 8.**

Meeting Date: 01/26/2021

By: Tim Gladhill, Community Development

Information

Title:

Approve Revised Cost Share Framework for Riverdale Drive Extension Improvement Project Related to Riverstone South; Case of Capstone Homes and Pearson Properties of Ramsey

Purpose/Background:

The purpose of this case is to consider a revised Cost Share Framework for the Riverdale Drive Extension related to the Riverstone South Subdivision.

The need for this project is being driven by a development proposal known as Riverstone South by Capstone Homes located on property owned by Pearson Properties of Ramsey on the south side of Highway 10. That being said, the project has a broader benefit for Highway 10 Safety/Congestion and the Bowers Drive Neighborhood.

This topic was discussed last discussed in March, 2020. General direction has been to split costs evenly between the City, Property Owner (Pearson) and Developer (Capstone), including any funding gap related to improvements to an adjacent parcel required to make this connection.

Below is a summary of topics for discussion at the request of the Developer and Property Owner. Additional detail is included in the attached presentation.

- Developer/Owner object to contributing to off-site improvements (County Parcel, Bowers Drive)
- City has found that acquisition/repayment of previous funding for the County Parcel shall likely be required
- Planning Level Layout has been adjusted slightly
- Cost Estimates have been improved
- The City was unsuccessful in the planned MnDOT Grant ($710,000)
- The City is applying for a different MnDOT Grant ($1.25M)

Timeframe:

30 minutes.

Observations/Alternatives:

Assessment Method

All parties involved have verbally agreed to an even split of the assessment between Capstone's residential development and the Pearson's future commercial/industrial development along Highway 10. The assumption is that all parties will agree to these terms in a future Assessment Agreement that eliminates any risk and/or liability from deviating from the 'net developable acreage' method of assessment used on Puma Street on the north side of Highway 10.

City Contribution to Collector Road

The original framework is attached along with minutes from Public Works Committee and City Council for additional detail.

A key component to the success of this project is a potential grant award from MnDOT in the amount of $1.25M. While Staff feels confident that this project will score well in the next application round, there is no guarantee of

this award. This project is listed in MnDOT and Anoka County's 2014 Highway 10 Access Planning Study, and the City's 2019 Ramsey Gateway Study.

A portion of the full Riverdale Drive project is located on real property owned by Anoka County. This corridor was originally planned for a river crossing across the Mississippi River to the City of Dayton. At this time, Anoka County does not have funding available to contribute to this project (Riverdale Drive Extension). As such, Anoka County has offered that the City can purchase this parcel, repaying grant funds for acquisition and receive any future land sales from redevelopment. This would not be a County Road - it would be a local City Street.

As a sidebar, the City still desires to plan for a river crossing, the alignment simply has changed to coincide with Armstrong Boulevard. MnDOT is currently leading a study on the feasibility of this river crossing.

Total Assessment Amount and Preliminary Assessment Amount

Attached to this case is a detailed breakdown of the proposed Project Proforma.

Timelines

Capstone Homes has their schedule for subdivision approval for Riverstone South by the end of 2021 with construction to commence in 2022. If the City Council is comfortable with the proposed cost share agreement, this timeframe is feasible. The City Council could consider a higher contribution with traditional funds or introducing an eligible Tax Increment Financing (TIF) economic development project on the commercial/industrial parcels along Highway 10. This could extend the desired timeframe.

At the end of the day, the City is not obligated to contribute to any portion of this project at any given time, although there would be value in doing so. The question at hand is to better determine what funding sources can be secured and at what timeframes. The City may be able to assemble additional funding sources (both internal and external) to increase our participation, but that will take time.

Future Discussions

This case is intended to serve as high-level policy direction. Next steps including, but not limited to Feasibility Report, Approving Plans, Awarding Contract and holding Assessment Hearing will provide additional levels of detail. The intent of this step is to limit the number of alternatives Staff should explore, given the request from the Developer to revise previous direction.

The City Council could consider asking the City's Financial Consultant, Ehlers, complete a financial analysis of the private development pro-forma to ensure that their Return on Investment is within industry standards and that the Land Sale Price is within industry standards. The Public Works Committee does not believe this is necessary. Of note, Staff will still be having Ehlers evaluate the Cost Share Framework without evaluating the private development pro-forma to ensure accuracy and compliance with applicable rules and regulations.

Alternatives

Alternative 1 - Recommend that the City Council proceed the ORIGINAL Cost Share Framework, including their contribution to the County Property, updating planned grant fund revenue and ROW acquisition cost. [Developer/Owner Object]

Alternative 2 - Recommend that the City Council proceed with the REVISED Cost Share Framework. [Current Discussions]

Funding Source:

The funding for this project is proposed to be a combination of City Contributions and Developer Assessments as outlined below. As it pertains to the City's Cost Share (Municipal Contribution to Collector Road + Assessment Amount for Ownership of Real Property), several funding sources are available.

1. City's Public Improvement Revolving (PIR) Fund (generated from local property tax revenue)
2. Anoka County Redevelopment Authority (ACHRA)
3. State of Minnesota Municipal State Aid (MSA) Account
4. MnDOT Local Partnership Program (LRIP - competitive grant up to $1.25M)
5. Tax Increment Financing (for qualifying projects in the Commercial/Industrial District)

Recommendation:

The Public Works Committee recommends approval of the revised Cost Share Framework without the need for financial underwriting. The Public Works Committee feels that a contribution to a collector road has a broader public benefit and that the revised cost share framework is close to the original framework originally approved (non-binding) by the City Council and that additional underwriting is unnecessary.

Action:

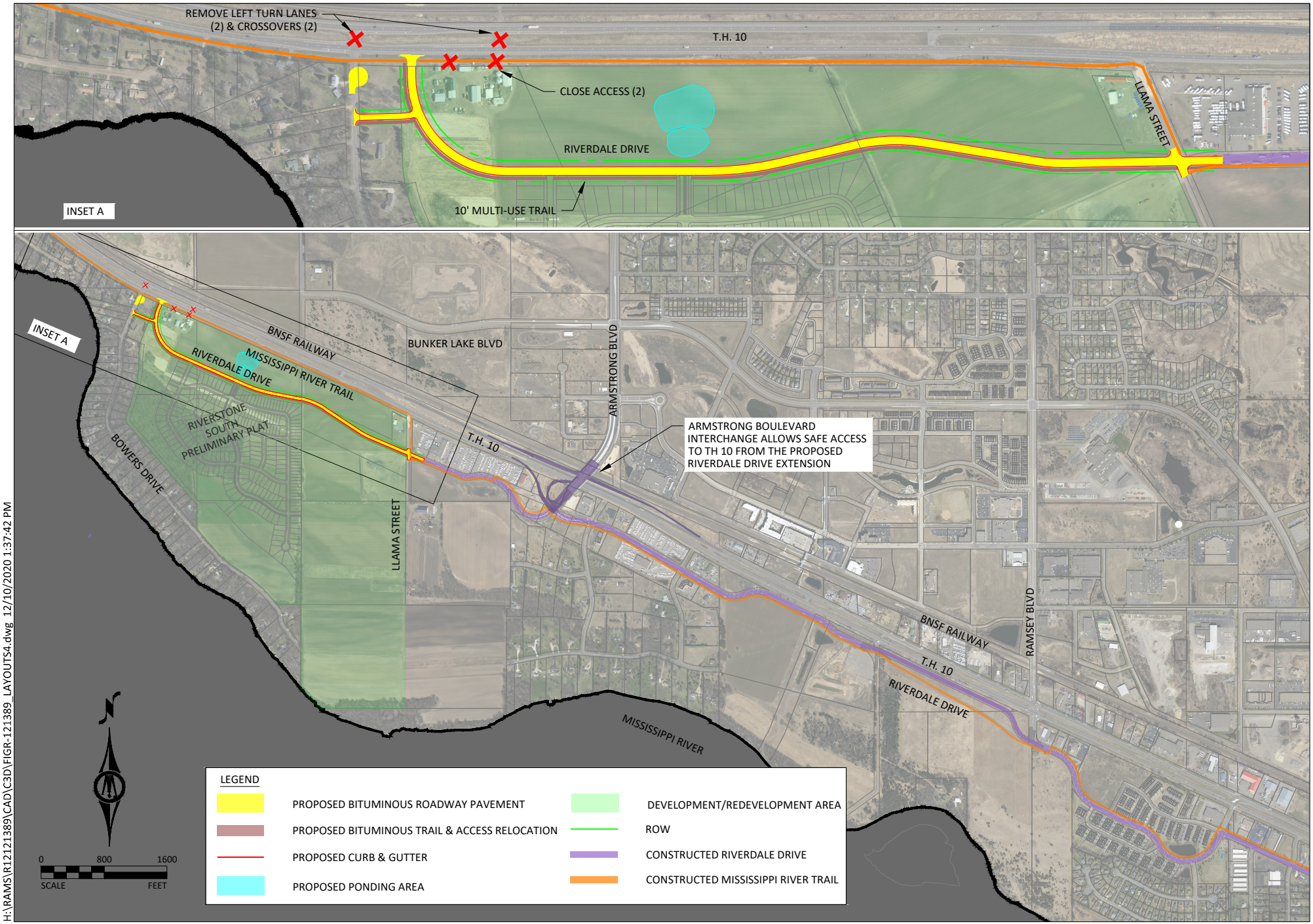
Motion to adopt Resolution approving the revised Cost Share Framework for the Riverdale Drive Extension related to Riverstone South.

Attachments

Riverdale Drive Planning Level Layout
Capstone Plans
Capstone Plans
ORIGINAL Cost Share Framework
REVISED Cost Share Framework
Public Works Committee Meeting Minutes dated March 16, 2020
Staff Presentation

Form Review

Inbox	Reviewed By	Date
Bruce Westby	Bruce Westby	01/21/2021 03:28 PM
Grant Riemer	Grant Riemer	01/21/2021 03:32 PM
Kurt Ulrich	Kurt Ulrich	01/21/2021 04:09 PM
Form Started By: Tim Gladhill		Started On: 01/19/2021 06:41 PM
Final Approval Date: 01/21/2021		



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LEGAL DESCRIPTION

PARCEL DESCRIPTION: (Per Schedule A of Title Commitment File No. 2651, with a commitment date of October 17, 2019 at 7:00 am, prepared Twin City Title Company, LLC as issuing agent for Old Republic National Title Insurance Company)

Parcel A: Outlot B, Pearson Place, Anoka County, Minnesota.

Parcel B: That part of the Northwest Quarter of the Northwest Quarter of Section 29, Township 32, Range 25, Anoka County, Minnesota, lying southerly of U.S. Highway 10 and 169.

Parcel C: Lot 2, Block 3, Pearson Place, Anoka County, Minnesota.

Parcel D: Lot 1, Block 3, Pearson Place, Anoka County, Minnesota.

(abstract property)

LEGEND

- OPEN SPACE
- OPEN SPACE – WOODED
- STORMWATER POND
- INFILTRATION BASIN

S00°08'36"W 1705.32

S00°17'33"W 1093.62

U.S. HIGHWAY NO. 10 & 169

COMMERCIAL DEVELOPMENT 21.96 AC

S66°01'43"E 1951.85

40' DETACHED TOWNHOMES

RESIDENTIAL DEV. 78.63 AC

65' SINGLE FAMILY

55' SINGLE FAMILY

PUBLIC PARK 1.0 AC.

PROPOSED INFILTRATION

PROPOSED POND

PROPOSED POND

STREET A

STREET B

STREET C

STREET D

STREET E

STREET F

PEARSON BLVD

RIVERDALE DRIVE

10' TRAIL

TRAIL/VEHICLE ACCESS

N51°55'40"W 620.99

S42°51'14"E 58.89

N89°47'35"W 193.74

334.66 S37°59'16"W

BOWERS DRIVE NW

MISSISSIPPI RIVER

AREA RETAINED BY LANDOWNER 9.70 AC

TREE PRESERVATION AREA 7.0 AC

EXISTING 50' TREE BUFFER

N40°39'19"W 1349.11

N17°54'18"E 322.61

S00°14'18"W 76.30

Δ=17°40'00" R=128.25 395.06

Δ=12°58'27" R=705.37 159.73

N69°29'50"W 205.79

N76°47'15"W 50.00

N22°30'16"E 451.73

Δ=06°31'20" R=955.37 100.41

Δ=03°27'10" R=450.00 270.04

Δ=58°33'37" R=60.36 61.69

0 60 120 240

(SCALE IN FEET)

SITE DATA

TOTAL AREA	±110.29 AC.
RESIDENTIAL DEVELOPMENT AREA	78.63
PUBLIC PARK AREA	1.0
TREE PRESERVATION AREA	7.0
COMMERCIAL DEVELOPMENT AREA	22.98
AREA RETAINED BY LANDOWNER	8.68

RESIDENTIAL DEVELOPMENT DATA

TOTAL NUMBER OF LOTS	242
GROSS DENSITY	3.1 U/AC
DETACHED TOWNHOMES	77
55' SINGLE FAMILY	115
65' SINGLE FAMILY	50

DETACHED TOWNHOME LOTS	77
DETACHED TOWNHOME GROSS AREA	15.05 AC.
(MINUS 30' OUTLOTS)	0.57 AC.
NET AREA	14.48 AC.
NET DENSITY	5.32 UNITS/AC.

55' SINGLE FAMILY LOTS	115
55' SINGLE FAMILY GROSS AREA	32.96 AC.
(MINUS 30' OUTLOTS & PARK)	1.48 AC.
NET AREA	31.48 AC.
NET DENSITY	3.65 UNITS/AC.

65' SINGLE FAMILY LOTS	50
65' SINGLE FAMILY GROSS AREA	14.42 AC.
NET DENSITY	3.47 UNITS/AC.

CARLSON McCAIN ENGINEERING SURVEYING ENVIRONMENTAL
3890 PHEASANT RIDGE DR NE
SUITE 100
BLAINE, MN 55449
TEL 763.489.7900
FAX 763.489.7959
CARLSONMCCAIN.COM

DRAWN BY: C#
ISSUE DATE: 08/05/2020
Revisions:

CAPSTONE HOMES, INC.
14015 Sunfish Lake Blvd. NW, Suite 400
Ramsey, MN 55303

RIVERSTONE SOUTH
Ramsey, Minnesota

PRODUCT DENSITY EXHIBIT

1 of 1

[Save Date: 08/05/20] F:\jobs\8481 - 8500\8494 - pearson place 2nd\cad c3d\survey\layouts\8494_layout 4 product areas.dwg

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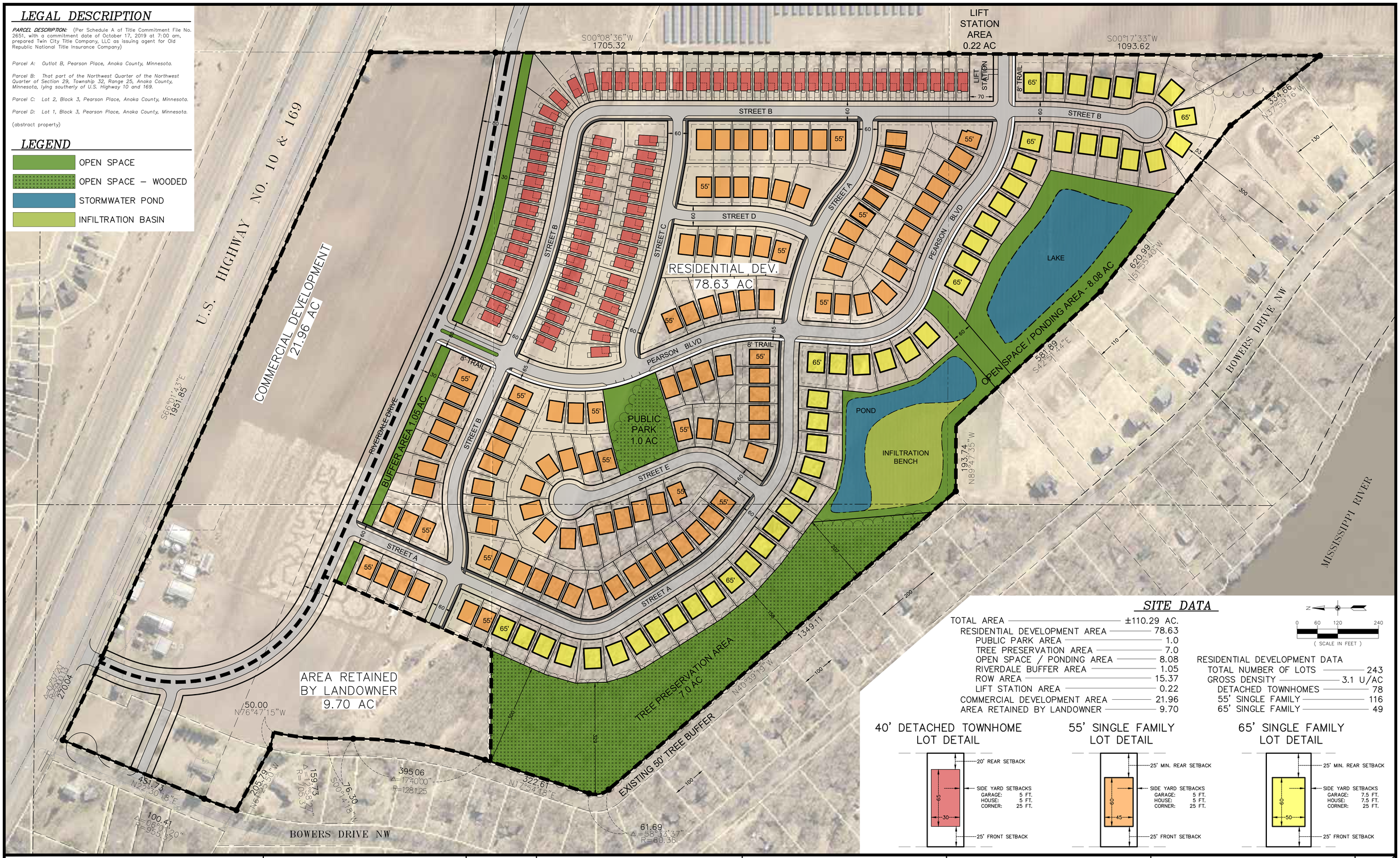

SITE DATA

TOTAL AREA	±110.29 AC.
RESIDENTIAL DEVELOPMENT AREA	78.63
PUBLIC PARK AREA	1.0
TREE PRESERVATION AREA	7.0
OPEN SPACE / PONDING AREA	8.08
RIVERDALE BUFFER AREA	1.05
ROW AREA	15.37
LIFT STATION AREA	0.22
COMMERCIAL DEVELOPMENT AREA	21.96
AREA RETAINED BY LANDOWNER	9.70

N

0 60 120 240

(SCALE IN FEET)

RESIDENTIAL DEVELOPMENT DATA

TOTAL NUMBER OF LOTS	243
GROSS DENSITY	3.1 U/AC
DETACHED TOWNHOMES	78
55' SINGLE FAMILY	116
65' SINGLE FAMILY	49

40' DETACHED TOWNHOME LOT DETAIL

55' SINGLE FAMILY LOT DETAIL

65' SINGLE FAMILY LOT DETAIL

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3890 PHEASANT RIDGE DR NE
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BLAINE, MN 55449
TEL 763.489.7900
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CARLSONMCCAIN.COM

DRAWN BY: C#/RR
ISSUE DATE: 12/3/20
Revisions:

CAPSTONE HOMES, INC.
14015 Sunfish Lake Blvd. NW, Suite 400
Ramsey, MN 55303

RIVERSTONE SOUTH
Ramsey, Minnesota

SKETCH PLAN W/AERIAL

1 of 1

[Save Date: 10/21/20] F:\jobs\8481 - 8500\8494 - pearson place 2nd\cad c3d\survey\layouts\8494_sketch plan.dwg

Riverdale Drive Development Initiated Expansion and Safety Improvement Project
Scenario 4d: Time Sensitive (2020 Approval) Scenario w/Public Works Committee Recommendation

Total Project Costs		
Anoka County Parcel	$	639,750
Pearson Properties Parcel	$	1,066,250
Total Project Costs	$	1,706,000

Pearson Properties Parcel	
Pro-Rata Frontage Costs	$1,066,250.00
Potential Funding Sources	
MnDOT LPP Grant Allocation	$188,000.00
Municipal Contribution to Collector Road	$200,000.00
Assessment Amount	**$678,250.00**

Preliminary Assessment Roll			
Property/Party		**Percentage**	**Assessment Amount**
Capstone/Riverstone South		50.00%	$339,125.00
Pearson/Commercial/Industrial		50.00%	$339,125.00
Total		**100.00%**	**$678,250.00**

Anoka County Parcel	
Roadway Costs	$639,750.00
MnDOT LPP Allocation	$522,000.00
Unallocated Public Contribution	$117,750.00

To be split evenly between City, Pearson, Capstone per PWC

Original Concept
Approved by Council

Total Contribution by Party: Cost Share with Pearson and Capstone						
	Pearson Frontage		Anoka County Frontage		Total	
Property/Party	**Amount**	**Percentage**	**Amount**	**Percentage**	**Amount**	**Percentage**
City/Public Dollars	$388,000	36.39%	$39,250	33.3%	$427,250	36.1%
Capstone/Riverstone South	$339,125	31.81%	$39,250	33.3%	$378,375	32.0%
Dobbs/Commercial/Industrial	$339,125	31.81%	$39,250	33.3%	$378,375	32.0%
Total	*$1,066,250*	*100.00%*	$117,750	100.0%	$1,184,000	100.0%

Total Project: Public versus Private Dollars			
	Amount	Percentage	
MnDOT Grant	$710,000	42%	
City Dollars (including unallocated from County Parcel)	$239,250	14%	*~56% Public Dollars*
Private Dollars	$756,750	44%	
Total	$1,706,000	100%	

Note: Developer recommends that they should not be responsible for solving for frontage on Anoka County Property. Feels City's contribution should be higher.

Alternative 6a

Capstone Proposal w/City Modifications - Capstone Pearson Even Split

	Project Costs (including ROW)	
County Parcel	$1,578,125	
Pearson Parcel	$971,500	
Bowers Drive Modifications	$75,375	
Total	$2,625,000	**Note: utilities not included - paid for by Trunk Fees**

Sources of Funds

	County Parcel	Pearson Parcel	%	Bowers Drive	Total	
Sources						
MnDOT Grant	$1,250,000				$1,250,000	
City Contribution	$328,125	$272,020	28.0%	$75,375	$675,520	
Pearson Contribution		$349,740	36.0%		$349,740	
Capstone Contribution		$349,740	36.0%		$349,740	
			100.0%		$2,625,000	
Uses (Project Costs)						
Portion of Overall Project	37.5%	58.0%		4.5%	100.0%	
Road, Trail, Storm	$628,125	$971,500		$75,375	$1,675,000	$1,675,000
ROW	$950,000					
	$1,578,125	$971,500		$75,375	$2,625,000	

Public vs. Private Dollars					
Private (Capstone + Pearson)	$0	$699,480	72%	$0	$699,480
Public (City + MnDOT)	$1,578,125	$272,020	28%	$75,375	$1,925,520
					$2,625,000

Talking Points

But for this development, the City would wait until other funding sources closed the gap.

If the Developer desires to accelerate the schedule, the Developer should bring additional dollars to the table.

This project derives a direct benefit to the connection to Highway 10 and associated improvements.

While not technically the Developer's responsibility, the Development relies on a connection through the County Property.

It is not feasible to phase the project.

If the Developer desires to not contribute to off site improvements, the City has less dollars to allocate to the Pearson Frontage.

Minnesota Statute allows the City to assess costs for off-site improvements that are necessary due to development impacts.

~~Considering contribution to Riverdale Drive + acquisition for open space preservation, City should review financials~~

Public Works recommended that review of financials (above) is not necessary.

PUBLIC WORKS COMMITTEE
CITY OF RAMSEY
ANOKA COUNTY
STATE OF MINNESOTA

The Public Works Committee conducted a regular meeting on Monday, March 16, 2020, at the Ramsey Municipal Center, 7550 Sunwood Drive NW, Ramsey, Minnesota. Appropriate social distancing was observed during the meeting.

Members Present: Chairperson Mark Kuzma
Councilmember Jeff Menth
Councilmember Chris Riley

Also Present: City Engineer Bruce Westby
Deputy City Administrator Tim Gladhill
Parks and Assistant Public Works Superintendent Mark Riverblood

1. CALL TO ORDER

Chairperson Kuzma called the regular meeting of the Public Works Committee to order at 5:00 p.m.

2. CITIZEN INPUT

There was none.

3. APPROVE AGENDA

Motion by Councilmember Riley, seconded by Councilmember Menth, to approve the agenda, as presented.

Motion carried. Voting Yes: Chairperson Kuzma, Councilmembers Riley and Menth. Voting No: None.

4. APPROVE MINUTES

4.01: Approve February 18, 2020, Meeting Minutes

Motion by Councilmember Menth, seconded by Councilmember Riley, to approve the following minutes:

Regular Meeting Minutes dated February 18, 2020

Motion carried. Voting Yes: Chairperson Kuzma, Councilmembers Menth and Riley. Voting No: None.

5. COMMITTEE BUSINESS

5.01: Consider Recommendation on Cost Share Alternatives for Riverdale Drive Development Initiated Expansion and Safety Improvement Project

Deputy City Administrator Gladhill reviewed the staff report and stated that staff recommends that the City Council confirm direction to continue funding discussions with the City, offering to pay up to one third of the project costs on the Pearson Properties Frontage (excluding Anoka County parcel). He noted that Capstone Homes is recommending that the City contribute 50 percent of the cost of the Pearson Properties Frontage (excluding Anoka County parcel).

Tom Bakritges, Capstone Homes, stated that it has been a good experience to work with City staff. He noted that they have tried to be consistent with what has been done with the City in terms of cost-share on other road projects. He stated that the one third/one third/one third split has always been discussed. He stated that this is an important road for the City and developer, and they are comfortable with the one third/one third/one third split. He stated that they are open to allowing the City additional time to find additional funding allocations, which would reduce the costs for all parties and therefore support option 4A.

John Dobbs, representing the Pearsons and Pearson properties, echoed the comments made by Capstone. He stated that staff has been amazingly supportive throughout this process over the past two years. He noted that the challenge has always been the cost of the County frontage of Riverdale Drive. He stated that the funding challenge is how the road can be built without the County contributing. He stated that they have a similar view to Capstone and hope to find a way through this.

Chairperson Kuzma stated that the challenge is the amount of $118,000 and asked if that amount could be split three ways as well.

Deputy City Administrator Gladhill noted that is up for discussion. He clarified that amount is allocation for the County parcel. He confirmed that could be split three ways. He noted that staff could also speak to the County to determine if the cost could be paid upfront and then reimbursed by the County when the parcel sells.

Chairperson Kuzma asked where the funding would come from for the City portion.

Deputy City Administrator Gladhill reviewed some available funding sources the City could utilize.

Councilmember Riley confirmed that the City has identified funding sources for its portion of the cost-share and that the issue is the County's portion, which equates to about $118,000. He noted that the County will receive additional funds for its parcel when it sells if the road is constructed.

Deputy City Administrator Gladhill explained that the County has funds allocated through its CIP and does not have funds or priority identified for this improvement, or the sale of that parcel.

Chairperson Kuzma asked if the developers would be open to splitting the $118,000 three ways.

Mr. Bakritges replied that they have not talked about that scenario and is not comfortable discussing that because the parcel is owned by the County. He stated that he could be open to it but there would need to be further discussion because the land is owned by the County.

Chairperson Kuzma stated that he is attempting to find a solution that could allow the project to move forward, noting that there could be a possibility that the funds could be reimbursed at a later date.

Mr. Dobbs stated that the numbers move around, but everyone is on the same page with the one third/one third/one third split. He stated that there is something to be said about improving another property owner's value five-fold that seems wrong. He stated that they would like to continue to be supportive of the project.

Councilmember Riley stated that he understands that point of view. He stated that having the shortfall, the City may possibly have to delay the development one year to find a solution. He explained that if everyone shares the additional cost at a rate of about $40,000 each, that could allow this to move forward.

Mr. Dobbs noted that he would have to speak with the Pearsons, noting that his prior comment was as a consultant. He acknowledged that everyone has worked hard to get this far, and he would like to continue discussions.

Mr. Bakritges stated that if this action is what the Committee would recommend, he would want to ensure that the City leaves open the option of investigating other funding sources that could bring down the cost and believed there to be enough time to do that.

Deputy City Administrator Gladhill agreed and asked if the Committee would be comfortable allowing staff and the developers to find that solution and define a timeframe.

Councilmember Riley stated that he would be willing to support splitting the additional cost three ways, otherwise would feel that the project would have to be moved back one year.

Chairperson Kuzma echoed the comments of Councilmember Riley. He stated that if the agreement of splitting the County cost equally between the three parties could be reached, the Committee could forward that to the Council and that would not preclude staff from looking at additional funding sources.

Councilmember Menth asked where the gap is coming from.

Deputy City Administrator Gladhill explained that is the portion for the County parcel frontage.

Mr. Bakritges stated that they would support that concept but would like to stress that staff continue to investigate alternate sources of funding, as mentioned in the staff report.

Motion by Councilmember Riley, seconded by Councilmember Menth, to recommend that the City Council confirm direction to continue funding discussions with the City offering to pay up to one third of the project costs on the Pearson Properties Frontage.

Motion carried. Voting Yes: Chairperson Kuzma, Councilmembers Riley and Menth. Voting No: None.

5.02: Center Street Area Capital Improvement Planning

Parks and Assistant Public Works Superintendent Riverblood reviewed the staff report and recommendation to proceed and approve the planning activity outlined in the case.

Chairperson Kuzma asked if the design cost would cover both the park and pump house areas.

Parks and Assistant Public Works Superintendent Riverblood provided additional details on the elements that are included in the design, including the pump house elements and Center Street improvements.

Chairperson Kuzma asked if the pump house elements would include filters that may be necessary for water treatment.

Parks and Assistant Public Works Superintendent Riverblood noted that would be a separate activity, and they would ensure not to plan anything in areas that would perhaps need to be disturbed in the future for water treatment improvements.

Councilmember Menth asked for additional details on how the improvements would be added.

Parks and Assistant Public Works Superintendent Riverblood replied that the pump house material is meant to have material clad onto it, explaining that the new materials would be added to the existing structure. He provided additional details on the location of the temporary section of road and trail that would be improved.

Councilmember Riley agreed that this is the right time to improve the pump house as the area around it continues to develop.

Councilmember Menth noted that the last Council meeting included a discussion on the desire to hold apartment buildings to certain standards and agreed that the City should hold itself to the same standard.

Motion by Councilmember Menth, seconded by Councilmember Riley, to recommend to the City Council to approve $11,800 for Center Street area capital improvement planning.

Motion carried. Voting Yes: Chairperson Kuzma, Councilmembers Menth and Riley. Voting No: None.

5.03: Consider Recommendation to City Council to Accept Feasibility Report for Amended 2020 Pavement Overlay Improvements, Improvement Project No. 20-02A

City Engineer Westby reviewed the staff report and recommendation that the City Council accept the Feasibility Report for Amended 2020 Pavement Overlay Improvements, Improvement Project No. 20-02A. Based on the pavement core analysis findings from both mill and overlay feasibility reports, the time of year as related to receiving competitive bids on projects, and the fact that the City is again discussing funding options for pavement management program projects, Staff does not recommend pursuing overlay improvements in 2020.

Councilmember Riley asked why the streets in Regency Ponds would look good and still not have enough pavement.

City Engineer Westby stated that the roads were sealcoated, which can make the road look better than the underlying conditions. He reviewed the ratings for the roads, which were 6, 7 and 8 and therefore seemed that they could be overlayed. He stated that after reviewing the pavement cores, much of the pavement is degrading from the bottom up. He reviewed information on the estimated timeline and the different factors that continue to impact that schedule. He stated that staff would recommend not moving forward on an overlay project this year for reasons noted earlier, and to allow Staff to focus on the Variolite Street Reconstruction project to ensure it can move forward this year. He noted that the overlay funds could be used for additional pavement corings and/or crack seal improvements, as needed.

Councilmember Riley stated that Business Park 95 is in bad shape and asked what would be done with those streets.

City Engineer Westby stated that the City would continue to patch those streets this year. He stated that there were two streets that had pavement sections that could support mill and overlay while the remainder requires full depth reclamation. He stated that he would prefer to delay that project to the next year when it can be better planned for and more is known about road funding.

Councilmember Riley asked if the streets would be good enough for businesses to use this year.

City Engineer Westby confirmed that the streets would be usable, although patching would not look as good aesthetically.

Councilmember Riley stated that originally, the City's plan for roads included completing mill and overlays but it continues to be the situation that mill and overlays cannot be completed. He asked if that would impact the City's plan and if other cities have similar problems.

City Engineer Westby noted that Anoka stopped completing mill and overlays in 2009 on older roads and are only doing full depth reclamations on its older roads. He confirmed that this will change the City's pavement management program for many of its streets.

Motion by Councilmember Menth, seconded by Councilmember Riley, to recommend that the City Council accept the Feasibility Report for Amended 2020 Pavement Overlay Improvements, Improvement Project No. 20-02A.

Motion carried. Voting Yes: Chairperson Kuzma, Councilmembers Menth and Riley. Voting No: None.

6. COMMITTEE / STAFF INPUT

6.01: Staff Updates on Variolite Street Reconstruction, Improvement Project No. 20-01

City Engineer Westby provided an update on the current status of the design options for Variolite Street in preparation of requesting City Council approval of the Feasibility Report on April 14th.

Councilmember Riley suggested placing signs out stating that the road is going to be reconstructed, as some residents do not seem to know about the upcoming project.

City Engineer Westby stated that staff will review that option once Public Works Superintendent Riemer returns from vacation.

6.02: Staff Updates on Improvement Projects and Items of Interest

City Engineer Westby reviewed the staff report, providing an update on current and proposed improvement projects within the City and on other items of interest to the Committee.

6.03: Review Future Topics Calendar

City Engineer Westby reviewed the future topics calendar.

7. ADJOURNMENT

Motion by Councilmember Riley, seconded by Councilmember Menth, to adjourn the Public Works Committee meeting.

Motion carried. Voting Yes: Chairperson Kuzma, Councilmembers Menth and Riley. Voting No: None.

The regular meeting of the Public Works Committee adjourned at 6:22 p.m.

Respectfully submitted,

Grant Riemer

Public Works Superintendent

Drafted by Amanda Staple
TimeSaver Off Site Secretarial, Inc.

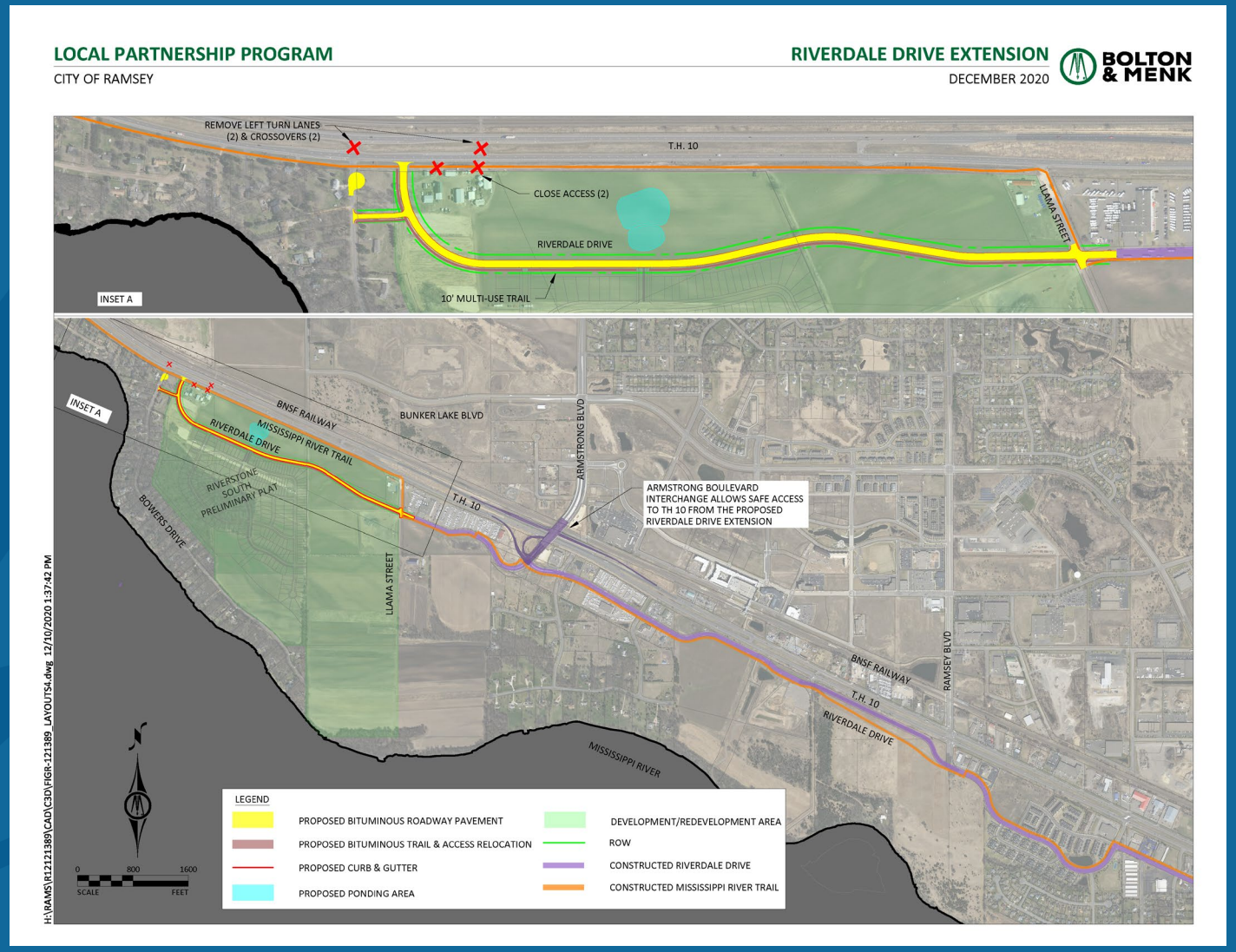
Riverdale Drive Extension
Riverstone South Subdivision

Public Works Committee

January 19, 2021

City of RAMSEY

Riverdale Drive Extension



Framing the Conversation

- But for this Development, the City would wait for this extension
  - Opportunity/Development Driven
- An accelerated schedule has financial value
- The legal framework would allow these costs to be required of the Developer
- It is reasonable and fair for the City to contribute due to the broader public benefit

Previous Council Direction

- Pearson Frontage
  - City, Developer and Property Owner each pay 1/3
- County Parcel
  - City, Developer and Property Owner each share 1/3 of cost in excess of potential grant [Developer and Property Owner Object]

Updates

- City must purchase County Parcel and repay a grant
  - $750K to $1.3M
  - Future Return on Investment – Land Sales
- Continued Negotiations with Developer/Property Owner
  - Developer Counter
  - Staff Counter to Developer Counter

Continued Negotiations

- Developer Counter Proposal
  - City pay for all costs on County Parcel
  - City pay for any improvements to Bowers Drive, Bowers Drive Connection to Riverdale Drive Extension and any improvements to Highway 10
- Staff Counter Proposal to Above
  - **[Partial Agreement]** City pay for all costs on County Parcel
    - **[Counter]** Allocate any grant award to County Property Only – no allocation to Pearson Frontage
  - **[Partial Agreement]** City pay for any improvements to Bowers Drive and Bowers Drive Connection to Riverdale Drive Extension
  - **[Reject]** City, Developer and Property Owner each contribute to Highway 10 Improvements [direct benefit to Development]
  - **[Counter]** Reduce amount of City Contribution to Pearson Frontage to offset significant contribution to overall project

Financial Analysis/Underwriting

- Is the contribution warranted?
- Is the Developer's Return on Investment within industry standard?
- Are we inflating the value of the land by contributing to the project?

Public Works Recommends Financial Underwriting Not Needed

Options to Waive Underwriting

- Developer pays for the Open Space Preservation ($350K); or
- Developer pays for the Pearson Frontage Contribution ($272K)

Public Works Recommends Financial Underwriting Not Needed

Legal Framework

- Per MN Statute 429, can assess for off-site improvements if benefits the project

Proposed Funding Source for City Contribution

- Anoka County Housing and Redevelopment Authority (ACHRA)

Riverdale Drive Development Initiated Expansion and Safety Improvement Project
Scenario 4d: Time Sensitive (2020 Approval) Scenario w/Public Works Committee Recommendation

Total Project Costs		
Anoka County Parcel	$	639,750
Pearson Properties Parcel	$	1,066,250
Total Project Costs	$	1,706,000

Pearson Properties Parcel	
Pro-Rata Frontage Costs	$1,066,250.00
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DRAFT
For Discussion Only
Not Reviewed by City Council

Total Contribution by Party: Cost Share with Pearson and Capstone						
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Property/Party	**Amount**	**Percentage**	**Amount**	**Percentage**	**Amount**	**Percentage**
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Total Project: Public versus Private Dollars			
	Amount	Percentage	
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City Dollars (including unallocated from County Parcel)	$239,250	14%	*~56% Public Dollars*
Private Dollars	$756,750	44%	
Total	$1,706,000	100%	

Note: Developer recommends that they should not be responsible for solving for frontage on Anoka County Property. Feels City's contribution should be higher.

Capstone Counter Proposal 12/16/2020

Riverdale Drive Development Initiated Expansion and Safety Improvement Project
Scenario 4d: Time Sensitive (2020 Approval) Scenario w/Public Works Committee Recommendation

Total Project Costs	Original		Corrected Cost Split	
Anoka County Parcel	639,750.00	37.5%	639,750.00	37.5%
Pearson Properties Parcel	1,066,250.00	62.5%	1,066,250.00	62.5%
Total Project Costs	1,706,000.00	100.0%	1,706,000.00	100.0%

Pearson Properties Parcel			
Pro-Rata Frontage Costs	1,066,250.00	1,066,250.00	City of Ramsey Responsible for: Bowers Connection and Improvements Bowers Cul-de-sac HWY 10 Connection
Potential Funding Sources			
Mn DOT LPP Grant Allocation	188,000.00	188,000.00	
Municipal Contribution to Collector Road	200,000.00	200,000.00	
Assessment Amount	**678,250.00**	**678,250.00**	

Preliminary Assessment Roll						
Pearson Property Frontage	Assessment Amount	Percentage	Assessment Amount	Front Footage (LF)	Percentage of Total Front Footage	Pearson Land Parcel (4904 North/South front footage)
Capstone/Riverstone South	339,125.00	50.00%	$ 228,204.02	1650	34%	Capstone South Frontage: 1650 LF
Pearson Commercial/Industrial	339,125.00	50.00%	$ 450,045.98	3254	66%	Pearson's North Frontage: 2452 LF
Total	**678,250.00**	**100.00%**	**678,250.00**	**4904**	**100.00%**	Pearson's South Frontage: 802 LF

Anoka County Parcel			
Roadway Costs	639,750.00	639,750.00	County Road Portion Center Line: 1532 LF
Mn DOT LPP Allocation	522,000.00	522,000.00	
Unallocated Public Contribution	117,750.00	117,750.00	*To be split evenly between City, Pearson, Capstone per PWC* / *To be funded fully by Public City Dollars*

Total Contribution by Party: Cost Share with Pearson and Capstone												
	Pearson Frontage		Anoka County Frontage		Total		Pearson Frontage		Anoka County Frontage		Total	
Property/Party	Amount	Percentage	Amount	Percentage	Amount	Percentage	Amount	Percentage	Amount	Percentage	Amount	Percentage
City/Public Dollars	$388,000	36.39%	$39,250	33.3%	$427,250	36.1%	$388,000	36.39%	$117,750	100.0%	$505,750	42.7%
Capstone/Riverstone South	$339,125	31.81%	$39,250	33.3%	$378,375	32.0%	$228,204	21.40%	$0	0.0%	$228,204	19.3%
Pearson Commercial/Industrial	$339,125	31.81%	$39,250	33.3%	$378,375	32.0%	$450,046	42.21%	$0	0.0%	$450,046	38.0%
Total	*$1,066,250*	*100.00%*	$117,750	100.0%	$1,184,000	100.0%	$1,066,250	*100.00%*	$117,750	100.0%	$1,184,000	100.0%

Total Project: Public versus Private Dollars					
	Amount	Percentage		Amount	Percentage
MnDOTGrant	$710,000	42%		$710,000	42%
City Dollars (including unallocated from County Parcel)	$239,250	14%	*~56% Public Dollars*	$317,750	19%
Private Dollars	$756,750	44%		$678,250	40%
Total	$1,706,000	100%		$1,706,000	100%

Any Additional Grant Funds to be spread evenly across Pearson Parcel based on "Pearson Frontage Percentage.

Note: Developer recommends that they should not be responsible for solving for frontage on Anoka County Property. Feels City's contribution should be higher.

Alternative 6a

Capstone Proposal w/City Modifications - Capstone Pearson Even Split

	Project Costs (including ROW)
County Parcel	$1,578,125
Pearson Parcel	$971,500
Bowers Drive Modifications	$75,375
Total	$2,625,000

Note: utilities not included - paid for by Trunk Fees

Sources of Funds

	County Parcel	Pearson Parcel	%	Bowers Drive	Total
Sources					
MnDOT Grant	$1,250,000				$1,250,000
City Contribution	$328,125	$272,020	28.0%	$75,375	$675,520
Pearson Contribution		$349,740	36.0%		$349,740
Capstone Contribution		$349,740	36.0%		$349,740
			100.0%		$2,625,000

Uses (Project Costs)

Portion of Overall Project	37.5%	58.0%		4.5%	100.0%	
Road, Trail, Storm	$628,125	$971,500		$75,375	$1,675,000	$1,675,000
ROW	$950,000					
	$1,578,125	$971,500		$75,375	$2,625,000	

Public vs. Private Dollars					
Private (Capstone + Pearson)	$0	$699,480	72%	$0	$699,480
Public (City + MnDOT)	$1,578,125	$272,020	28%	$75,375	$1,925,520
					$2,625,000

DRAFT
Not Reviewed by City Council

Talking Points

But for this development, the City would wait until other funding sources closed the gap.

If the Developer desires to accelerate the schedule, the Developer should bring additional dollars to the table.

This project derives a direct benefit to the connection to Highway 10 and associated improvements.

While not technically the Developer's responsibility, the Development relies on a connection through the County Property.

It is not feasible to phase the project.

If the Developer desires to not contribute to off site improvements, the City has less dollars to allocate to the Pearson Frontage.

Minnesota Statute allows the City to assess costs for off-site improvements that are necessary due to development impacts.

Considering contribution to Riverdale Drive + acquisition for open space preservation, City should review financials