MANKATO PLANNING COMMISSION
Regular Meeting October 22, 2025 - 6:00 p.m.
Intergovernmental Center
Mankato Room
****

Any person speaking to the Commission shall give to the Secretary of the Commission the NAME and HOME ADDRESS of such person prior to speaking.
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1. **CALL TO ORDER**

2. **APPROVAL OF AGENDA**

3. **APPROVAL OF MINUTES**

   1. **September 24, 2025 Planning Commission minutes**

4. **OLD BUSINESS**

5. **NEW BUSINESS**

   1. CY56-25

      Request of the Planning Agency to review the proposed 2026-2030 Capital Infrastructure Plan.

      The anticipated date of Council action is December 1, 2025.

   2. CY53-25

      Request of APX Construction Group, with permission of the owner, for a preliminary plat review of Evenson Subdivision; for annexation; and for the rezoning of the subject parcel from T, Transition, to B-3, Highway Business. The subject property is generally described as being in the east ½ of the northwest ¼, Section 21, Township 108 N, Range 26 W lying south of Highway 83 and east of Highway 22 excluding Stanley Subdivision, Blue Earth County (Blue Earth County PID R430921177001).

      The anticipated date of Council action is November 10, 2025.

3. CY54-25

Request of Ryan Evenson, with permission of the property owner, for a conditional use permit to allow an indoor playground and sport center in the B-3, Highway Business, zoning district, and for a certificate of design compliance for the construction of a new structure in the Highway Gateway Overlay District. The subject property is described as Lot 5, Block 2, Venstar Subdivision (1740 Premier Drive).

The anticipated date of Council action is November 10, 2025.

4. CY55-25

Request of the Planning Agency to review Chapter 10 of Mankato City Code related to variances.

The anticipated date of City Council action is December 8, 2025.

6. **MISCELLANEOUS**

7. **ADJOURNMENT**

Planning Commission Regular Meeting **3. 1.**

Meeting Date: 10/22/2025

Title

September 24, 2025 Planning Commission minutes

Attachments

Draft 9-24-25 Planning Commission Minutes

MINUTES

Mankato Planning Commission
September 24, 2025 - 6:00 p.m.
IGC - Mankato Room

1. **CALL TO ORDER**

Chair Zehnder called the meeting to order at 6:00 p.m.

Commissioner's Present: Chair Zehnder, Ms. Surdy, Mr. Filipovitch, Mr. Dieken, Mr. Iddings.

Staff Present: Molly Westman — Planning and Zoning Administrator, Mark Konz — Director of Planning and Development Services, Bennett Hanson — Economic Development Specialist, Travis Johnson — Permit Technician, and Brittany Mitchell — Planning Coordinator.

2. **APPROVAL OF AGENDA**

Mr. Filipovitch made a motion to approve the agenda. Ms. Surdy seconded the motion. The motion carried unanimously.

3. **APPROVAL OF MINUTES**

Ms. Surdy made a motion to approve the minutes from August 27th, 2025. Mr. Dieken seconded the motion. The motion carried unanimously.

1. **August 27, 2025 Planning Commission Minutes**

4. **OLD BUSINESS**

No old business

5. **NEW BUSINESS**

1. CY 46-25

Request of Widseth, on behalf of the developer, Southwest Minnesota Housing Partnership, with permission of the property owner, for a final plat review of Good Counsel Meadows plat. The subject property is generally described as Outlot C, School Sisters of Notre Dame Subdivision; part of vacated Ruth Street; part of Outlot B, School Sisters of Notre Dame Subdivision, etal.

Ms. Mitchell reports that staff submits the following findings of fact:

General Requirements:

1. The site is designed in conformance with the location and width of streets, the general drainage location, lot sizes and arrangement.
2. A drainage study has been submitted to verify compliance with the city drainage requirements.
3. The site provides storm drains and stormwater ponds that outlet into the city's stormwater facilities at the rates and volumes allowed by the MS4 permit.

Streets:

1. The street right-of-way widths conform to the standards listed in Chapter 10 of the Mankato City code by meeting the right-of-way standards.
2. The proposal will vacate a portion of Ruth Street right-of-way.

Easements:

1. The proposed preliminary plat provides the standard easements required in Chapter 10 of the Mankato City Code.

Block Standards:

1. The blocks within the subdivision were designed for the intended end use as residential lots.

Lot Standards:

1. The lots within the subdivision are intended for residential development. The lots are designed in conformance with the standards set forth in Chapter 10.
2. The concept plan for the residential areas conforms to the minimum lot size requirements.

Public Sites and Open Spaces:

1. The applicant is not required to make a parkland dedication, as the property was previously platted.

Ms. Mitchell reports that based on conformance with the preliminary plat, staff recommends approval of the final plat.

Craig Britton (Widseth) and James Arentson (Architect, Southwest Minnesota Housing Partnership) were present at the meeting to represent the applicant and respond to any questions from the commission members. Mr. Britton indicated that they have reviewed and agreed to the conditions set forth and will work with the City of Mankato to finalize the construction plans and the final plat.

Chair Zehnder opened the public hearing for comment. With no one wishing to speak, the public hearing was closed.

Mr. Filipovitch made a motion to approve the final plat. Ms. Surdy seconded the motion. The motion passed unanimously.

The anticipated date of City Council action is October 14, 2025.

2. CY 47-25

Request of ISG, with permission of the property owner, for a conditional use permit to allow unenclosed storage of materials, products and equipment in the PI, Planned Industrial, zoning district, and for a conditional use permit to allow for exterior fluid/fuel storage tanks. The subject properties are described as all of Lots 1 thru 3 and all of Lots 6, Lundin Industrial Park. (304 Lundin Blvd; PID R010906126035).

Mr. Hanson reports that staff respectfully submit the following findings regarding the Conditional Use Permit:

1. The proposed unenclosed storage of material, products and equipment is considered a Conditional Use in the PI, Planned Industrial Zoning District.
2. The proposed outdoor storage, when implemented with the recommendations and in conformance with Mankato City Code, is in keeping with the comprehensive planning policies of the City. The underlying land use plan identifies this parcel as "Light Industrial".
3. The proposal does not interfere with or diminish the use of property in the immediate vicinity.
4. The proposal does not cause undue traffic congestion. The number of site accesses along Lundin Blvd will not increase.
5. To the extent known, the development conforms with all other applicable regulations of the district, and other applicable ordinances.
6. There are no known historical or architectural resources on the site.
7. There are no known significant natural or environmental features on the property.
8. It will not cause a negative cumulative effect and effect on the City as a whole.
9. The proposal will not jeopardize the public's health, safety, or general welfare.
10. The applicant has identified the three following aboveground storage tanks that will be constructed or remain on-site: 1) a new 1,000-gallon diesel / HVO tank, 2) an existing 200-gallon diesel tank, relocated on site, and 3) an existing 1,000-lb LP tank to remain as is.

Mr. Hanson reports that staff recommends approval of the Conditional Use Permit to allow unenclosed storage in the PI, Planned Industrial, zoning district and a conditional use permit to allow for exterior fluid/fuel storage tanks with the following conditions:

1. The applicant shall provide a complete set of civil construction plans, including a SWPPP, and a stormwater management plan that meet the City of Mankato standards and MS4 permit. Approval by the City Engineer will be required prior to issuance of a building permit.
2. Outdoor storage is limited to operable equipment only. Inoperable or unlicensed equipment or construction materials will not be permitted. Wrecked, dismantled, partially dismantled, inoperative, or abandoned vehicles or machinery shall be prohibited.
3. The outdoor storage of any refuse or waste material must conform to section 11-32 and section 10-1743, including full enclosure of any refuse containers.
4. Signage for the development shall conform to Mankato City Code standards and a sign permit shall be obtained for any proposed signage prior to fabrication and installation.
5. The applicant shall provide proper notification to MPCA regarding the installation of the above-ground storage tanks on site. If fueling of vehicles occurs on site, MPCA substance transfer area requirements may need to be met
6. The applicant shall receive fire permits for the proposed above-ground storage tanks prior to issuance of a certificate of occupancy.
7. The applicant shall provide tank detail sheets for all existing or proposed aboveground tanks on site prior to issuance of a building permit.
8. Dispensing of flammable/combustible liquids stored within exterior above-ground storage tanks is limited to a maximum of three tanks on site.
9. If traffic associated with the use of the property causes undue traffic concerns on Lundin

Blvd., the applicant shall be required to complete a traffic study and make the recommended modifications needed to mitigate these conditions.
10. The applicant shall provide screening of 90% opacity or greater for the proposed exterior storage in accordance with Mankato City Code. Screening shall be installed prior to issuance of a certificate of occupancy.
11. On-site lighting shall conform to the lighting standards in the Mankato City Code, including but not limited to full-cut, fully shielded fixtures. Conformance shall include, but not limited to, all signage, building, and parking lot lighting. Conforming lighting shall be installed prior to issuance of a certificate of occupancy.
12. Landscaping shall be installed in conformance with the Mankato City Code and in accordance with an approved landscaping plan prior to issuance of a certificate of occupancy.
13. Barbed wire, if installed, must be installed above a height of 6 1/2 feet. A fence permit must be obtained prior to modification to or instillation of fencing on site.
14. Noise levels may not exceed the allowable MPCA standards and shall not be audible beyond the property lines.

Ms. Surdy inquired whether hazardous waste cleanup is required, given the presence of storage tanks on the site.

Mr. Hanson stated that, to his understanding, the Minnesota Pollution Control Agency (MPCA) has its own set of regulations based on the size and contents of storage tanks. In this case, the combined capacity is limited to 1,000 gallons between each tank, which only triggers the notification requirement. However, if the tanks are used for fuel storage, additional requirements would apply. He also noted that the City of Mankato requires fire permits to be obtained in addition to meeting MPCA regulations.

Randy Potter (ISG) was present at the meeting representing Rolls-Royce and was available to answer any questions the commission members may have had.

Chair Zehnder opened the public hearing for comment. With no one wishing to speak, the public hearing was closed.

Ms. Surdy made a motion to approve the Conditional Use Permit to allow unenclosed storage in the PI (Planned Industrial) zoning district, as well as a Conditional Use Permit to allow exterior fluid/fuel storage tanks, subject to conditions. Mr. Iddings seconded the motion. The motion passed unanimously.

The anticipated date of City Council action is October 14, 2025.

3. CY 48-25

Request of Bolton and Menk, with permission of the property owner, for a final plat review of Victory Ridge Apartments; for a conditional use permit to allow a grouped housing project in the O-R, Office Residential zoning district; and for a conditional use permit for a wetland sequencing and replacement request. The subject property is described as Outlot B, Kearney Addition No. 2, City of Mankato (Blue Earth County PID R010909301015).

Ms. Mitchell reports that staff submit the following findings of fact:

1. The use, a grouped housing project, is considered a conditional use in the O-R, Office Residential district.
2. The request is in keeping with the comprehensive planning policies of the City, as the underlying land use plan identifies this parcel as “Office Residential.”

3. The proposal does not interfere with or diminish the use of property in the immediate vicinity.
4. The proposal will be served with public utilities and services.
5. There are no known historical or architectural resources on the site.
6. There are known environmental conditions on the site. The applicant has worked through the conditions with the appropriate state and city departments.
7. The grouped housing development will not cause a negative effect on the city as a whole as the proposed development conforms to the standards in the Code.
8. To the extent known, the proposal conforms with all other applicable regulations of the district, and other applicable ordinances.
9. The proposal will not jeopardize the public's health, safety, or general welfare.
10. The proposal will not cause undue traffic congestion, as the traffic impact analysis demonstrates that the level of service proposed for the amount of traffic generated within the development will remain at acceptable levels. A traffic study determined that a dedicated left turn signal may be beneficial at the intersection of Adams St. and Victory Dr. to continue to assist with traffic conditions. Staff will continue to work with all parties to determine an appropriate solution.

Ms. Mitchell reports that staff recommend approval of the final plat and conditional use permit for the Victory Ridge Development with the following conditions:

1. The applicant shall submit a geotechnical evaluation and bluff stability study for review and approval prior to building permit submittal.
2. The applicant shall be a willing participant in further evaluation of the signal phasing and upgrades at the intersection of N. Victory Dr. and Adams St. and agree to cost participation of warranted left turn land movement improvements.
3. If the grouped housing project on the subject parcel is constructed in phases, a phasing plan shall be submitted for review and approval, which demonstrates conformance to all standards for each phase of the development.
4. The applicant shall install bicycle parking which conforms to the Mankato City Code.
5. The applicant shall provide a photometric plan that demonstrates conforming lighting levels at the property line. This shall be provided with the building permit submission for the structures.
6. The applicant shall provide exterior light fixture cut sheets. All exterior light fixtures shall conform to Mankato City Code.
7. The applicant shall obtain a sign permit for any desired site signage prior to fabrication and installation.
8. The required landscaping shall be installed prior to, or in conjunction with, occupancy of the premise.
9. Prior to occupancy of any units, a rental license issued by the City of Mankato shall be in place.
10. The applicant shall submit a snow removal and storage plan for the proposed grouped housing project.

Chair Zehnder noted that if improvements to the Adams Street and Victory Drive intersection are warranted in the future, the city would work with previous developments to share in the costs. He asked whether this should be included as a condition of the recommendation, or if the existing process is sufficient without needing to make it a formal condition.

Mr. Konz referenced the discussion during the approval process for the Holiday gas station (now Circle K), noting that the City of Mankato entered into a development agreement with the applicant to help offset the potential costs of future traffic signal alterations at the Victory Drive and Adams Street intersection. He stated that the city would seek to enter into a similar agreement with the applicant for this project, as referenced in Condition #2.

Mr. Konz added that additional steps will be necessary moving forward. He noted that the

applicant conducted a traffic study that identified the potential need to further evaluate the traffic signal at the Adams Street and Victory Drive intersection. He emphasized that both the City of Mankato and Blue Earth County will need to conduct their own traffic study. Once that study is completed, the city will follow up with the applicant regarding a development agreement and any associated cost participation.

Nate Myhra (Bolton & Menk) and Chris Raimann (Kuepers Architects & Builders) were present at the meeting to address any questions from the commission members. Mr. Myhra stated that they have reviewed the proposed conditions and agree with them.

Chair Zehnder opened the public hearing for comment. With no one wishing to speak, the public hearing was closed.

Mr. Dieken made a motion to approve the final plat and conditional use permit, including the stated conditions. Mr. Iddings seconded the motion. The motion carried unanimously.

The anticipated date of City Council action is October 14, 2025.

4. CY 50-25

Request of American Builders and Contractors, Supply Co Inc, with permission of the property owner, for a conditional use permit to allow unenclosed storage of materials, products and equipment including wholesale building materials in the PI, Planned Industrial, zoning district. The subject properties are described as Lots 1 thru 8, Block 21 and Lots 12-16, 9-11, Block 12, and vacated alleys and streets and Lot 2, Block 1, Vogel Addition. (2205 7th Avenue; PID R010906182007 and R010906183004).

Mr. Hanson reports that staff respectfully submit the following findings of fact for the Conditional Use Permit:

1. The proposed unenclosed storage of material, products and equipment is considered a Conditional Use in the PI, Planned Industrial Zoning District.
2. The proposed outdoor storage, when implemented with the recommendations and in conformance with Mankato City Code, is in keeping with the comprehensive planning policies of the City. The underlying land use plan identifies this parcel as "Light Industrial".
3. The proposal does not interfere with or diminish the use of property in the immediate vicinity.
4. The proposal does not cause undue traffic congestion. Access will not be modified as part of the proposed project.
5. To the extent known, the development conforms with all other applicable regulations of the district, and other applicable ordinances.
6. There are no known historical or architectural resources on the site.
7. There are no known significant natural or environmental features on the property.
8. It will not cause a negative cumulative effect and effect on the City as a whole.
9. The proposal will not jeopardize the public's health, safety, or general welfare.
10. The existing fence near the northern property line is fencing for the U.S. Hwy 14 Right-of-Way.

Mr. Hanson reports that staff recommends approval of the Conditional Use Permit to allow unenclosed storage of materials, products and equipment including wholesale building materials in the PI, Planned Industrial Zoning District with the following conditions:

1. Outdoor storage is limited to operable equipment only. Inoperable or unlicensed equipment will not be permitted. Wrecked, dismantled, partially dismantled, inoperative,

or abandoned vehicles or machinery shall be prohibited.
2. The outdoor storage of any refuse or waste material must conform to section 11-32 and section 10-1743, including full enclosure of any refuse containers.
3. Signage for the development shall conform to Mankato City Code standards and a sign permit shall be obtained for any proposed signage prior to fabrication and installation.
4. The applicant shall obtain an industrial stormwater permit prior to future expansion of the area labeled "future storage area" on Doc. #C100.
5. The applicant shall provide screening of 90% opacity or greater for the proposed exterior storage in accordance with Mankato City Code.
6. On-site lighting shall conform to the lighting standards in the Mankato City Code, including but not limited to full-cut, fully shielded fixtures. Conformance shall include, but not limited to, all signage, building, and parking lot lighting.
7. Landscaping shall be installed in conformance with the Mankato City Code and in accordance with an approved landscaping plan prior to issuance of a certificate of occupancy.
8. The proposed gate located along Cleveland Street shall be required to remain in an open position during business hours, and when deliveries/pick-ups are planned to occur.
9. If traffic associated with the usage of the property causes undue traffic concerns on Cleveland Street or 7th Avenue, the applicant shall be required to complete a traffic study and make the recommended modifications needed to mitigate these conditions.
10. The applicant shall obtain a survey prior to any fence installation to ensure it does not encroach into state highway right-of-way. Additionally, proposed fencing shall not attach to the existing MnDOT fence located along the northerly property line unless prior approval is obtained from MnDOT.
11. If drainage associated with snow storage within the existing grassy area impacts adjacent properties or public ROW, an alternative snow storage/removal plan shall be provided and approved.
12. A minimum of three off-street bicycle parking spaces shall be provided on site.

Emily Bickford (Asset Manager, ABC Supply) and Derrick Jacobson (Branch Manager, ABC Supply) were present at the meeting to address any questions from the commission members.

Chair Zehnder opened the public hearing for comment. With no one wishing to speak, the public hearing was closed.

Mr. Dieken made a motion to approve the conditional use permit with the stated conditions. Mr. Iddings seconded the motion. The motion passed unanimously.

The anticipated date of City Council action is October 14, 2025.

5. CY 51-25

Request of Power Athletics, with permission of the property owner, for a conditional use permit to allow an athletic facility for sports instruction in the M-1, Light Industrial, zoning district. The subject property is described as part of Common Interest Community Number 122, APX Campus Park (1021 Elevate Lane; PID R0109034760020).

Ms. Westman reports that staff respectfully submits the following findings of fact with respect to the conditional use permit to allow non-commercial, recreational use in the R-3 zoning district:

1. The proposed use, a non-commercial recreational use, is considered a conditional use in the R-3 zoning district.
2. The request is in keeping with the comprehensive planning policies of the City as the

underlying land use plan identifies this parcel as "Medium Density Residential", and in that district this proposed use is identified in Code as a conditional use.
3. The proposal does not interfere with or diminish the use of property in the immediate vicinity.
4. The proposed development will be served by public utilities.
5. The proposal will not cause undue traffic congestion, according to the trip generation memo provided. A condition is included herein that in the event that traffic impacts occur, the applicant will be required to study and implement mitigation strategies.
6. There are no known historical or architectural resources on the site.
7. There are no known environmentally sensitive areas on the site.
8. It will not cause a negative cumulative effect and effect on the City as a whole.
9. To the extent known, the development, when considered with the recommended conditions, conforms with all other applicable regulations of the district, and other applicable ordinances.
10. The proposal will not jeopardize the public's health, safety, or general welfare.

Ms. Westman reports that staff recommend approval of the conditional use permit to allow the operation of a recreational cheerleading and tumbling operation in Suite 500 of the property zoned M-1, Light Industrial, with the following conditions:

1. Prior to the fabrication or installation of signage at the site, a City of Mankato Sign Permit shall be in place.
2. Prior to the issuance of a sign permit, a development sign plan shall be submitted for review and approval. The plan shall contemplate all possible site signage.
3. All parking stalls shown on the parking plan shall be designed in accordance with the City of Mankato Parking Plates prior to the subject use operating at this location.
4. The facility will be used for private recreational practices. Tournaments, meets, competitions or other events that involve spectators and additional occupants will require an amendment to the conditional use permit, which will allow a review of necessary additional parking or traffic operational requirements for additional occupants and operational components.
5. Bicycle parking in conformance with Mankato City Code shall be provided.
6. A site traffic management plan shall be provided at the time of building permit submission for occupancy of this space. The plan shall detail how traffic and uses associated with potential industrial components on the site will be coordinated and operated in tandem with the proposed recreational use.
7. If traffic issues arise associated with the internal components of the site such as parking, internal site traffic circulation, or other, at the discretion of the City of Mankato Engineering Department, the property owner will be responsible for privately managing the subject site and making modifications necessary to eliminate potential public transportation corridor concerns and conflicts.
8. Future recreational uses, if desired of this facility, will be limited to this suite space and the same or similar operational components, and will be subject to the approving conditions of this conditional use permit.
9. A refuse plan shall be submitted for review and approval. If exterior dumpsters are utilized or proposed on the subject site, they will be required to achieve the Mankato City Code standards.

Jim Halbur (Full Sail Commercial Real Estate) was present at the meeting to represent the applicant and respond to any questions from the commission members. Mr. Halbur explained that the applicant has been searching for a new location for several months and selected this property for a variety of reasons, including ceiling height and available parking.

Chair Zehnder opened the public hearing for comment. With no one wishing to speak, the public hearing was closed.

Mr. Iddings made a motion to approve the conditional use permit with the stated conditions. Ms. Surdy seconded the motion. The motion passed unanimously.

The anticipated date of City Council action is October 14, 2025.

6. CY 52-25

Request of the Planning Agency for review of the Hilltop Study.

Mr. Konz indicated that on December 13, 2023, the Mankato City Council authorized the Hilltop Planning Area Study to evaluate land use transitions, neighborhood traffic concerns, and long-term preservation strategies for the area bounded by Madison Avenue, Victory Drive, Main Street, and the Crocus Street bluff line. The study responds to pressures from institutional expansion, commercial redevelopment, and transportation challenges that affect the stability and character of Hilltop neighborhoods.

Through a robust community engagement process—including five public meetings, online participation, and collaboration with institutional and commercial stakeholders, residents identified key priorities: pedestrian safety, traffic-calming, preservation of affordable housing, neighborhood reinvestment, and balancing institutional growth with livability.

Transportation analysis confirmed concerns about cut-through traffic, speeding, and crash history along major corridors, while also highlighting opportunities for pedestrian system improvements and safer multi-modal connectivity. Land use review emphasized the importance of managing institutional growth under the Institutional Overlay District framework, addressing redevelopment pressures along Madison Avenue, and preserving housing stock critical to neighborhood affordability.

The Hilltop Planning Study provides recommendations that could be implemented to address the concerns identified in November 2023.

Mr. Konz reports that The Hilltop Planning Study conforms to the goals of the Land Use Plan and supports concepts identified in the Strategic Plan.

Mr. Konz reports that staff recommends adoption of the Hilltop Planning Study.

Chair Zehnder opened the public hearing for comment. With no one wishing to speak, the public hearing was closed.

Mr. Filipovitch made a motion to approve the Hilltop Planning Study. The motion was seconded by Mr. Dieken. The motion passed unanimously.

The anticipated date of Council Action is November 10, 2025.

6. **MISCELLANEOUS**

No Miscellaneous items

7. **ADJOURNMENT**

There being no further business, Ms. Surdy moved to adjourn the meeting. The motion was seconded by Mr. Iddings with all in favor. The meeting adjourned at 7:11 pm.

MINUTES APPROVED.

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Chair, Mankato Planning Commission

Planning Commission Regular Meeting **5. 1.**

Meeting Date: 10/22/2025

Title

CY56-25

Request of the Planning Agency to review the proposed 2026-2030 Capital Infrastructure Plan.

The anticipated date of Council action is December 1, 2025.

Review

The Community Investment Program (CIP) is a multi-year plan that helps identify, prioritize, budget, and plan for needed improvements to streets, parks, utilities, including water and wastewater facilities, major projects and purchases, such as airport improvements, park upgrades and city vehicles.

Part of the review and approval process for the CIP requires that the Planning Commission reviews the document and confirms the plan conforms to the goals of the Land Use Plan.

The CIP can be found in the Attachments section of this report and starts on page 167 of the budget here:

https://www.mankatomn.gov/home/showpublisheddocument/15774/638926817617400000

Findings

Staff submits the following findings:
1. The plan conforms to the goals of the Mankato Land Use Plan.
2. The plan conforms to the goals of the Mankato Parks and Open Spaces Plan.
3. The plan conforms to the goals of the Mankato Strategic Plan.

Recommendation

Staff recommends approval of the Community Investment Plan.

Attachments

Community Investment Plan 2026-2030

2026 CIP Presentation

Surface Transportation CIP

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Street Projects

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CIP Fund Overview 2026

Project Name	Project Year	Project Cost
2026 Resurfacing	2026	2,448,765
Belleview Avenue, Jayro Court, and Riverview Street	2026	1,597,000
Hiniker Park Parking Lot	2026	400,000
Hiniker Parkway	2026	1,295,455
Long Street and Emerson Lane	2026	2,541,577
Mn Rivertrail Northstar to Main street	2026	843,554
Petition, Expansion and Major Streets	2026	150,000
Plum Street	2026	863,836
Riverfront and Main Signal Replacement	2026	425,000
Sidewalk Improvements	2026	100,000
Third Ave - Riverfront to Summit	2026	3,105,000
Veteran's Bridge Redecking	2026	9,723,000
Total		**23,493,187**

CIP Fund Overview 2027

Project Name	Project Year	Project Cost
Fair St - McConnell to Belmont	2027	2,794,000
Germania Park Phase 6	2027	2,323,000
Petition, Expansion and Major Streets	2027	150,000
Resurfacing Projects	2027	670,000
Rita Road	2027	2,329,000
Sidewalk Improvements	2027	100,000
TH 169 - North River Ln - Local share	2027	142,500
TH 169 - Utilities	2027	2,343,800
Total		**10,852,300**

CIP Fund Overview 2028

Project Name	Project Year	Project Cost
2nd and Hickory Signal Replacement	2028	225,000
Anderson Dr and McConnell St	2028	1,552,000
N River Dr Resurface	2028	785,000
Petition, Expansion and Major Streets	2028	150,000
Pfau St and Shamrock- Goodyear to Adams	2028	1,187,000
Resurfacing Projects	2028	0
Sidewalk Improvements	2028	100,000
Woodland Ave - Gwyn to Skyline	2028	1,065,000
Woodshire Phase 3	2028	2,214,000
Total		**7,278,000**

CIP Fund Overview 2029

Project Name	Project Year	Project Cost
Germania Park Phase 7	2029	4,293,000
Madison Avenue Resurface	2029	1,257,000
Petition, Expansion and Major Streets	2029	150,000
Resurfacing Projects	2029	0
Riverfront Dr - Stoltzman to Warren	2029	2,107,000
Riverfront Dr - Warren to Main	2029	2,129,000
Sidewalk Improvements	2029	100,000
Total		**10,036,000**

CIP Fund Overview 2030

Project Name	Project Year	Project Cost
Gwyn Area	2030	3,450,000
Marion Ln - Emerson to Main	2030	714,000
Meadow Lane & Welcome Ave - Monks to Rita	2030	1,920,000
Petition, Expansion and Major Streets	2030	150,000
Plainview Avenue - Fair to Marwood	2030	1,681,000
Resurfacing Projects	2030	750,000
Riverfront Dr - Chestnut to Ruth	2030	1,106,000
Sidewalk Improvements	2030	100,000
Total		**9,871,000**

2026 Resurfacing

Department: STREET PROJECTS

Project Years: 2026 - 2026

Project Description

The existing asphalt pavement on Main Street from Hannah Street to Victory Drive is in poor condition with fatigue cracking and pot holes present throughout. The utilities beneath the roadway were installed around the year 2000 and are constructed of modern materials. A resurfacing project will extend the useful life of the roadway and create a safe driving surface for the public. The scope of work is proposed as a full depth reclamation, ADA sidewalk improvements, spot curb & gutter replacement, and possible isolated storm drainage improvements. The project also includes reconstructing the access road to the City's Dolph Reservoir, located on the Minnesota State University Mankato campus at 710 Maywood Avenue.

Engagement Strategy

An informational meeting will be held with the community prior to the improvement hearing.

Project Uses

	2026	2027	2028	2029	2030	Total
Administration	126,660	0	0	0	0	126,660
Contingency	191,910	0	0	0	0	191,910
Engineering	211,100	0	0	0	0	211,100
Storm	104,300	0	0	0	0	104,300
Street	1,716,670	0	0	0	0	1,716,670
SWPPP	89,125	0	0	0	0	89,125
Watermain	9,000	0	0	0	0	9,000
Total	**2,448,765**	**0**	**0**	**0**	**0**	**2,448,765**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Loan/Bond Proceeds	962,194	0	0	0	0	962,194
Special Assessments	598,710	0	0	0	0	598,710
State Funding	600,000	0	0	0	0	600,000
Stormwater Revenue	105,017	0	0	0	0	105,017
Water Revenue	182,844	0	0	0	0	182,844
Total	**2,448,765**	**0**	**0**	**0**	**0**	**2,448,765**

Project Timeline

- October 2025 - Community Engagement
- November 2025 - Improvement Hearing
- Spring 2026 - Bid
- Summer 2026 - Start Construction
- Fall 2026 - Substantial Completion

Belleview Avenue, Jayro Court, and Riverview Street

Department: STREET PROJECTS

Project Years: 2026 - 2026

Project Description

The proposed improvements for Belleview Avenue, Jayro Court, and Riverview Street from Woodshire drive to Swiss Street include replacement of sanitary sewer, watermain, storm sewer, end services, aggregate base, concrete curb and gutter, bituminous pavement, sidewalks, landscaping, and driveway pavement.

Belleview Avenue, Jayro Court and Riverview Street are the second phase of the Woodshire Neighborhood Construction Plan. This neighborhood has inadequate sanitary sewer depth and drainage issues, resulting in high maintenance costs and roadway deterioration. The watermain in this area is installed in phases between the 1930s and 1970s and made of cast iron and ductile iron. Cast iron is susceptible to corrosion and rusting over time. The sanitary sewer in this area is installed in phases betweeen the 1930s and 1970s and is made of vitrified clay. Vitrified clay is susceptible to root intrusion and leaks over time.

Woodshire Drive Neighborhood Construction Plan

The neighborhood generally consisting of Madison Avenue to Swiss Street and Madison Avenue to Adams Street is considered by staff to be in need of reconstruction. The primary need for reconstruction in this area is due to aging and inadequate utilities.The sanitary infrastructure in this area consists of vitrified clay pipe constructed between the 1930s and 1950s. This infrastructure is generally considered by staff to be failing due to inadequate depth of the sanitary system as it extends into the neighborhood, most specifically at the northern terminus of Jayro Court. It has been determined by staff that the sanitary mainline exiting the neighborhood through the northern terminus of Woodshire Drive can be abandoned and rerouted to travel south along Woodshire Drives southern terminus. This would increase accessibility to the line for any needed maintenance activities. This would also allow for increased sanitary mainline depth and will result in less needed maintenance in this neighborhood.

This neighborhood has mostly cast iron watermain constructed between the 1920s and 1950s.It is proposed to reconstruct this neighborhood in several phases.

Engagement Strategy

An informational meeting will be held with the property owners prior to the improvement hearing.

Project Uses

	2026	2027	2028	2029	2030	Total
Admin/bonding	82,593	0	0	0	0	82,593
Contingency	125,346	0	0	0	0	125,346
Engineering	137,655	0	0	0	0	137,655
Sanitary	258,650	0	0	0	0	258,650
Storm	172,950	0	0	0	0	172,950
Street	479,295	0	0	0	0	479,295
SWPP	38,625	0	0	0	0	38,625
Watermain	301,886	0	0	0	0	301,886
Total	**1,597,000**	**0**	**0**	**0**	**0**	**1,597,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Loan/Bond Proceeds	152,000	0	0	0	0	152,000
Sewer Revenue	304,000	0	0	0	0	304,000
Special Assessments	583,000	0	0	0	0	583,000
Stormwater Revenue	203,000	0	0	0	0	203,000
Water Revenue	355,000	0	0	0	0	355,000
Total	**1,597,000**	**0**	**0**	**0**	**0**	**1,597,000**

Project Timeline

- August-September 2025 - Community Engagement
- October 2025 - Improvement Hearing
- March 2026 - Bid
- May 2026 - Start construct i on
- October 2026 - Substant i a l co mp l et i o

Hiniker Park Parking Lot

Department: STREET PROJECTS

Project Years: 2026 - 2026

Project Description

The Hiniker Park Parking Lot reconstruction is driven by desire of the Parks Capital Improvement Plan and hopeful to coincide with the construction of Hiniker Parkway. The scope of work would be evaluating the current and anticipated needs of the parking lot and reconstructing to meet those needs and bringing the lot to meet City Code.

Engagement Strategy

Project Uses

	2026	2027	2028	2029	2030	Total
Construction	400,000	0	0	0	0	400,000
Total	**400,000**	**0**	**0**	**0**	**0**	**400,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	10,000	0	0	0	0	10,000
Loan/Bond Proceeds	390,000	0	0	0	0	390,000
Total	**400,000**	**0**	**0**	**0**	**0**	**400,000**

Project Timeline

- Summer 2025 - Project Development
- Fall/Winter 2025/2026 - Design and Council Approval
- March 2026 - Bid
- May 2026 - Begin Construction
- September 2026 - Substantial Completion

Hiniker Parkway

Department: STREET PROJECTS

Project Years: 2026 - 2026

Project Description

The construction of Hiniker Parkway is required as a prerequisite project to the 2027 US 169 project with planned local road reconfigurations. The scope of work includes a new roadway with necessary drainage infrastructure and access to adjacent parcels. The City of Mankato intends to contract the design of this project to a consultant.

Project Uses

	2026	2027	2028	2029	2030	Total
Hiniker Parkway	1,295,455	0	0	0	0	1,295,455
Total	**1,295,455**	**0**	**0**	**0**	**0**	**1,295,455**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Loan/Bond Proceeds	280,806	0	0	0	0	280,806
Sewer Revenue	100,000	0	0	0	0	100,000
Special Assessments	714,649	0	0	0	0	714,649
Stormwater Revenue	100,000	0	0	0	0	100,000
Water Revenue	100,000	0	0	0	0	100,000
Total	**1,295,455**	**0**	**0**	**0**	**0**	**1,295,455**

Project Timeline

- September 2025 - Community Engagement
- November 2025 - Improvement Hearing
- March 2026 - Bid
- May 2026 - Begin Construction
- October 2026 - Substantial Completion

Long Street and Emerson Lane

Department: STREET PROJECTS

Project Years: 2026 - 2026

Project Description

This project will consist of replacing watermain, sanitary sewer and stormwater utilities. This neighborhood is experiencing a large amount of watermain breaks due to aging and failing infrastructure. The watermain in this area is from the 1950s and made of cast iron. Cast iron is susceptible to corrosion and fractures over time. The sanitary sewer in this area is from the 1950s and is made of vitrified clay. Vitrified clay is susceptible to root intrusion, breaks, and ground water infiltration. There is sidewalk identified in this area under the City of Mankato Critical Link Sidewalk Plan. The neighborhood generally bound by Madison Avenue, Dickinson Street, Main Street, and Victory Drive is considered by staff to be in need of reconstruction. The primary need for reconstruction in this area is due to aging and failing utilities. The watermain network has experienced many watermain breaks since tracking began in the city's Cartegraph system. Cartegraph shows the cost of watermain breaks in this area broken down by year below:2016: $7109 2017: $17,088 2018: $31,535 2019: $27,638 2020: $24,497 2021: $21,756. Roadway widths, traffic patterns, traffic calming, and intersection traffic control will be evaluated with the project.

Engagement Strategy

An informational meeting will be held with the property owners prior to the feasibility hearing.

Project Uses

	2026	2027	2028	2029	2030	Total
Administration	131,461	0	0	0	0	131,461
Contingency	199,183	0	0	0	0	199,183
Engineering	219,101	0	0	0	0	219,101
Sanitary Sewer	313,900	0	0	0	0	313,900
Storm Drainage	485,775	0	0	0	0	485,775
Stormwater Pollution Prevention	40,400	0	0	0	0	40,400
Street	769,032	0	0	0	0	769,032
Watermain	382,725	0	0	0	0	382,725
Total	**2,541,577**	**0**	**0**	**0**	**0**	**2,541,577**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Loan/Bond Proceeds	393,932	0	0	0	0	393,932
Sewer Revenue	369,146	0	0	0	0	369,146
Special Assessments	757,143	0	0	0	0	757,143
Stormwater Revenue	571,271	0	0	0	0	571,271
Water Revenue	450,085	0	0	0	0	450,085
Total	**2,541,577**	**0**	**0**	**0**	**0**	**2,541,577**

Project Timeline

- Hilltop Area Feasibility Study - September/October 2025
- Community Engagement - November 2025
- Improvement Hearing - December 2025
- Bidding - Spring 2026
- Start Construct i on- J une 2026
- Substant i al Co mpl et i on- Nov emb er 202

Mn Rivertrail Northstar to Main street

Department: STREET PROJECTS

Project Years: 2026 - 2026

Project Description

Resurfacing of the Minnesota River Trail from Northstar to Main Street. The City has hired HR Green to lead the Project Memorandum, design, and permitting efforts to rebuild the trail.

Project Uses

	2026	2027	2028	2029	2030	Total
Mn Rivertrail Northstar to Main street	843,554	0	0	0	0	843,554
Total	**843,554**	**0**	**0**	**0**	**0**	**843,554**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Loan/Bond Proceeds	168,711	0	0	0	0	168,711
Other Sources	674,843	0	0	0	0	674,843
Total	**843,554**	**0**	**0**	**0**	**0**	**843,554**

Project Timeline

- Fall 2025 - Project Memorandum approval by State
- Fall-Winter 2025-2026 - Design
- Spring 2026 - Bid
- May 2026 - Begin Construct i on
- September 2026 - Substant i al Co mp l et i o

Petition, Expansion and Major Streets

Department: STREET PROJECTS

Project Years: 2026 - 2030

Project Description

Improvement to minor local roads and alleys. Typically pavement and transportation related. Each year the Public Works Department receives requests for improvements to the transportation system. Many of these projects are local streets or alleys. This budget line item exists to allow for minor projects that are petitioned to be designed and constructed within a single construction season, outside of the normal Community Investment Plan process. Alley 18-176 has been petitioned for reconstruction in 2024.

Engagement Strategy

An informational meeting will be held with the property owners prior to the feasibility hearing.

Project Uses

	2026	2027	2028	2029	2030	Total
Petition Project	150,000	150,000	150,000	150,000	150,000	750,000
Total	**150,000**	**150,000**	**150,000**	**150,000**	**150,000**	**750,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Loan/Bond Proceeds	150,000	150,000	150,000	150,000	150,000	750,000
Total	**150,000**	**150,000**	**150,000**	**150,000**	**150,000**	**750,000**

Project Timeline

- January – Feasibility
- February – Hearing
- March – Bid
- May – Construction
- October – Project completion

Plum Street

Department: STREET PROJECTS

Project Years: 2026 - 2026

Project Description

The proposed improvements for Plum Street from Riverfront Drive to 2nd Street include replacement of storm sewer, aggregate base, concrete curb and gutter, roadway pavement, sidewalks, and driveway pavement. The existing concrete roadway pavement is in poor condition, resulting in high maintenance costs. The storm sewer system was installed in the 1980's. Additional research will be conducted during the design process to determine the need for reconstructing the storm sewer system. There is no existing watermain on Plum Street; however, a new watermain loop is proposed with this project to improve fire protection and provide redundancy for the watermain system. The roadway width is planned to be narrowed with the proposed improvements. Narrowing the roadway will allow for parallel parking along the north side of Plum Street, while maintaining an ADA accessible sidewalk along the project corridor.

Engagement Strategy

Discussions with the adjacent property owner's are on going.

Project Uses

	2026	2027	2028	2029	2030	Total
Admin/Bonding	44,681	0	0	0	0	44,681
Contingency	67,699	0	0	0	0	67,699
Engineering	74,469	0	0	0	0	74,469
Sanitary	800	0	0	0	0	800
Storm	92,750	0	0	0	0	92,750
Street	393,688	0	0	0	0	393,688
SWPPP	6,500	0	0	0	0	6,500
Watermain	183,250	0	0	0	0	183,250
Total	**863,836**	**0**	**0**	**0**	**0**	**863,836**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Loan/Bond Proceeds	433,289	0	0	0	0	433,289
Sewer Revenue	941	0	0	0	0	941
Special Assessments	105,030	0	0	0	0	105,030
Stormwater Revenue	109,074	0	0	0	0	109,074
Water Revenue	215,502	0	0	0	0	215,502
Total	**863,836**	**0**	**0**	**0**	**0**	**863,836**

Project Timeline

- September 2025 - Community Engagement
- October-November 2025 - Improvement Hearing
- April 2026 - Bid
- June 2026 - Start construct i on
- November 2026 - Substant i a l co mp l et i o

Riverfront and Main Signal Replacement

Department: STREET PROJECTS

Project Years: 2026 - 2026

Project Description

The existing signal at Riverfront Drive and Main Street is nearing the end of its useful life with Operations staff reporting possible structural issues. It is recommended by those staff that a replacement project is done to avoid emergency repairs.

Engagement Strategy

Project Uses

	2026	2027	2028	2029	2030	Total
Signal Replacement	425,000	0	0	0	0	425,000
Total	**425,000**	**0**	**0**	**0**	**0**	**425,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
State Funding	425,000	0	0	0	0	425,000
Total	**425,000**	**0**	**0**	**0**	**0**	**425,000**

Project Timeline

- Fall 2025 - Feasibility
- Winter 2025-2026 - Design
- March 2026 - Bid
- May 2026 - Begin Construction
- September 2026 - Substantial Completion

Sidewalk Improvements

Department: STREET PROJECTS

Project Years: 2026 - 2030

Project Description

Panels prioritized by ADA compliance requirements and requests from citizens.

Engagement Strategy

An informational meeting will be held with the property owners prior to the feasibility hearing.

Project Uses

	2026	2027	2028	2029	2030	Total
Sidewalk Improvements	100,000	100,000	100,000	100,000	100,000	500,000
Total	**100,000**	**100,000**	**100,000**	**100,000**	**100,000**	**500,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Loan/Bond Proceeds	90,000	90,000	90,000	90,000	90,000	450,000
Special Assessments	10,000	10,000	10,000	10,000	10,000	50,000
Total	**100,000**	**100,000**	**100,000**	**100,000**	**100,000**	**500,000**

Project Timeline

- January – Feasibility Hearing
- February – Assessment Hearing
- March – Bid Award
- May – Begin Construction
- October – Project completion

Third Ave - Riverfront to Summit

Department: STREET PROJECTS

Project Years: 2026 - 2026

Project Description

The reconstruction of 3rd Avenue (CSAH 5) is a Blue Earth County led project with the City of Mankato partnering on City facilities within the corridor. These facilities include watermain, sanitary sewer, lighting, and fiber. The City will need to go through the 429 process for special assessments for these facilities and Council approval(s).

Engagement Strategy

Led by Blue Earth County.

Project Uses

	2026	2027	2028	2029	2030	Total
Third Ave - Riverfront to Summit	3,105,000	0	0	0	0	3,105,000
Total	**3,105,000**	**0**	**0**	**0**	**0**	**3,105,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Sewer Revenue	1,382,000	0	0	0	0	1,382,000
Special Assessments	380,000	0	0	0	0	380,000
Water Revenue	1,343,000	0	0	0	0	1,343,000
Total	**3,105,000**	**0**	**0**	**0**	**0**	**3,105,000**

Project Timeline

- Plans/Design (By Bolton & Menk hired by Blue Earth County) - Anticipate completion in Summer 2025
- Community Engagement was headed by Blue Earth County
- September 2025 - Improvement Hearing
- Bidding to be done by Blue Earth County - Anticipated Spring 2026

Veteran's Bridge Redecking

Department: STREET PROJECTS

Project Years: 2026 - 2026

Project Description

The Veteran's Bridge is scoped by MnDOT for a rehabilitation project in FY 2025. The required city share for this project is $6,952,000. The project has an estimated total cost of $15,204,000 of which MnDOT is responsible for seeking funds of the remaining $8,252,000. This project is intended to extend the life of the Veteran's Bridge by providing needed maintenance.

Engagement Strategy

An informational meeting will be held with the property owners prior to the feasibility hearing.

Project Uses

	2026	2027	2028	2029	2030	Total
Veteran's Bridge	9,723,000	0	0	0	0	9,723,000
Total	**9,723,000**	**0**	**0**	**0**	**0**	**9,723,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Federal Funding	6,938,000	0	0	0	0	6,938,000
State Funding	2,785,000	0	0	0	0	2,785,000
Total	**9,723,000**	**0**	**0**	**0**	**0**	**9,723,000**

Project Timeline

- 2023-2025 - seek federal funding opportunities, MnDOT leads project design and coordination
- January 2026 – Feasibility Hearing
- February 2026 – Bid
- May 2026 – Construction
- October 2026 – Project completion

Fair St - McConnell to Belmont

Department: STREET PROJECTS

Project Years: 2027 - 2027

Project Description

This project will consist of replacing watermain, sanitary sewer and stormwater utilities. This street is the fourth phase of the Long St Neighborhood Construction Plan. This neighborhood is experiencing a large amounts of watermain breaks consistently due to aging and failing infrastructure. The watermain in this area is from the mid-1950s and made of cast iron. Cast iron is susceptible to corrosion and rusting over time. The sanitary sewer in this area is from the mid-1950s and is made of vitrified clay. Vitrified clay is susceptible to root intrusion and leaks over time. There is sidewalk identified in this area under the City of Mankato Critical Link Sidewalk Plan. Long St Neighborhood Construction Plan. The neighborhood generally consisting of Dickinson Street to Victory Drive and Main Street to Fair Street is considered by staff to be in need of reconstruction. The primary need for reconstruction in this area is due to aging and failing utilities. This neighborhood has mostly cast iron watermain constructed in the mid to late 1950s. This watermain network has experienced many watermain breaks since tracking began in the cities Cartegraph system. Cartegraph shows the cost of watermain breaks in this area broken down by year below: 2016: $7109 2017: $17,088 2018: $31,535 2019: $27,638 2020: $24,497 2021: $21,756 The sanitary infrastructure in this area generally consists of vitrified clay pipe constructed in the mid to late 1950s. There are several sidewalk links identified in the City of Mankato Critical Link Sidewalk Plan that may also be addressed with reconstruction activities in the neighborhood. It is proposed to reconstruct this neighborhood in several phases.

Engagement Strategy

An informational meeting will be held with the property owners prior to the feasibility hearing.

Project Uses

	2026	2027	2028	2029	2030	Total
Administration	0	86,312	0	0	0	86,312
Contingency	0	130,776	0	0	0	130,776
Engineering	0	143,855	0	0	0	143,855
Sanitary Sewer	0	206,346	0	0	0	206,346
Storm Drainage	0	122,499	0	0	0	122,499
Stormwater Pollution Prevention	0	37,927	0	0	0	37,927
Street	0	1,823,395	0	0	0	1,823,395
Watermain	0	242,890	0	0	0	242,890
Total	**0**	**2,794,000**	**0**	**0**	**0**	**2,794,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Loan/Bond Proceeds	0	549,000	0	0	0	549,000
Sewer Revenue	0	339,000	0	0	0	339,000
Special Assessments	0	851,000	0	0	0	851,000
Stormwater Revenue	0	533,000	0	0	0	533,000
Water Revenue	0	522,000	0	0	0	522,000
Total	**0**	**2,794,000**	**0**	**0**	**0**	**2,794,000**

Project Timeline

- January – Feasibility Hearing
- February – Assessment Hearing
- March – Bid
- May – Construction
- October – Project completion

Germania Park Phase 6

Department: STREET PROJECTS

Project Years: 2027 - 2027

Project Description

The reconstruction of 2nd Avenue from Maxfield Street to Pine Street; Maxfield Street from 1st Avenue to 3rd Avenue; Chestnut Street from 1st Avenue to 3rd Avenue.

The Germania Park Capital Improvements Plan (CIP) covers an area of Mankato generally bounded by Riverfront Drive, 1st Avenue, Trunk Highway 14 (TH 14), and the Minnesota River. The existing subsurface of this area is predominantly bedrock, which has limited the development to smaller residential developments and industrial businesses. Most of the city-owned infrastructure is original and dates 50 to 75 years in age, with the exception of Pine Street and a few residential streets on the east side of 3rd Avenue.

In 2011, Short Elliott Hendrickson, Inc. was retained by the City of Mankato to develop a master plan for the Germania Park area. This plan originally envisioned the improvements starting in 2015. Due to funding priorities within the Community Investment Plan these projects were delayed until 2019.

The project area generally has utilities that are 50-75 years old. Sewer is believed to be made of vitrified clay. Vitrified clay is a brittle material susceptible to cracking, joint displacement, root intrusion, and infiltration. The sanitary sewer manholes are of a similar age and likely block or brick built. Due to the age and material build of the sanitary sewer, it is suggested that all sanitary sewer within the project area be reconstructed and replaced with polyvinyl chloride (PVC) pipe. The watermain is most likely made of cast iron, which is susceptible to breaking due to deterioration and freezing conditions in colder weather. It is also 6-inch in diameter, which is undersized compared to current standards.

Engagement Strategy

An informational meeting will be held with the property owners prior to the feasibility hearing.

Project Uses

	2026	2027	2028	2029	2030	Total
Admin/bonding	0	115,936	0	0	0	115,936
Contingency	0	175,660	0	0	0	175,660
Engineering	0	193,227	0	0	0	193,227
Sanitary Sewer	0	164,487	0	0	0	164,487

	2026	2027	2028	2029	2030	Total
Stormwater	0	64,272	0	0	0	64,272
Streets	0	1,404,034	0	0	0	1,404,034
SWPP	0	4,008	0	0	0	4,008
Watermain	0	201,376	0	0	0	201,376
Total	**0**	**2,323,000**	**0**	**0**	**0**	**2,323,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Loan/Bond Proceeds	0	642,000	0	0	0	642,000
Sewer Revenue	0	239,000	0	0	0	239,000
Special Assessments	0	884,000	0	0	0	884,000
Stormwater Revenue	0	208,000	0	0	0	208,000
Water Revenue	0	350,000	0	0	0	350,000
Total	**0**	**2,323,000**	**0**	**0**	**0**	**2,323,000**

Project Timeline

- January - Feasibility Hearing
- February - Assessment Hearing
- March - Bid Award
- May - Construct i on
- October - Project complet i on

Resurfacing Projects

Department: STREET PROJECTS

Project Years: 2027 - 2030

Project Description

n/a

Engagement Strategy

Project Uses

	2026	2027	2028	2029	2030	Total
Resurfacing Projects	0	670,000	0	0	750,000	1,420,000
Total	**0**	**670,000**	**0**	**0**	**750,000**	**1,420,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Loan/Bond Proceeds	0	325,000	0	0	400,000	725,000
Sewer Revenue	0	50,000	0	0	50,000	100,000
Special Assessments	0	220,000	0	0	225,000	445,000
Stormwater Revenue	0	25,000	0	0	25,000	50,000
Water Revenue	0	50,000	0	0	50,000	100,000
Total	**0**	**670,000**	**0**	**0**	**750,000**	**1,420,000**

Project Timeline

n/a

Rita Road

Department: STREET PROJECTS

Project Years: 2027 - 2027

Project Description

The reconstruction of Rita Road from Monks Avenue to End.

This project will consist of replacing watermain, sanitary sewer and stormwater utilities.This street is the first phase of the Rita Road Neighborhood Construction Plan. This neighborhood is one of the few remaining without underdrain. The watermain in this area is from the late-1950s and made of cast iron. Cast iron is susceptible to corrosion and rusting over time. The sanitary sewer in this area is from the late-1950s and is made of vitrified clay. Vitrified clay is susceptible to root intrusion and leaks over time.

Rita Road Neighborhood Construction Plan

The neighborhood generally consisting of Monks Avenue to Rita Road and Rita Road to Welcome Avenue is considered by staff to be in need of reconstruction. The primary need for reconstruction in this area is due to drainage/grading issues and aging utilities.

This neighborhood experiences drainage problems due to a lack of storm sewer and grading challenges in a majority of the neighborhood. Storm sewer is present on the northern portion of Rita Road and the adjacent Monks Avenue. The eastern portion of Rita Road as well as Meadow Lane and Welcome Avenue rely on surface drainage. The current grading of this neighborhood does not allow for surface drainage to reach the storm sewer conveyance system in a large portion of this neighborhood.

This neighborhood has cast iron watermain constructed in the late 1950s.

The sanitary infrastructure in this area consists of vitrified clay pipe constructed in the late 1950s.

It is proposed to reconstruct this neighborhood in several phases.

Engagement Strategy

An informational meeting will be held with the property owners prior to the feasibility hearing.

Project Uses

	2026	2027	2028	2029	2030	Total
Admin/bonding	0	84,820	0	0	0	84,820
Contingency	0	128,515	0	0	0	128,515
Engineering	0	141,367	0	0	0	141,367
Sanitary Sewer	0	286,487	0	0	0	286,487
Storm Water	0	194,350	0	0	0	194,350
Streets	0	1,242,465	0	0	0	1,242,465
SWPPP	0	26,674	0	0	0	26,674
Watermain	0	224,322	0	0	0	224,322
Total	**0**	**2,329,000**	**0**	**0**	**0**	**2,329,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Loan/Bond Proceeds	0	293,000	0	0	0	293,000
Sewer Revenue	0	392,000	0	0	0	392,000
Special Assessments	0	818,000	0	0	0	818,000
Stormwater Revenue	0	391,000	0	0	0	391,000
Water Revenue	0	435,000	0	0	0	435,000
Total	**0**	**2,329,000**	**0**	**0**	**0**	**2,329,000**

Project Timeline

- January – Feasibility Hearing
- February – Assessment Hearing
- March – Bid Award
- May – Construction
- October – Project completion

TH 169 - North River Ln - Local share

Department: STREET PROJECTS

Project Years: 2027 - 2027

Project Description

Reconstruction of North River Lane in conjunction with the TH 169 project.

Engagement Strategy

Project Uses

	2026	2027	2028	2029	2030	Total
TH 169 - Local Share	0	142,500	0	0	0	142,500
Total	**0**	**142,500**	**0**	**0**	**0**	**142,500**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Loan/Bond Proceeds	0	110,000	0	0	0	110,000
Special Assessments	0	32,500	0	0	0	32,500
Total	**0**	**142,500**	**0**	**0**	**0**	**142,500**

Project Timeline

To follow MnDOT's project schedule.

TH 169 - Utilities

Department: STREET PROJECTS

Project Years: 2027 - 2027

Project Description

Replacement or rehabilitation of water and sanitary sewer infrastructure in conjunction with the TH 169 project.

Engagement Strategy

Project Uses

	2026	2027	2028	2029	2030	Total
TH 169 Utilities	0	2,343,800	0	0	0	2,343,800
Total	**0**	**2,343,800**	**0**	**0**	**0**	**2,343,800**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Loan/Bond Proceeds	0	310,000	0	0	0	310,000
Sewer Revenue	0	1,033,000	0	0	0	1,033,000
Water Revenue	0	1,000,800	0	0	0	1,000,800
Total	**0**	**2,343,800**	**0**	**0**	**0**	**2,343,800**

Project Timeline

To follow MnDOT's project timeline.

2nd and Hickory Signal Replacement

Department: STREET PROJECTS

Project Years: 2028 - 2028

Project Description

Replacement of the signal and 2nd and Hickory.

Engagement Strategy

Project Uses

	2026	2027	2028	2029	2030	Total
2nd and Hickory Signal Replacement	0	0	225,000	0	0	225,000
Total	**0**	**0**	**225,000**	**0**	**0**	**225,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Loan/Bond Proceeds	0	0	225,000	0	0	225,000
Total	**0**	**0**	**225,000**	**0**	**0**	**225,000**

Project Timeline

- Feasibility - Summer 2027
- Design - Fall/Winter 2027-2028
- Bid - Spring 2028
- Construction- Summer 2028
- Substantial Completion- Fall 202

Anderson Dr and McConnell St

Department: STREET PROJECTS

Project Years: 2028 - 2028

Project Description

Reconstruction of Anderson Drive from Dickinson to McConnell Street and reconstruction of McConnell Street from Emerson Lane to Marsh Street. Reconstruction to include utilities and surface improvements.

Engagement Strategy

Project Uses

	2026	2027	2028	2029	2030	Total
Anderson Dr and McConnell St	0	0	1,552,000	0	0	1,552,000
Total	**0**	**0**	**1,552,000**	**0**	**0**	**1,552,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Loan/Bond Proceeds	0	0	648,000	0	0	648,000
Sewer Revenue	0	0	106,000	0	0	106,000
Special Assessments	0	0	450,000	0	0	450,000
Stormwater Revenue	0	0	182,000	0	0	182,000
Water Revenue	0	0	166,000	0	0	166,000
Total	**0**	**0**	**1,552,000**	**0**	**0**	**1,552,000**

Project Timeline

- Feasibility - Summer 2027
- Design - Fall/Winter - 2027-2028
- Bid - Spring 2028
- Construction - Summer 2028
- Substantial Completion - Fall 2028

N River Dr Resurface

Department: STREET PROJECTS

Project Years: 2028 - 2028

Project Description

Resurfacing project for North River Drive after the TH 169 project in 2027 to improve the useful life of the roadway for approximately 20 years.

Engagement Strategy

Project Uses

	2026	2027	2028	2029	2030	Total
N River Dr Resurface	0	0	785,000	0	0	785,000
Total	**0**	**0**	**785,000**	**0**	**0**	**785,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Loan/Bond Proceeds	0	0	475,000	0	0	475,000
Sewer Revenue	0	0	50,000	0	0	50,000
Special Assessments	0	0	200,000	0	0	200,000
Stormwater Revenue	0	0	10,000	0	0	10,000
Water Revenue	0	0	50,000	0	0	50,000
Total	**0**	**0**	**785,000**	**0**	**0**	**785,000**

Project Timeline

- Feasibility - Summer 2027
- Design - Fall/Winter 2027-2028
- Bid - Spring 2028
- Construction - Summer 2028
- Substantial Completion - Fall 2028

Pfau St and Shamrock- Goodyear to Adams

Department: STREET PROJECTS

Project Years: 2028 - 2028

Project Description

Full reconstruction of utilities and surface improvements for Pfau Street from Adams Street to Goodyear Avenue, and Shamrock Drive from Pfau Street to east terminus.

Engagement Strategy

Project Uses

	2026	2027	2028	2029	2030	Total
Pfau St and Shamrock- Goodyear to Adams	0	0	1,187,000	0	0	1,187,000
Total	**0**	**0**	**1,187,000**	**0**	**0**	**1,187,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Loan/Bond Proceeds	0	0	272,000	0	0	272,000
Sewer Revenue	0	0	205,000	0	0	205,000
Special Assessments	0	0	285,000	0	0	285,000
Stormwater Revenue	0	0	263,000	0	0	263,000
Water Revenue	0	0	162,000	0	0	162,000
Total	**0**	**0**	**1,187,000**	**0**	**0**	**1,187,000**

Project Timeline

- Feasibility - Summer 2027
- Design - Fall/Winter 2027-2028
- Bid - Spring 2028
- Construction- Summer 2028
- Substantial Completion- Fall 2028

Woodland Ave - Gwyn to Skyline

Department: STREET PROJECTS

Project Years: 2028 - 2028

Project Description

Woodland Avenue is the first phase in the Woodland Avenue neighborhood reconstruction plan. The neighborhood is generally bounded by Belwood Drive and Woodland Avenue, the city of Skyline and Gwyn Avenue. This road is considered to be in need of reconstruction due to sub-standard infrastructure, including cast iron watermain and vitrified clay sanitary sewer, as well as failing pavements. Woodland Avenue is proposed to reconstruct the watermain connection to the water tower at the uphill end of the project. The existing 10 inch cast iron watermain will be replaced with a higher capacity 12 inch PVC watermain.

Engagement Strategy

An informational meeting will be held with the property owners prior to the feasibility hearing.

Project Uses

	2026	2027	2028	2029	2030	Total
Administration	0	0	55,114	0	0	55,114
Contingency	0	0	83,507	0	0	83,507
Engineering	0	0	91,858	0	0	91,858
Sanitary Sewer	0	0	70,935	0	0	70,935
Storm Drainage	0	0	105,758	0	0	105,758
Stormwater Pollution Prevention	0	0	40,821	0	0	40,821
Street	0	0	392,513	0	0	392,513
Watermain	0	0	224,494	0	0	224,494
Total	**0**	**0**	**1,065,000**	**0**	**0**	**1,065,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Loan/Bond Proceeds	0	0	187,000	0	0	187,000
Sewer Revenue	0	0	83,000	0	0	83,000
Special Assessments	0	0	407,000	0	0	407,000
Stormwater Revenue	0	0	124,000	0	0	124,000
Water Revenue	0	0	264,000	0	0	264,000
Total	**0**	**0**	**1,065,000**	**0**	**0**	**1,065,000**

Project Timeline

- January – Feasibility Hearing
- February – Assessment Hearing
- March – Bid Award
- May – Construction
- October – Project completion

Woodshire Phase 3

Department: STREET PROJECTS

Project Years: 2028 - 2028

Project Description

The proposed improvements for Wilson Way, Bonnie Lane, Sylvan Way and Knollcrest Drive include replacement of sanitary sewer, watermain, storm sewer, end services, aggregate base, concrete curb and gutter, bituminous pavement, sidewalks, landscaping, and driveway pavement. Wilson Way, Bonnie Lane, Sylvan Way and Knollcrest Drive are the third phase of the Rita Road Neighborhood Construction Plan.

This neighborhood has inadequate sanitary sewer depth and drainage issues, resulting in high maintenance costs and roadway deterioration. The watermain in this area is installed in phases between the 1930s and 1970s and made of cast iron and ductile iron. Cast iron is susceptible to corrosion and rusting over time. The sanitary sewer in this area is installed in phases between the 1930s and 1970s and is made of vitrified clay. Vitrified clay is susceptible to root intrusion and leaks over time.

Woodshire Drive Neighborhood Construction Plan.

The neighborhood generally consisting of Madison Avenue to Swiss Street and Madison Avenue to Adams Street is considered by staff to be in need of reconstruction. The primary need for reconstruction in this area is due to aging and inadequate utilities. The sanitary infrastructure in this area consists of vitrified clay pipe constructed between the 1930s and 1950s. This infrastructure is generally considered by staff to be failing due to inadequate depth of the sanitary system as it extends into the neighborhood, most specifically at the northern terminus of Jayro Court. It has been determined by staff that the sanitary mainline exiting the neighborhood through the northern terminus of Woodshire Drive can be abandoned and rerouted to travel south along Woodshire Drives southern terminus. This would increase accessibility to the line for any needed maintenance activities. This would also allow for increased sanitary mainline depth and will result in less needed maintenance in this neighborhood. This neighborhood has mostly cast iron watermain constructed between the 1920s and 1950s. It is proposed to reconstruct this neighborhood in several phases.

Engagement Strategy

An informational meeting will be held with the property owners prior to the feasibility hearing.

Project Uses

	2026	2027	2028	2029	2030	Total
Administration	0	0	61,182	0	0	61,182
Contingency	0	0	92,700	0	0	92,700
Engineering	0	0	101,968	0	0	101,968
Sanitary Sewer	0	0	175,741	0	0	175,741
Storm Drainage	0	0	142,745	0	0	142,745
Stormwater Pollution Prevention	0	0	23,622	0	0	23,622
Street	0	0	1,523,423	0	0	1,523,423
Watermain	0	0	92,619	0	0	92,619
Total	**0**	**0**	**2,214,000**	**0**	**0**	**2,214,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Loan/Bond Proceeds	0	0	589,000	0	0	589,000
Sewer Revenue	0	0	346,000	0	0	346,000
Special Assessments	0	0	533,000	0	0	533,000
Stormwater Revenue	0	0	288,000	0	0	288,000
Water Revenue	0	0	458,000	0	0	458,000
Total	**0**	**0**	**2,214,000**	**0**	**0**	**2,214,000**

Project Timeline

- January - Feasibility hearing
- February - Assessment hearing
- March - Award Bids
- May - Start construct i on
- August - Project complet i on

Germania Park Phase 7

Department: STREET PROJECTS

Project Years: 2029 - 2029

Project Description

The reconstruction of 1st Avenue from Riverfront drive eastward to the railroad tracks.

The Germania Park Capital Improvements Plan (CIP) covers an area of Mankato generally bounded by Riverfront Drive, 1st Avenue, Trunk Highway 14 (TH 14), and the Minnesota River. The existing subsurface of this area is predominantly bedrock, which has limited the development to smaller residential developments and industrial businesses. Most of the city-owned infrastructure is original and dates 50 to 75 years in age, with the exception of Pine Street and a few residential streets on the east side of 3rd Avenue.

In 2011, Short Elliott Hendrickson, Inc. was retained by the City of Mankato to develop a master plan for the Germania Park area. This plan originally envisioned the improvements starting in 2015. Due to funding priorities within the Community Investment Plan these projects were delayed until 2019.

The project area generally has utilities that are 50-75 years old. Sewer is believed to be made of vitrified clay. Vitrified clay is a brittle material susceptible to cracking, joint displacement, root intrusion, and infiltration. The sanitary sewer manholes are of a similar age and likely block or brick built. Due to the age and material build of the sanitary sewer, it is suggested that all sanitary sewer within the project area be reconstructed and replaced with polyvinyl chloride (PVC) pipe. The watermain is most likely made of cast iron, which is susceptible to breaking due to deterioration and freezing conditions in colder weather. It is also 6-inch in diameter, which is undersized compared to current standards.

Engagement Strategy

An informational meeting will be held with the property owners prior to the feasibility hearing.

Project Uses

	2026	2027	2028	2029	2030	Total
Admin/Bonding	0	0	0	222,007	0	222,007
Contingency	0	0	0	336,375	0	336,375
Engineering	0	0	0	370,013	0	370,013

	2026	2027	2028	2029	2030	Total
Sanitary sewer	0	0	0	1,023,553	0	1,023,553
Stormwater	0	0	0	48,870	0	48,870
Streets	0	0	0	2,074,292	0	2,074,292
Watermain	0	0	0	217,890	0	217,890
Total	**0**	**0**	**0**	**4,293,000**	**0**	**4,293,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Loan/Bond Proceeds	0	0	0	1,675,000	0	1,675,000
Sewer Revenue	0	0	0	1,204,000	0	1,204,000
Special Assessments	0	0	0	1,100,000	0	1,100,000
Stormwater Revenue	0	0	0	58,000	0	58,000
Water Revenue	0	0	0	256,000	0	256,000
Total	**0**	**0**	**0**	**4,293,000**	**0**	**4,293,000**

Project Timeline

- January – Feasibility
- February – Hearing
- March – Bid
- May – Construction
- October – Project completion

Madison Avenue Resurface

Department: STREET PROJECTS

Project Years: 2029 - 2029

Project Description

This project is proposed as a full depth reclamation of Madison Avenue from Riverfront Drive to 7th Street. This project will not impact existing sanitary sewer and watermain. Selective storm drain improvements will take place with the project.

Engagement Strategy

An informational meeting will be held with the property owners prior to the feasibility hearing.

Project Uses

	2026	2027	2028	2029	2030	Total
Adminstration	0	0	0	60,125	0	60,125
Contingency	0	0	0	91,097	0	91,097
Engineering	0	0	0	100,208	0	100,208
Sanitary Sewer	0	0	0	50,000	0	50,000
Storm Drainage	0	0	0	41,752	0	41,752
Stormwater Pollution Prevention	0	0	0	4,189	0	4,189
Street	0	0	0	859,629	0	859,629
Watermain	0	0	0	50,000	0	50,000
Total	**0**	**0**	**0**	**1,257,000**	**0**	**1,257,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Loan/Bond Proceeds	0	0	0	250,000	0	250,000
Sewer Revenue	0	0	0	50,000	0	50,000
Special Assessments	0	0	0	156,000	0	156,000
State Funding	0	0	0	701,000	0	701,000
Stormwater Revenue	0	0	0	50,000	0	50,000
Water Revenue	0	0	0	50,000	0	50,000
Total	**0**	**0**	**0**	**1,257,000**	**0**	**1,257,000**

Project Timeline

- January – Feasibility Hearing
- February – Assessment Hearing
- March – Bid
- May – Construction
- October – Project completion

Riverfront Dr - Stoltzman to Warren

Department: STREET PROJECTS

Project Years: 2029 - 2029

Project Description

Riverfront Drive reconstruction is programmed as a full reconstruction of Riverfront Drive from Stoltzman Drive to Warren Street. The project will be a full reconstruct excluding the sanitary sewer and median. The sanitary sewer is made of PVC and up to date for city standard materials.

Engagement Strategy

An informational meeting will be held with the property owners prior to the feasibility hearing.

Project Uses

	2026	2027	2028	2029	2030	Total
Administration	0	0	0	106,478	0	106,478
Contingency	0	0	0	161,331	0	161,331
Engineering	0	0	0	177,464	0	177,464
Sanitary Sewer	0	0	0	49,858	0	49,858
Storm Drainage	0	0	0	104,510	0	104,510
Storm Pollution Prevention	0	0	0	12,796	0	12,796
Street	0	0	0	1,443,217	0	1,443,217
Watermain	0	0	0	51,346	0	51,346
Total	**0**	**0**	**0**	**2,107,000**	**0**	**2,107,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Loan/Bond Proceeds	0	0	0	590,000	0	590,000
Sewer Revenue	0	0	0	50,000	0	50,000
Special Assessments	0	0	0	484,000	0	484,000
State Funding	0	0	0	800,000	0	800,000
Stormwater Revenue	0	0	0	123,000	0	123,000
Water Revenue	0	0	0	60,000	0	60,000
Total	**0**	**0**	**0**	**2,107,000**	**0**	**2,107,000**

Project Timeline

- January – Feasibility Hearing
- February – Assessment Hearing
- March – Bid
- May – Construction
- October – Project completion

Riverfront Dr - Warren to Main

Department: STREET PROJECTS

Project Years: 2029 - 2029

Project Description

Reconstruction of Riverfront Drive from Warren Street to Main Street. This reconstruction will rehabilitate watermain and sewer utilities as necessary. The road section and sidewalk will be reconstructed.

Engagement Strategy

An informational meeting will be held with the property owners prior to the feasibility hearing.

Project Uses

	2026	2027	2028	2029	2030	Total
Administration	0	0	0	100,121	0	100,121
Contingency	0	0	0	151,698	0	151,698
Engineering	0	0	0	166,868	0	166,868
Sanitary Sewer	0	0	0	100,000	0	100,000
Storm Drainage	0	0	0	150,568	0	150,568
Stormwater Pollution Prevention	0	0	0	5,412	0	5,412
Street	0	0	0	1,354,906	0	1,354,906
Watermain	0	0	0	99,427	0	99,427
Total	**0**	**0**	**0**	**2,129,000**	**0**	**2,129,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Loan/Bond Proceeds	0	0	0	200,000	0	200,000
Sewer Revenue	0	0	0	100,000	0	100,000
Special Assessments	0	0	0	242,000	0	242,000
State Funding	0	0	0	1,310,000	0	1,310,000
Stormwater Revenue	0	0	0	177,000	0	177,000
Water Revenue	0	0	0	100,000	0	100,000
Total	**0**	**0**	**0**	**2,129,000**	**0**	**2,129,000**

Project Timeline

- January - Feasibility Hearing
- February - Assessment Hearing
- March - Bid Award
- May - Construct i on
- October - Project complet i on

Gwyn Area

Department: STREET PROJECTS

Project Years: 2030 - 2030

Project Description

Full reconstruction of utilities and surface improvements for:

- Gwyn Drive from Chapman Road to Woodland Avenue
- Gwyn Avenue from Woodland Avenue to Carney Avenue
- Chapman Road from western improved limits to Woodland Avenue (~550-ft)
- Caron Drive from Belwood Drive to Woodland Avenue
- Belwood Drive from Lillian Drive to Woodland Avenue
- Lillian Drive from south terminus to Woodland Avenue
- Southview Drive from Carney Avenue to eastern terminus

Project Uses

	2026	2027	2028	2029	2030	Total
Gwyn Area	0	0	0	0	3,450,000	3,450,000
Total	**0**	**0**	**0**	**0**	**3,450,000**	**3,450,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Loan/Bond Proceeds	0	0	0	0	625,000	625,000
Sewer Revenue	0	0	0	0	500,000	500,000
Special Assessments	0	0	0	0	1,285,000	1,285,000
Stormwater Revenue	0	0	0	0	530,000	530,000
Water Revenue	0	0	0	0	510,000	510,000
Total	**0**	**0**	**0**	**0**	**3,450,000**	**3,450,000**

Project Timeline

- Feasibility - Summer 2029
- Design - Fall/Winter 2029-2030
- Bid - Spring 2030
- Construction - Summer 2030
- Substantial Completion - Fall 203

Marion Ln - Emerson to Main

Department: STREET PROJECTS

Project Years: 2030 - 2030

Project Description

Reconstruction of utilities and surface improvements for Marion Lane from Main Street to Emerson Lane.

Project Uses

	2026	2027	2028	2029	2030	Total
Marion Lane	0	0	0	0	714,000	714,000
Total	**0**	**0**	**0**	**0**	**714,000**	**714,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Loan/Bond Proceeds	0	0	0	0	129,000	129,000
Sewer Revenue	0	0	0	0	136,000	136,000
Special Assessments	0	0	0	0	257,000	257,000
Stormwater Revenue	0	0	0	0	59,000	59,000
Water Revenue	0	0	0	0	133,000	133,000
Total	**0**	**0**	**0**	**0**	**714,000**	**714,000**

Project Timeline

- Feasibility - Summer 2029
- Design - Fall/Winter 2029-2030
- Bid - Spring 2030
- Construction - Summer 2030
- Substantial Completion - Fall 2030

Meadow Lane & Welcome Ave - Monks to Rita

Department: STREET PROJECTS

Project Years: 2030 - 2030

Project Description

The proposed improvements for Meadow Lane from Monks Avenue to Rita Road include replacement of sanitary sewer, watermain, storm sewer, end services, aggregate base, concrete curb and gutter, bituminous pavement, landscaping, and driveway pavement.

This street is the second phase of the Rita Road Neighborhood Construction Plan. This neighborhood is one of the few remaining without underdrain. The watermain in this area is from the late-1950s and made of cast iron. Cast iron is susceptible to corrosion and rusting over time. The sanitary sewer in this area is from the late-1950s and is made of vitrified clay. Vitrified clay is susceptible to root intrusion and leaks over time.

Rita Road Neighborhood Construction Plan

The neighborhood generally consisting of Monks Avenue to Rita Road and Rita Road to Welcome Avenue is considered by staff to be in need of reconstruction. The primary need for reconstruction in this area is due to drainage/grading issues and aging utilities.

This neighborhood experiences drainage problems due to a lack of storm sewer and grading challenges in a majority of the neighborhood. Storm sewer is present on the northern portion of Rita Road and the adjacent Monks Avenue. The eastern portion of Rita Road as well as Meadow Lane and Welcome Avenue rely on surface drainage. The current grading of this neighborhood does not allow for surface drainage to reach the storm sewer conveyance system in a large portion of this neighborhood.

This neighborhood has cast iron watermain constructed in the late 1950s.

The sanitary infrastructure in this area consists of vitrified clay pipe constructed in the late 1950s.

It is proposed to reconstruct this neighborhood in several phases.

Engagement Strategy

Engagement Strategy

An informational meeting will be held with the property owners prior to the feasibility hearing.

Project Uses

	2026	2027	2028	2029	2030	Total
Admin/bonding	0	0	0	0	49,921	49,921
Contingency	0	0	0	0	75,637	75,637
Engineering	0	0	0	0	83,201	83,201
Sanitary	0	0	0	0	159,563	159,563
Storm	0	0	0	0	75,695	75,695
Street	0	0	0	0	1,334,668	1,334,668
SWPP	0	0	0	0	4,814	4,814
Watermain	0	0	0	0	136,501	136,501
Total	**0**	**0**	**0**	**0**	**1,920,000**	**1,920,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Loan/Bond Proceeds	0	0	0	0	437,000	437,000
Sewer Revenue	0	0	0	0	376,000	376,000
Special Assessments	0	0	0	0	603,000	603,000
Stormwater Revenue	0	0	0	0	182,000	182,000
Water Revenue	0	0	0	0	322,000	322,000
Total	**0**	**0**	**0**	**0**	**1,920,000**	**1,920,000**

Project Timeline

- January – Feasibility Hearing
- February – Assessment Hearing
- March – Bid Award
- May – Construction
- October – Project completion

Plainview Avenue - Fair to Marwood

Department: STREET PROJECTS

Project Years: 2030 - 2030

Project Description

Reconstruction of Plainview Avenue from Marwood Drive to Fair Street. This project will consist of replacing watermain, sanitary sewer and storm water utilities.

This neighborhood is experiencing a large amounts of watermain breaks consistently due to aging and failing infrastructure. This area has had 4 main breaks between 2016-2021 and is considered the 6th most costly main break area during this time period. The watermain in this area is from the mid-1950s and made of cast iron. Cast iron is susceptible to corrosion and rusting over time. The sanitary sewer in this area is from the mid-1950s and is made of vitrified clay. Vitrified clay is susceptible to root intrusion and leaks over time. There is sidewalk identified in this area under the City of Mankato Critical Link Sidewalk Plan.

Engagement Strategy

An informational meeting will be held with the property owners prior to the feasibility hearing.

Project Uses

	2026	2027	2028	2029	2030	Total
Admin/bonding	0	0	0	0	86,939	86,939
Contingency	0	0	0	0	131,725	131,725
Engineering	0	0	0	0	144,898	144,898
Sanitary	0	0	0	0	344,398	344,398
Storm	0	0	0	0	140,828	140,828
Street	0	0	0	0	587,457	587,457
SWPP	0	0	0	0	9,696	9,696
Watermain	0	0	0	0	235,059	235,059
Total	**0**	**0**	**0**	**0**	**1,681,000**	**1,681,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Loan/Bond Proceeds	0	0	0	0	363,000	363,000
Sewer Revenue	0	0	0	0	405,000	405,000
Special Assessments	0	0	0	0	471,000	471,000
Stormwater Revenue	0	0	0	0	166,000	166,000
Water Revenue	0	0	0	0	276,000	276,000
Total	**0**	**0**	**0**	**0**	**1,681,000**	**1,681,000**

Project Timeline

- January – Feasibility Hearing
- February – Assessment Hearing
- March – Bid Award
- May – Construction
- October – Project completion

Riverfront Dr - Chestnut to Ruth

Department: STREET PROJECTS

Project Years: 2030 - 2030

Project Description

The sanitary line running generally from the WRRF eastward on the north side of the train tracks and south through Mabel St, Riverfront Dr and Ruth St before crossing southeast along grassland to Thompson Ravine Road is considered to have inadequate capacity and is in inadequate condition.

In assessing this mainline it has been determined that one adequate alternative is to install a new sanitary line that follows a different footprint that has fewer geographical constraints. One option that has been considered is running a concurrent line from Thompson Ravine Road through Ruth Street to Riverfront Drive. At Riverfront Drive, flow will be directed southwest until Chestnut Drive. The mainline will travel west on Chestnut Drive until 1st Avenue. On 1st Avenue the mainline will travel north to Mills Street. On Mills Street the mainline will continue west to 3rd Avenue. The concurrent line would then follow the existing footprint to the WRRF. This proposed path of travel can be seen in the image below.

This option would incorporate multiple reconstruction projects to complete. It is proposed that construction of the new sanitary line coincide with reconstruction of 3rd Avenue, reconstruction of Mills Street, 1st Avenue, and Chestnut Street, reconstruction of Riverfront Drive and reconstruction of Ruth Street. There would also be needed reconstruction at Mabel Street to redirect sanitary flows to the southwest. The planned reconstruct of Germania Park Phase 7 includes the entirety of 1st Avenue.

This project is proposed to be expanded to include Mills Street and Chestnut Street. Reconstruction of Riverfront Drive from Chestnut Street to Mabel Street is proposed to reroute sanitary flows southward from Mabel Street. Reconstruction of Ruth Street from Riverfront Drive past its eastern extents to Thompson Ravine Road is proposed to install the concurrent sanitary line. Reconstruction of Mabel Street is proposed to allow for the sanitary line crossing the railroad tracks northward to be abandoned.

Engagement Strategy

An informational meeting will be held with the property owners prior to the feasibility hearing.

Project Uses

	2026	2027	2028	2029	2030	Total
Administration	0	0	0	0	57,244	57,244
Contingency	0	0	0	0	86,734	86,734
Engineering	0	0	0	0	95,407	95,407
Sanitary Sewer	0	0	0	0	187,804	187,804
Storm Drainage	0	0	0	0	57,995	57,995
Stormwater Pollution Prevention	0	0	0	0	5,142	5,142
Street	0	0	0	0	566,250	566,250
Watermain	0	0	0	0	49,424	49,424
Total	**0**	**0**	**0**	**0**	**1,106,000**	**1,106,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Loan/Bond Proceeds	0	0	0	0	575,000	575,000
Sewer Revenue	0	0	0	0	221,000	221,000
Special Assessments	0	0	0	0	184,000	184,000
Stormwater Revenue	0	0	0	0	68,000	68,000
Water Revenue	0	0	0	0	58,000	58,000
Total	**0**	**0**	**0**	**0**	**1,106,000**	**1,106,000**

Project Timeline

- January – Feasibility Hearing
- February – Assessment Hearing
- March – Bid Award
- May – Construction
- October – Project completion

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Capital Replacement

Mankato EDA Capital

EDA Capital						
	2026	2027	2028	2029	2030	
Projected fund balance	$ 105,000	$ 330,000	$ 375,000	$ 525,000	$ 625,000	
Rent Proceeds	$ 225,000	$ 225,000	$ 225,000	$ 225,000	$ 225,000	
Available Funds	$ 330,000	$ 555,000	$ 600,000	$ 750,000	$ 850,000	

Project Name	2026	2027	2028	2029	2030	Total	Illustrative
GMBDC - Roof Replacement						$ -	$ (2,710,120)
GMBDC - Landscaping Replacement		$ (80,000)				$ (80,000)	
GMBDC - Facility Wall Concrete Joint Sealant Replacement			$ (75,000)			$ (75,000)	
GMBDC - HVAC Unit Replacement				$ (125,000)	$ (125,000)	$ (250,000)	
GMBDC - Ceiling Tile Replacement						$ -	$ (200,000)
GMBDC - Conference Room Relocation						$ -	$ (85,000)
GMBDC - Conference Room Furniture						$ -	$ (100,000)
GMBDC - Fire Alarm System Upgrade		$ (100,000)				$ (100,000)	
Total	$ -	$ (180,000)	$ (75,000)	$ (125,000)	$ (125,000)	$ (505,000)	$ (3,095,120)
Fund Balance	$ 330,000	$ 375,000	$ 525,000	$ 625,000	$ 725,000		
Fund Balance Target	$ 400,000	$ 400,000	$ 400,000	$ 400,000	$ 400,000		
Project count	0	2	1	1	1		

CIP Fund Overview 2027

Project Name	Project Year	Project Cost
GMBDC - Fire Alarm System Upgrade	2027	100,000
GMBDC - Landscaping Replacement	2027	80,000
Total		**180,000**

CIP Fund Overview 2028

Project Name	Project Year	Project Cost
GMBDC - Facility Wall Concrete Joint Sealant Replacement	2028	75,000
Total		**75,000**

CIP Fund Overview 2029

Project Name	Project Year	Project Cost
GMBDC - HVAC Unit Replacement	2029	125,000
Total		**125,000**

CIP Fund Overview 2030

Project Name	Project Year	Project Cost
GMBDC - HVAC Unit Replacement	2030	125,000
Total		**125,000**

Illustrative CIP Fund Overview

Project Name	Project Year	Project Cost
GMBDC - Ceiling Tile Replacement	2033	200,000
GMBDC - Conference Room Furniture Replacement	2033	100,000
GMBDC - Conference Room Relocation	2033	85,000
GMBDC - Roof Replacement	2033	2,710,120
Total		**3,095,120**

GMBDC - Fire Alarm System Upgrade

Department: MANKATO EDA CAPITAL

Project Years: 2027 - 2027

Project Description

The existing alarm panel is at the end of its useful life and needs to be upgraded. The new system will include a cell dialer for monitoring which eliminates the need for a dedicated phone line.

Project Uses

	2026	2027	2028	2029	2030	Total
Fire alarm system upgrade	0	100,000	0	0	0	100,000
Total	**0**	**100,000**	**0**	**0**	**0**	**100,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	100,000	0	0	0	100,000
Total	**0**	**100,000**	**0**	**0**	**0**	**100,000**

Project Timeline

- January - Obtain quotes
- March - Install new system and test i ng

GMBDC - Landscaping Replacement

Department: MANKATO EDA CAPITAL

Project Years: 2027 - 2027

Project Description

The landscaping in the parking lot islands, perimeter of the lot, and around the building will be refreshed with new plantings that are salt tolerant for our snow removal operations. We have had good luck with them in the downtown environment and those will be mirrored at this facility.

Project Uses

	2026	2027	2028	2029	2030	Total
Landscape replacement	0	80,000	0	0	0	80,000
Total	**0**	**80,000**	**0**	**0**	**0**	**80,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	80,000	0	0	0	80,000
Total	**0**	**80,000**	**0**	**0**	**0**	**80,000**

Project Timeline

- February - Request for quotes released
- March - Finalize quote
- May - Begin work

GMBDC - Facility Wall Concrete Joint Sealant Replacement

Department: MANKATO EDA CAPITAL

Project Years: 2028 - 2028

Project Description

The concrete tip up panel seams will be cleaned and recaulked as part of this project.

Project Uses

	2026	2027	2028	2029	2030	Total
Wall Joint Sealant	0	0	75,000	0	0	75,000
Total	**0**	**0**	**75,000**	**0**	**0**	**75,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	0	75,000	0	0	75,000
Total	**0**	**0**	**75,000**	**0**	**0**	**75,000**

Project Timeline

- April - Request for quotations released
- June - Construction

GMBDC - HVAC Unit Replacement

Department: MANKATO EDA CAPITAL

Project Years: 2029 - 2030

Project Description

The replacement units will be prioritized based on the age and condition of each unit. Staff anticipates being able to replace 3-6 units per year depending on the size of the unit. Depending on the ability to support the weight and added footprint, heat pump units will be considered as an alternative.

Project Uses

	2026	2027	2028	2029	2030	Total
HVAC Replacements	0	0	0	125,000	125,000	250,000
Total	**0**	**0**	**0**	**125,000**	**125,000**	**250,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	0	0	125,000	125,000	250,000
Total	**0**	**0**	**0**	**125,000**	**125,000**	**250,000**

Project Timeline

- January - Request quotes
- March - Order units
- September - Installat i on

Mankato EDA - Housing

Housing - Mankato

	2026	2027	2028	2029	2030
Projected fund balance	$ -	$ 1,507,655	$ 1,098,655	$ 708,655	$ 736,655
Prior CFP Grants - Federal Aid	$ 1,535,965				
Transfer-In	$ 500,000	$ 500,000	$ 500,000	$ 500,000	$ 500,000
Available Funds	$ 2,035,965	$ 2,007,655	$ 1,598,655	$ 1,208,655	$ 1,236,655

Project Name	2026	2027	2028	2029	2030	Total	Illustrative
Mankato Unit Renovations	$ (400,000)	$ (400,000)	$ (400,000)	$ (400,000)	$ (400,000)	**$ (2,000,000)**	
Mankato RAD Conversion Critical Repairs	$ (24,310)					**$ (24,310)**	
Orness Plaza Boiler Replacement						**$ -**	$ (100,000)
Orness Plaza HVAC Replacement Phase 1		$ (400,000)				**$ (400,000)**	
Orness Plaza HVAC Replacement Phase 2			$ (375,000)			**$ (375,000)**	
Appliance, Furnace, & Water Heater Replacement	$ (31,000)	$ (34,000)	$ (37,000)	$ (41,000)	$ (45,000)	**$ (188,000)**	
Driveway & Misc. Site Improvements	$ (23,000)	$ (25,000)	$ (28,000)	$ (31,000)	$ (35,000)	**$ (142,000)**	
Orness Plaza EIFS Repairs						**$ -**	$ (100,000)
Unit Electrical Code Upgrades	$ (50,000)	$ (50,000)	$ (50,000)			**$ (150,000)**	
Parking Lot Repairs & Sealcoating						**$ -**	$ (80,000)
Total	**$ (528,310)**	**$ (909,000)**	**$ (890,000)**	**$ (472,000)**	**$ (480,000)**	**$ (3,279,310)**	$ (280,000)
Fund Balance	$ 1,507,655	$ 1,098,655	$ 708,655	$ 736,655	$ 756,655		
Fund Balance Target	$ 500,000	$ 515,000	$ 530,000	$ 545,000	$ 560,000		
Project count	5	5	5	3	3		

CIP Fund Overview 2026

Project Name	Project Year	Project Cost
Mankato Housing - Appliance, Furnace, & Water Heater Replacement	2026	31,000
Mankato Housing - Driveway & Misc. Site Improvements	2026	23,000
Mankato Housing - RAD Conversion Critical Repairs	2026	24,310
Mankato Housing - Unit Electrical Code Upgrades	2026	50,000
Mankato Housing - Unit Renovations	2026	400,000
Total		**528,310**

CIP Fund Overview 2027

Project Name	Project Year	Project Cost
Mankato Housing - Appliance, Furnace, & Water Heater Replacement	2027	34,000
Mankato Housing - Driveway & Misc. Site Improvements	2027	25,000
Mankato Housing - Orness Plaza HVAC Replacement Phase 1	2027	400,000
Mankato Housing - Unit Electrical Code Upgrades	2027	50,000
Mankato Housing - Unit Renovations	2027	400,000
Total		**909,000**

CIP Fund Overview 2028

Project Name	Project Year	Project Cost
Mankato Housing - Orness Plaza HVAC Replacement Phase 2	2028	375,000
Mankato Housing - Appliance, Furnace, & Water Heater Replacement	2028	37,000
Mankato Housing - Driveway & Misc. Site Improvements	2028	28,000
Mankato Housing - Unit Electrical Code Upgrades	2028	50,000
Mankato Housing - Unit Renovations	2028	400,000
Total		**890,000**

CIP Fund Overview 2029

Project Name	Project Year	Project Cost
Mankato Housing - Appliance, Furnace, & Water Heater Replacement	2029	41,000
Mankato Housing - Driveway & Misc. Site Improvements	2029	31,000
Mankato Housing - Unit Renovations	2029	400,000
Total		**472,000**

CIP Fund Overview 2030

Project Name	Project Year	Project Cost
Mankato Housing - Appliance, Furnace, & Water Heater Replacement	2030	45,000
Mankato Housing - Driveway & Misc. Site Improvements	2030	35,000
Mankato Housing - Unit Renovations	2030	400,000
Total		**480,000**

Illustrative CIP Fund Overview

Project Name	Project Year	Project Cost
Mankato Housing - Orness Plaza Boiler Replacement	2030	100,000
Mankato Housing - Orness Plaza EIFS Repairs	2030	100,000
Mankato Housing - Parking Lot Repairs & Sealcoating	2030	80,000
Total		**280,000**

Mankato Housing - Appliance, Furnace, & Water Heater Replacement

Department: MANKATO EDA - HOUSING

Project Years: 2026 - 2030

Project Description

Replacement of appliances as they approach the end of their useful life will allow for reduced downtime for tenants and reduce the number of stall call backs for maintenance.

Project Uses

	2026	2027	2028	2029	2030	Total
Housing (City) Appliance, furnace, & water heater replacement	31,000	34,000	37,000	41,000	45,000	188,000
Total	**31,000**	**34,000**	**37,000**	**41,000**	**45,000**	**188,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	31,000	34,000	37,000	41,000	45,000	188,000
Total	**31,000**	**34,000**	**37,000**	**41,000**	**45,000**	**188,000**

Project Timeline

Multi year project will replace appliances as time allows throughout the calendar year.

Mankato Housing - Driveway & Misc. Site Improvements

Department: MANKATO EDA - HOUSING

Project Years: 2026 - 2030

Project Description

Replacement of failing site improvements to comply with housing unit inspections and site accessibility for our tenants.

Project Uses

	2026	2027	2028	2029	2030	Total
Housing (City) Driveway, misc site improvements	23,000	25,000	28,000	31,000	35,000	142,000
Total	**23,000**	**25,000**	**28,000**	**31,000**	**35,000**	**142,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	23,000	25,000	28,000	31,000	35,000	142,000
Total	**23,000**	**25,000**	**28,000**	**31,000**	**35,000**	**142,000**

Project Timeline

Multiyear project will be accomplished as projects are identified and staffing allows.

Mankato Housing - RAD Conversion Critical Repairs

Department: MANKATO EDA - HOUSING

Project Years: 2026 - 2026

Project Description

The project will include items identified through the RAD conversion process. They include scald abrasion protection for under ADA sinks, accessible parking stall installations at various sites, the addition of audio visual alarms in various accessible units, railing along a retaining wall, and lighting fixture upgrades.

Project Uses

	2026	2027	2028	2029	2030	Total
Mankato RAD Conversion Critical Repairs	24,310	0	0	0	0	24,310
Total	**24,310**	**0**	**0**	**0**	**0**	**24,310**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	24,310	0	0	0	0	24,310
Total	**24,310**	**0**	**0**	**0**	**0**	**24,310**

Project Timeline

The items that can be completed by Housing staff will be done in January of 2026. The items requiring contractor work will be bid out in Spring of 2026 with completion in June of 2026.

Mankato Housing - Unit Electrical Code Upgrades

Department: MANKATO EDA - HOUSING

Project Years: 2026 - 2028

Project Description

With the start of the new Inspire inspections, electrical code upgrades were a key feature in the new rating structure. Housing authorities have a limited window of time to bring all units up to compliance and we have developed a plan to bring all of our units up to current code within 3 years. Old electrical systems will be replaced and upgraded to modern wiring and breaker boxes and ground fault outlets will be added in the appropriate locations. Finally, lighting and exhaust systems will be upgraded for energy efficiency where feasible.

Project Uses

	2026	2027	2028	2029	2030	Total
Unit Electrical Code Upgrades	50,000	50,000	50,000	0	0	150,000
Total	**50,000**	**50,000**	**50,000**	**0**	**0**	**150,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	50,000	50,000	50,000	0	0	150,000
Total	**50,000**	**50,000**	**50,000**	**0**	**0**	**150,000**

Project Timeline

This is a multi year project that will be undertaken with open units being done first followed by occupied units to reduce the impact on our tenants.

Mankato Housing - Unit Renovations

Department: MANKATO EDA - HOUSING

Project Years: 2026 - 2030

Project Description

Various unit modernization and updates as the units become available during turnovers.

Project Uses

	2026	2027	2028	2029	2030	Total
Housing (City) Housing unit turnover renovations	400,000	400,000	400,000	400,000	400,000	2,000,000
Total	**400,000**	**400,000**	**400,000**	**400,000**	**400,000**	**2,000,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	400,000	400,000	400,000	400,000	400,000	2,000,000
Total	**400,000**	**400,000**	**400,000**	**400,000**	**400,000**	**2,000,000**

Project Timeline

Multiyear project to be undertaken as units become available and staffing allows.

Mankato Housing - Orness Plaza HVAC Replacement Phase 1

Department: MANKATO EDA - HOUSING

Project Years: 2027 - 2027

Project Description

The first phase of improvements will include installation of 4 heats pumps on the first floor of the atrium. Currently, the space is serviced only by a large air handler on the roof of the 7 story building without sufficient power to supply the space below. The project will also include improvements to the heating in the vestibules, stairways, and the addition of air curtains at the main entrances to reduce the infiltration of cold air in the winter months.

Project Uses

	2026	2027	2028	2029	2030	Total
Orness Plaza HVAC Replacement Phase 1	0	400,000	0	0	0	400,000
Total	**0**	**400,000**	**0**	**0**	**0**	**400,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	400,000	0	0	0	400,000
Total	**0**	**400,000**	**0**	**0**	**0**	**400,000**

Project Timeline

- January - Feasibility Hearing
- March - Award bids
- May - September - Construct i on

Mankato Housing - Orness Plaza HVAC Replacement Phase 2

Department: MANKATO EDA - HOUSING

Project Years: 2028 - 2028

Project Description

The project includes the replacement of both RTUs with new units. This will require a controls upgrade to the building automation system and some rework of the duct work servicing these areas. Given the location of the units in the center of the roof structure, a large crane will be needed for demolition and installation of the new equipment.

Project Uses

	2026	2027	2028	2029	2030	Total
Orness Plaza HVAC Replacement Phase 2	0	0	375,000	0	0	375,000
Total	**0**	**0**	**375,000**	**0**	**0**	**375,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	0	375,000	0	0	375,000
Total	**0**	**0**	**375,000**	**0**	**0**	**375,000**

Project Timeline

- January - Feasibility Hearing
- March - Bid Award
- September - October - Construct i on

Blue Earth County
EDA - Housing

Housing - Blue Earth County							
	2026	**2027**	**2028**	**2029**	**2030**		
Projected fund balance	$ -	$ 753,900	$ 604,900	$ 574,900	$ 577,900		
Prior CFP Grants - Federal Aid	$ 829,010						
Transfer In	$ 250,000	$ 250,000	$ 250,000	$ 250,000	$ 250,000		
Available Funds	$ 1,079,010	$ 1,003,900	$ 854,900	$ 824,900	$ 827,900		
Project Name	**2026**	**2027**	**2028**	**2029**	**2030**	**Total**	**Illustrative**
Housing Unit Turnover Renovations	$ (175,000)	$ (175,000)	$ (175,000)	$ (175,000)	$ (175,000)	**$ (875,000)**	
Blue Earth County RAD Conversion Critical Repairs	$ (36,110)					**$ (36,110)**	
Appliance, Furnace, & Water Heater Replacement	$ (31,000)	$ (34,000)	$ (37,000)	$ (41,000)	$ (44,000)	**$ (187,000)**	
Parking Lot Patching & Sealcoating						**$ -**	$ 75,000
Driveway, Sidewalk, & Misc. Site Improvements	$ (23,000)	$ (25,000)	$ (28,000)	$ (31,000)	$ (33,500)	**$ (140,500)**	
Eastview Apartments Exterior Lighting Replacement		$ (75,000)				**$ (75,000)**	
Pioneer Plaza Apartments Exterior Lighting Electrical Upgrades		$ (50,000)				**$ (50,000)**	
Unit Electrical Code Upgrades	$ (60,000)	$ (40,000)	$ (40,000)			**$ (140,000)**	
						$ -	$ -
Total	**$ (325,110)**	**$ (399,000)**	**$ (280,000)**	**$ (247,000)**	**$ (252,500)**	**$ (1,503,610)**	$ 75,000
Fund Balance	$ 753,900	$ 604,900	$ 574,900	$ 577,900	$ 575,400		
Fund Balance Target	$ 500,000	$ 515,000	$ 530,000	$ 545,000	$ 560,000		
Project count	5	6	4	3	3		

CIP Fund Overview 2026

Project Name	Project Year	Project Cost
BEC Housing - Appliance, Furnace, & Water Heater Replacement	2026	31,000
BEC Housing - Driveway & Misc. Site Improvements	2026	23,000
BEC Housing - Housing Unit Renovations	2026	175,000
BEC Housing - RAD Conversion Critical Repairs	2026	36,110
BEC Housing - Unit Electrical Code Upgrades	2026	60,000
Total		**325,110**

CIP Fund Overview 2027

Project Name	Project Year	Project Cost
BEC Housing - Appliance, Furnace, & Water Heater Replacement	2027	34,000
BEC Housing - Driveway & Misc. Site Improvements	2027	25,000
BEC Housing - Eastview Apartments Exterior Lighting Replacement	2027	75,000
BEC Housing - Housing Unit Renovations	2027	175,000
BEC Housing - Pioneer Plaza Apartments Exterior Lighting Electrical Upgrades	2027	50,000
BEC Housing - Unit Electrical Code Upgrades	2027	40,000
Total		**399,000**

CIP Fund Overview 2028

Project Name	Project Year	Project Cost
BEC Housing - Appliance, Furnace, & Water Heater Replacement	2028	37,000
BEC Housing - Driveway & Misc. Site Improvements	2028	28,000
BEC Housing - Housing Unit Renovations	2028	175,000
BEC Housing - Unit Electrical Code Upgrades	2028	40,000
Total		**280,000**

CIP Fund Overview 2029

Project Name	Project Year	Project Cost
BEC Housing - Appliance, Furnace, & Water Heater Replacement	2029	41,000
BEC Housing - Driveway & Misc. Site Improvements	2029	31,000
BEC Housing - Housing Unit Renovations	2029	175,000
Total		**247,000**

CIP Fund Overview 2030

Project Name	Project Year	Project Cost
BEC Housing - Appliance, Furnace, & Water Heater Replacement	2030	44,000
BEC Housing - Driveway & Misc. Site Improvements	2030	33,500
BEC Housing - Housing Unit Renovations	2030	175,000
Total		**252,500**

Illustrative CIP Fund Overview

Project Name	Project Year	Project Cost
BEC Housing - Parking lot patching & sealcoating	2031	75,000
Total		**75,000**

BEC Housing - Appliance, Furnace, & Water Heater Replacement

Department: BLUE EARTH COUNTY EDA - HOUSING

Project Years: 2026 - 2030

Project Description

Replacement of appliances as they approach the end of their useful life will allow for reduced downtime for tenants and reduce the number of call backs for maintenance.

Project Uses

	2026	2027	2028	2029	2030	Total
BEC Housing - Appliance, furnace, & water heater replacement	31,000	34,000	37,000	41,000	44,000	187,000
Total	**31,000**	**34,000**	**37,000**	**41,000**	**44,000**	**187,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	31,000	34,000	37,000	41,000	44,000	187,000
Total	**31,000**	**34,000**	**37,000**	**41,000**	**44,000**	**187,000**

Project Timeline

Multi year project will replace appliances as time allows throughout the calendar year.

BEC Housing - Driveway & Misc. Site Improvements

Department: BLUE EARTH COUNTY EDA - HOUSING

Project Years: 2026 - 2030

Project Description

Replacement of failing site improvements to comply with housing unit inspections and site accessibility for our tenants.

Project Uses

	2026	2027	2028	2029	2030	Total
BEC Housing - Driveway, sidewalk, misc site improvements	23,000	25,000	28,000	31,000	33,500	140,500
Total	**23,000**	**25,000**	**28,000**	**31,000**	**33,500**	**140,500**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	23,000	25,000	28,000	31,000	33,500	140,500
Total	**23,000**	**25,000**	**28,000**	**31,000**	**33,500**	**140,500**

Project Timeline

Multiyear project will be accomplished as projects are identified and staffing allows.

BEC Housing - Housing Unit Renovations

Department: BLUE EARTH COUNTY EDA - HOUSING

Project Years: 2026 - 2030

Project Description

Various unit modernization and updates as the units become available during turnovers.

Project Uses

	2026	2027	2028	2029	2030	Total
BEC Housing - Housing unit turnover renovations	175,000	175,000	175,000	175,000	175,000	875,000
Total	**175,000**	**175,000**	**175,000**	**175,000**	**175,000**	**875,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	175,000	175,000	175,000	175,000	175,000	875,000
Total	**175,000**	**175,000**	**175,000**	**175,000**	**175,000**	**875,000**

Project Timeline

Multiyear project to be undertaken as units become available and staffing allows.

BEC Housing - RAD Conversion Critical Repairs

Department: BLUE EARTH COUNTY EDA - HOUSING

Project Years: 2026 - 2026

Project Description

The project will include items identified through the RAD conversion process. They include scald abrasion protection for under ADA sinks, accessible parking stall installations at various sites, the addition of audio visual alarms in various accessible units, railing along a retaining wall, and lighting fixture upgrades.

Project Uses

	2026	2027	2028	2029	2030	Total
RAD Conversion Critical Repairs	36,110	0	0	0	0	36,110
Total	**36,110**	**0**	**0**	**0**	**0**	**36,110**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	36,110	0	0	0	0	36,110
Total	**36,110**	**0**	**0**	**0**	**0**	**36,110**

Project Timeline

The items that can be completed by Housing staff will be done in January of 2026. The items requiring contractor work will be bid out in Spring of 2026 with completion in June of 2026.

BEC Housing - Unit Electrical Code Upgrades

Department: BLUE EARTH COUNTY EDA - HOUSING

Project Years: 2026 - 2028

Project Description

With the start of the new Inspire inspections, electrical code upgrades were a key feature in the new rating structure. Housing authorities have a limited window of time to bring all units up to compliance and we have developed a plan to bring all of our units up to current code within 3 years. Old electrical systems will be replaced and upgraded to modern wiring and breaker boxes and ground fault outlets will be added in the appropriate locations. Finally, lighting and exhaust systems will be upgraded for energy efficiency where feasible.

Project Uses

	2026	2027	2028	2029	2030	Total
Unit Electrical Code Upgrades	60,000	40,000	40,000	0	0	140,000
Total	**60,000**	**40,000**	**40,000**	**0**	**0**	**140,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	60,000	40,000	40,000	0	0	140,000
Total	**60,000**	**40,000**	**40,000**	**0**	**0**	**140,000**

Project Timeline

This is a multi year project that will be undertaken with open units being done first followed by occupied units to reduce the impact on our tenants.

BEC Housing - Eastview Apartments Exterior Lighting Replacement

Department: BLUE EARTH COUNTY EDA - HOUSING

Project Years: 2027 - 2027

Project Description

Replacement of all 12 of the light poles servicing the exterior walk ways and parking lot with new poles and underground wiring. The system will be brought up to current standards and include LED fixtures and fully cutoff light heads to reduce light pollution.

Project Uses

	2026	2027	2028	2029	2030	Total
Eastview Apts Exterior Lighting Replacement	0	75,000	0	0	0	75,000
Total	**0**	**75,000**	**0**	**0**	**0**	**75,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	75,000	0	0	0	75,000
Total	**0**	**75,000**	**0**	**0**	**0**	**75,000**

Project Timeline

The project will be let for quotations in spring of 2026 with installation occurring in fall of 2026 after receipt of the light poles.

BEC Housing - Pioneer Plaza Apartments Exterior Lighting Electrical Upgrades

Department: BLUE EARTH COUNTY EDA - HOUSING

Project Years: 2027 - 2027

Project Description

The existing direct bury wiring will be replaced due to is failure in multiple locations. It has been spot repaired however new lines need to be installed for continued operation and longevity of the system.

Project Uses

	2026	2027	2028	2029	2030	Total
Pioneer Plaza Apt Exterior Lighting Electrical Upgrades	0	50,000	0	0	0	50,000
Total	**0**	**50,000**	**0**	**0**	**0**	**50,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	50,000	0	0	0	50,000
Total	**0**	**50,000**	**0**	**0**	**0**	**50,000**

Project Timeline

The project will be released for quotations in spring of 2027 with construction in summer of 2027.

IGC Capital Replacement Fund

IGC Replacement Fund	2026	2027	2028	2029	2030
Projected fund Balance	$ 1,200,497	$ 1,109,497	$ 503,497	$ 360,497	$ 446,497
Transfer-in IGC	$ 204,000	$ 208,000	$ 212,000	$ 216,000	$ 220,000
Available Funds	$1,404,497	$1,317,497	$715,497	$576,497	$666,497

Project Name	2026	2027	2028	2029	2030	Total	Illustrative
Intergovernmental Center - Building Exterior Cleaning & Repairs	$ (30,000)	$ (30,000)	$ (30,000)	$ (30,000)	$ (30,000)	**$ (150,000)**	
Intergovernmental Center - AED Replacement		$ (7,000)				**$ (7,000)**	
Intergovernmental Center - Roof Safety Improvements Phase 1		$ (100,000)				**$ (100,000)**	
Intergovernmental Center - Floor Scrubber Replacement		$ (18,000)				**$ (18,000)**	
Intergovernmental Center - Front Door Replacement						**$ -**	$ (100,000)
Intergovernmental Center - 3rd Floor Remodel	$ (265,000)					**$ (265,000)**	
Intergovernmental Center - Roof Replacement - 3rd Floor		$ (474,000)				**$ (474,000)**	
Intergovernmental Center - Roof Replacement - 1st Floor			$ (225,000)			**$ (225,000)**	
Intergovernmental Center - Server Room HVAC Replacement			$ (100,000)			**$ (100,000)**	
Intergovernmental Center - HVAC Unit Replacement				$ (100,000)		**$ (100,000)**	
Intergovernmental Center - Council Chambers Seating Replacement						**$ -**	$ (125,000)
Intergovernmental Center - Carpet Replacement and Painting on the 2nd Floor						**$ -**	$ (500,000)
Intergovernmental Center - Eastern EIFS Replacement					$ (325,000)	**$ (325,000)**	
Intergovernmental Center - Western & 3rd Floor EIFS Replacement						**$ -**	$ (500,000)
Intergovernmental Center - Elevator Code Upgrades		$ (185,000)				**$ (185,000)**	
Total	$ (295,000)	$ (814,000)	$ (355,000)	$ (130,000)	$ (355,000)	**$ (1,949,000)**	$ (1,225,000)
Fund Balance	$ 1,109,497	$ 503,497	$ 360,497	$ 446,497	$ 311,497		
Fund Balance Target	$ 265,000	$ 272,500	$ 280,000	$ 287,500	$ 295,000		
Project Count	2	6	3	2	2		

CIP Fund Overview 2026

Project Name	Project Year	Project Cost
Intergovernmental Center - 3rd Floor Remodel	2026	265,000
Intergovernmental Center - Building Exterior Cleaning & Repairs	2026	30,000
Total		**295,000**

CIP Fund Overview 2027

Project Name	Project Year	Project Cost
Intergovernmental Center - AED Replacements	2027	7,000
Intergovernmental Center - Building Exterior Cleaning & Repairs	2027	30,000
Intergovernmental Center - Elevator Code Upgrades	2027	185,000
Intergovernmental Center - Floor Scrubber Replacement	2027	18,000
Intergovernmental Center - Roof Replacement - 3rd Floor	2027	474,000
Intergovernmental Center - Roof Safety Improvements Phase 1	2027	100,000
Total		**814,000**

CIP Fund Overview 2028

Project Name	Project Year	Project Cost
Intergovernmental Center - Building Exterior Cleaning & Repairs	2028	30,000
Intergovernmental Center - Roof Replacement - 1st Floor	2028	225,000
Intergovernmental Center - Server Room HVAC Replacement	2028	100,000
Total		**355,000**

CIP Fund Overview 2029

Project Name	Project Year	Project Cost
Intergovernmental Center - Building Exterior Cleaning & Repairs	2029	30,000
Intergovernmental Center - HVAC Unit Replacement	2029	100,000
Total		**130,000**

CIP Fund Overview 2030

Project Name	Project Year	Project Cost
Intergovernmental Center - Building Exterior Cleaning & Repairs	2030	30,000
Intergovernmental Center - Eastern EIFS Replacement	2030	325,000
Total		**355,000**

Illustrative CIP Fund Overview

Project Name	Project Year	Project Cost
Intergovernmental Center - Carpet Replacement and Painting on the 2nd Floor	2030	500,000
Intergovernmental Center - Council Chambers Seating Replacement	2030	125,000
Intergovernmental Center - Front Door Replacement	2030	100,000
Intergovernmental Center - Western & 3rd Floor EIFS Replacement	2030	500,000
Total		**1,225,000**

Intergovernmental Center - 3rd Floor Remodel

Department: IGC CAPITAL REPLACEMENT FUND

Project Years: 2026 - 2026

Project Description

Minor modifications will be required to accommodate existing staff with the addition of a secure front counter area to allow public access. Additional furniture may need to be purchased as part of the move.

Project Uses

	2026	2027	2028	2029	2030	Total
IGC 3rd Floor Remodel	265,000	0	0	0	0	265,000
Total	**265,000**	**0**	**0**	**0**	**0**	**265,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	265,000	0	0	0	0	265,000
Total	**265,000**	**0**	**0**	**0**	**0**	**265,000**

Project Timeline

- March - Feasibility Hearing and hiring of an architect
- June - Bid Award
- September/October - Construction (City to take over space on September 1, 2026)

Intergovernmental Center - Building Exterior Cleaning & Repairs

Department: IGC CAPITAL REPLACEMENT FUND

Project Years: 2026 - 2030

Project Description

Annual allocation of funds to continue to keep the building in excellent condition to allow for the continued hosting of various outdoor events on the front lawn.

Project Uses

	2026	2027	2028	2029	2030	Total
Intergovernmental Center - Building Exterior Cleaning & Repairs	30,000	30,000	30,000	30,000	30,000	150,000
Total	**30,000**	**30,000**	**30,000**	**30,000**	**30,000**	**150,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	30,000	30,000	30,000	30,000	30,000	150,000
Total	**30,000**	**30,000**	**30,000**	**30,000**	**30,000**	**150,000**

Project Timeline

Spring of each year

Intergovernmental Center - AED Replacements

Department: IGC CAPITAL REPLACEMENT FUND

Project Years: 2027 - 2027

Project Description

Replacement of the building Automated External Defibrillators. The current Zoll AED's were purchased in 2020 and will reach the end of their warranty period requiring replacement in 2026.

Project Uses

	2026	2027	2028	2029	2030	Total
AED Replacements	0	7,000	0	0	0	7,000
Total	**0**	**7,000**	**0**	**0**	**0**	**7,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	7,000	0	0	0	7,000
Total	**0**	**7,000**	**0**	**0**	**0**	**7,000**

Project Timeline

Purchase will occur with city wide AED replacement project in 2026.

Intergovernmental Center - Elevator Code Upgrades

Department: IGC CAPITAL REPLACEMENT FUND

Project Years: 2027 - 2027

Project Description

Replacement of the elevator mechanical equipment and button stations at the Intergovernmental Center. The elevator mechanical equipment will be nearing the end of its useful life in the coming years. Proactive replacement of the equipment is critical to maintaining sufficient access for the public to use this critical facility.

Project Uses

	2026	2027	2028	2029	2030	Total
Elevator Code Upgrades	0	185,000	0	0	0	185,000
Total	**0**	**185,000**	**0**	**0**	**0**	**185,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	185,000	0	0	0	185,000
Total	**0**	**185,000**	**0**	**0**	**0**	**185,000**

Project Timeline

- February - Feasibility hearing
- April - Bid Award

July - Construction

Intergovernmental Center - Floor Scrubber Replacement

Department: IGC CAPITAL REPLACEMENT FUND

Project Years: 2027 - 2027

Project Description

The new scrubber is proposed to be a stand on unit vs the existing riding scrubber. With the modifications to the building since the previous scrubber was purchased in 2006, the corridors and doorways have gotten tighter and don't allow full utilization of the scrubber in all areas. The new machine will be able to get to nearly every public space in the building allowing for a more consistent cleaning operation.

Project Uses

	2026	2027	2028	2029	2030	Total
IGC Scrubber	0	18,000	0	0	0	18,000
Total	**0**	**18,000**	**0**	**0**	**0**	**18,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	18,000	0	0	0	18,000
Total	**0**	**18,000**	**0**	**0**	**0**	**18,000**

Project Timeline

- January - Order equipment
- March - receive machine

Intergovernmental Center - Roof Replacement - 3rd Floor

Department: IGC CAPITAL REPLACEMENT FUND

Project Years: 2027 - 2027

Project Description

Intergovernmental Center - Roof Replacement - 3rd Floor. These roofs are original to the construction in 1996/7 and are in need of replacement. The project will include installation of a new 90 mil fully adhered rubber roof system with installation of necessary safety equipment to allow city staff access to the roof for regular maintenance.

Project Uses

	2026	2027	2028	2029	2030	Total
Intergovernmental Center - Roof Replacement - 1st and 3rd Floors	0	474,000	0	0	0	474,000
Total	**0**	**474,000**	**0**	**0**	**0**	**474,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	474,000	0	0	0	474,000
Total	**0**	**474,000**	**0**	**0**	**0**	**474,000**

Project Timeline

- January - Feasibility Hearing
- March - Bid Award
- July/August - Construct i on

Intergovernmental Center - Roof Safety Improvements Phase 1

Department: IGC CAPITAL REPLACEMENT FUND

Project Years: 2027 - 2027

Project Description

Installations would include access ladder safety guards, safety railing at all locations with existing mechanical equipment, safety railing around the existing roof hatch, safety guards around all existing skylight locations.

Project Uses

	2026	2027	2028	2029	2030	Total
IGC Roof Safety Improvements	0	100,000	0	0	0	100,000
Total	**0**	**100,000**	**0**	**0**	**0**	**100,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	100,000	0	0	0	100,000
Total	**0**	**100,000**	**0**	**0**	**0**	**100,000**

Project Timeline

- March - order equipment
- May - installat i on

Intergovernmental Center - Roof Replacement - 1st Floor

Department: IGC CAPITAL REPLACEMENT FUND

Project Years: 2028 - 2028

Project Description

Intergovernmental Center - Roof Replacement - 1st floor. These roofs are original to the construction in 1996/7 and are in need of replacement. Following an audit by a roof safety company, additional safety features will be added to bring the roof into full compliance for city staff to perform regular maintenance.

Project Uses

	2026	2027	2028	2029	2030	Total
Roof Replacement & Safety Improvements	0	0	225,000	0	0	225,000
Total	**0**	**0**	**225,000**	**0**	**0**	**225,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	0	225,000	0	0	225,000
Total	**0**	**0**	**225,000**	**0**	**0**	**225,000**

Project Timeline

- January - Feasibility
- March - Bid Award
- July/August - Construct i on

Intergovernmental Center - Server Room HVAC Replacement

Department: IGC CAPITAL REPLACEMENT FUND

Project Years: 2028 - 2028

Project Description

Replacement will include the roof top unit that services this room and the in room auxiliary unit that provides both redundancy and humidity control. The in room unit was installed in 2006 and is well past its life expectancy for this type of unit.

Project Uses

	2026	2027	2028	2029	2030	Total
Intergovernmental Center - Server Room HVAC Replacement	0	0	100,000	0	0	100,000
Total	**0**	**0**	**100,000**	**0**	**0**	**100,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	0	100,000	0	0	100,000
Total	**0**	**0**	**100,000**	**0**	**0**	**100,000**

Project Timeline

- January - Release a request for quotat i ons
- March - Award quote
- September/October - Construct i on

Intergovernmental Center - HVAC Unit Replacement

Department: IGC CAPITAL REPLACEMENT FUND

Project Years: 2029 - 2029

Project Description

Replacement of three roof top units servicing the Information Technology and Finance Divisions. There are several small units that are no longer functioning at their optimal level. Maintenance costs are increasing and control failures occur on a regular basis.

Project Uses

	2026	2027	2028	2029	2030	Total
HVAC Units replacement	0	0	0	100,000	0	100,000
Total	**0**	**0**	**0**	**100,000**	**0**	**100,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	0	0	100,000	0	100,000
Total	**0**	**0**	**0**	**100,000**	**0**	**100,000**

Project Timeline

- February - Release request for quotat i ons
- March - Award Quote
- September - Installat i on

Intergovernmental Center - Eastern EIFS Replacement

Department: IGC CAPITAL REPLACEMENT FUND

Project Years: 2030 - 2030

Project Description

The project will replace the EIFS on the eastern and north eastern facades of the building. Materials used will compliment both the original building and the work completed on the civic center bringing the design of both buildings together. The new materials will also be more durable and reduce ongoing maintenance costs.

Project Uses

	2026	2027	2028	2029	2030	Total
Intergovernmental Center - Eastern EIFS Replacement	0	0	0	0	325,000	325,000
Total	**0**	**0**	**0**	**0**	**325,000**	**325,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	0	0	0	325,000	325,000
Total	**0**	**0**	**0**	**0**	**325,000**	**325,000**

Project Timeline

- January - Feasibility and hire architect
- April - Bid Award
- July - September - Construct i on

All Seasons Arena

All Seasons Arena

	2026	2027	2028	2029	2030
Projected fund balance	$ 175,000	$ 175,000	$ 155,000	$ 20,000	$ 20,000
Interest on Investments					
Transfer In					
Revenue Total	$ -	$ -	$ -	$ -	$ -
Available Funds	$ 175,000	$ 175,000	$ 155,000	$ 20,000	$ 20,000

Project Name	**2026**	**2027**	**2028**	**2029**	**2030**	**Total**	**Illustrative**
2010 Zamboni Replacement (2030)						**$ -**	$ (220,000)
2017 Zamboni Battery Replacement		$ (20,000)				**$ (20,000)**	
Ammonia Relief Valves (15 total)						**$ -**	$ (75,000)
North Rink Zamboni Water Heater Replacement						**$ -**	$ (40,000)
South Rink Zamboni Water Heater Replacement						**$ -**	$ (40,000)
Parking Lot Replacement						**$ -**	$ (1,000,000)
North Rink Sound System Replacement						**$ -**	$ (65,000)
South Rink Sound System Replacement						**$ -**	$ (65,000)
2011 Chevrolet K3500 Replacement						**$ -**	$ (80,000)
Door Hardware Upgrades (Keyways, Frames, Doors)					$ (20,000)	**$ (20,000)**	
Emergency Exit Signs						**$ -**	$ (30,000)
South Rink Ceiling Tile Replacement						**$ -**	$ (45,000)
Elevator Code Compliance			$ (135,000)			**$ (135,000)**	
Total	**$ -**	**$ (20,000)**	**$ (135,000)**	**$ -**	**$ (20,000)**	**$ (175,000)**	**$ (1,660,000)**

Fund Balance	$ 175,000	$ 155,000	$ 20,000	$ 20,000	$ -
Fund Balance Target					
Project Count	0	1	1	0	1

CIP Fund Overview 2027

Project Name	Project Year	Project Cost
All Seasons Arena - 2017 Zamboni Battery Replacement	2027	20,000
Total		**20,000**

CIP Fund Overview 2028

Project Name	Project Year	Project Cost
All Seasons Arena - Elevator Code Compliance	2028	135,000
Total		**135,000**

CIP Fund Overview 2030

Project Name	Project Year	Project Cost
All Seasons Arena - Door Hardware Upgrades (Keyways, Frames, Doors)	2030	20,000
Total		**20,000**

Illustrative CIP Fund Overview

Project Name	Project Year	Project Cost
All Seasons Arena - 2010 Zamboni Replacement	2033	220,000
All Seasons Arena - Emergency Exit Sign and Light Replacement	2033	30,000
All Seasons Arena - Ice Plant Ammonia Valve Replacement	2033	75,000
All Seasons Arena - North Rink Sound System Replacement	2033	65,000
All Seasons Arena - North Rink Zamboni Water Heater Replacement	2033	40,000
All Seasons Arena - Parking Lot Reconstruction	2033	1,000,000
All Seasons Arena - Pickup Replacement	2033	80,000
All Seasons Arena - South Rink Ceiling Tile Replacement	2033	45,000
All Seasons Arena - South Rink Sound System Replacement	2033	65,000
All Seasons Arena - South Rink Zamboni Water Heater Replacement	2033	40,000
Total		**1,660,000**

All Seasons Arena - 2017 Zamboni Battery Replacement

Department: ALL SEASONS ARENA

Project Years: 2027 - 2027

Project Description

The lead acid battery bank on the Zamboni will be removed and replaced with a new bank of batteries. The old set will be recycled.

Project Uses

	2026	2027	2028	2029	2030	Total
Zam Battery Replacement	0	20,000	0	0	0	20,000
Total	**0**	**20,000**	**0**	**0**	**0**	**20,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	20,000	0	0	0	20,000
Total	**0**	**20,000**	**0**	**0**	**0**	**20,000**

Project Timeline

- January 2027 - Finalize purchase agreement for board approval
- February 2027 - Order batteries
- June 2027 - Install batteries during off season

All Seasons Arena - Elevator Code Compliance

Department: ALL SEASONS ARENA

Project Years: 2028 - 2028

Project Description

Replacement of the elevator mechanical equipment and button stations at All Seasons Arena. The elevator mechanical equipment will be nearing the end of its useful life in the coming years. Proactive replacement of the equipment is critical to maintaining sufficient access for the public to use this critical facility.

Project Uses

	2026	2027	2028	2029	2030	Total
Elevator Code Upgrades	0	0	135,000	0	0	135,000
Total	**0**	**0**	**135,000**	**0**	**0**	**135,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	0	135,000	0	0	135,000
Total	**0**	**0**	**135,000**	**0**	**0**	**135,000**

Project Timeline

- February - Feasibility hearing
- April - Bid Award
- July - Construct i on

All Seasons Arena - Door Hardware Upgrades (Keyways, Frames, Doors)

Department: ALL SEASONS ARENA

Project Years: 2030 - 2030

Project Description

Locations will be determined based on operational impact and greatest need but door hardware and keying will be given the highest priority in this project. In future years, the doors themselves will be switched out if they are in need of replacement due to warping or deterioration due to rust.

Project Uses

	2026	2027	2028	2029	2030	Total
Door Hardware	0	0	0	0	20,000	20,000
Total	**0**	**0**	**0**	**0**	**20,000**	**20,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	0	0	0	20,000	20,000
Total	**0**	**0**	**0**	**0**	**20,000**	**20,000**

Project Timeline

- March - Identify project scope
- April - Seek board authorization for purchases
- September - Installation

Information Technology Capital Replacement

IT Replacement Fund	2026	2027	2028	2029	2030
Projected Fund Balance	$931,024	$545,024	$587,024	$637,024	$770,024
Interest on Investments	$2,000	$2,000	$2,000	$2,000	$2,000
Transfer-in IT	$319,000	$328,000	$337,000	$346,000	$346,000
Cell Phone Tower Rent	$235,000	$235,000	$235,000	$235,000	$235,000
Fund Balance - Special Assessment Reserve		$220,000			
Available Funds	$1,487,024	$1,330,024	$1,161,024	$1,220,024	$1,353,024

Project Title	2026	2027	2028	2029	2030	Total
Conference Room(s) Technology	$40,000	$20,000	$20,000	$20,000	$20,000	**$120,000**
Fiber Communications Infrastructure Expansion and Maintenance	$106,000	$109,000	$112,000	$115,000	$118,000	**$560,000**
Network Equipment Upgrades	$25,000	$25,000	$45,000	$45,000	$45,000	**$185,000**
Security Access Control System Upgrades and Expansion	$95,000	$95,000	$70,000	$70,000	$70,000	**$400,000**
Security Camera System Upgrades and Expansion	$96,000	$99,000	$102,000	$105,000	$108,000	**$510,000**
Server Virtualization Upgrades	$25,000	$25,000	$25,000	$25,000	$25,000	**$125,000**
IT Security Solutions	$20,000	$20,000	$20,000	$20,000	$20,000	**$100,000**
Video Storage Solution	$135,000	$80,000	$80,000	$25,000	$25,000	**$345,000**
VoIP Phone System & 311 Call Center Upgrades	$25,000	$50,000	$50,000	$25,000	$25,000	**$175,000**
Special Assessment Software	$0	$220,000	$0	$0	$0	**$220,000**
Total	**$567,000**	**$743,000**	**$524,000**	**$450,000**	**$456,000**	**$2,740,000**
Fund Balance - Special Assessment Reserve	$375,000	$155,000	$155,000	$155,000	$155,000	
Fund Balance	$545,024	$587,024	$637,024	$770,024	$897,024	
Fund Balance Target	$ 515,000	$ 530,000	$ 545,000	$ 560,000	$ 575,000	

CIP Fund Overview 2026

Project Name	Project Year	Project Cost
Conference Room(s) Technology	2026	40,000
Fiber Communications Infrastructure Expansion and Maintenance	2026	106,000
IT Security Solutions	2026	20,000
Network Equipment Upgrades	2026	25,000
Security Access Control System Upgrades and Expansion	2026	95,000
Security Camera System Upgrades and Expansion	2026	96,000
Server Virtualization Upgrades	2026	25,000
Video Storage Solution	2026	135,000
VoIP Phone System & 311 Call Center Upgrades	2026	25,000
Total		**567,000**

CIP Fund Overview 2027

Project Name	Project Year	Project Cost
Conference Room(s) Technology	2027	20,000
Fiber Communications Infrastructure Expansion and Maintenance	2027	109,000
IT Security Solutions	2027	20,000
Network Equipment Upgrades	2027	25,000
Security Access Control System Upgrades and Expansion	2027	95,000
Security Camera System Upgrades and Expansion	2027	99,000
Server Virtualization Upgrades	2027	25,000
Special Assessment Software	2027	220,000
Video Storage Solution	2027	80,000
VoIP Phone System & 311 Call Center Upgrades	2027	50,000
Total		**743,000**

CIP Fund Overview 2028

Project Name	Project Year	Project Cost
Conference Room(s) Technology	2028	20,000
Fiber Communications Infrastructure Expansion and Maintenance	2028	112,000
IT Security Solutions	2028	20,000
Network Equipment Upgrades	2028	45,000
Security Access Control System Upgrades and Expansion	2028	70,000
Security Camera System Upgrades and Expansion	2028	102,000
Server Virtualization Upgrades	2028	25,000
Video Storage Solution	2028	80,000
VoIP Phone System & 311 Call Center Upgrades	2028	50,000
Total		**524,000**

CIP Fund Overview 2029

Project Name	Project Year	Project Cost
Conference Room(s) Technology	2029	20,000
Fiber Communications Infrastructure Expansion and Maintenance	2029	115,000
IT Security Solutions	2029	20,000
Network Equipment Upgrades	2029	45,000
Security Access Control System Upgrades and Expansion	2029	70,000
Security Camera System Upgrades and Expansion	2029	105,000
Server Virtualization Upgrades	2029	25,000
Video Storage Solution	2029	25,000
VoIP Phone System & 311 Call Center Upgrades	2029	25,000
Total		**450,000**

CIP Fund Overview 2030

Project Name	Project Year	Project Cost
Conference Room(s) Technology	2030	20,000
Fiber Communications Infrastructure Expansion and Maintenance	2030	118,000
IT Security Solutions	2030	20,000
Network Equipment Upgrades	2030	45,000
Security Access Control System Upgrades and Expansion	2030	70,000
Security Camera System Upgrades and Expansion	2030	108,000
Server Virtualization Upgrades	2030	25,000
Video Storage Solution	2030	25,000
VoIP Phone System & 311 Call Center Upgrades	2030	25,000
Total		**456,000**

Conference Room(s) Technology

Department: INFO TECH CAPITAL REPLACEMENT

Project Years: 2026 - 2030

Project Description

Conference Room(s)Technology Upgrades. Refresh aging technology in our meeting spaces to ensure our staff have modern technology tools and solutions.

Project Uses

	2026	2027	2028	2029	2030	Total
Conference room technology	40,000	20,000	20,000	20,000	20,000	120,000
Total	**40,000**	**20,000**	**20,000**	**20,000**	**20,000**	**120,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	40,000	20,000	20,000	20,000	20,000	120,000
Total	**40,000**	**20,000**	**20,000**	**20,000**	**20,000**	**120,000**

Project Timeline

Project will be on-going over next 1-5 years.

Fiber Communications Infrastructure Expansion and Maintenance

Department: INFO TECH CAPITAL REPLACEMENT

Project Years: 2026 - 2030

Project Description

Expand and maintain the city's fiber communication infrastructure to key city facilities. Identified facilities include; Parks, Water Utility Sites, Traffic Signals, Lighting System. As the city's fiber footprint continues to expand, portions of these funds need to be allocated for relocation and maintenance to the existing fiber communication infrastructure. By investing in high speed communication infrastructure, the network foundation is created for the City to facilitate the deployment of enterprise level technology systems (VoIP, Security Access, Security Cameras, etc.) across the City's network. The fiber infrastructure also interconnects other critical systems; Traffic Signals and Lighting System.

Project Uses

	2026	2027	2028	2029	2030	Total
Fiber Infrastructure and Maintenance	106,000	109,000	112,000	115,000	118,000	560,000
Total	**106,000**	**109,000**	**112,000**	**115,000**	**118,000**	**560,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	106,000	109,000	112,000	115,000	118,000	560,000
Total	**106,000**	**109,000**	**112,000**	**115,000**	**118,000**	**560,000**

Project Timeline

This is an ongoing annual project

IT Security Solutions

Department: INFO TECH CAPITAL REPLACEMENT

Project Years: 2026 - 2030

Project Description

Upgrade our Network Firewall(s) and implement additional cybersecurity management solutions to enhance our threat defense systems. Information Technology Security (IT Security) is growing in importance due to reliance on computer systems, the internet, wireless networks, and mobile devices. Over the next 1-3 years IT will be placing a high priority on the defense systems we have and place and upgrading them to the latest technology, implementing cybersecurity software to ensure our systems and data are secure.

Project Uses

	2026	2027	2028	2029	2030	Total
Information Technology Security	20,000	20,000	20,000	20,000	20,000	100,000
Total	**20,000**	**20,000**	**20,000**	**20,000**	**20,000**	**100,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	20,000	20,000	20,000	20,000	20,000	100,000
Total	**20,000**	**20,000**	**20,000**	**20,000**	**20,000**	**100,000**

Project Timeline

Project will be on-going over next 1-5 years.

Network Equipment Upgrades

Department: INFO TECH CAPITAL REPLACEMENT

Project Years: 2026 - 2030

Project Description

Network Equipment & Upgrades. Replace aging Network Switches and Wireless Network Access Points to increase network performance.

Project Uses

	2026	2027	2028	2029	2030	Total
Network Equipment Upgrades	25,000	25,000	45,000	45,000	45,000	185,000
Total	**25,000**	**25,000**	**45,000**	**45,000**	**45,000**	**185,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	25,000	25,000	45,000	45,000	45,000	185,000
Total	**25,000**	**25,000**	**45,000**	**45,000**	**45,000**	**185,000**

Project Timeline

Project will be on-going over next 1-5 years.

Security Access Control System Upgrades and Expansion

Department: INFO TECH CAPITAL REPLACEMENT

Project Years: 2026 - 2030

Project Description

Continue to expand and maintain the city's security access control system. Portions of these funds are to be allocated to maintenance and replacement of any failing access control components.

Enterprise Security Access Control System is integrated in most city buildings on a single software platform. Provides the ability to configure employee access cards to specific doors in multiple buildings. This centralized system creates efficiencies for system management, alarming, and reporting features.

Project Uses

	2026	2027	2028	2029	2030	Total
Fiber Infrastructure and Maintenance	95,000	95,000	70,000	70,000	70,000	400,000
Total	**95,000**	**95,000**	**70,000**	**70,000**	**70,000**	**400,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	95,000	95,000	70,000	70,000	70,000	400,000
Total	**95,000**	**95,000**	**70,000**	**70,000**	**70,000**	**400,000**

Project Timeline

This is an ongoing annual project.

Security Camera System Upgrades and Expansion

Department: INFO TECH CAPITAL REPLACEMENT

Project Years: 2026 - 2030

Project Description

Continue to expand and maintain the city's video security camera system. Improving the video camera coverage for Public Safety in key identified areas. Portions of these funds need to be allocated to replace aging analog cameras with High Definition (HD) cameras.

Project Uses

	2026	2027	2028	2029	2030	Total
Security Camera System Upgrades and Replacements	96,000	99,000	102,000	105,000	108,000	510,000
Total	**96,000**	**99,000**	**102,000**	**105,000**	**108,000**	**510,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	96,000	99,000	102,000	105,000	108,000	510,000
Total	**96,000**	**99,000**	**102,000**	**105,000**	**108,000**	**510,000**

Project Timeline

This is an ongoing annual project.

Server Virtualization Upgrades

Department: INFO TECH CAPITAL REPLACEMENT

Project Years: 2026 - 2030

Project Description

Upgrades to the server virtualization environment(s). Includes both the main and redundant server environments. This server farm environment is the city's core server environment, hosting all of the enterprise level software systems, and databases. Upgraded equipment will provide more server capacity and increased performance for server scalability.

Project Uses

	2026	2027	2028	2029	2030	Total
Server Virtualization Upgrades	25,000	25,000	25,000	25,000	25,000	125,000
Total	**25,000**	**25,000**	**25,000**	**25,000**	**25,000**	**125,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	25,000	25,000	25,000	25,000	25,000	125,000
Total	**25,000**	**25,000**	**25,000**	**25,000**	**25,000**	**125,000**

Project Timeline

Project will be on-going over next 1-5 years.

Video Storage Solution

Department: INFO TECH CAPITAL REPLACEMENT

Project Years: 2026 - 2030

Project Description

Continue to expand the unified video storage solution for the city's security video systems. This unified storage solution, provides the city will have a more agile, scalable, reliable, and cost effective solution for future video storage demands. Upgrading our security cameras to High Definition (HD) requires additional storage capacity.

Project Uses

	2026	2027	2028	2029	2030	Total
Video Storage Solution	135,000	80,000	80,000	25,000	25,000	345,000
Total	**135,000**	**80,000**	**80,000**	**25,000**	**25,000**	**345,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	135,000	80,000	80,000	25,000	25,000	345,000
Total	**135,000**	**80,000**	**80,000**	**25,000**	**25,000**	**345,000**

Project Timeline

This is an ongoing annual project.

VoIP Phone System & 311 Call Center Upgrades

Department: INFO TECH CAPITAL REPLACEMENT

Project Years: 2026 - 2030

Project Description

Upgrades to the VoIP Phone System and 311 Call Center. Includes the failover phone system(s) for redundancy at our disaster recovery site (Public Works Center).

Keeping the phones systems and software current:

Cisco Call Manager software

Cisco software version for desktop phones

Redundancy systems 311 call center and unity servers (voice mail).

Project Uses

	2026	2027	2028	2029	2030	Total
Phone System Upgrade	25,000	50,000	50,000	25,000	25,000	175,000
Total	**25,000**	**50,000**	**50,000**	**25,000**	**25,000**	**175,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	25,000	50,000	50,000	25,000	25,000	175,000
Total	**25,000**	**50,000**	**50,000**	**25,000**	**25,000**	**175,000**

Project Timeline

N/A

Special Assessment Software

Department: INFO TECH CAPITAL REPLACEMENT

Project Years: 2027 - 2027

Project Description

Special Assessments Software to integrate with our Financial Software System. Estimated Cost: $750,000.00 Current software is over 30years old and has reached it's end of life.

Project Uses

	2026	2027	2028	2029	2030	Total
Software	0	220,000	0	0	0	220,000
Total	**0**	**220,000**	**0**	**0**	**0**	**220,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	220,000	0	0	0	220,000
Total	**0**	**220,000**	**0**	**0**	**0**	**220,000**

Project Timeline

2024-2025

Mass Transit

Transit	2026	2027	2028	2029	2030
Projected Fund Balance	$ 692,927	$ 871,977	$ 657,777	$ 742,777	$ 707,777
Transfer In	$ 250,000	$ 250,000	$ 250,000	$ 250,000	$ 250,000
Available Funds	$ 942,927	$ 1,121,977	$ 907,777	$ 992,777	$ 957,777

Project Name	2026	2027	2028	2029	2030	Total	Illustrative
Transit Maintenance Facility - Replace Window Sealant						$ -	$ (75,000)
Bus Stop Improvement Project - Construction		$ (50,000)	$ (50,000)	$ (50,000)		**$ (150,000)**	
Bus Stop Improvement Project - Planning and Design	$ (27,500)	$ (30,000)	$ (30,000)			**$ (87,500)**	
Bus Stop Maintenance	$ (25,000)	$ (25,000)	$ (25,000)	$ (25,000)	$ (25,000)	**$ (125,000)**	
Transit - Overhead Door Replacement		$ (80,000)				**$ (80,000)**	
Public Works Center - Fuel Island Relocation Design - 50% Share Transit			$ (20,000)			**$ (20,000)**	
Public Works Center - Fuel Island Relocation Construction- 50% Share Transit				$ (90,000)		**$ (90,000)**	
Transit - Electric Vehicle Charging Stations						$ -	$ (110,000)
Transit - Unit Heater Replacement		$ (40,000)	$ (40,000)			**$ (80,000)**	
Transit - Vehicle Wash System Replacement		$ (180,000)				**$ (180,000)**	
Transit - Facility Wall Concrete Joint Sealant Replacement					$ (75,000)	**$ (75,000)**	
Transit - Boiler Replacement					$ (40,000)	**$ (40,000)**	
Transit - Lighting Control Panel Replacement					$ (25,000)	**$ (25,000)**	
Transit - MAU/Exhaust Replacement				$ (120,000)		**$ (120,000)**	
Transit - Roof Replacement						$ -	$ (407,000)
5 - Year Transit Development Plan		$ (59,200)				**$ (59,200)**	
Replace ARMER Portable Radios	$ (18,450)					**$ (18,450)**	
Total	**$ (70,950)**	**$ (464,200)**	**$ (165,000)**	**$ (285,000)**	**$ (165,000)**	**$ (1,131,700)**	**$ (592,000)**
Fund Balance	$ 871,977	$ 657,777	$ 742,777	$ 707,777	$ 792,777		
Fund Balance Target	$515,000	$530,000	$545,000	$560,000	$575,000		

CIP Fund Overview 2026

Project Name	Project Year	Project Cost
Bus Stop Improvement Project - Planning and Design	2026	137,500
Bus Stop Maintenance	2026	25,000
Replace ARMER Portable Radios	2026	92,250
Total		**254,750**

CIP Fund Overview 2027

Project Name	Project Year	Project Cost
5 - Year Transit Development Plan	2027	296,000
Bus Stop Improvement Project - Construction	2027	250,000
Bus Stop Improvement Project - Planning and Design	2027	150,000
Bus Stop Maintenance	2027	25,000
Transit - Overhead Door Replacement	2027	80,000
Transit - Unit Heater Replacement	2027	40,000
Transit - Vehicle Wash System Replacement	2027	900,000
Total		**1,741,000**

CIP Fund Overview 2028

Project Name	Project Year	Project Cost
Bus Stop Improvement Project - Construction	2028	250,000
Bus Stop Improvement Project - Planning and Design	2028	150,000
Bus Stop Maintenance	2028	25,000
Public Works Center - Fuel Island Relocation Design - 50% Share Transit	2028	100,000
Transit - Unit Heater Replacement	2028	40,000
Total		**565,000**

CIP Fund Overview 2029

Project Name	Project Year	Project Cost
Bus Stop Improvement Project - Construction	2029	250,000
Bus Stop Maintenance	2029	25,000
Transit - Fuel Island Relocation Construction - 50% Share Transit	2029	450,000
Transit - MAU/Exhaust Replacement	2029	600,000
Total		**1,325,000**

CIP Fund Overview 2030

Project Name	Project Year	Project Cost
Bus Stop Maintenance	2030	25,000
Transit - Boiler Replacement	2030	200,000
Transit - Facility Wall Concrete Joint Sealant Replacement	2030	75,000
Transit - Lighting Control Panel Replacement	2030	25,000
Total		**325,000**

Illustrative CIP Fund Overview

Project Name	Project Year	Project Cost
Electrical Vehicle Charging Stations	2029	550,000
Transit - Replace Window Sealant	2030	75,000
Transit - Roof Replacement	2033	2,035,000
Total		**2,660,000**

Bus Stop Improvement Project - Planning and Design

Department: MASS TRANSIT

Project Years: 2026 - 2028

Project Description

Transit will coordinate with engineering annually to procure a vendor to plan and design bus stop locations utilizing a scope of work provided by Transit. The bus stop improvements address access to the fixed route transit stops in the urbanized area, such as lack of landing pad space to accommodate extendable/retractable bus ramps, sidewalk connectivity, shelters, benches, and signage. The construction for these bus stop improvements is projected to occur in 2027 - 2029 and will be identified in a separate CIP line item.

Engagement Strategy

Transit admin staff will engage with bus drivers to ensure the stops identified in the scope of work make sense and are in a favorable location. Community outreach will also take place to engage the Transit dependent members of our community. Southern Minnesota Independent Living Enterprises and Services (SMILES) has asked to be part of this engagement process.

Project Uses

	2026	2027	2028	2029	2030	Total
Bus Stop Improvement Project - Planning and Design	137,500	150,000	150,000	0	0	437,500
Total	**137,500**	**150,000**	**150,000**	**0**	**0**	**437,500**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	27,500	30,000	30,000	0	0	87,500
Federal Funding	110,000	120,000	120,000	0	0	350,000
Total	**137,500**	**150,000**	**150,000**	**0**	**0**	**437,500**

Project Timeline

Bus Stop Improvement planning and design will take place starting in 2026 and will end in 2028. The bus stop construction will take place each subsequent year starting in 2027 ending in 2029. The bus stop construction will be identified in a separate CIP project/line item.

Bus Stop Maintenance

Department: MASS TRANSIT

Project Years: 2026 - 2030

Project Description

Funds will be used to repair, maintain, and replace bus stop shelters, benches, and signs so they are in a state of good repair to support fixed route bus service.

Project Uses

	2026	2027	2028	2029	2030	Total
Bus Stop Maintenance	25,000	25,000	25,000	25,000	25,000	125,000
Total	**25,000**	**25,000**	**25,000**	**25,000**	**25,000**	**125,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	25,000	25,000	25,000	25,000	25,000	125,000
Total	**25,000**	**25,000**	**25,000**	**25,000**	**25,000**	**125,000**

Project Timeline

Bus stop shelters, benches, and signs will be repaired, maintained, and replaced as deficiencies are identified.

Replace ARMER Portable Radios

Department: MASS TRANSIT

Project Years: 2026 - 2026

Project Description

Replace an estimated 15 Transit ARMER portable radios utilized for Transit operations as they have met their useful life and are no longer supported for maintenance/programming.

Project Uses

	2026	2027	2028	2029	2030	Total
Replace ARMER Portable Radios	92,250	0	0	0	0	92,250
Total	**92,250**	**0**	**0**	**0**	**0**	**92,250**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	18,450	0	0	0	0	18,450
Federal Funding	73,800	0	0	0	0	73,800
Total	**92,250**	**0**	**0**	**0**	**0**	**92,250**

Project Timeline

Transit will work with public safety to procure and purchase replacement ARMER portable radios in 2026.

5 - Year Transit Development Plan

Department: MASS TRANSIT

Project Years: 2027 - 2027

Project Description

Transit' will look to hire a consultant to complete a 5-year Transit Development Plan (TDP). A vendor will be awarded in 2027 with an estimated project completion in 2028. The TDP will serve as a strategic plan for future routes, route changes, and improvements to the Transit System. 80% of the funding will come from 5307 funds and the 20% local share will be paid by the Transit Capital Replacement Fund.

Project Uses

	2026	2027	2028	2029	2030	Total
5 - Year Transit Development Plan	0	296,000	0	0	0	296,000
Total	**0**	**296,000**	**0**	**0**	**0**	**296,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	59,200	0	0	0	59,200
Federal Funding	0	236,800	0	0	0	236,800
Total	**0**	**296,000**	**0**	**0**	**0**	**296,000**

Project Timeline

Procure and award a vendor for a 5 - year Transit Development Plan in 2027 with project completion estimated in 2028.

Bus Stop Improvement Project - Construction

Department: MASS TRANSIT

Project Years: 2027 - 2029

Project Description

Transit will coordinate with engineering annually to procure a vendor to plan and design bus stop locations utilizing a scope of work provided by Transit. The bus stop improvements address access to the fixed route transit stops in the urbanized area, such as lack of landing pad space to accommodate extendable/retractable bus ramps, sidewalk connectivity, shelters, benches, and signage. The construction for these bus stop improvements is projected to occur in 2027 - 2029 and will be identified in a separate CIP line item.

Engagement Strategy

Transit admin staff will engage with bus drivers to ensure the stops identified in the scope of work make sense and are in a favorable location. Community outreach will also take place to engage the Transit dependent members of our community. Southern Minnesota Independent Living Enterprises and Services (SMILES) has asked to be part of this engagement process.

Project Uses

	2026	2027	2028	2029	2030	Total
Bus Stop Improvement Project - Construction	0	250,000	250,000	250,000	0	750,000
Total	**0**	**250,000**	**250,000**	**250,000**	**0**	**750,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	50,000	50,000	50,000	0	150,000
Federal Funding	0	200,000	200,000	200,000	0	600,000
Total	**0**	**250,000**	**250,000**	**250,000**	**0**	**750,000**

Project Timeline

Bus Stop Improvement planning and design will take place starting in 2026 and will end in 2028. The bus stop construction will take place each subsequent year starting in 2027 ending in 2029. The bus stop construction will be identified in a separate CIP project/line item.

Transit - Overhead Door Replacement

Department: MASS TRANSIT

Project Years: 2027 - 2027

Project Description

Replacement of the three remaining overhead doors on the Transit maintenance facility. Original doors contained heavy glass panels that are not able to withstand the use seen with our operation.

Project Uses

	2026	2027	2028	2029	2030	Total
Overhead Doors	0	80,000	0	0	0	80,000
Total	**0**	**80,000**	**0**	**0**	**0**	**80,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	80,000	0	0	0	80,000
Total	**0**	**80,000**	**0**	**0**	**0**	**80,000**

Project Timeline

Replacement in spring of 2027

Transit - Unit Heater Replacement

Department: MASS TRANSIT

Project Years: 2027 - 2028

Project Description

Replacement of hanging unit heaters in the garage areas of the Mass Transit Facility. Because of the come and go nature of the building, the unit heaters located at each door see extensive use in the winter months. Because of this accelerated wear and tear, the units should be replaced after 12 years of service to prevent failure during the winter months.

Project Uses

	2026	2027	2028	2029	2030	Total
Unit heater replacement	0	40,000	40,000	0	0	80,000
Total	**0**	**40,000**	**40,000**	**0**	**0**	**80,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	40,000	40,000	0	0	80,000
Total	**0**	**40,000**	**40,000**	**0**	**0**	**80,000**

Project Timeline

Installation - Summer 2027 and Summer 2028

Transit - Vehicle Wash System Replacement

Department: MASS TRANSIT

Project Years: 2027 - 2027

Project Description

Replacement of the Vehicle Wash system The vehicle wash system will be nearing the end of its useful life in 2027.The system is highly computerized and the wash equipment is located in a harsh environment. Staff is reviewing alternatives to the drive through system including a drive in and stationary wash to reduce vehicle collisions.

Project Uses

	2026	2027	2028	2029	2030	Total
Vehicle Wash system replacement	0	900,000	0	0	0	900,000
Total	**0**	**900,000**	**0**	**0**	**0**	**900,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	180,000	0	0	0	180,000
Federal Funding	0	720,000	0	0	0	720,000
Total	**0**	**900,000**	**0**	**0**	**0**	**900,000**

Project Timeline

- 2026 - Grant Applicat i on
- 2027
  - January - Feasibility Hearing
  - March - Bid Award
  - June/August - Construction

Public Works Center - Fuel Island Relocation Design - 50% Share Transit

Department: MASS TRANSIT

Project Years: 2028 - 2028

Project Description

Due to likely receiving state and federal funds as the transit cost share, environmental studies will be required for the funding application. A consultant will be hired to assist staff in the application process and conducting the necessary studies prior to submittal.

Project Uses

	2026	2027	2028	2029	2030	Total
Fuel Island Design	0	0	100,000	0	0	100,000
Total	**0**	**0**	**100,000**	**0**	**0**	**100,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	0	20,000	0	0	20,000
Federal Funding	0	0	80,000	0	0	80,000
Total	**0**	**0**	**100,000**	**0**	**0**	**100,000**

Project Timeline

Consultant will be hired in March of 2028.

Transit - Fuel Island Relocation Construction - 50% Share Transit

Department: MASS TRANSIT

Project Years: 2029 - 2029

Project Description

Construction of the relocated fuel island at the Public Works Campus. A new fuel island has been proposed for the Public Works Campus in order to bring more pumps and a covered island for fueling in inclement weather. Costs would be shared 50% Public Works and 50% Transit with 80% of the Transit dollars coming from a Federal or state grant.

Project Uses

	2026	2027	2028	2029	2030	Total
Fuel Island	0	0	0	450,000	0	450,000
Total	**0**	**0**	**0**	**450,000**	**0**	**450,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	0	0	90,000	0	90,000
Federal Funding	0	0	0	360,000	0	360,000
Total	**0**	**0**	**0**	**450,000**	**0**	**450,000**

Project Timeline

- February - Feasibility Hearing
- May - Bid Award
- Construct i on- Su mmer

Transit - MAU/Exhaust Replacement

Department: MASS TRANSIT

Project Years: 2029 - 2029

Project Description

The project will include replacement of the two roof top make up air units with new controls equipment. These units act as the exhaust for the building allowing it to comply with OSHA safety regulations while the buses are running. The make up air portion preheats the incoming fresh air during colder months to reduce the strain on the HVAC system.

Project Uses

	2026	2027	2028	2029	2030	Total
Transit MAU/Exhaust	0	0	0	600,000	0	600,000
Total	**0**	**0**	**0**	**600,000**	**0**	**600,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	0	0	120,000	0	120,000
County Funding	0	0	0	480,000	0	480,000
Total	**0**	**0**	**0**	**600,000**	**0**	**600,000**

Project Timeline

- 2028 - Grant Applicat i on
- 2029
  - January - Feasibility Hearing
  - March - Bid Award
  - August/September - Construction

Transit - Boiler Replacement

Department: MASS TRANSIT

Project Years: 2030 - 2030

Project Description

Project will include the replacement of the two existing boilers, installation of two new circulating pumps, and complete draining of the system and installation of a 35% glycol solution throughout the piping.

Project Uses

	2026	2027	2028	2029	2030	Total
Transit Boiler Replacement	0	0	0	0	200,000	200,000
Total	**0**	**0**	**0**	**0**	**200,000**	**200,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	0	0	0	40,000	40,000
Federal Funding	0	0	0	0	160,000	160,000
Total	**0**	**0**	**0**	**0**	**200,000**	**200,000**

Project Timeline

- January - Feasibility Hearing
- March - Bid Award
- June/July - Construct i on

Transit - Facility Wall Concrete Joint Sealant Replacement

Department: MASS TRANSIT

Project Years: 2030 - 2030

Project Description

The tip up wall panel joints are sealed with a silicone caulk. As the building ages, this sealant deteriorates and needs to be removed and replaced.

Project Uses

	2026	2027	2028	2029	2030	Total
Wall Panel Sealant	0	0	0	0	75,000	75,000
Total	**0**	**0**	**0**	**0**	**75,000**	**75,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	0	0	0	75,000	75,000
Total	**0**	**0**	**0**	**0**	**75,000**	**75,000**

Project Timeline

Quotations will be solicited in spring of 2030 with construction taking place in Summer of 2030.

Transit - Lighting Control Panel Replacement

Department: MASS TRANSIT

Project Years: 2030 - 2030

Project Description

The project will include the replacement of the current control panel for the lighting system. The panel is a requirement in current electrical code to allow for dimming of lights during times of low occupancy and the exterior lights at night. The existing panel has seen several failures and can no longer receive software updates. During time changes, staff has to manually reset the times for the programming to work correctly.

Project Uses

	2026	2027	2028	2029	2030	Total
Transit lighting panel replacment	0	0	0	0	25,000	25,000
Total	**0**	**0**	**0**	**0**	**25,000**	**25,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	0	0	0	25,000	25,000
Total	**0**	**0**	**0**	**0**	**25,000**	**25,000**

Project Timeline

- March - Request quotat i ons
- September - Construct i on

Public Safety Building Replacement Fund

Public Safety Center	2026	2027	2028	2029	2030
Fund Balance	$1,982,805	$2,331,805	$1,290,805	$1,374,805	$1,428,805
Transfer-In PSC	$459,000	$474,000	$489,000	$504,000	$519,000
Available Funds	$2,441,805	$2,805,805	$1,779,805	$1,878,805	$1,947,805

Project Name	2026	2027	2028	2029	2030	Total	Illustrative
Fire Station #2 - Roof Replacement							$ (357,500)
Fire Station #3 - Building Envelope Improvements				$ (200,000)		**$ (200,000)**	
Fire Station #3 - Kitchen/Living Room Renovation		$ (30,000)				**$ (30,000)**	
Fire Station #3 - Paint Apparatus Bay Interior			$ (75,000)			**$ (75,000)**	
Fire Station Landscaping		$ (75,000)				**$ (75,000)**	
Public Safety Center - Apparatus Bay Apron Concrete Replacement		$ (40,000)				**$ (40,000)**	
Public Safety Center - Replace Concrete Stairs		$ (25,000)				**$ (25,000)**	
Public Safety Center - Admin Conference Room/Office Reconfiguration						**$ -**	$ (250,000)
Public Safety Center - Door Hardware Replacement and Rekey		$ (35,000)	$ (35,000)	$ (35,000)		**$ (105,000)**	
Public Safety Center - Dynamic Message Sign						**$ -**	$ (125,000)
Public Safety Center - Emergency Operations Center Furniture Replacement				$ (150,000)		**$ (150,000)**	
Public Safety Center - Exterior Service Door Replacement			$ (30,000)	$ (40,000)		**$ (70,000)**	
Public Safety Center - Fire Living Quarters Furniture Replacement		$ (35,000)				**$ (35,000)**	
Public Safety Center - HVAC Overhaul			$ (200,000)			**$ (200,000)**	
Public Safety Center - HVAC Over Pressurization Engineering Study & Repairs		$ (75,000)				**$ (75,000)**	
Public Safety Center - Interior Rear Stairwell Improvements		$ (75,000)				**$ (75,000)**	
Public Safety Center - Office Furniture Replacement		$ (25,000)	$ (25,000)	$ (25,000)		**$ (75,000)**	
Public Safety Center - Roof Replacement						**$ -**	$ (1,375,000)
Public Safety Impound Lot - 117 Rogers Street	$ (110,000)					**$ (110,000)**	
Public Safety Parking - Lot Sealcoating - Fire Station #2 & #3			$ (40,000)			**$ (40,000)**	
Public Safety - Apartments Fire Station #2		$ (1,100,000)				**$ (1,100,000)**	
Total	$ (110,000)	$ (1,515,000)	$ (405,000)	$ (450,000)	$ -	**$ (2,480,000)**	$ (2,107,500)
Fund Balance	$ 2,331,805	$ 1,290,805	$ 1,374,805	$ 1,428,805	$ 1,947,805		
Fund Balance Target	$ 794,000	$ 816,000	$ 838,000	$ 860,000	$ 882,000		
Project count	1	9	6	5	0		

CIP Fund Overview 2026

Project Name	Project Year	Project Cost
Public Safety Impound Lot - 117 Rogers St.	2026	110,000
Total		**110,000**

CIP Fund Overview 2027

Project Name	Project Year	Project Cost
Apartments Fire Station #2	2027	1,100,000
Fire Station #3 - Kitchen/Living Room Renovation	2027	30,000
Fire Station Landscaping	2027	75,000
Public Safety Center - Apparatus Bay Apron Concrete Replacement	2027	40,000
Public Safety Center - Door Hardware Replacement and Rekey	2027	35,000
Public Safety Center - Fire Living Quarters Furniture Replacement	2027	35,000
Public Safety Center - HVAC Over Pressurization Engineering Study & Repairs	2027	75,000
Public Safety Center - Interior Rear Stairwell Improvements	2027	75,000
Public Safety Center - Office Furniture Replacement	2027	25,000
Public Safety Center - Replace Concrete Stairs	2027	25,000
Total		**1,515,000**

CIP Fund Overview 2028

Project Name	Project Year	Project Cost
Fire Station #3 - Paint Apparatus Bay Interior	2028	75,000
Public Safety Center - Door Hardware Replacement and Rekey	2028	35,000
Public Safety Center - HVAC Overhaul	2028	200,000
Public Safety Center - Office Furniture Replacement	2028	25,000
Public Safety Center Exterior Service Door Replacement	2028	30,000
Public Safety Parking Lot Sealcoating - Fire Station #2 & #3	2028	40,000
Total		**405,000**

CIP Fund Overview 2029

Project Name	Project Year	Project Cost
Fire Station #3 - Building Envelope Improvements	2029	200,000
Public Safety Center - Door Hardware Replacement and Rekey	2029	35,000
Public Safety Center - Emergency Operations Center Furniture Replacement	2029	150,000
Public Safety Center - Office Furniture Replacement	2029	25,000
Public Safety Center Exterior Service Door Replacement	2029	40,000
Total		**450,000**

Illustrative CIP Fund Overview

Project Name	Project Year	Project Cost
Fire Station #2 Roof Replacement	2033	357,500
Public Safety Center - Admin Conference Room/Office Reconfiguration	2033	250,000
Public Safety Center - Roof Replacement	2030	1,375,000
Public Safety Center Dynamic Message Sign	2033	125,000
Total		**2,107,500**

Public Safety Impound Lot - 117 Rogers St.

Department: PUBLIC SAFETY BUILDING REPLACEMENT FUND

Project Years: 2026 - 2026

Project Description

Creation of an impound area at 117 Rogers Street will allow for shared resources and cost savings. Space is available at 117 Rogers Street.

Project Uses

	2026	2027	2028	2029	2030	Total
Public Safety Impound Lot	110,000	0	0	0	0	110,000
Total	**110,000**	**0**	**0**	**0**	**0**	**110,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	110,000	0	0	0	0	110,000
Total	**110,000**	**0**	**0**	**0**	**0**	**110,000**

Project Timeline

TBD

Apartments Fire Station #2

Department: PUBLIC SAFETY BUILDING REPLACEMENT FUND

Project Years: 2027 - 2027

Project Description

Construction of a second set of townhomes at the site of Fire Station #2. The scope would include another building or potentially an extension of the existing townhomes and associated site work and utility extensions.

Project Uses

	2026	2027	2028	2029	2030	Total
Fire 2 Townhomes	0	1,100,000	0	0	0	1,100,000
Total	**0**	**1,100,000**	**0**	**0**	**0**	**1,100,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	1,100,000	0	0	0	1,100,000
Total	**0**	**1,100,000**	**0**	**0**	**0**	**1,100,000**

Project Timeline

- January - Present feasibility report and authorize bidding
- March - Award CMAR contract
- June - Begin Construct i on
- December - Complete Construct i on

Fire Station #3 - Kitchen/Living Room Renovation

Department: PUBLIC SAFETY BUILDING REPLACEMENT FUND

Project Years: 2027 - 2027

Project Description

The project will replace some of the kitchen appliances as well as purchase new furniture for use by the staff at the station.

Project Uses

	2026	2027	2028	2029	2030	Total
Kitchen/Living Room Fire #3	0	30,000	0	0	0	30,000
Total	**0**	**30,000**	**0**	**0**	**0**	**30,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	30,000	0	0	0	30,000
Total	**0**	**30,000**	**0**	**0**	**0**	**30,000**

Project Timeline

- March - request quotat i ons
- June - install equipment and furniture

Fire Station Landscaping

Department: PUBLIC SAFETY BUILDING REPLACEMENT FUND

Project Years: 2027 - 2027

Project Description

Installation of landscaping, river rock, and concrete edging around Fire Station #2 Landscaping was not installed during the construction of Fire Station #2 in 2013 and as a result there have been a few issues with lawn equipment coming into contact with the building and rain water splashing dirt onto the building façade. Installation of landscaping will bring the station into conformance with the appearance of other city buildings while also providing a buffer for lawn equipment and a dirt free splash zone around the perimeter.

Additional landscaping will be installed at Fire Station #3.

Project Uses

	2026	2027	2028	2029	2030	Total
Landscaping	0	75,000	0	0	0	75,000
Total	**0**	**75,000**	**0**	**0**	**0**	**75,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	75,000	0	0	0	75,000
Total	**0**	**75,000**	**0**	**0**	**0**	**75,000**

Project Timeline

Landscaping - Summer 2026

Public Safety Center - Apparatus Bay Apron Concrete Replacement

Department: PUBLIC SAFETY BUILDING REPLACEMENT FUND

Project Years: 2027 - 2027

Project Description

Replacement of select concrete panels in the Public Safety Center Fire Apparatus apron. Several of the concrete panels in the fire apparatus apron have cracked and failed. Replacement is warranted to prevent any future deterioration of adjacent panels or displacement causing a tripping hazard.

Project Uses

	2026	2027	2028	2029	2030	Total
PSC Fire App Apron Concrete	0	40,000	0	0	0	40,000
Total	**0**	**40,000**	**0**	**0**	**0**	**40,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	40,000	0	0	0	40,000
Total	**0**	**40,000**	**0**	**0**	**0**	**40,000**

Project Timeline

Replacement will be planned to reduce interruptions to the fire apparatus response.

Spring 2025 construction

Public Safety Center - Door Hardware Replacement and Rekey

Department: PUBLIC SAFETY BUILDING REPLACEMENT FUND

Project Years: 2027 - 2029

Project Description

Multi year project to replace the aging door hardware and rekey the Public Safety Center. Most of the door hardware originally installed in 2012 has started to fail. To ensure proper security protocols are met and to keep the function of the hardware for our staff, replacement is required. A rekey of the facility will be undertaken during this process.

Project Uses

	2026	2027	2028	2029	2030	Total
Door hardware	0	35,000	35,000	35,000	0	105,000
Total	**0**	**35,000**	**35,000**	**35,000**	**0**	**105,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	35,000	35,000	35,000	0	105,000
Total	**0**	**35,000**	**35,000**	**35,000**	**0**	**105,000**

Project Timeline

- Summer 2026 - Rekey of facility
- Summer 2027 - Replacement of door hardware on 2nd and 3rd floors
- Summer 2028 - Replacement of door hardware in basement and on 1st floor

Public Safety Center - Fire Living Quarters Furniture Replacement

Department: PUBLIC SAFETY BUILDING REPLACEMENT FUND

Project Years: 2027 - 2027

Project Description

Replacement of the furniture in the Fire living quarters at the Public Safety Center. The furniture in the fire fighter living quarters of the Public Safety Center is nearing the end of its useful life and is in need of replacement.

Project Uses

	2026	2027	2028	2029	2030	Total
Furniture	0	35,000	0	0	0	35,000
Total	**0**	**35,000**	**0**	**0**	**0**	**35,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	35,000	0	0	0	35,000
Total	**0**	**35,000**	**0**	**0**	**0**	**35,000**

Project Timeline

Purchase furniture - Spring 2027

Public Safety Center - HVAC Over Pressurization Engineering Study & Repairs

Department: PUBLIC SAFETY BUILDING REPLACEMENT FUND

Project Years: 2027 - 2027

Project Description

Engineering study to determine causes and possible solutions to the over pressurization issue at the Public Safety Center. When the HVAC system is ramped up on either a warm or cold day, excess heating or cooling is released into the vestibule spaces within the building. This has caused several issues with the doors not properly securing when staff is entering or exiting the building. Facilities staff has been able to manage by continually adjusting the door closures however because of the varied times of the year that this issue is prevalent, staff does see issues with the doors slamming when the HVAC pressure ramps back down. A study will be conducted to identify any solutions to this issue to ensure the building remains secure year round.

Project Uses

	2026	2027	2028	2029	2030	Total
Engineering Study & Repairs	0	75,000	0	0	0	75,000
Total	**0**	**75,000**	**0**	**0**	**0**	**75,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	75,000	0	0	0	75,000
Total	**0**	**75,000**	**0**	**0**	**0**	**75,000**

Project Timeline

Study will be conducted beginning in spring 2026

Public Safety Center - Interior Rear Stairwell Improvements

Department: PUBLIC SAFETY BUILDING REPLACEMENT FUND

Project Years: 2027 - 2027

Project Description

Improvements to the rear interior stairwell at the Public Safety Center. The rear stairwell steps and concrete were left untouched during the renovation in 2012.The concrete is starting to deteriorate and staff is recommending corrective work to preserve the life of the stairs. Some of the concrete is starting to spall and accelerated deterioration is inevitable when introduced to salt during the winter months.

Project Uses

	2026	2027	2028	2029	2030	Total
Interior Stairwell Improvements	0	75,000	0	0	0	75,000
Total	**0**	**75,000**	**0**	**0**	**0**	**75,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	75,000	0	0	0	75,000
Total	**0**	**75,000**	**0**	**0**	**0**	**75,000**

Project Timeline

Construction - Summer 2027

Public Safety Center - Office Furniture Replacement

Department: PUBLIC SAFETY BUILDING REPLACEMENT FUND

Project Years: 2027 - 2029

Project Description

Phased replacement of the furniture at the Public Safety Center. The furniture purchased for the remodeled building in 2012 has started to reach the end of its useful life. Particularly the areas in Fire and Patrol which see use 24 hrs a day, 7 days a week, staff has seen an accelerated rate of wear due to the heavy use. Replacement will be phased over multiple years in order to replace the well used furniture first followed by the administrative areas in future years. One item of note is the manufacturer of the existing desk furniture no longer supports ongoing maintenance and has discontinued manufacturing of parts.

Project Uses

	2026	2027	2028	2029	2030	Total
Office Furniture Replacement	0	25,000	25,000	25,000	0	75,000
Total	**0**	**25,000**	**25,000**	**25,000**	**0**	**75,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	25,000	25,000	25,000	0	75,000
Total	**0**	**25,000**	**25,000**	**25,000**	**0**	**75,000**

Project Timeline

Multi-year project

Public Safety Center - Replace Concrete Stairs

Department: PUBLIC SAFETY BUILDING REPLACEMENT FUND

Project Years: 2027 - 2027

Project Description

Replacement of the concrete stairs leading from the PSC Ramp area to the Fire Apparatus apron After numerous attempts to repair the broken concrete stairs, replacement is warranted. Due to the location of the failure, the concrete patches are not holding through the winter. This is a safety hazard that has been identified in annual walkthroughs of the facility.

Project Uses

	2026	2027	2028	2029	2030	Total
PSC Fire Concrete Stairs	0	25,000	0	0	0	25,000
Total	**0**	**25,000**	**0**	**0**	**0**	**25,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	25,000	0	0	0	25,000
Total	**0**	**25,000**	**0**	**0**	**0**	**25,000**

Project Timeline

Replacement will coincide with the concrete apron replacement to reduce contractor mobilization costs.

Fire Station #3 - Paint Apparatus Bay Interior

Department: PUBLIC SAFETY BUILDING REPLACEMENT FUND

Project Years: 2028 - 2028

Project Description

Interior painting of the apparatus bays at Fire Station 3. Repainting of the interior of the Apparatus Bay to improve the interior cleanliness and improve the aesthetic looks of the facility.

Project Uses

	2026	2027	2028	2029	2030	Total
Paint App Bay Interior	0	0	75,000	0	0	75,000
Total	**0**	**0**	**75,000**	**0**	**0**	**75,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	0	75,000	0	0	75,000
Total	**0**	**0**	**75,000**	**0**	**0**	**75,000**

Project Timeline

Painting to take place in summer of 2028.

Public Safety Center - HVAC Overhaul

Department: PUBLIC SAFETY BUILDING REPLACEMENT FUND

Project Years: 2028 - 2028

Project Description

Major overhaul of the HVAC unit at the Public Safety Center. The main air handler servicing the Public Safety Center will be 16 years old in 2028 and in need of a major overhaul. Items may include replacement of wear parts, compressor replacements or upgrades, and inspection and possible replacement of electrical components. Work will be performed to ensure the unit can continue service for many years to come.

Project Uses

	2026	2027	2028	2029	2030	Total
HVAC Overhaul	0	0	200,000	0	0	200,000
Total	**0**	**0**	**200,000**	**0**	**0**	**200,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	0	200,000	0	0	200,000
Total	**0**	**0**	**200,000**	**0**	**0**	**200,000**

Project Timeline

- Design - Winter 2027/2028
- Upgrades to heating components - Summer 2028
- Upgrades to cooling components - Fall/Winter 2028

Public Safety Center Exterior Service Door Replacement

Department: PUBLIC SAFETY BUILDING REPLACEMENT FUND

Project Years: 2028 - 2029

Project Description

To date, 2 doors have been replaced. Several more doors will be in need of replacement by 2028 and will be removed and replaced with new steel hollow frame doors. Upgraded hardware will also be installed for a longer lasting product.

Project Uses

	2026	2027	2028	2029	2030	Total
Public Safety Center Exterior Service Door Replacement	0	0	30,000	40,000	0	70,000
Total	**0**	**0**	**30,000**	**40,000**	**0**	**70,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	0	30,000	40,000	0	70,000
Total	**0**	**0**	**30,000**	**40,000**	**0**	**70,000**

Project Timeline

- January - Request for quotations
- May - Construction

Public Safety Parking Lot Sealcoating - Fire Station #2 & #3

Department: PUBLIC SAFETY BUILDING REPLACEMENT FUND

Project Years: 2028 - 2028

Project Description

Sealcoating bituminous pavement at regular intervals throughout it's lifecycle will prolong the life of the surface. Both of the stations have seen asphalt improvements in the last 5-10 years and sealcoating is warranted at this time.

Project Uses

	2026	2027	2028	2029	2030	Total
Public Safety Parking Lot Sealcoating - Fire #2 & Fire #3	0	0	40,000	0	0	40,000
Total	**0**	**0**	**40,000**	**0**	**0**	**40,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	0	40,000	0	0	40,000
Total	**0**	**0**	**40,000**	**0**	**0**	**40,000**

Project Timeline

Work will be coordinated with Engineering staff when street sealcoating is being completed.

Fire Station #3 - Building Envelope Improvements

Department: PUBLIC SAFETY BUILDING REPLACEMENT FUND

Project Years: 2029 - 2029

Project Description

Exterior improvements to the building envelope are needed at Fire Station #3. A design detail at the corners of the building and roof line create the ability for water to infiltrate behind the brick and has caused damage to the exterior of the building. An inspection will occur prior to the start of the project to determine the extent of the issues and will help lay out the required improvements.

Project Uses

	2026	2027	2028	2029	2030	Total
Building Envelope Improvements	0	0	0	200,000	0	200,000
Total	**0**	**0**	**0**	**200,000**	**0**	**200,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	0	0	200,000	0	200,000
Total	**0**	**0**	**0**	**200,000**	**0**	**200,000**

Project Timeline

- January - Feasibility Hearing and hiring of an architect
- April - Award Bids
- June/July - Construct i on

Public Safety Center - Emergency Operations Center Furniture Replacement

Department: PUBLIC SAFETY BUILDING REPLACEMENT FUND

Project Years: 2029 - 2029

Project Description

Replacement of the Emergency Operations Center furniture at the Public Safety Center. The furniture will be nearing the end of its useful life and will be in need of replacement in 2029. The space is well utilized by both Public Safety and other city staff for trainings and events that are held within the space. New furniture will continue to be mobile and flexible for reconfiguration based on needs of staff.

Project Uses

	2026	2027	2028	2029	2030	Total
EOC Furniture	0	0	0	150,000	0	150,000
Total	**0**	**0**	**0**	**150,000**	**0**	**150,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	0	0	150,000	0	150,000
Total	**0**	**0**	**0**	**150,000**	**0**	**150,000**

Project Timeline

- Order furniture - Spring 2029
- Installat i on- Fal 2029

Public Safety Fire Equipment

Public Safety Fire Apparatus	2026	2027	2028	2029	2030		
Fund Balance	$265,698	$586,698	$916,698	$55,698	$403,698		
Transfer-In PSC	$321,000	$330,000	$339,000	$348,000	$357,000		
Available Funds	$586,698	$916,698	$1,255,698	$403,698	$760,698		
Project Name	2026	2027	2028	2029	2030	Total	Illustrative
Fire Apparatus			$ 1,200,000			**$ 1,200,000**	
Total	$ -	$ -	$ 1,200,000	$ -		**$ 1,200,000**	**$ -**
Fund Balance	$ 586,698	$ 916,698	$ 55,698	$ 403,698	$ 760,698		

CIP Fund Overview 2028

Project Name	Project Year	Project Cost
Fire Apparatus	2028	1,200,000
Total		**1,200,000**

Fire Apparatus

Department: PUBLIC SAFETY FIRE EQUIPMENT

Project Years: 2028 - 2028

Project Description

Replacement of Fire Apparatus.

Project Uses

	2026	2027	2028	2029	2030	Total
Fire apparatus replacement	0	0	1,200,000	0	0	1,200,000
Total	**0**	**0**	**1,200,000**	**0**	**0**	**1,200,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	0	1,200,000	0	0	1,200,000
Total	**0**	**0**	**1,200,000**	**0**	**0**	**1,200,000**

Project Timeline

TBD

Public Safety Police Equipment

Public Safety Capital Equipment Replacement	2026	2027	2028	2029	2030
Fund balance	$ 893,759	$ 844,759	$ 762,759	$ 700,759	$ 704,759
Transfer-in	$ 99,000	$ 102,000	$ 105,000	$ 108,000	$ 111,000
Available Funds	$ 992,759	$ 946,759	$ 867,759	$ 808,759	$ 815,759

Project Name	2026	2027	2028	2029	2030	Total
Body Worn Cameras						$ -
Replacement of LUCAS CPR Device	$ (34,000)					$ (34,000)
Replacement of Public Safety Automated External Defibrillators			$ (63,000)			$ (63,000)
Radios Replacement	$ (50,000)	$ (50,000)	$ (50,000)	$ (50,000)	$ (50,000)	$ (250,000)
SCBA Replacement	$ (54,000)	$ (54,000)	$ (54,000)	$ (54,000)	$ (54,000)	$ (270,000)
Public Safety Door Training Prop	$ (10,000)					$ (10,000)
Live Fire Training Prop		$ (80,000)				$ (80,000)
Total	**$ (148,000)**	**$ (184,000)**	**$ (167,000)**	**$ (104,000)**	**$ (104,000)**	**$ (707,000)**

SCBA	$ 270,000	$ 324,000	$ 378,000	$ 432,000	$ 486,000
Radios	$ 250,000	$ 300,000	$ 350,000	$ 400,000	$ 450,000
Fund Balance - Unallocated	$ 844,759	$ 762,759	$ 700,759	$ 704,759	$ 711,759
Fund Balance Target	$400,000	$400,000	$400,000	$400,000	$400,000

CIP Fund Overview 2026

Project Name	Project Year	Project Cost
Public Safety Door Training Prop	2026	10,000
Public Safety Radio Replacement	2026	50,000
Replacement of LUCAS Machine	2026	34,000
SCBA Replacement	2026	54,000
Total		**148,000**

CIP Fund Overview 2027

Project Name	Project Year	Project Cost
Live Fire Training Prop	2027	80,000
Public Safety Radio Replacement	2027	50,000
SCBA Replacement	2027	54,000
Total		**184,000**

CIP Fund Overview 2028

Project Name	Project Year	Project Cost
Public Safety Radio Replacement	2028	50,000
Replacement of Public Safety Automated External Defibrillators	2028	63,000
SCBA Replacement	2028	54,000
Total		**167,000**

CIP Fund Overview 2029

Project Name	Project Year	Project Cost
Public Safety Radio Replacement	2029	50,000
SCBA Replacement	2029	54,000
Total		**104,000**

CIP Fund Overview 2030

Project Name	Project Year	Project Cost
Public Safety Radio Replacement	2030	50,000
SCBA Replacement	2030	54,000
Total		**104,000**

Public Safety Door Training Prop

Department: PUBLIC SAFETY POLICE EQUIPMENT

Project Years: 2026 - 2026

Project Description

Purchase a training prop to simulate forcible door entry for fire and police staff.

Project Uses

	2026	2027	2028	2029	2030	Total
Purchase training prop	10,000	0	0	0	0	10,000
Total	**10,000**	**0**	**0**	**0**	**0**	**10,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	10,000	0	0	0	0	10,000
Total	**10,000**	**0**	**0**	**0**	**0**	**10,000**

Project Timeline

March, 2026: purchase prop and implement its use.

Public Safety Radio Replacement

Department: PUBLIC SAFETY POLICE EQUIPMENT

Project Years: 2026 - 2030

Project Description

Replacement planning for Public Safety radios Mobile and portable Public Safety radios were replaced in 2020/2021 and are assumed to need replacing 8-10 years into the future. Radio technology will see upgrades over the next 8-10 years that will cause a need to replace the current inventory. Additionally, the radio vendor may stop servicing the existing model of radio in our inventory because of the new technology available.

Project Uses

	2026	2027	2028	2029	2030	Total
Cash reserves for radio replacement	50,000	50,000	50,000	50,000	50,000	250,000
Total	**50,000**	**50,000**	**50,000**	**50,000**	**50,000**	**250,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	50,000	50,000	50,000	50,000	50,000	250,000
Total	**50,000**	**50,000**	**50,000**	**50,000**	**50,000**	**250,000**

Project Timeline

Planning for replacement of the radios began immediately after the purchase of the current/new inventory of radios as the cost to replace them will be significant. The radios may need replacement as early as 2029.

Replacement of LUCAS Machine

Department: PUBLIC SAFETY POLICE EQUIPMENT

Project Years: 2026 - 2026

Project Description

Public Safety purchased a LUCAS machine in 2020 and another in 2021. The LUCAS machine is an easy-to-use mechanical chest compression device that helps lifesaving teams around the world deliver high-quality, guidelines-consistent chest compressions to sudden cardiac arrest patients; in the field, on the move and in the hospital. The LUCAS machine comes with a 1 year warranty and an expected life cycle of 7-9 years.

Project Uses

	2026	2027	2028	2029	2030	Total
Cash reserves for LUCAS replacement	34,000	0	0	0	0	34,000
Total	**34,000**	**0**	**0**	**0**	**0**	**34,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	34,000	0	0	0	0	34,000
Total	**34,000**	**0**	**0**	**0**	**0**	**34,000**

Project Timeline

Replacement could reasonably occur in 2026 and 2027.

SCBA Replacement

Department: PUBLIC SAFETY POLICE EQUIPMENT

Project Years: 2026 - 2031

Project Description

Replace fire Self Contained Breathing Apparatus (SCBA) The SCBAs were replaced in 2016. They have a service live of 15 years, making the replacement schedule due in 2031.

Project Uses

	2026	2027	2028	2029	2030	Total
Cash reserve-SCBA	54,000	54,000	54,000	54,000	54,000	270,000
Total	**54,000**	**54,000**	**54,000**	**54,000**	**54,000**	**270,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	54,000	54,000	54,000	54,000	54,000	270,000
Total	**54,000**	**54,000**	**54,000**	**54,000**	**54,000**	**270,000**

Project Timeline

Research models in 2030. Purchase replacement air packs in 2031.

Live Fire Training Prop

Department: PUBLIC SAFETY POLICE EQUIPMENT

Project Years: 2027 - 2027

Project Description

n/a

Project Uses

	2026	2027	2028	2029	2030	Total
Live Fire Training Prop	0	80,000	0	0	0	80,000
Total	**0**	**80,000**	**0**	**0**	**0**	**80,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	80,000	0	0	0	80,000
Total	**0**	**80,000**	**0**	**0**	**0**	**80,000**

Project Timeline

n/a

Replacement of Public Safety Automated External Defibrillators

Department: PUBLIC SAFETY POLICE EQUIPMENT

Project Years: 2028 - 2028

Project Description

Replacement of Public Safety's Automated External Defibrillators (AEDs)</p>

Through a matching grant with Mayo Clinic Health System, the City of Mankato was able to purchase approximately 57 AEDs to deploy in all Public Safety vehicles and deploy in several City buildings in 2019. Replacement planning for Public Safety AEDs is for the 45 that we have in our inventory. Facilities is handling the budgeting for the other 12 that are deployed in City buildings.
</p>The AEDs come with a warranty and expected life cycle of 5 years. Replacement of some, or all, of the AEDs could reasonably begin in 2024.

Project Uses

	2026	2027	2028	2029	2030	Total
Cash reserves for AED replacement	0	0	63,000	0	0	63,000
Total	**0**	**0**	**63,000**	**0**	**0**	**63,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	0	63,000	0	0	63,000
Total	**0**	**0**	**63,000**	**0**	**0**	**63,000**

Project Timeline

Replacement is expected to begin as early as 2024.

Facilities Capital

Facilities	2026	2027	2028	2029	2030
Projected Fund Balance	$1,474,712	$1,524,712	$1,283,712	$1,646,212	$1,961,212
Transfer-In Facilities	$580,000	$595,000	$610,000	$625,000	$640,000
Available Funds	$2,054,712	$2,119,712	$1,893,712	$2,271,212	$2,601,212

Project Name	2026	2027	2028	2029	2030	Total	Illustrative
Building Automation System Upgrades & Expansion		$ (25,000)	$ (35,000)		$ (35,000)	**$ (95,000)**	
Caledonia Community Center - Drainage Improvements		$ (80,000)				**$ (80,000)**	
Caledonia Community Center - Exterior Waterproofing & Repairs		$ (125,000)				**$ (125,000)**	
Caledonia Community Center - Facility Audit	$ (30,000)					**$ (30,000)**	
Central Garage - Mobile Truck Lift					$ (100,000)	**$ (100,000)**	
Facilities - AED Replacement		$ (21,000)				**$ (21,000)**	
Facilities - Fire Alarm Panel Replacements			$ (40,000)	$ (35,000)		**$ (75,000)**	
Hubbard House - Waterproofing, Restoration, & ADA Improvements		$ (25,000)				**$ (25,000)**	
Park Pavilion - Appliance Replacement				$ (25,000)		**$ (25,000)**	
Parks Restroom Maintenance	$ (50,000)	$ (75,000)	$ (75,000)	$ (75,000)	$ (75,000)	**$ (350,000)**	
Public Works Center - Central Garage In-Floor Exhaust Fan Replacement				$ (30,000)		**$ (30,000)**	
Public Works Center - Central Garage Office Floor Improvements		$ (30,000)				**$ (30,000)**	
Public Works Center - Eastern Fence Replacement		$ (170,000)				**$ (170,000)**	
Public Works Center - Electrical Panel Upgrade		$ (50,000)	$ (50,000)	$ (50,000)	$ (50,000)	**$ (200,000)**	
Public Works Center - Elevator Code Upgrades		$ (125,000)				**$ (125,000)**	
Public Works Center - Fire Door Replacement			$ (22,500)	$ (25,000)	$ (25,000)	**$ (72,500)**	
Public Works Center - Floor Grate Repairs	$ (50,000)					**$ (50,000)**	
Public Works Center - Heated Storage Building						**$ -**	$ (2,750,000)
Public Works Center - Insulate and Resheet Parks Cold Storage Building						**$ -**	$ (300,000)
Public Works Center - Master Planning Design	$ (100,000)					**$ (100,000)**	
Public Works Center - Material Storage Building						**$ -**	$ (1,200,000)
Public Works Center - Welding Bay Exhaust & Tool Replacement	$ (300,000)					**$ (300,000)**	
Sibley Park - Pavilion HVAC Improvements		$ (60,000)				**$ (60,000)**	
Tourtellotte Pool FF&E		$ (50,000)	$ (25,000)	$ (25,000)	$ (25,000)	**$ (125,000)**	
Tourtellotte Pool Pump Rebuild				$ (45,000)		**$ (45,000)**	
Total	**$ (530,000)**	**$ (836,000)**	**$ (247,500)**	**$ (310,000)**	**$ (310,000)**	**$ (2,233,500)**	$ (4,250,000)
Fund Balance	$ 1,524,712	$ 1,283,712	$ 1,646,212	$ 1,961,212	$ 2,291,212		
Fund Balance Target	$ 1,160,000	$ 1,190,000	$ 1,220,000	$ 1,250,000	$ 1,280,000		

CIP Fund Overview 2026

Project Name	Project Year	Project Cost
Caledonia Community Center - Facility Audit	2026	30,000
Parks Restroom Maintenance	2026	50,000
Public Works Center - Floor Grate Repairs	2026	50,000
Public Works Center - Master Planning Design	2026	100,000
Public Works Center - Welding Bay Exhaust & Tool Replacement	2026	300,000
Total		**530,000**

CIP Fund Overview 2027

Project Name	Project Year	Project Cost
Building Automation System Upgrades & Expansion	2027	25,000
Caledonia Community Center - Drainage Improvements	2027	80,000
Caledonia Community Center - Exterior Waterproofing & Repairs	2027	125,000
Facilities - AED Replacements	2027	21,000
Hubbard House - Waterproofing, Restoration, & ADA Improvements	2027	25,000
Parks Restroom Maintenance	2027	75,000
Public Works Center - Central Garage Office Floor Improvements	2027	30,000
Public Works Center - Eastern Fence Replacement	2027	170,000
Public Works Center - Electrical Panel Upgrade	2027	50,000
Public Works Center - Elevator Code Upgrades	2027	125,000
Sibley Park - Pavilion HVAC Improvements	2027	60,000
Tourtellotte Pool - FF&E	2027	50,000
Total		**836,000**

CIP Fund Overview 2028

Project Name	Project Year	Project Cost
Building Automation System Upgrades & Expansion	2028	35,000
Facilities - Fire Alarm Panel Replacements	2028	40,000
Parks Restroom Maintenance	2028	75,000
Public Works Center - Electrical Panel Upgrade	2028	50,000
Public Works Center - Fire Door Replacement	2028	22,500
Tourtellotte Pool - FF&E	2028	25,000
Total		**247,500**

CIP Fund Overview 2029

Project Name	Project Year	Project Cost
Building Automation System Upgrades & Expansion	2029	0
Facilities - Fire Alarm Panel Replacements	2029	35,000
Park Pavilion - Appliance Replacement	2029	25,000
Parks Restroom Maintenance	2029	75,000
Public Works Center - Central Garage In-Floor Exhaust Fan Replacement	2029	30,000
Public Works Center - Electrical Panel Upgrade	2029	50,000
Public Works Center - Fire Door Replacement	2029	25,000
Tourtellotte Pool - FF&E	2029	25,000
Tourtellotte Pool - Pump Rebuilds	2029	45,000
Total		**310,000**

CIP Fund Overview 2030

Project Name	Project Year	Project Cost
Building Automation System Upgrades & Expansion	2030	35,000
Central Garage - Mobile Truck Lift	2030	100,000
Parks Restroom Maintenance	2030	75,000
Public Works Center - Electrical Panel Upgrade	2030	50,000
Public Works Center - Fire Door Replacement	2030	25,000
Tourtellotte Pool - FF&E	2030	25,000
Total		**310,000**

Illustrative CIP Fund Overview

Project Name	Project Year	Project Cost
Public Works Center - Heated Storage Building	2030	2,750,000
Public Works Center - Insulate and Resheet Parks Cold Storage Building	2030	300,000
Public Works Center - Material Storage Structure	2030	1,200,000
Total		**4,250,000**

Caledonia Community Center - Facility Audit

Department: FACILITIES CAPITAL

Project Years: 2026 - 2026

Project Description

This will be the fourth facility audit we have undertaken at various sites across the city and they have helped guide future planning for those locations.

Project Uses

	2026	2027	2028	2029	2030	Total
Facility Audit	30,000	0	0	0	0	30,000
Total	**30,000**	**0**	**0**	**0**	**0**	**30,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	30,000	0	0	0	0	30,000
Total	**30,000**	**0**	**0**	**0**	**0**	**30,000**

Project Timeline

- January - Hire and architecture firm
- February - Initial walkthrough of the facility while curling ice is still in place
- May - Secondary walk thru and exterior envelope inspection
- September - Final Report received

Parks Restroom Maintenance

Department: FACILITIES CAPITAL

Project Years: 2026 - 2030

Project Description

Parks Restroom Maintenance. Heavy maintenance of the Parks restrooms. These assets are heavily utilized during the summer months and heavy maintenance activities need to be performed from time to time to keep them in good working order.

Project Uses

	2026	2027	2028	2029	2030	Total
Parks Restroom Maintenance	50,000	75,000	75,000	75,000	75,000	350,000
Total	**50,000**	**75,000**	**75,000**	**75,000**	**75,000**	**350,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	50,000	75,000	75,000	75,000	75,000	350,000
Total	**50,000**	**75,000**	**75,000**	**75,000**	**75,000**	**350,000**

Project Timeline

Restroom maintenance improvements are planned each year.

Public Works Center - Floor Grate Repairs

Department: FACILITIES CAPITAL

Project Years: 2026 - 2026

Project Description

The floor grates were in poor shape when the City assumed control of the facility from MNDOT in 2010. The frames have continued to rust away and there isn't enough structure left to support the existing grates. The frame and concrete surrounding the drains will be removed and reinstalled with new grates that can support the increasing weight of the equipment using the space. Other areas of the building have been previously replaced including Bay 2 a few years ago.

Project Uses

	2026	2027	2028	2029	2030	Total
Floor Grate Replacement	50,000	0	0	0	0	50,000
Total	**50,000**	**0**	**0**	**0**	**0**	**50,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	50,000	0	0	0	0	50,000
Total	**50,000**	**0**	**0**	**0**	**0**	**50,000**

Project Timeline

- January - Request quotations
- June - Construction after spring cleanup and when trucks will be able to sit outside for the day

Public Works Center - Master Planning Design

Department: FACILITIES CAPITAL

Project Years: 2026 - 2026

Project Description

An architect will be hired to assist staff in finalizing the master planning document and creating more detailed plans for further project execution and budgeting.

Project Uses

	2026	2027	2028	2029	2030	Total
Master plan	100,000	0	0	0	0	100,000
Total	**100,000**	**0**	**0**	**0**	**0**	**100,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	100,000	0	0	0	0	100,000
Total	**100,000**	**0**	**0**	**0**	**0**	**100,000**

Project Timeline

- February - Engage with architecture firm
- April - Planning kickoff
- May-June - meetings with various divisions of Public Works
- September - Draft plan for review
- November - Final plan

Public Works Center - Welding Bay Exhaust & Tool Replacement

Department: FACILITIES CAPITAL

Project Years: 2026 - 2026

Project Description

Some of the existing tools in the welding shop at the Public Works Center are nearing the end of their serviceable life. New technology is available to make the equipment easier to service in the future and more ergonomic for staff to utilize.

The exhaust system will be completely replaced with an upgraded system. The current air quality in the space is poor and a new system is need to improve the working conditions for our employees. The system will be run through the existing building automation system and will mirror the project that was completed in the Central Garage portion a few years ago.

Project Uses

	2026	2027	2028	2029	2030	Total
Welding shop upgrades	300,000	0	0	0	0	300,000
Total	**300,000**	**0**	**0**	**0**	**0**	**300,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	300,000	0	0	0	0	300,000
Total	**300,000**	**0**	**0**	**0**	**0**	**300,000**

Project Timeline

- January - Feasibility Hearing
- March - Award Bids
- June/July - Construct i on

Building Automation System Upgrades & Expansion

Department: FACILITIES CAPITAL

Project Years: 2027 - 2030

Project Description

Upgrades to the existing BAS (Building Automation System) will allow us to continue the transition from stand alone systems to a fully accessible online system available on the city's network. Expansion will include buildings that have been recently added to the fiber network and now have the capability to be brought online for monitoring and control.

Project Uses

	2026	2027	2028	2029	2030	Total
Building Automation System Upgrades & Expansion	0	25,000	35,000	0	35,000	95,000
Total	**0**	**25,000**	**35,000**	**0**	**35,000**	**95,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	25,000	35,000	0	35,000	95,000
Total	**0**	**25,000**	**35,000**	**0**	**35,000**	**95,000**

Project Timeline

Work would be accomplished as time allows each year.

Caledonia Community Center - Drainage Improvements

Department: FACILITIES CAPITAL

Project Years: 2027 - 2027

Project Description

Currently, the west half of the building does not have any drains which has caused issues for many years. The added sewer connection will allow for proper floor drains in the active spaces and create a better solution for ice removal at the end of the curling season.

Project Uses

	2026	2027	2028	2029	2030	Total
Drainage Improvements	0	80,000	0	0	0	80,000
Total	**0**	**80,000**	**0**	**0**	**0**	**80,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	80,000	0	0	0	80,000
Total	**0**	**80,000**	**0**	**0**	**0**	**80,000**

Project Timeline

- January - Request quotations
- April - Begin exterior construction
- May/June - Begin interior construction following the conclusion of the curling season

Caledonia Community Center - Exterior Waterproofing & Repairs

Department: FACILITIES CAPITAL

Project Years: 2027 - 2027

Project Description

Caledonia Community Center - Exterior Remodel The facility is showing its age and is in need of a refresh. With the roof replacement completed, the exterior water intrusions should be addressed on the siding and windows of the building.

Project Uses

	2026	2027	2028	2029	2030	Total
Caledonia Community Center - Exterior Remodel	0	125,000	0	0	0	125,000
Total	**0**	**125,000**	**0**	**0**	**0**	**125,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	125,000	0	0	0	125,000
Total	**0**	**125,000**	**0**	**0**	**0**	**125,000**

Project Timeline

- Design: Spring 2027
- Construction: Summer 2027, with completion prior to the Tri-County Fair in August

Facilities - AED Replacements

Department: FACILITIES CAPITAL

Project Years: 2027 - 2027

Project Description

Replacement of the building Automated External Defibrillators. The current Zoll AED's were purchased in 2020 and will reach the end of their warranty period requiring replacement in 2025.

Project Uses

	2026	2027	2028	2029	2030	Total
AED Replacements	0	21,000	0	0	0	21,000
Total	**0**	**21,000**	**0**	**0**	**0**	**21,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	21,000	0	0	0	21,000
Total	**0**	**21,000**	**0**	**0**	**0**	**21,000**

Project Timeline

Purchase will occur with city wide AED replacement project in 2026.

Hubbard House - Waterproofing, Restoration, & ADA Improvements

Department: FACILITIES CAPITAL

Project Years: 2027 - 2027

Project Description

The scope of the improvements would be foundation work including drain tile, repairs to the limestone foundation, and waterproofing. The rear porch outside Mr. Hubbard's office has settled and is not structurally sound. Finally, the accessible ramp needs replacement and a lift was selected as an alternative due to the condensed footprint allowing for more garden space in the rear of the property.

Project Uses

	2026	2027	2028	2029	2030	Total
Initial Design for Grant Application	0	25,000	0	0	0	25,000
Total	**0**	**25,000**	**0**	**0**	**0**	**25,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	25,000	0	0	0	25,000
Total	**0**	**25,000**	**0**	**0**	**0**	**25,000**

Project Timeline

- March - Hire an architect with historical background
- July - Complete initial designs for inclusion in a grant application packet

Public Works Center - Central Garage Office Floor Improvements

Department: FACILITIES CAPITAL

Project Years: 2027 - 2027

Project Description

Floor resurfacing in the Central Garage office and parts room at the Public Works Center. The floor is a paint product that was applied prior to staff relocation to the site. A more appropriate and durable floor coating will be applied to the floor to help keep the area clean for staff.

Project Uses

	2026	2027	2028	2029	2030	Total
Floor coating	0	30,000	0	0	0	30,000
Total	**0**	**30,000**	**0**	**0**	**0**	**30,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	30,000	0	0	0	30,000
Total	**0**	**30,000**	**0**	**0**	**0**	**30,000**

Project Timeline

Summer 2027 - will require relocation of staff offices and parts room for 2 weeks

Public Works Center - Eastern Fence Replacement

Department: FACILITIES CAPITAL

Project Years: 2027 - 2027

Project Description

Replacement of the eastern fence line at the Public Works Center The existing 6' chain link fence has become overgrown with vegetation. The current vegetation will be cleared and the fence will be replaced with an 8' high privacy chain link fence to increase security of the facility as well as cut down on light pollution into the neighboring property.

Project Uses

	2026	2027	2028	2029	2030	Total
Fence replacement	0	170,000	0	0	0	170,000
Total	**0**	**170,000**	**0**	**0**	**0**	**170,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	170,000	0	0	0	170,000
Total	**0**	**170,000**	**0**	**0**	**0**	**170,000**

Project Timeline

Construction: Summer 2027

Public Works Center - Electrical Panel Upgrade

Department: FACILITIES CAPITAL

Project Years: 2027 - 2030

Project Description

Multi-year replacement of the electrical system components at the Public Works Center. The electrical panels and system at the Public Works Center are largely remnants of the original construction nearly 50 years ago. The equipment is aging and parts have been extremely hard to find. This will be a multi-year phased approach to update the entire building's electrical system.

Project Uses

	2026	2027	2028	2029	2030	Total
Electrical Panel Upgrades	0	50,000	50,000	50,000	50,000	200,000
Total	**0**	**50,000**	**50,000**	**50,000**	**50,000**	**200,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	50,000	50,000	50,000	50,000	200,000
Total	**0**	**50,000**	**50,000**	**50,000**	**50,000**	**200,000**

Project Timeline

Work will be performed annually during summer months to reduce the impact on Public Works Operations and Central Garage staff.

Public Works Center - Elevator Code Upgrades

Department: FACILITIES CAPITAL

Project Years: 2027 - 2027

Project Description

Replacement of the elevator mechanical equipment and button stations at the Public Works Center. The elevator mechanical equipment will be nearing the end of its useful life in the coming years. Proactive replacement of the equipment is critical to maintaining sufficient access for the public to use this critical facility.

Project Uses

	2026	2027	2028	2029	2030	Total
Elevator Code Upgrades	0	125,000	0	0	0	125,000
Total	**0**	**125,000**	**0**	**0**	**0**	**125,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	125,000	0	0	0	125,000
Total	**0**	**125,000**	**0**	**0**	**0**	**125,000**

Project Timeline

- February - Feasibility hearing
- April - Bid Award
- July - Construct i on

Sibley Park - Pavilion HVAC Improvements

Department: FACILITIES CAPITAL

Project Years: 2027 - 2027

Project Description

The existing system will be replaced with new equipment. Energy efficient heat pumps will be explored if mechanical spaces allow.

Project Uses

	2026	2027	2028	2029	2030	Total
Sibley Park Pavilion HVAC Improvements	0	60,000	0	0	0	60,000
Total	**0**	**60,000**	**0**	**0**	**0**	**60,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	60,000	0	0	0	60,000
Total	**0**	**60,000**	**0**	**0**	**0**	**60,000**

Project Timeline

- January - Request for quotations
- April - Installation prior to graduation season start

Tourtellotte Pool - FF&E

Department: FACILITIES CAPITAL

Project Years: 2027 - 2030

Project Description

Various items would be selected each year for replacement based on the anticipated end of their useful life. This includes the following: pool deck equipment, safety equipment, minor repairs to pool mechanical equipment, pool maintenance equipment, etc.

Project Uses

	2026	2027	2028	2029	2030	Total
Pool FF&E	0	50,000	25,000	25,000	25,000	125,000
Total	**0**	**50,000**	**25,000**	**25,000**	**25,000**	**125,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	50,000	25,000	25,000	25,000	125,000
Total	**0**	**50,000**	**25,000**	**25,000**	**25,000**	**125,000**

Project Timeline

Equipment would be purchased as needed but likely in the months leading up to the pool opening for the season.

Facilities - Fire Alarm Panel Replacements

Department: FACILITIES CAPITAL

Project Years: 2028 - 2029

Project Description

Multi year project to replace existing fire alarm panels throughout city buildings. Fire alarm panels have a life expectancy of 10-15 years. Several of our facilities have panels within this range. The city is also undertaking a consolidation of our fire alarm monitoring service to provide a more streamlined system for monitoring all of our facilities. The organization currently utilize 4 separate monitoring vendors and it is time consuming to update contact lists for each as staff changes occur.

Project Uses

	2026	2027	2028	2029	2030	Total
Fire Alarm replacements	0	0	40,000	35,000	0	75,000
Total	**0**	**0**	**40,000**	**35,000**	**0**	**75,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	0	40,000	35,000	0	75,000
Total	**0**	**0**	**40,000**	**35,000**	**0**	**75,000**

Project Timeline

Work will be undertaken in spring of each year.

Public Works Center - Fire Door Replacement

Department: FACILITIES CAPITAL

Project Years: 2028 - 2030

Project Description

Many of the fire rated doors within the facility are original to the building's construction and have had components fail. Due to the failures, most doors have been removed or propped open to allow movement through the building. Having a fire separation between spaces is critical should an incident occur. This would be a multi year project to replace all of the fire doors in the facility including new frames and door hardware.

Project Uses

	2026	2027	2028	2029	2030	Total
Fire Door Replacement	0	0	22,500	25,000	25,000	72,500
Total	**0**	**0**	**22,500**	**25,000**	**25,000**	**72,500**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	0	22,500	25,000	25,000	72,500
Total	**0**	**0**	**22,500**	**25,000**	**25,000**	**72,500**

Project Timeline

Work would be done in the spring of each year prior to the busy summer season starting.

Park Pavilion - Appliance Replacement

Department: FACILITIES CAPITAL

Project Years: 2029 - 2029

Project Description

Replacement of the appliances at Floyd Roberts Pavilion, Sibley Park Pavilion, Sibley Park Giving Barn, and the Caledonia Community Center.

Project Uses

	2026	2027	2028	2029	2030	Total
Park Pavilion - Appliance Replacement	0	0	0	25,000	0	25,000
Total	**0**	**0**	**0**	**25,000**	**0**	**25,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	0	0	25,000	0	25,000
Total	**0**	**0**	**0**	**25,000**	**0**	**25,000**

Project Timeline

Appliances would be replaced as rental schedules allow.

Public Works Center - Central Garage In-Floor Exhaust Fan Replacement

Department: FACILITIES CAPITAL

Project Years: 2029 - 2029

Project Description

Replacement of the exhaust fan for the in floor exhaust at the Public Works Center. The central garage has the capability to use the in floor exhaust system to safely operate and test vehicles in the maintenance bays. The exhaust fan predates the relocation of Public Works staff to the current site and staff recommends replacement prior to failure.

Project Uses

	2026	2027	2028	2029	2030	Total
Exhaust Fan	0	0	0	30,000	0	30,000
Total	**0**	**0**	**0**	**30,000**	**0**	**30,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	0	0	30,000	0	30,000
Total	**0**	**0**	**0**	**30,000**	**0**	**30,000**

Project Timeline

Summer 2029

Tourtellotte Pool - Pump Rebuilds

Department: FACILITIES CAPITAL

Project Years: 2029 - 2029

Project Description

The current 6 pump motors would be removed from the pump pit and sent off to be rebuilt and reinstalled.

Project Uses

	2026	2027	2028	2029	2030	Total
Rebuild pool pumps	0	0	0	45,000	0	45,000
Total	**0**	**0**	**0**	**45,000**	**0**	**45,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	0	0	45,000	0	45,000
Total	**0**	**0**	**0**	**45,000**	**0**	**45,000**

Project Timeline

- February - Removal of pumps and delivery to electrical contractor
- April - Pumps are delivered and reinstalled for pool startup

Central Garage - Mobile Truck Lift

Department: FACILITIES CAPITAL

Project Years: 2030 - 2030

Project Description

Project will include the purchase of 4 column lifts and a wing plow attachment to allow for maintenance of the snow fleet in our facility.

Project Uses

	2026	2027	2028	2029	2030	Total
Mobile Truck Lift	0	0	0	0	100,000	100,000
Total	**0**	**0**	**0**	**0**	**100,000**	**100,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	0	0	0	100,000	100,000
Total	**0**	**0**	**0**	**0**	**100,000**	**100,000**

Project Timeline

Purchase equipment in January 2030.

Parks Capital Replacement Fund

Parks	2026	2027	2028	2029	2030
Projected Fund Balance	$ 2,324,366	$1,281,866	$1,261,866	$ 1,000,866	$ 1,199,366
Budgeted Amount for Parks CIP Projects (General Fund) Note: these funds may only be used for existing parks	$525,000	$540,000	$555,000	$570,000	$585,000
Guaranteed Available Funds	$2,849,366	$1,821,866	$1,816,866	$1,570,866	$1,784,366
Less Restricted (Splash Pad & Pickleball)	($580,000)				
CBDG Funds (*) If qualifying project	$0	$0	$0	$0	$0
Grants (awarded**)	$0	$0	$0	$0	$0
Other contributions !					
Available Funds	$2,269,366	$1,821,866	$1,816,866	$1,570,866	$1,784,366

Project Name	2026	2027	2028	2029	2030	Total	Illustrative
Shelter Improvements * Note: Rasmussen Shelter planned for 2026; Sibley Park backside for 2027	$ (50,000)	$ (55,000)	$ (60,000)	$ (65,000)	$ (70,000)	**$ (300,000)**	
Rasmussen Floating Trail*** ($250K CIP, $250 Grant applied for in 2022; not successful; moved to 2029; 2028 design costs)	$ -		$ (50,000)	$ (250,000)		**$ (300,000)**	
Land of Memories New Playground Improvements *** (DNR $200K/CIP $350K - $200 in 2025/150K in 2026)	$ (150,000)					**$ (150,000)**	
Land of Memories Existing Playground Replacement		$ (150,000)				**$ (150,000)**	
West Mankato Park Upgrades (playground and shelter relocation)*** Apply for DNR grant for this park ($300k CIP, $300k Grant)		$ (25,000)	$ (600,000)			**$ (625,000)**	
Tennis Court Resurfacing (Alexander and Erlandson)		$ (150,000)				**$ (150,000)**	
Jaycee Park Improvements (50K for overall park design in 2028)			$ (50,000)			**$ (50,000)**	$ -
Thomas Park Playground, Rink and Flagpole	$ (32,500)		$ -		$ -	**$ (32,500)**	
Pilot project for engagement of new/expanded groups in parks - Phase 3		$ (50,000)	$ (50,000)	$ (50,000)	$ (50,000)	**$ (200,000)**	
Alexander Park - upgrade tennis court lights retrofit (repaint light poles; redo light kits; new electric lines)		$ (75,000)				**$ (75,000)**	
Erlandson Park - upgrade tennis court lights (repaint light poles; redo light kits; new electric lines)		$ -				**$ -**	$ 50,000
Thomas Park - upgrade hockey rink lights					$ (100,000)	**$ (100,000)**	$ -
Stoltzman Park - upgrade rink lights (repaint light poles; redo light kits; new electric lines)		$ (50,000)				**$ (50,000)**	
Bike Racks - replacement & additions	$ (5,000)	$ (5,000)	$ (6,000)	$ (6,500)	$ (7,000)	**$ (29,500)**	
Surface Upgrades - Caledonia		$ -				**$ -**	$ 465,000
Groh Park Development (DNR Grant $250K, Charter bonds $500K) ***	$ -	$ -				**$ -**	$ 1,000,000
PW Parks *@ (100K CDBG, 125K PIL, 325K Charter Bonds, 200K DNR Grant)	$ -	$ -				**$ -**	$ 1,000,000
Pickleball Court Replacements - Tourtellotte Park	$ (750,000)						
CIP funding incurred	$ (987,500)	$ (560,000)	$ (816,000)	$ (371,500)	$ (227,000)	**$ (2,962,000)**	
Kearney Pond Park !@ (10K Other, 440K Charter,)						**$ -**	$ 450,000
Proposed Charter Bond Funding Incurred	$ -	$ -				**$ -**	
Total Capital Enhancement	**$ (987,500)**	**$ (560,000)**	**$ (816,000)**	**$ (371,500)**	**$ (227,000)**	**$ (5,174,000)**	$ 2,965,000
Fund Balance - Restricted (Splash Pad)	$ 580,000	$ 580,000	$ 580,000	$ 580,000	$ 580,000		
Fund Balance	$ 1,281,866	$ 1,261,866	$ 1,000,866	$ 1,199,366	$ 1,557,366		
Fund Balance Target	$ 775,000	$ 798,000	$ 822,000	$ 847,000	$ 872,000		

CIP Fund Overview 2026

Project Name	Project Year	Project Cost
Bike Racks - replacement & additions	2026	5,000
Land of Memories - New Playground Improvements	2026	150,000
Pickleball Court Replacements - Tourtellotte Park	2026	750,000
Shelter Improvements	2026	50,000
Thomas Park Playground, Rink and Flagpole	2026	32,500
Total		**987,500**

CIP Fund Overview 2027

Project Name	Project Year	Project Cost
Alexander and Erlandson - tennis court resurfacing	2027	150,000
Alexander Park - tennis court lights	2027	75,000
Bike Racks - replacement & additions	2027	5,000
Land of Memories - Existing Playground Replacement	2027	150,000
Parks Pilot Project Phase 3	2027	50,000
Shelter Improvements	2027	55,000
Stoltzman Park - rink lighting	2027	50,000
West Mankato Park Upgrades	2027	25,000
Total		**560,000**

CIP Fund Overview 2028

Project Name	Project Year	Project Cost
Bike Racks - replacement & additions	2028	6,000
Jaycee Park - Park improvements	2028	50,000
Parks Pilot Project Phase 3	2028	50,000
Rasmussen Floating Trail	2028	50,000
Shelter Improvements	2028	60,000
West Mankato Park Upgrades	2028	600,000
Total		**816,000**

CIP Fund Overview 2029

Project Name	Project Year	Project Cost
Bike Racks - replacement & additions	2029	6,500
Parks Pilot Project Phase 3	2029	50,000
Rasmussen Floating Trail	2029	500,000
Shelter Improvements	2029	65,000
Total		**621,500**

CIP Fund Overview 2030

Project Name	Project Year	Project Cost
Bike Racks - replacement & additions	2030	7,000
Parks Pilot Project Phase 3	2030	50,000
Shelter Improvements	2030	70,000
Thomas Park - upgrade hockey rink lights	2030	100,000
Total		**227,000**

Illustrative CIP Fund Overview

Project Name	Project Year	Project Cost
Development of Park on PWC Land-Behind Public Works Building	2030	1,000,000
Erlandson Park - Upgrade tennis court lights	2030	50,000
Groh Park Development	2030	1,000,000
Kearney Pond Park Improvements	2030	450,000
Parks Surface Upgrades - Caledonia	2026	465,000
Total		**2,965,000**

Land of Memories - New Playground Improvements

Department: PARKS CAPITAL REPLACEMENT FUND

Project Years: 2025 - 2026

Project Description

A new playground unit will be installed in Land of Memories Park. The play equipment will be designed to meet CPSC requirements for safe play equipment and will provide opportunities for play in accordance with ADA requirements.

Project Uses

	2026	2027	2028	2029	2030	Total
Land of Memories new playground installation	150,000	0	0	0	0	150,000
Total	**150,000**	**0**	**0**	**0**	**0**	**150,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	150,000	0	0	0	0	150,000
Other Sources	0	0	0	0	0	0
Total	**150,000**	**0**	**0**	**0**	**0**	**150,000**

Project Timeline

The project is estimated to be complete in 2025 and 2026.

Bike Racks - replacement & additions

Department: PARKS CAPITAL REPLACEMENT FUND

Project Years: 2026 - 2030

Project Description

n/a

Project Uses

	2026	2027	2028	2029	2030	Total
Bike Racks - replacement & additions	5,000	5,000	6,000	6,500	7,000	29,500
Total	**5,000**	**5,000**	**6,000**	**6,500**	**7,000**	**29,500**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	5,000	5,000	6,000	6,500	7,000	29,500
Total	**5,000**	**5,000**	**6,000**	**6,500**	**7,000**	**29,500**

Project Timeline

Bike rack installation is planned over the next 5 years.

Pickleball Court Replacements - Tourtellotte Park

Department: PARKS CAPITAL REPLACEMENT FUND

Project Years: 2026 - 2026

Project Description

N/A

Project Uses

	2026	2027	2028	2029	2030	Total
Pickleball Court Replacements	750,000	0	0	0	0	750,000
Total	**750,000**	**0**	**0**	**0**	**0**	**750,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	750,000	0	0	0	0	750,000
Total	**750,000**	**0**	**0**	**0**	**0**	**750,000**

Project Timeline

N/A

Shelter Improvements

Department: PARKS CAPITAL REPLACEMENT FUND

Project Years: 2026 - 2030

Project Description

This funding is to provide maintenance and replacement of park shelters throughout the City of Mankato. Highland Both shelters 1 & 2 at Highland Park shelters are programmed for cosmetic and structural upgrades in 2025. Work will include concrete rehabilitation at Shelter #2 (east side) as well as structural repairs and painting. Work at Shelter #1 (west side) will include electrical repairs, concrete siding on the gable ends, concrete board and batten ceilings, paint, and minor concrete repair work. The work with refresh these facilities bring them up to a manageable maintenance level, and make them more cohesive with the previous upgrades that have been performed in the park.

Project Uses

	2026	2027	2028	2029	2030	Total
Shelter upgrades/replacemet	50,000	55,000	60,000	65,000	70,000	300,000
Total	**50,000**	**55,000**	**60,000**	**65,000**	**70,000**	**300,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	50,000	55,000	60,000	65,000	70,000	300,000
Other Sources	0	0	0	0	0	0
Total	**50,000**	**55,000**	**60,000**	**65,000**	**70,000**	**300,000**

Project Timeline

Funding is planned for 2025-2029.

Thomas Park Playground, Rink and Flagpole

Department: PARKS CAPITAL REPLACEMENT FUND

Project Years: 2026 - 2026

Project Description

Installation of a flagpole. Playground equipment replacement is planned for Thomas Park. Updates to the existing ice rink including replacing the current asphalt surface with concrete and incorporate multi-season uses for the space.

Project Uses

	2026	2027	2028	2029	2030	Total
Flag pole	32,500	0	0	0	0	32,500
Total	**32,500**	**0**	**0**	**0**	**0**	**32,500**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	32,500	0	0	0	0	32,500
Total	**32,500**	**0**	**0**	**0**	**0**	**32,500**

Project Timeline

Flagpole installation is planned for 2026; design work is planned for 2029, and playground and ice rink upgrades are illustrative.

Alexander and Erlandson - tennis court resurfacing

Department: PARKS CAPITAL REPLACEMENT FUND

Project Years: 2027 - 2027

Project Description

Resurfacing of the tennis courts at Alexander Park and Erlandson Park is planned. Resurfacing includes cleaning and washing, crack milling, routing and filling, patching of low areas, a new color system coat and stripping.

Project Uses

	2026	2027	2028	2029	2030	Total
Alexander and Erlandson tennis court resurfacing	0	150,000	0	0	0	150,000
Total	**0**	**150,000**	**0**	**0**	**0**	**150,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	150,000	0	0	0	150,000
Total	**0**	**150,000**	**0**	**0**	**0**	**150,000**

Project Timeline

Work is planned for 2027.

Alexander Park - tennis court lights

Department: PARKS CAPITAL REPLACEMENT FUND

Project Years: 2027 - 2027

Project Description

Replacing the court lights will result in energy reduction and equipment modernization. Repainting of the light polies, reconfiguration of the light kits and new electrical lines are planned.

Project Uses

	2026	2027	2028	2029	2030	Total
Alexander Park - tennis court lights	0	75,000	0	0	0	75,000
Total	**0**	**75,000**	**0**	**0**	**0**	**75,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	75,000	0	0	0	75,000
Total	**0**	**75,000**	**0**	**0**	**0**	**75,000**

Project Timeline

The project is planned for 2027.

Land of Memories - Existing Playground Replacement

Department: PARKS CAPITAL REPLACEMENT FUND

Project Years: 2027 - 2027

Project Description

The existing playground system in Land of Memories campground area was installed in 1994. The equipment has reached its useful life and finding replacement parts is difficult. A new, similar-sized system is proposed in the same location as the current system.

Project Uses

	2026	2027	2028	2029	2030	Total
Land of Memories - campground playground system replacement	0	150,000	0	0	0	150,000
Total	**0**	**150,000**	**0**	**0**	**0**	**150,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	150,000	0	0	0	150,000
Total	**0**	**150,000**	**0**	**0**	**0**	**150,000**

Project Timeline

The project is planned for 2026.

Parks Pilot Project Phase 3

Department: PARKS CAPITAL REPLACEMENT FUND

Project Years: 2027 - 2030

Project Description

Parks Pilot Project, Phase 3, a continuation of a project started in 2024, continued in 2025, is proposed for continuation in 2027. The parks pilot project is proposed to assess and trial possibilities to increase user groups in the parks. Past projects include the concrete ping pong table in Stoltzman Park, hammock stands, gaga pit and concrete cornhole boards.

Project Uses

	2026	2027	2028	2029	2030	Total
Parks Pilot Project Phase 3	0	50,000	50,000	50,000	50,000	200,000
Total	**0**	**50,000**	**50,000**	**50,000**	**50,000**	**200,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	50,000	50,000	50,000	50,000	200,000
Total	**0**	**50,000**	**50,000**	**50,000**	**50,000**	**200,000**

Project Timeline

The next phase is contemplated in 2027.

Stoltzman Park - rink lighting

Department: PARKS CAPITAL REPLACEMENT FUND

Project Years: 2027 - 2027

Project Description

Replacing the court lights will result in energy reduction and equipment modernization.

Project Uses

	2026	2027	2028	2029	2030	Total
Stoltzman Park - rink lighting upgrades	0	50,000	0	0	0	50,000
Total	**0**	**50,000**	**0**	**0**	**0**	**50,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	50,000	0	0	0	50,000
Total	**0**	**50,000**	**0**	**0**	**0**	**50,000**

Project Timeline

The project is planned for 2027.

West Mankato Park Upgrades

Department: PARKS CAPITAL REPLACEMENT FUND

Project Years: 2027 - 2028

Project Description

The playground system and shelter in West Mankato Park are scheduled for upgrades. Park improvements will include shelter replacement, sidewalk and playground updates. The equipment and shelter in West Mankato Park are nearing their useful life and require replacement.

Project Uses

	2026	2027	2028	2029	2030	Total
Design Costs	0	25,000	0	0	0	25,000
Playground	0	0	325,000	0	0	325,000
Shelter and Accessible Sidewalk	0	0	275,000	0	0	275,000
Total	**0**	**25,000**	**600,000**	**0**	**0**	**625,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	25,000	600,000	0	0	625,000
Total	**0**	**25,000**	**600,000**	**0**	**0**	**625,000**

Project Timeline

The project is scheduled for 2027, and is contingent upon receiving grant funding.

Jaycee Park - Park improvements

Department: PARKS CAPITAL REPLACEMENT FUND

Project Years: 2028 - 2028

Project Description

Design work to study and prepare a comprehensive park plan for Jaycee Park is proposed. Playground equipment replacement at Jaycee Park is needed. Parking lot reconstruction and restroom facility reconstruction are also necessary.

Project Uses

	2026	2027	2028	2029	2030	Total
Jaycee Park design/comprehensive plan	0	0	50,000	0	0	50,000
Total	**0**	**0**	**50,000**	**0**	**0**	**50,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	0	50,000	0	0	50,000
Total	**0**	**0**	**50,000**	**0**	**0**	**50,000**

Project Timeline

The cost for preparation of a comprehensive plan is scheduled for 2028.

Rasmussen Floating Trail

Department: PARKS CAPITAL REPLACEMENT FUND

Project Years: 2028 - 2029

Project Description

The floating trail in Rasmussen Woods requires rebuilding. Maintenance and improvements are needed to the Rasmussen Woods floating trail due to flooding. Because of the sensitive nature of the area, advanced design work is anticipated.

Project Uses

	2026	2027	2028	2029	2030	Total
Rasmussen Floating Trail	0	0	50,000	500,000	0	550,000
Total	**0**	**0**	**50,000**	**500,000**	**0**	**550,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	0	50,000	250,000	0	300,000
Other Sources	0	0	0	250,000	0	250,000
Total	**0**	**0**	**50,000**	**500,000**	**0**	**550,000**

Project Timeline

Planned improvements in 2029, and design work is anticipated for 2028.

Thomas Park - upgrade hockey rink lights

Department: PARKS CAPITAL REPLACEMENT FUND

Project Years: 2030 - 2030

Project Description

Replacing the court lights will result in energy reduction and equipment modernization.

Project Uses

	2026	2027	2028	2029	2030	Total
Thomas Park tennis court lights	0	0	0	0	100,000	100,000
Total	**0**	**0**	**0**	**0**	**100,000**	**100,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	0	0	0	100,000	100,000
Total	**0**	**0**	**0**	**0**	**100,000**	**100,000**

Project Timeline

The project is planned for 2023 in conjunction with the rink and playground improvements.

Water Capital Improvement Fund

Water Capital	2026	2027	2028	2029	2030		
Projected Fund Balance	$8,731,994	$6,614,994	$4,464,994	$1,102,994	$2,387,994		
Transfer-In Water	$1,000,000	$2,000,000	$2,000,000	$2,000,000	$2,000,000		
Transfer-In Meter Replacement	$100,000	$100,000	$100,000	$100,000	$100,000		
Available Funds	$9,831,994	$8,714,994	$6,564,994	$3,202,994	$4,487,994		

Project Title	2026	2027	2028	2029	2030	Total	Illustrative
Balcerzak Tower Rehab	$1,950,000					$1,950,000	
Softener HVAC Replacement			$300,000			$300,000	
Water Handling Facility (WHF) HVAC Replacement			$80,000			$80,000	
Surge protection devices on the incoming power to buildings and MCC's				$125,000		$125,000	
High Lift Pump Station HVAC Replacement				$215,000		$215,000	
Madison Tower Rehab - RFP 2030 rehab 2031					$50,000	$50,000	
Well 13 Lateral Installation	$50,000	$3,915,000				$3,965,000	
RO Pilot test	$275,000					$275,000	
Deep Well Emergency Connection		$35,000	$1,112,000			$1,147,000	
RFP for new water tower design/build		$75,000				$75,000	
Dolph Reservoir Roof Replacement			$200,000			$200,000	
Booster installation at North City Reservoir		$50,000	$3,015,000			$3,065,000	
Dolph Booster Pump upgrade					$900,000	$900,000	
Rehab Dolph reservoir driveway	$175,000					$175,000	
Membrane Filter Replacement			$575,000			$575,000	
Remote site PLC upgrade		$75,000		$75,000	$90,000	$240,000	
WHF Overhead Door Replacement	$17,000					$17,000	
Well 15 rehab and inspection			$80,000			$80,000	
WTP Upper Roof Replacement				$300,000		$300,000	
HWY 14 Watermain Lining	$650,000					$650,000	
Water Meter Replacement	$100,000	$100,000	$100,000	$100,000	$100,000	$500,000	
Total	**$3,217,000**	**$4,250,000**	**$5,462,000**	**$815,000**	**$1,140,000**	**$14,884,000**	$ -
Water Meter Reserve	$400,000	$500,000	$600,000	$700,000	$800,000		
Fund Balance	$6,614,994	$4,464,994	$1,102,994	$2,387,994	$3,347,994		
Reserve Target	$1,000,000	$1,030,000	$1,060,000	$1,090,000	$1,120,000		

CIP Fund Overview 2026

Project Name	Project Year	Project Cost
Balcerzak Tower Rehab	2026	1,950,000
Dolph Station Driveway Rehab	2026	175,000
Highway 14 Watermain Lining	2026	650,000
RO Pilot test	2026	275,000
Water Meter Replacement	2026	100,000
Well 13 Lateral installation	2026	50,000
WHF Overhead Door Replacement	2026	17,000
Total		**3,217,000**

CIP Fund Overview 2027

Project Name	Project Year	Project Cost
Booster installation at North City Reservoir	2027	50,000
Deep Well Emergency Connection	2027	35,000
Remote Site PLC upgrade	2027	75,000
RFP for new Water Tower	2027	75,000
Water Meter Replacement	2027	100,000
Well 13 Lateral installation	2027	3,915,000
Total		**4,250,000**

CIP Fund Overview 2028

Project Name	Project Year	Project Cost
Booster installation at North City Reservoir	2028	3,015,000
Deep Well Emergency Connection	2028	1,112,000
Dolph Reservoir Roof Replacement	2028	200,000
Membrane Filter Replacement	2028	575,000
Remote Site PLC upgrade	2028	0
Softener HVAC Replacement	2028	300,000
Water Meter Replacement	2028	100,000
Well 15 rehab and inspection	2028	80,000
WHF HVAC Replacement	2028	80,000
Total		**5,462,000**

CIP Fund Overview 2029

Project Name	Project Year	Project Cost
High Lift Pump Station HVAC Replacement	2029	215,000

Project Name	Project Year	Project Cost
Remote Site PLC upgrade	2029	75,000
Surge Protection device additions	2029	125,000
Water Meter Replacement	2029	100,000
WTP Upper Roof Replacement	2029	300,000
Total		**815,000**

CIP Fund Overview 2030

Project Name	Project Year	Project Cost
Dolph Booster Pump Upgrade	2030	900,000
Madison Tower Rehab RFP	2030	50,000
Remote Site PLC upgrade	2030	90,000
Water Meter Replacement	2030	100,000
Total		**1,140,000**

Balcerzak Tower Rehab

Department: WATER CAPITAL IMPROVEMENT FUND

Project Years: 2025 - 2026

Project Description

Balcerzak Tower has coating failures at the weld seams, rust pushing through the support beams on the roof of the tower, lead paint on the interior dry side, spiral staircase that needs removal, support footing repair due to concrete failure, paint failure of interior dry paint that is not lead. Complete rehab will ensure the integrity of the structure for years to come.

Project Uses

	2026	2027	2028	2029	2030	Total
Balcerzak Tower Rehab	1,950,000	0	0	0	0	1,950,000
Total	**1,950,000**	**0**	**0**	**0**	**0**	**1,950,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	1,950,000	0	0	0	0	1,950,000
Total	**1,950,000**	**0**	**0**	**0**	**0**	**1,950,000**

Project Timeline

TBD

Dolph Station Driveway Rehab

Department: WATER CAPITAL IMPROVEMENT FUND

Project Years: 2026 - 2026

Project Description

Dolph Booster station access road replacement.

Project Uses

	2026	2027	2028	2029	2030	Total
	175,000	0	0	0	0	175,000
Total	**175,000**	**0**	**0**	**0**	**0**	**175,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Water Revenue	175,000	0	0	0	0	175,000
Total	**175,000**	**0**	**0**	**0**	**0**	**175,000**

Project Timeline

Summer of 2026 depending on contractor's schedule.

Highway 14 Watermain Lining

Department: WATER CAPITAL IMPROVEMENT FUND

Project Years: 2026 - 2026

Project Description

Reinforce the 12-inch ductile iron pipe by lining it.

Engagement Strategy

- Community Investment Plan
- Open House
- City Website (community investment plan project pages)
- Other

Project Uses

	2026	2027	2028	2029	2030	Total
Highway 14 West water main lining	650,000	0	0	0	0	650,000
Total	**650,000**	**0**	**0**	**0**	**0**	**650,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	650,000	0	0	0	0	650,000
Total	**650,000**	**0**	**0**	**0**	**0**	**650,000**

Project Timeline

2026 based off the contractor's schedule.

RO Pilot test

Department: WATER CAPITAL IMPROVEMENT FUND

Project Years: 2026 - 2026

Project Description

6 month pilot test verifying the compatibility of an RO system and Mankato's drinking water supply.

Project Uses

	2026	2027	2028	2029	2030	Total
	275,000	0	0	0	0	275,000
Total	**275,000**	**0**	**0**	**0**	**0**	**275,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	275,000	0	0	0	0	275,000
Total	**275,000**	**0**	**0**	**0**	**0**	**275,000**

Project Timeline

Spring into summer of 2026.

Water Meter Replacement

Department: WATER CAPITAL IMPROVEMENT FUND

Project Years: 2026 - 2033

Project Description

Annual contribution towards future Water Meter Replacement

Water meters typically have a 20 year lifecycle which with the current replacement in 2024-2026 we would be looking to start saving up for future replacements via cash versus having to take on new debt.

Engagement Strategy

N/A

Project Uses

	2026	2027	2028	2029	2030	Total
Water Meter Reserve	100,000	100,000	100,000	100,000	100,000	500,000
Total	**100,000**	**100,000**	**100,000**	**100,000**	**100,000**	**500,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	100,000	100,000	100,000	100,000	100,000	500,000
Total	**100,000**	**100,000**	**100,000**	**100,000**	**100,000**	**500,000**

Project Timeline

2023 -2043 - annual contribution

Well 13 Lateral installation

Department: WATER CAPITAL IMPROVEMENT FUND

Project Years: 2026 - 2027

Project Description

Well 13 lateral replacement. The work will need to be done in the off peak pumping. Which is October-March and the duration of the project will be 4 months.

Project Uses

	2026	2027	2028	2029	2030	Total
	50,000	3,915,000	0	0	0	3,965,000
Total	**50,000**	**3,915,000**	**0**	**0**	**0**	**3,965,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	50,000	3,915,000	0	0	0	3,965,000
Total	**50,000**	**3,915,000**	**0**	**0**	**0**	**3,965,000**

Project Timeline

Fall of 2026 into 2027.

WHF Overhead Door Replacement

Department: WATER CAPITAL IMPROVEMENT FUND

Project Years: 2026 - 2026

Project Description

WHF drive through bay door replacement

Project Uses

	2026	2027	2028	2029	2030	Total
	17,000	0	0	0	0	17,000
Total	**17,000**	**0**	**0**	**0**	**0**	**17,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Water Revenue	17,000	0	0	0	0	17,000
Total	**17,000**	**0**	**0**	**0**	**0**	**17,000**

Project Timeline

Spring based on contractor's schedule and availability of materials

Booster installation at North City Reservoir

Department: WATER CAPITAL IMPROVEMENT FUND

Project Years: 2027 - 2028

Project Description

Booster pump installation, installation of a water main along highway 14 and under to connect tot he upper system, roof replacement, and install a blacktop driveway with concrete apron

Project Uses

	2026	2027	2028	2029	2030	Total
Boosters Installation	0	50,000	3,015,000	0	0	3,065,000
Total	**0**	**50,000**	**3,015,000**	**0**	**0**	**3,065,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Loan/Bond Proceeds	0	50,000	3,015,000	0	0	3,065,000
Total	**0**	**50,000**	**3,015,000**	**0**	**0**	**3,065,000**

Project Timeline

RFP in 2026 with the installation of pipe, pumps, roof, and driveway in 2027.

Deep Well Emergency Connection

Department: WATER CAPITAL IMPROVEMENT FUND

Project Years: 2027 - 2028

Project Description

Deep well bypass for critical outage situations.

Project Uses

	2026	2027	2028	2029	2030	Total
	0	35,000	1,112,000	0	0	1,147,000
Total	**0**	**35,000**	**1,112,000**	**0**	**0**	**1,147,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	35,000	1,112,000	0	0	1,147,000
Total	**0**	**35,000**	**1,112,000**	**0**	**0**	**1,147,000**

Project Timeline

Fall of 2027

Remote Site PLC upgrade

Department: WATER CAPITAL IMPROVEMENT FUND

Project Years: 2027 - 2030

Project Description

PLC (Programmable Logic Controller) replacement/upgrade at the remote sites The PLC's have been installed since the early 2000's and are obsolete. The products are outdated with replacement parts difficult to find. A PLC upgrade is required to effectively communicate with the rest of the WTP infrastructure into the future.

Project Uses

	2026	2027	2028	2029	2030	Total
Remote Site PLC upgrade	0	75,000	0	75,000	90,000	240,000
Total	**0**	**75,000**	**0**	**75,000**	**90,000**	**240,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	75,000	0	75,000	90,000	240,000
Total	**0**	**75,000**	**0**	**75,000**	**90,000**	**240,000**

Project Timeline

Fall of 2027

RFP for new Water Tower

Department: WATER CAPITAL IMPROVEMENT FUND

Project Years: 2027 - 2027

Project Description

RFP in 2027 for the installation of a third water tower on the east end of town. In the RFP will be design, location, capacity, and bidding for contractors. The current timeline for RFP to construction is 30-60 months out. Tower would be built in 2030 based off contractor projections.

Project Uses

	2026	2027	2028	2029	2030	Total
	0	75,000	0	0	0	75,000
Total	**0**	**75,000**	**0**	**0**	**0**	**75,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	75,000	0	0	0	75,000
Total	**0**	**75,000**	**0**	**0**	**0**	**75,000**

Project Timeline

Spring of 2027

Dolph Reservoir Roof Replacement

Department: WATER CAPITAL IMPROVEMENT FUND

Project Years: 2028 - 2028

Project Description

Dolph Reservoir roof replacement.

Project Uses

	2026	2027	2028	2029	2030	Total
	0	0	200,000	0	0	200,000
Total	**0**	**0**	**200,000**	**0**	**0**	**200,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	0	200,000	0	0	200,000
Total	**0**	**0**	**200,000**	**0**	**0**	**200,000**

Project Timeline

Summer of 2028

Membrane Filter Replacement

Department: WATER CAPITAL IMPROVEMENT FUND

Project Years: 2028 - 2028

Project Description

Replacement of 640 membrane modules.

The facility has 8 membranes filter skids consisting of 80 modules each making a total of 640 filter modules total in the facility. 320 modules were replaced in 2017 and 320 in 2018. I would like to begin replacement in 2027 by completing a 50% replacement the middle of the year. This will begin to spread out future module replacements. The membranes cannot be stored on site. They must be put into service when purchased since there is no guaranteed shelf life if they are not actually on-line receiving water. As the filter modules age the small internal strands become brittle and break.

Detection is through declining Log Removal Values (LRV), increase Membrane Integrity Testing (MIT)-water flow testing, and the use of sounding gear. The WTP maintenance department is spending one full day every month to maintain an acceptable LRV. The MN Department of Health requires an LRV of 4.0 for potable water. The WTP has set a standard of removing a filter from service for repair if an LRV falls below 4.30. We feel that this proactive approach will keep our team ahead of any arising issues. It will also allow us the time to attend to other emergency repairs before completing membrane repairs. Due to the regulations, extended lead time and increasing maintenance costs it is critical that these be replaced in a timely manner.

The LRV is a number that is calculated by using the last known filtration volume, last known pressure/trans membrane pressure, and the displaced flow on the Membrane Integrity Panel. This test is done daily to record any perforations in the membrane surface where contaminants would have the possibility to pass.

Membrane pinning is a process where the leaks are isolated to the A or B side of the filter. Maintenance will conduct a MIT Diagnostic on the filter in question. At this time they will use an electronic stethoscope to listen for fiber breakage. All vessels with possible leaks are recorded. The filter is then drained and locked out. The modules are pulled and submerged in a water bath, the filtrate side of the fiber is pressurized with air. If there is a leak, air bubbles will expose themselves from one of the 10,000 fibers on the module surface.

Project Uses

	2026	2027	2028	2029	2030	Total
Construction	0	0	575,000	0	0	575,000
Total	**0**	**0**	**575,000**	**0**	**0**	**575,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	0	575,000	0	0	575,000
Total	**0**	**0**	**575,000**	**0**	**0**	**575,000**

Project Timeline

Installation Fall of 2027 or spring of 2028

Softener HVAC Replacement

Department: WATER CAPITAL IMPROVEMENT FUND

Project Years: 2028 - 2028

Project Description

Replacement of the rooftop units. We have been cycling through them as parts become obsolete or the maintenance items exceeds the value of the unit. Burners have begun to corrode in recent years.

Project Uses

	2026	2027	2028	2029	2030	Total
	0	0	300,000	0	0	300,000
Total	**0**	**0**	**300,000**	**0**	**0**	**300,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Water Revenue	0	0	300,000	0	0	300,000
Total	**0**	**0**	**300,000**	**0**	**0**	**300,000**

Project Timeline

Spring of 2028

Well 15 rehab and inspection

Department: WATER CAPITAL IMPROVEMENT FUND

Project Years: 2028 - 2028

Project Description

n/a

Project Uses

	2026	2027	2028	2029	2030	Total
well 15 rehab and inspection	0	0	80,000	0	0	80,000
Total	**0**	**0**	**80,000**	**0**	**0**	**80,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	0	80,000	0	0	80,000
Total	**0**	**0**	**80,000**	**0**	**0**	**80,000**

Project Timeline

n/a

WHF HVAC Replacement

Department: WATER CAPITAL IMPROVEMENT FUND

Project Years: 2028 - 2028

Project Description

Replace the original rooftop unit. would be 29 years of use at the time of replacement.

Project Uses

	2026	2027	2028	2029	2030	Total
	0	0	80,000	0	0	80,000
Total	**0**	**0**	**80,000**	**0**	**0**	**80,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Water Revenue	0	0	80,000	0	0	80,000
Total	**0**	**0**	**80,000**	**0**	**0**	**80,000**

Project Timeline

Spring based off contractor's schedule and lead time.

High Lift Pump Station HVAC Replacement

Department: WATER CAPITAL IMPROVEMENT FUND

Project Years: 2029 - 2029

Project Description

Replace the HVAC for the building based off contractor's schedule.

Project Uses

	2026	2027	2028	2029	2030	Total
	0	0	0	215,000	0	215,000
Total	**0**	**0**	**0**	**215,000**	**0**	**215,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Water Revenue	0	0	0	215,000	0	215,000
Total	**0**	**0**	**0**	**215,000**	**0**	**215,000**

Project Timeline

Based off Contractor.

Surge Protection device additions

Department: WATER CAPITAL IMPROVEMENT FUND

Project Years: 2029 - 2029

Project Description

Add electrical protection devices. With all the sensitive electrical components they are prone to failure under surges so this will protect the drives, PLC's, and other sensitive equipment.

Project Uses

	2026	2027	2028	2029	2030	Total
	0	0	0	125,000	0	125,000
Total	**0**	**0**	**0**	**125,000**	**0**	**125,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Water Revenue	0	0	0	125,000	0	125,000
Total	**0**	**0**	**0**	**125,000**	**0**	**125,000**

Project Timeline

Spring based off lead and contractor schedule

WTP Upper Roof Replacement

Department: WATER CAPITAL IMPROVEMENT FUND

Project Years: 2029 - 2029

Project Description

Main Water Plant Roof Replacement.

Project Uses

	2026	2027	2028	2029	2030	Total
	0	0	0	300,000	0	300,000
Total	**0**	**0**	**0**	**300,000**	**0**	**300,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	0	0	300,000	0	300,000
Total	**0**	**0**	**0**	**300,000**	**0**	**300,000**

Project Timeline

Summer of 2029, depending on contractor's schedule.

Dolph Booster Pump Upgrade

Department: WATER CAPITAL IMPROVEMENT FUND

Project Years: 2030 - 2030

Project Description

The current boosters produce a maximum amount of 1350 gallons per minute. To meet the growing demand of the East side of Mankato the boosters will need to be upsized to keep a sufficiently producing third booster station. The upgrade would include the installation of a generator.

Project Uses

	2026	2027	2028	2029	2030	Total
	0	0	0	0	900,000	900,000
Total	**0**	**0**	**0**	**0**	**900,000**	**900,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	0	0	0	900,000	900,000
Total	**0**	**0**	**0**	**0**	**900,000**	**900,000**

Project Timeline

Fall of 2030

Madison Tower Rehab RFP

Department: WATER CAPITAL IMPROVEMENT FUND

Project Years: 2030 - 2030

Project Description

RFP for the design, bidding, and project management of the full wet and dry rehab of the tower.

Project Uses

	2026	2027	2028	2029	2030	Total
	0	0	0	0	50,000	50,000
Total	**0**	**0**	**0**	**0**	**50,000**	**50,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	0	0	0	50,000	50,000
Total	**0**	**0**	**0**	**0**	**50,000**	**50,000**

Project Timeline

Winter/Spring of 2030.

Wastewater Plant Capital Improvement Fund

Wastewater Plant Capital Impr	2026	2027	2028	2029	2030	
Projected Fund Balance	$5,299,412	$6,337,707	$7,913,947	$5,442,250	$7,333,367	
Transfer-In Wastewater	**$2,000,000**	**$2,000,000**	**$2,000,000**	**$2,000,000**	**$2,000,000**	
Blower Reserve - Release			**$1,537,500**			
Available Funds	$ 7,299,412	$ 8,337,707	$ 11,451,447	$ 7,442,250	$ 9,333,367	

Project Title	**2026**	**2027**	**2028**	**2029**	2030	**Total**
Blower Replacement with turbo blowers			$5,300,000			**$5,300,000**
Disc filter panel replacement	$65,000		$68,000			**$133,000**
EQ Tank Propeller Mixers					$85,963	**$85,963**
Influent Pumps VFD replacement	$94,057	$98,760	$103,698	$108,883		**$405,398**
Chlorine Analyzer replacement	$52,648					**$52,648**
20 Year Facility plan			$500,000			**$500,000**
WRF Reclaim pump rebuilds	$50,000		$37,500		$55,000	**$142,500**
WRF Actiflo lamella tube replacement		$325,000				**$325,000**
Secondary Scum Pump station removal	$200,000					**$200,000**
Regional trunk line - engineering work / construction 3rd ave	$500,000					**$500,000**
Total	**$961,705**	**$423,760**	**$6,009,198**	**$108,883**	**$140,963**	**$7,644,508**
Blower Replacement Reserve	$1,537,500	$1,537,500	$0	$0	$0	
Fund Balance	$6,337,707	$7,913,947	$5,442,250	$7,333,367	$9,192,404	
Reserve Target	$ 1,000,000	$ 1,030,000	$ 1,060,000	$ 1,090,000	$ 1,120,000	

CIP Fund Overview 2026

Project Name	Project Year	Project Cost
2025 - Upgrade regional trunk line - Thompson Ravine to WRRF (customer community line)	2026	500,000
Chlorine analyzer replacement	2026	52,648
Disc filter panel replacement 22 - 2028	2026	65,000
Influent VFD replacement	2026	94,057
Reclaim Pump Rebuilds	2026	50,000
Secondary scum station removal	2026	200,000
Total		**961,705**

CIP Fund Overview 2027

Project Name	Project Year	Project Cost
Actiflo Lamella Tube Replacement	2027	325,000
Disc filter panel replacement 22 - 2028	2027	0
Influent VFD replacement	2027	98,760
Reclaim Pump Rebuilds	2027	0
Total		**423,760**

CIP Fund Overview 2028

Project Name	Project Year	Project Cost
20 Year WRRF Facility plan	2028	500,000
2028 - Blower Replacement with turbo blowers	2028	5,300,000
Disc filter panel replacement 22 - 2028	2028	68,000
Influent VFD replacement	2028	103,698
Reclaim Pump Rebuilds	2028	37,500
Total		**6,009,198**

CIP Fund Overview 2029

Project Name	Project Year	Project Cost
Influent VFD replacement	2029	108,883
Reclaim Pump Rebuilds	2029	0
Total		**108,883**

CIP Fund Overview 2030

Project Name	Project Year	Project Cost
EQ Tank Propeller Mixers	2030	85,963
Reclaim Pump Rebuilds	2030	55,000
Total		**140,963**

2025 - Upgrade regional trunk line - Thompson Ravine to WRRF (customer community line)

Department: WASTEWATER PLANT CAPITAL IMPROVEMENT FUND

Project Years: 2026 - 2026

Project Description

Increase the overall size of the interceptor pipe running from Thompson Ravine to Pine street where it enters the WRRF. During the SEH collection study, and the Bolton and Menk / Black and Veatch facility plan, the collection interception entering the WRRF from the east to Thompson Ravine was determined to be a flow bottle neck during high flows. This has the potential cause back-ups of the sanitary system more often then other areas of the city, and have the potential to hinder growth the of the city, as normal usage over the system is over loading sections of the interceptor. Since the development of the reports the execution of the project was to be aligned with road overlays in the area.

Engagement Strategy

Community Investment Plan open house

City website (Community Investment Plan project pages)

Project Uses

	2026	2027	2028	2029	2030	Total
construction	400,000	0	0	0	0	400,000
contingency	0	0	0	0	0	0
engineering	100,000	0	0	0	0	100,000
Materials	0	0	0	0	0	0
Total	**500,000**	**0**	**0**	**0**	**0**	**500,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	500,000	0	0	0	0	500,000
Loan/Bond Proceeds	0	0	0	0	0	0
Total	**500,000**	**0**	**0**	**0**	**0**	**500,000**

Project Timeline

Work with internal engineering staff in 2025 on design plan.

In 2026 install a section of new sanitary pipe along 3rd ave to align with Blue Earth Counties planned reconstruction of the road in 2026.

Chlorine analyzer replacement

Department: WASTEWATER PLANT CAPITAL IMPROVEMENT FUND

Project Years: 2026 - 2026

Project Description

Order new chlorine analyzers for reuse water system.

Remove existing ORP meters to be repurposed in other parts of the plant.

Replumb supply water to new location.

Install new analyzers.

Perform control work to connect new analyzers to SCADA.

Project Uses

	2026	2027	2028	2029	2030	Total
Chlorine analyzers	30,148	0	0	0	0	30,148
Construction install	12,000	0	0	0	0	12,000
Controls adjustment	5,000	0	0	0	0	5,000
Plumbing	5,500	0	0	0	0	5,500
Total	**52,648**	**0**	**0**	**0**	**0**	**52,648**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	52,648	0	0	0	0	52,648
Total	**52,648**	**0**	**0**	**0**	**0**	**52,648**

Project Timeline

- Order equipment Jan 2025
- Install equipment in late spring utilizing onsite contractor for D&D project.

Disc filter panel replacement 22 - 2028

Department: WASTEWATER PLANT CAPITAL IMPROVEMENT FUND

Project Years: 2026 - 2028

Project Description

Mankato's WRRF disc filters focus on removing fine particulates to meet turbidity standards prior to sending water to Mankato Energy Center and Riverfront Park as reuse water. The panels stretch over time thus requiring periodic replacement. Replacement of the panels requires ordering from the filter manufacture, no alternative supplier exists, and installing them with plant personnel. The facility has 4 filters, and replacement will be spread over 4 years to reduce annual impact. afterwards this will enter a 5 year replacement schedule unless usage requires adjustment. Proper filtration is required by permit, and helps reduce chemical costs of disinfection. Costs below are based on last replacement costs in 2018 with a 3% annual price increase.

Project Uses

	2026	2027	2028	2029	2030	Total
Replacement Filter Panels	65,000	0	68,000	0	0	133,000
Total	**65,000**	**0**	**68,000**	**0**	**0**	**133,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	65,000	0	68,000	0	0	133,000
Total	**65,000**	**0**	**68,000**	**0**	**0**	**133,000**

Project Timeline

Panels will be ordered from supplier in December of the year prior to install. Delivery takes 10 - 12 weeks, and will be installed in the spring to avoid peak power demand of summer by Mankato Energy Center.

Influent VFD replacement

Department: WASTEWATER PLANT CAPITAL IMPROVEMENT FUND

Project Years: 2026 - 2029

Project Description

Variable Frequency Drives (VFD's) modulate the current to motors to allow them to run at different speeds, this allows pumps to run at the most efficient energy curve for the motor and plant operations. Replacement of influent pump VFD's would be to swap existing VFD's with new more efficient and capable versions then existing models. Project would not replace any of the pumps or motors at the building VFD's have a 7 to 15 year life expectancy. The influent pump station drives were installed in 2000, and one required replacement in 2010. The current drives are becoming obsolete, and parts are becoming harder to find. Mankato preforms annual inspections on these drives, and intend to replace these drives prior to failure due to the criticality of the drives. The Influent pump station houses 6 main pumps, thus at 1 VFD a year the project would take 6 years to complete. Current regional growth trends indicate capacity of pump station is adequate for next 20 years (as long as inflow and infiltration is programmed to be reduced), thus the new VFD's would fully depreciate prior to replacement.

Project Uses

	2026	2027	2028	2029	2030	Total
Replace 1 VFD drive at IPS	94,057	98,760	103,698	108,883	0	405,398
Total	**94,057**	**98,760**	**103,698**	**108,883**	**0**	**405,398**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	94,057	98,760	103,698	108,883	0	405,398
Total	**94,057**	**98,760**	**103,698**	**108,883**	**0**	**405,398**

Project Timeline

Order drives in spring of the year. Delivery schedule for drives is 25 to 30 weeks. Once on-site Mankato will hire an electrical contractor to install the drives, and an integrator to program the new drives into the facility. First drive replacement is 2023 so work being preformed in the building for the digester upgrade can be done prior to these drives are replaced, which will reduce cost of integration.

Reclaim Pump Rebuilds

Department: WASTEWATER PLANT CAPITAL IMPROVEMENT FUND

Project Years: 2026 - 2030

Project Description

Remove 1 reclaim pump per year to inspect for excessive wear, and repair recommended parts. Pumps were last rebuilt in 2016, so this is keeping with a 10 year rebuild schedule.

Engagement Strategy

na

Project Uses

	2026	2027	2028	2029	2030	Total
Pump Rebuilds	50,000	0	37,500	0	55,000	142,500
Total	**50,000**	**0**	**37,500**	**0**	**55,000**	**142,500**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	50,000	0	37,500	0	55,000	142,500
Total	**50,000**	**0**	**37,500**	**0**	**55,000**	**142,500**

Project Timeline

- Early Spring or late fall of 2026 remove pump for inspection and rebuild. Timing will be dependent on power plant schedule.
- 2026 and 2028 will be 150 hp pump rebuilds
- 2027 and 2029 will be 300 hp pump rebuilds

Secondary scum station removal

Department: WASTEWATER PLANT CAPITAL IMPROVEMENT FUND

Project Years: 2026 - 2026

Project Description

Removal of piping and electrical system for scum removal system near the final clarifiers. Install a drain pipe 50 feet to allow all scum build up to flow back to the front of the plant to offload from new RDT's being installed.

Project Uses

	2026	2027	2028	2029	2030	Total
construction	200,000	0	0	0	0	200,000
Total	**200,000**	**0**	**0**	**0**	**0**	**200,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	200,000	0	0	0	0	200,000
Total	**200,000**	**0**	**0**	**0**	**0**	**200,000**

Project Timeline

- Fall of 2025 design project using Bolton and Menk or Black and Veatch contract.
- Spring / summer - bid project or issue work change direct i vet o Rice Laket o perf or m work.

Actiflo Lamella Tube Replacement

Department: WASTEWATER PLANT CAPITAL IMPROVEMENT FUND

Project Years: 2027 - 2027

Project Description

Replace aging lamella tubes with more efficient version. Lamella tubes are plastic honeycomb shaped media with a varying lifespan around 20 years. The material is starting to show signs of degradation, and there is potential for a more efficient architecture to be explored.

Engagement Strategy

n/a

Project Uses

	2026	2027	2028	2029	2030	Total
Actiflo Lamella Tube Replacement	0	325,000	0	0	0	325,000
Total	**0**	**325,000**	**0**	**0**	**0**	**325,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	325,000	0	0	0	325,000
Total	**0**	**325,000**	**0**	**0**	**0**	**325,000**

Project Timeline

- Winter of 2026 - engineering design
- Spring 2027 - product ordered
- Fall of 2027 - installation during MEC shutdown

20 Year WRRF Facility plan

Department: WASTEWATER PLANT CAPITAL IMPROVEMENT FUND

Project Years: 2028 - 2028

Project Description

Mankato WRRF would request proposals from engineering firms as done in 2015 for the last facility plan. The selected engineering firm would review the facility and over two years produce a 20 year facility plan for the facility as was done in 2017. Mankato WRRF requires accurate and up-to-date facility plan for PFA funding of major capital projects and for permit renewals. Mankato's needs are outpacing the planned replacement schedule indicated in the existing plan , which may require minor adjustments for PFA funding. The timing of the facility plan renewal aligns with the Disinfection and Digestion project and the WRRF entering a permit renewal year allowing for a good recalibration of the existing facility plan and designing future major capital projects for the next 20 years.

Project Uses

	2026	2027	2028	2029	2030	Total
Engineering Design of Facility Plan	0	0	500,000	0	0	500,000
Total	**0**	**0**	**500,000**	**0**	**0**	**500,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	0	500,000	0	0	500,000
Total	**0**	**0**	**500,000**	**0**	**0**	**500,000**

Project Timeline

- Summer of 2025 - internal team prepares scope of project
- Fall of 2025 - Request for bids based on internal scope goes out
- Spring of 2026 - Engineer selected and design starts
- Winter of 2026 - Facility plan completed

2028 - Blower Replacement with turbo blowers

Department: WASTEWATER PLANT CAPITAL IMPROVEMENT FUND

Project Years: 2028 - 2028

Project Description

Current blowers would be replaced with high efficiency turbo blowers to reduce overall electrical costs, and be sized in preparation for biological nutrient removal in the future. Current blowers are highly inefficient, and current turbo blowers are around 6 years ROI. The current blowers will be rebuilt by end of 2022 and are rebuilt every 6 to 8 years. Capital in years prior to 2029 is being allocated to pay for blowers. If it was determined to change this to an ESCO based project, funds saved can be allocated to the initial startup of the project.

Engagement Strategy

- Community Investment Plan open house
- City website (Community Investment Plan project pages)

Project Uses

	2026	2027	2028	2029	2030	Total
Equipment	0	0	5,300,000	0	0	5,300,000
Total	**0**	**0**	**5,300,000**	**0**	**0**	**5,300,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	0	5,300,000	0	0	5,300,000
Total	**0**	**0**	**5,300,000**	**0**	**0**	**5,300,000**

Project Timeline

- 2025 - 2026 - RFQ an engineering firm to begin design work on the turbo blowers
- 2027 - bid project
- 2027 - 2028 - construction

EQ Tank Propeller Mixers

Department: WASTEWATER PLANT CAPITAL IMPROVEMENT FUND

Project Years: 2030 - 2030

Project Description

Installation of three submersible propeller mixers into one equalization tank. The mixers would allow settled solids to stay in suspension thus reducing treatment impacts at the facility. Includes mounting equipment, installation costs, motors, and mixers. Does not include electrical costs for installation, which will be paid from line item budget.The WRRF equalization tanks have been actively used for the past 5 years to modulate for entering the facility. The equalization allows for reduced chemical usage in the plant, to maintain adequate water supply for the power plant, and to reduce shock loading to the biological process at the plant. The current mixers are too small to function, and technology has changed drastically in regards to mixing technologies.

Project Uses

	2026	2027	2028	2029	2030	Total
Consulting	0	0	0	0	30,963	30,963
Mixing Equipment and installation	0	0	0	0	55,000	55,000
Total	**0**	**0**	**0**	**0**	**85,963**	**85,963**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	0	0	0	85,963	85,963
Total	**0**	**0**	**0**	**0**	**85,963**	**85,963**

Project Timeline

- Project moved to post facility plan in 2026.
- Will update timeline in 2027 budget input.

WW Collections Capital Improvement Fund

Sewer Collection Capital	2026	2027	2028	2029	2030
Projected Fund Balance	$198,001	$398,001	$598,001	$798,001	$998,001
Transfer-In Sewer Capital	$200,000	$200,000	$200,000	$200,000	$200,000
Available Funds	$ 398,001	$ 598,001	$ 798,001	$ 998,001	$ 1,198,001

Project Title	2026	2027	2028	2029	2030	Total
Total	**$0.00**	**$0.00**	**$0.00**	**$0.00**		**$0.00**

Fund Balance	$ 398,001	$ 598,001	$ 798,001	$ 998,001	$ 1,198,001
Reserve Target	$ 500,000	$ 515,000	$ 530,000	$ 545,000	$ 560,000

Stormwater Capital Fund

Stormwater Capital	2026	2027	2028	2029	2030
Projected Fund Balance	$2,862,647	$2,914,660	$3,639,660	$2,881,534	$2,833,928
Transfer-In Stormwater	$850,000	$925,000	$950,000	$850,000	$850,000
Available Funds	$3,712,647	$3,839,660	$4,589,660	$3,731,534	$3,683,928

Project Title	2026	2027	2028	2029	2030	Total	Illustrative
Honeymead Pump Station Facility & Electrical	$697,988					**$697,988**	
Indian Creek Pump Station Facility & Electrical		$100,000	$1,508,126			**$1,608,126**	
Mulberry Pumping Station Facility & Electrical			$100,000	$797,606		**$897,606**	
Warren Creek Facility & Electrical						**$0**	$1,523,833
Private Property BMPs	$100,000	$100,000	$100,000	$100,000		**$400,000**	
Total	**$797,988**	**$200,000**	**$1,708,126**	**$897,606**	**$0**	**$3,603,719**	$1,523,833
Fund Balance	$2,914,660	$3,639,660	$2,881,534	$2,833,928	$3,683,928		
Reserve Target	$ 1,750,000	$ 2,000,000	$ 2,060,000	$ 2,120,000	$ 2,180,000		

CIP Fund Overview 2026

Project Name	Project Year	Project Cost
Honeymead Pump Station Facility & Electrical	2026	697,988
Private Property BMPs	2026	100,000
Total		**797,988**

CIP Fund Overview 2027

Project Name	Project Year	Project Cost
Indian Creek Pump Station Facility & Electrical	2027	100,000
Private Property BMPs	2027	100,000
Total		**200,000**

CIP Fund Overview 2028

Project Name	Project Year	Project Cost
Indian Creek Pump Station Facility & Electrical	2028	1,508,126
Mulberry Pumping Station Facility & Electrical	2028	100,000
Private Property BMPs	2028	100,000
Total		**1,708,126**

CIP Fund Overview 2029

Project Name	Project Year	Project Cost
Mulberry Pumping Station Facility & Electrical	2029	797,606
Private Property BMPs	2029	100,000
Total		**897,606**

Illustrative CIP Fund Overview

Project Name	Project Year	Project Cost
Warren Creek Facility & Electrical	2030	1,523,833
Total		**1,523,833**

Honeymead Pump Station Facility & Electrical

Department: STORMWATER CAPITAL FUND

Project Years: 2026 - 2026

Project Description

Honeymead Pump Station is located adjacent to Sibley Park, at the intersection of Spence Street and West 3rd Street. It is part of the USACE Stage 2 drainage area, which is approximately 293 acres in size, and includes the area tributary to three storm water pump stations, including the Le Hillier East pump station and the Le Hillier West pump station. Of the three, only the Honeymead pump station is located within the City of Mankato. The Honeymead pump station has three vertical turbine pumps, with a design capacity of 52,400 gallons per minute (gpm)/

Several deficiencies were noted in the station. These included structural deterioration in the building components and electrical issues that need to be addressed to ensure the reliability of the station. The detail of the deterioration and reliability issues are noted in the 2017 Flood Risk Reduction System Pump Station Modernization Study performed by SEH. This project is being proposed to be done as a Section 208 project with the US Army Corps of engineering. This may allow for additional outside funding from the Corps, but the amount will not be determined until the Section 208 application is submitted 18 months before the start of the project.

Engagement Strategy

- Community Investment Plan open house
- City website (Community Investment Plan project pages)
- Other

Project Uses

	2026	2027	2028	2029	2030	Total
Construction	628,189	0	0	0	0	628,189
Contingency	69,799	0	0	0	0	69,799
Engineering	0	0	0	0	0	0
Total	**697,988**	**0**	**0**	**0**	**0**	**697,988**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Stormwater Revenue	697,988	0	0	0	0	697,988
Total	**697,988**	**0**	**0**	**0**	**0**	**697,988**

Project Timeline

This project will be design the year prior to construction and submitted to COE for approval for construction in the project year.

Private Property BMPs

Department: STORMWATER CAPITAL FUND

Project Years: 2026 - 2029

Project Description

As a part of the Surface Water Management Policy, a cost sharing program for property owners has been established. This program provides a public contribution to private improvements that are on surface water conveyances that carry public water. In order to promote improvements along surface waters a cost sharing program was established as a part of the Surface Water Management Policy. By promoting private investment along surface waters conveying public drainage property owner will be able to achieve the desired level of service of an improvement should for private property.

Engagement Strategy

- Community Investment Plan open house
- City website (Community Investment Plan project pages)
- Other

Project Uses

	2026	2027	2028	2029	2030	Total
BMPs	100,000	100,000	100,000	100,000	0	400,000
Total	**100,000**	**100,000**	**100,000**	**100,000**	**0**	**400,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	100,000	100,000	100,000	100,000	0	400,000
Total	**100,000**	**100,000**	**100,000**	**100,000**	**0**	**400,000**

Project Timeline

The timeline is developed for individual projects as they are submitted.

Indian Creek Pump Station Facility & Electrical

Department: STORMWATER CAPITAL FUND

Project Years: 2027 - 2028

Project Description

The Indian Creek Pump Station is located near the intersection of Poplar Street and Sibley Parkway. The total drainage area of the Indian Creek pump station is approximately 5,720 acres. The station has four vertical turbine pumps with a design capacity of 136,000 gpm. Several deficiencies were noted in the station. These included structural deterioration in the building components and electrical issues that need to be addressed to ensure the reliability of the station. The detail of the deterioration and reliability issues are noted in the 2017 Flood Risk Reduction System Pump Station Modernization Study performed by SEH. This project is being proposed to be done as a Section 208 project with the US Army Corps of engineering.

Engagement Strategy

- Community Investment Plan open house
- City website (Community Investment Plan project pages)

Project Uses

	2026	2027	2028	2029	2030	Total
Construction	0	0	1,357,314	0	0	1,357,314
Contingency	0	0	150,812	0	0	150,812
Engineering	0	100,000	0	0	0	100,000
Total	**0**	**100,000**	**1,508,126**	**0**	**0**	**1,608,126**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Stormwater Revenue	0	100,000	1,508,126	0	0	1,608,126
Total	**0**	**100,000**	**1,508,126**	**0**	**0**	**1,608,126**

Project Timeline

- January – Feasibility
- March – Bid
- May – Construction
- October – Project completion

Mulberry Pumping Station Facility & Electrical

Department: STORMWATER CAPITAL FUND

Project Years: 2028 - 2029

Project Description

Mulberry Pump Station is located north of the Mulberry Street bridge.

Several deficiencies were noted in the station. These included structural deterioration in the building components and electrical issues that need to be addressed to ensure the reliability of the station. The detail of the deterioration and reliability issues are noted in the 2017 Flood Risk Reduction System Pump Station Modernization Study performed by SEH. This project is being proposed to be done as a Section 208 project with the US Army Corps of engineering. This may allow for additional outside funding from the Corps, but the amount will not be determined until the Section 208 application is submitted 18 months before the start of the project.

Engagement Strategy

- Community Investment Plan open house
- City website (Community Investment Plan project pages)
- Other

Project Uses

	2026	2027	2028	2029	2030	Total
Pump Station Improvements	0	0	100,000	797,606	0	897,606
Total	**0**	**0**	**100,000**	**797,606**	**0**	**897,606**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	0	100,000	797,606	0	897,606
Total	**0**	**0**	**100,000**	**797,606**	**0**	**897,606**

Project Timeline

This project will be design the year prior to construction and submitted to COE for approval for construction in the project year.

Sales Tax CIP

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Sales Tax - Airport

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Airport Capital Improvement Fund	2026	2027	2028	2029	2030		
Projected Fund Balance	($118,650)	($563,275)	($569,125)	($914,025)	($1,128,025)		
Transfer-In Airport	$432,000	$440,000	$448,000	$456,000	$456,000		
Available Funds	$ 313,350	$ (123,275)	$ (121,125)	$ (458,025)	$ (672,025)		
Project Title	**2026**	**2027**	**2028**	**2029**	**2030**	**Total**	Illustrative
Acquire Airport Tractor/Mower		(37,500)				**(37,500)**	
Runway 04-22 Shift Planning Study	(1,250)					**(1,250)**	
Air Traffic Control Tower Construction	(632,550)					**(632,550)**	
Flail Mower Attachment		(39,000)				**(39,000)**	
Acquire Snow Removal Equipment (SRE) Loader and Plow	(11,250)					**(11,250)**	
Acquire Snow Removal Equipment (SRE) Self Propelled Snowblower		(18,750)				**(18,750)**	
Parking Lot/Entrance Road Pavement Rehabilitation	(90,000)					**(90,000)**	
Runway 04-22 Shift Environmental Assessment		(7,500)				**(7,500)**	
Runway 04/22 Shift / Temporary Extension Design			(15,000)			**(15,000)**	
Runway 04/22 Shift, Reconstruction, Runway Lighting & Signage			(359,625)			**(359,625)**	
Runway 15/33 Pavement Reconstruction				(300,000)		**(300,000)**	
Runway 15/33 Rehabilitate Runway Lights				(75,000)		**(75,000)**	
Taxiway A/D/E Intersection Reconstruction	(29,000)					**(29,000)**	
Construct Wildlife Fencing					(112,500)	**(112,500)**	
Construct Service Road					(45,000)	**(45,000)**	
Replace Airfield Electrical Vault				(10,000)		**(10,000)**	
Taxilane Pavement Reconstruction J/K/N/O/P/Q		(243,100)				**(243,100)**	
Taxiway A Reconstruction				(125,000)		**(125,000)**	
Runway Protection Zone (RPZ) Land Acquisition			(6,250)			**(6,250)**	
Taxiway B Reconstruction			(192,025)			**(192,025)**	
Acquire Snow Removal Equipment (SRE) - Boom Truck with Jets			(120,000)			**(120,000)**	
3030 S Airport Rd Hangar (Piston Shop) Roof Replacement				(160,000)		**(160,000)**	
Relocate Airport Beacon	(10,500)					**(10,500)**	
Overhead Door Maintenance	(40,000)	(50,000)	(30,000)		(50,000)	**(170,000)**	
Heater & Exhaust Fan Replacement	(30,000)		(30,000)		(30,000)	**(90,000)**	
Airport Facility Rekey & Hardware Replacement	(30,000)	(50,000)	(40,000)		(20,000)	**(140,000)**	
Enhanced Taxiway Markings (Part 139)	(2,075)					**(2,075)**	
Airport Terminal HVAC Replacement						-	(1,200,000)
Airport Terminal Roof Replacement						-	(960,000)
Total	**(876,625)**	**(445,850)**	**(792,900)**	**(670,000)**	**(257,500)**	**(3,042,875)**	**($2,160,000)**
Fund Balance	($563,275)	($569,125)	($914,025)	($1,128,025)	($929,525)		

CIP Fund Overview 2026

Project Name	Project Year	Project Cost
Acquire Snow Removal Equipment (SRE) Loader and Plow	2026	450,000
Construct New Federal Contract Airport Traffic Control Tower	2026	25,302,000
Enhanced Taxiway Markings (Part 139)	2026	83,000
Mankato Regional Airport - Airport Facility Rekey	2026	30,000
Mankato Regional Airport - Heater & Exhaust Fan Replacement	2026	30,000
Mankato Regional Airport - Overhead Door Maintenance	2026	40,000
Parking Lot / Entrance Road Pavement Rehabilitation	2026	300,000
Runway 04-22 Shift Planning Study	2026	50,000
Taxiway A/D/E Intersection Reconstruction	2026	1,160,000
Total		**27,445,000**

CIP Fund Overview 2027

Project Name	Project Year	Project Cost
Acquire Airport Tractor/Mower	2027	125,000
Acquire Flail Mower Attachment	2027	130,000
Acquire Snow Removal Equipment (SRE) Self Propelled Snowblower	2027	750,000
Mankato Regional Airport - Airport Facility Rekey	2027	50,000
Mankato Regional Airport - Heater & Exhaust Fan Replacement	2027	0
Mankato Regional Airport - Overhead Door Maintenance	2027	50,000
Runway 04-22 Shift Environmental Assessment	2027	150,000
Taxi Lanes J/K/N/O/P/Q Pavement Rehabilitation	2027	1,104,900
Total		**2,359,900**

CIP Fund Overview 2028

Project Name	Project Year	Project Cost
Acquire Snow Removal Equipment (SRE) - Boom Truck with Jets	2028	400,000
Mankato Regional Airport - Airport Facility Rekey	2028	40,000
Mankato Regional Airport - Heater & Exhaust Fan Replacement	2028	30,000
Mankato Regional Airport - Overhead Door Maintenance	2028	30,000
Runway 04-22 Shift / Temporary Extension Design	2028	300,000
Runway 04/22 Shift, Reconstruction, Runway Lighting & Signage	2028	7,192,500
Runway Protection Zone (RPZ) Land Acquisition	2028	125,000
Taxiway B Reconstruction	2028	2,226,376
Total		**10,343,876**

CIP Fund Overview 2029

Project Name	Project Year	Project Cost
3030 S Airport Rd Hangar (Piston Shop) Roof Replacement	2029	160,000
Mankato Regional Airport - Airport Facility Rekey	2029	0
Mankato Regional Airport - Heater & Exhaust Fan Replacement	2029	0
Mankato Regional Airport - Overhead Door Maintenance	2029	0
Rehabilitate Airfield Electrical Vault	2029	200,000
Runway 15/33 Pavement Reconstruction	2029	6,000,000
Runway 15/33 Rehabilitate Runway Lights	2029	1,500,000
Taxiway A Reconstruction	2029	2,500,000
Total		**10,360,000**

CIP Fund Overview 2030

Project Name	Project Year	Project Cost
Construct Service Road	2030	900,000
Construct Wildlife Fencing	2030	2,250,000
Mankato Regional Airport - Airport Facility Rekey	2030	20,000
Mankato Regional Airport - Heater & Exhaust Fan Replacement	2030	30,000
Mankato Regional Airport - Overhead Door Maintenance	2030	50,000
Total		**3,250,000**

Illustrative CIP Fund Overview

Project Name	Project Year	Project Cost
Airport Terminal HVAC Replacement	2030	1,200,000
Airport Terminal Roof Replacement	2030	960,000
Total		**2,160,000**

Acquire Snow Removal Equipment (SRE) Loader and Plow

Department: SALES TAX - AIRPORT

Project Years: 2026 - 2026

Project Description

Replace Snow Removal Equipment (SRE) - Loader and Plow Unit #91. Price confirmed by Ben Sparks 5/29/2025. (SS)

Project Uses

	2026	2027	2028	2029	2030	Total
Snow REmoval Equipment (SRE) Loader and Plow	450,000	0	0	0	0	450,000
Total	**450,000**	**0**	**0**	**0**	**0**	**450,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	11,250	0	0	0	0	11,250
Federal Funding	427,500	0	0	0	0	427,500
State Funding	11,250	0	0	0	0	11,250
Total	**450,000**	**0**	**0**	**0**	**0**	**450,000**

Project Timeline

n/a

Construct New Federal Contract Airport Traffic Control Tower

Department: SALES TAX - AIRPORT

Project Years: 2026 - 2026

Project Description

Construct a new federal contract Airport Traffic Control Tower. Includes Construction $18,089,000, Design Contingency $2,713,000, Equipment $1,500,000 and Engineering $3,000,000 (ss)

Project Uses

	2026	2027	2028	2029	2030	Total
Construct New Federal Contract Airport Traffic Control Tower	25,302,000	0	0	0	0	25,302,000
Total	**25,302,000**	**0**	**0**	**0**	**0**	**25,302,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	632,550	0	0	0	0	632,550
Federal Funding	24,036,900	0	0	0	0	24,036,900
State Funding	632,550	0	0	0	0	632,550
Total	**25,302,000**	**0**	**0**	**0**	**0**	**25,302,000**

Project Timeline

n/a

Enhanced Taxiway Markings (Part 139)

Department: SALES TAX - AIRPORT

Project Years: 2026 - 2026

Project Description

Enhanced taxiway markings are intended to provide additional visual cues to taxiing pilots to help them identify the location of the runway holding position as a runway incursion prevention initiative. For Part 139 airports, all taxiways that intersect a runway must have an enhanced taxiway centerline marking. Includes Construction $62,000, Engineering $16,000, and Administrative Costs $5,000. (ss)

Project Uses

	2026	2027	2028	2029	2030	Total
Enhanced Taxiway Marking (Part 139)	83,000	0	0	0	0	83,000
Total	**83,000**	**0**	**0**	**0**	**0**	**83,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Federal Funding	78,850	0	0	0	0	78,850
Sales Tax	2,075	0	0	0	0	2,075
State Funding	2,075	0	0	0	0	2,075
Total	**83,000**	**0**	**0**	**0**	**0**	**83,000**

Project Timeline

Federal Fiscal Grant Year 2026

Mankato Regional Airport - Airport Facility Rekey

Department: SALES TAX - AIRPORT

Project Years: 2026 - 2030

Project Description

Rekey of the entire airport complex - multi year project. There are over 75 hangar units on the airfield. A rekey of the airport facility is needed to bring the complex into conformity with the city wide keying system currently in place. This will also allow updates to failed door hardware and simplify the keying structure to make it easier for staff to identify the correct key. With the addition of the air traffic control tower and FAA staff on site daily, security and access control will need to be increased from the current levels.

Project Uses

	2026	2027	2028	2029	2030	Total
Airport rekey	30,000	50,000	40,000	0	20,000	140,000
Total	**30,000**	**50,000**	**40,000**	**0**	**20,000**	**140,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Sales Tax	30,000	50,000	40,000	0	20,000	140,000
Total	**30,000**	**50,000**	**40,000**	**0**	**20,000**	**140,000**

Project Timeline

Phased approach with work completed in the summer months as time allows.

Mankato Regional Airport - Heater & Exhaust Fan Replacement

Department: SALES TAX - AIRPORT

Project Years: 2026 - 2030

Project Description

Multi year project to replace failing mechanical equipment in Airport buildings Many of the heaters and exhaust fans in the hangers and ancillary buildings at the Mankato Regional Airport are past or nearing the end of their useful life. Maintenance costs are increasing and spare parts are becoming more difficult to acquire. A replacement schedule is being developed for the equipment to prevent service interruption in the event of a failure. New equipment will be placed on a regular preventative maintenance schedule to ensure a long service life.

Engagement Strategy

- City projects, including sales tax items.
- Community Investment Plan open house.
- City website (Community Investment Plan project pages)

Project Uses

	2026	2027	2028	2029	2030	Total
Heater & Exhaust Fan Replacement	30,000	0	30,000	0	30,000	90,000
Total	**30,000**	**0**	**30,000**	**0**	**30,000**	**90,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Sales Tax	30,000	0	30,000	0	30,000	90,000
Total	**30,000**	**0**	**30,000**	**0**	**30,000**	**90,000**

Project Timeline

Replacements would take place in the summer months of each project year.

Mankato Regional Airport - Overhead Door Maintenance

Department: SALES TAX - AIRPORT

Project Years: 2026 - 2030

Project Description

Replacement of failing overhead and hanger door components and installation of additional safety devices. A majority of the overhead and hanger door hardware and mechanisms date to the time of construction for each of the buildings, some dating back 40+ years. A significant number of failures have occurred in the last few years with several near accidents. A significant investment is needed to restore the doors to a safe operating condition. Additional safety features will be installed on the highest use doors.

Engagement Strategy

City projects, including sales tax items. Community Investment Plan open house. City website (Community Investment Plan project pages).

Project Uses

	2026	2027	2028	2029	2030	Total
Door maintenance	40,000	50,000	30,000	0	50,000	170,000
Total	**40,000**	**50,000**	**30,000**	**0**	**50,000**	**170,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	40,000	50,000	30,000	0	50,000	170,000
Total	**40,000**	**50,000**	**30,000**	**0**	**50,000**	**170,000**

Project Timeline

Repairs will be made each spring/summer.

Parking Lot / Entrance Road Pavement Rehabilitation

Department: SALES TAX - AIRPORT

Project Years: 2026 - 2026

Project Description

Landside improvements to rehabilitate the Airport Parking Lot / Airport Entrance Road Pavement. (SS)

Project Uses

	2026	2027	2028	2029	2030	Total
Rehabilitate the Airport Parking Lot / Airport Entrance Road Pavement.	300,000	0	0	0	0	300,000
Total	**300,000**	**0**	**0**	**0**	**0**	**300,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Sales Tax	90,000	0	0	0	0	90,000
State Funding	210,000	0	0	0	0	210,000
Total	**300,000**	**0**	**0**	**0**	**0**	**300,000**

Project Timeline

N/A

Runway 04-22 Shift Planning Study

Department: SALES TAX - AIRPORT

Project Years: 2026 - 2026

Project Description

Sequenced part of the Runway 04/22 Shift / Temporary Extension (400') Project. The project has been delayed to later years on account of the Airport Traffic Control Tower project. (SS)

Project Uses

	2026	2027	2028	2029	2030	Total
Runway 04-22 Shift Planning Study	50,000	0	0	0	0	50,000
Total	**50,000**	**0**	**0**	**0**	**0**	**50,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Federal Funding	47,500	0	0	0	0	47,500
Sales Tax	1,250	0	0	0	0	1,250
State Funding	1,250	0	0	0	0	1,250
Total	**50,000**	**0**	**0**	**0**	**0**	**50,000**

Project Timeline

n/a

Taxiway A/D/E Intersection Reconstruction

Department: SALES TAX - AIRPORT

Project Years: 2026 - 2026

Project Description

Reconstruct the intersection of Taxiway A/D/E to improve safety of the intersection, improve the movement of non-aircraft, and recondition the pavement. Includes Construction $985,000, Engineering $170,000, and Administrative $5,000 (SS)

Project Uses

	2026	2027	2028	2029	2030	Total
Taxiway A/D/E Intersection Reconstruction	1,160,000	0	0	0	0	1,160,000
Total	**1,160,000**	**0**	**0**	**0**	**0**	**1,160,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Federal Funding	1,102,000	0	0	0	0	1,102,000
Sales Tax	29,000	0	0	0	0	29,000
State Funding	29,000	0	0	0	0	29,000
Total	**1,160,000**	**0**	**0**	**0**	**0**	**1,160,000**

Project Timeline

N/A

Acquire Airport Tractor/Mower

Department: SALES TAX - AIRPORT

Project Years: 2027 - 2027

Project Description

Acquire Airport tractor/mower to replace unit #95. This tractor/mower would be a replacement unit for one of the current tractors at the airport. This piece of equipment is primarily used for mowing in the summer months. Purchase dependent on receiving a MNDOT grant.

Engagement Strategy

City projects, including sales tax items. Community Investment Plan open house. City website (Community Investment Plan project pages

Project Uses

	2026	2027	2028	2029	2030	Total
Acquire tractor/mower	0	125,000	0	0	0	125,000
Total	**0**	**125,000**	**0**	**0**	**0**	**125,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	37,500	0	0	0	37,500
State Funding	0	87,500	0	0	0	87,500
Total	**0**	**125,000**	**0**	**0**	**0**	**125,000**

Project Timeline

Depending upon grant timelines (SS)

Acquire Flail Mower Attachment

Department: SALES TAX - AIRPORT

Project Years: 2027 - 2027

Project Description

Acquire flail mower attachment for airport tractor. A flail mower attachment for the airport tractor would be a new piece of equipment. The flail mower is used for cutting larger brush and vegetation that would not be able to be cut with a standard rotary mower. This would allow for more cost effective maintenance of some of the areas on the airport grounds to be maintained vs. using manpower to cut back brush.

Purchase dependent on receiving a MNDOT grant.

Engagement Strategy

City projects, including sales tax items. Community Investment Plan open house. City website (Community Investment Plan project pages.

Project Uses

	2026	2027	2028	2029	2030	Total
Acquire flail mower attachment	0	130,000	0	0	0	130,000
Total	**0**	**130,000**	**0**	**0**	**0**	**130,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	39,000	0	0	0	39,000
State Funding	0	91,000	0	0	0	91,000
Total	**0**	**130,000**	**0**	**0**	**0**	**130,000**

Project Timeline

Depends upon State Grant timelines

Acquire Snow Removal Equipment (SRE) Self Propelled Snow-blower

Department: SALES TAX - AIRPORT

Project Years: 2027 - 2027

Project Description

Acquire Snow Removal Equipment (SRE) Self Propelled Snowblower to replace Unit #93

Project Uses

	2026	2027	2028	2029	2030	Total
Acquire SRE	0	750,000	0	0	0	750,000
Total	**0**	**750,000**	**0**	**0**	**0**	**750,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	18,750	0	0	0	18,750
Federal Funding	0	712,500	0	0	0	712,500
State Funding	0	18,750	0	0	0	18,750
Total	**0**	**750,000**	**0**	**0**	**0**	**750,000**

Project Timeline

na

Runway 04-22 Shift Environmental Assessment

Department: SALES TAX - AIRPORT

Project Years: 2027 - 2027

Project Description

Sequenced part of the Runway 04/22 Shift / Temporary Extension (400') Project. The project has been delayed to later years on account of the Airport Traffic Control Tower project. (SS)

Project Uses

	2026	2027	2028	2029	2030	Total
Runway 04-22 Shift Environmental Assessment	0	150,000	0	0	0	150,000
Total	**0**	**150,000**	**0**	**0**	**0**	**150,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Federal Funding	0	135,000	0	0	0	135,000
Sales Tax	0	7,500	0	0	0	7,500
State Funding	0	7,500	0	0	0	7,500
Total	**0**	**150,000**	**0**	**0**	**0**	**150,000**

Project Timeline

n/a

Taxi Lanes J/K/N/O/P/Q Pavement Rehabilitation

Department: SALES TAX - AIRPORT

Project Years: 2027 - 2027

Project Description

Provides for the rehabilitation of Taxi Lanes J, K, N, O, P, and Q to extend the useful life. Work will include removal, asphalt paving, and pavement markings. Includes Construction $930,000, Engineering $170,000, and Administrative $5,000 (ss)

Project Uses

	2026	2027	2028	2029	2030	Total
Taxi Lanes J, K, N, O, P and Q Rehabilitation	0	1,104,900	0	0	0	1,104,900
Total	**0**	**1,104,900**	**0**	**0**	**0**	**1,104,900**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Federal Funding	0	318,240	0	0	0	318,240
Sales Tax	0	243,000	0	0	0	243,000
State Funding	0	543,660	0	0	0	543,660
Total	**0**	**1,104,900**	**0**	**0**	**0**	**1,104,900**

Project Timeline

n/a

Acquire Snow Removal Equipment (SRE) - Boom Truck with Jets

Department: SALES TAX - AIRPORT

Project Years: 2028 - 2028

Project Description

N/A

Project Uses

	2026	2027	2028	2029	2030	Total
Snow Removal Equipment	0	0	400,000	0	0	400,000
Total	**0**	**0**	**400,000**	**0**	**0**	**400,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	0	120,000	0	0	120,000
State Funding	0	0	280,000	0	0	280,000
Total	**0**	**0**	**400,000**	**0**	**0**	**400,000**

Project Timeline

N/A

Runway 04-22 Shift / Temporary Extension Design

Department: SALES TAX - AIRPORT

Project Years: 2028 - 2028

Project Description

Sequenced part of the Runway 04/22 Shift / Temporary Extension (400') Project. The project has been delayed to later years on account of the Airport Traffic Control Tower project. (SS)

Originally stated: As part of the 2027 04/22 runway shift design work needs to be completed.

Project Uses

	2026	2027	2028	2029	2030	Total
Design	0	0	300,000	0	0	300,000
Total	**0**	**0**	**300,000**	**0**	**0**	**300,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	0	15,000	0	0	15,000
Federal Funding	0	0	270,000	0	0	270,000
State Funding	0	0	15,000	0	0	15,000
Total	**0**	**0**	**300,000**	**0**	**0**	**300,000**

Project Timeline

N/A

Runway 04/22 Shift, Reconstruction, Runway Lighting & Signage

Department: SALES TAX - AIRPORT

Project Years: 2028 - 2028

Project Description

This multi-year project seeks to improve the runway visibility zone (RVZ) by shifting Runway 04/22 400-feet to the northwest, replace the Runway End Identifier Lights (REIL) Lights / Precision Approach Path Indicator (PAPI), runway lights, and reconstruct the remaining 4,000-feet of runway pavement. Runway 15-33 was extended in 2007 from 5,400 feet to 6,600 feet. However, with the extension, the line-of-sight points associated with Runways 15/33 and 04/22 shifted the runway visibility zone (RVZ) onto the terminal apron. As a result, use of the apron for aircraft parking is not allowed since it would impede the line-of-sight requirements. According to AC 150/5300-13A, a modification to this requirement may be approved if an acceptable level of safety is maintained as a result of:

"1) the airport has a 24-hour control tower; and 2) the operation of the control tower will continue based on acceptable activity forecasts."

Thus, to allow for use of the terminal apron (Apron A) for flight training, corporate and potential charter operations, a modification of the RVZ is needed. Options considered as part of the alternatives analysis include: 1) No build 2) Reconfigure apron parking area geometry/parking areas, 3) Shift Runway 04/22 Northeast by 200 feet, 4) Shift Runway 04/22 Northeast by 400 feet, and/or 5) Shift Runway 04/22 Northeast by 1,114-feet. The preferred long-term RVZ mitigation alternative is Option 4 to shift Runway 4-22 by 400 feet to the northeast to allow for existing and a reasonable future apron expansion without parked aircraft within the RVZ. A short-term interim solution is Option 1, which would allow the airport to meet design standards but reduce capacity and convenience. Other options did not improve apron utility significantly or result in a higher development cost. Option 4 provides a reasonable balance between cost and utility. This project will be reevaluated pending the outcome and timeline of the FAA Air Traffic Control Tower but will most likely still be needed as the tower will not be in operation 24-hours a day.

Engagement Strategy

Community projects, including sales tax items. Community Investment Plan open house (future opportunities--detailed on overall Community Investment Plan communications and engagement action plan). City website (Community Investment Plan project pages and respective webpage). Direct mail to area residents living near project. Focus groups. Pop-up events. Informational materials (print and electronic). Online newsletter. News release and email notification asking for input. Utility insert. Online engagement tools. Surveys (online). Online city calendar. Social media Video. Other. City projects, including sales tax items. Community Investment Plan open house. City website (Community Investment Plan project pages).

Project Uses

	2026	2027	2028	2029	2030	Total
Pavement Reconstruction	0	0	4,303,000	0	0	4,303,000
Reconstruct Runway Signage	0	0	245,000	0	0	245,000
Rehabilitate Runway Lights	0	0	882,000	0	0	882,000
REIL/PAPI Light Replacement	0	0	291,000	0	0	291,000
Shift/Temporary Extension	0	0	1,471,500	0	0	1,471,500
Total	**0**	**0**	**7,192,500**	**0**	**0**	**7,192,500**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	0	359,625	0	0	359,625
Federal Funding	0	0	6,473,250	0	0	6,473,250
State Funding	0	0	359,625	0	0	359,625
Total	**0**	**0**	**7,192,500**	**0**	**0**	**7,192,500**

Project Timeline

Timeline does not accurately reflect the delayed implementation of the project; however, the sequence is valid. (SS)

- 2023 - Master Plan Update Required (Triggering Event)
- 2025 - Environmental Assessment
- 2026 - Land Acquisition- Runway 22 Approach (Parcel 15C- 6.6 ac)
- 2026 - Runway 04/22 Shift / Temporary Extension (400') Design
- 2027 - Runway 04/22 Shift / Temporary Extension (400') Construction
- 2027 - Runway 04/22 REIL/PAPI Replacement
- 2027 - Replace 04/22 Runway Lights
- 2027 - Runway 04/22 Pavement Reconstruction

Runway Protection Zone (RPZ) Land Acquisition

Department: SALES TAX - AIRPORT

Project Years: 2028 - 2028

Project Description

Land acquisition of parcel 15C totaling 1.2 acres and 15B totaling 5.4 acres in order to accomplish runway 04/22 shift and temporary extension. Identified in the Masterplan to improve the runway protection zone.

This is a change from the previous acquisition entry of 3C and 22A totaling 4.8 acres because they are not associated with runway 04/22 (SS)

Engagement Strategy

Community projects, including sales tax items. Community Investment Plan open house (future opportunities--detailed on overall Community Investment Plan communications and engagement action plan). City website (Community Investment Plan project pages and respective webpage). Direct mail to area residents living near project. Focus groups. Pop-up events. Informational materials (print and electronic). Online newsletter. News release and email notification asking for input. Utility insert. Online engagement tools. Surveys (online). Online city calendar. Social media Video. Other. City projects, including sales tax items. Community Investment Plan open house. City website (Community Investment Plan project pages).

Project Uses

	2026	2027	2028	2029	2030	Total
Acquire Parcel 15C (6.6 ac)	0	0	125,000	0	0	125,000
Total	**0**	**0**	**125,000**	**0**	**0**	**125,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	0	6,250	0	0	6,250
Federal Funding	0	0	112,500	0	0	112,500
State Funding	0	0	6,250	0	0	6,250
Total	**0**	**0**	**125,000**	**0**	**0**	**125,000**

Project Timeline

2028 - Acquire parcel - Originally scheduled for 2026, the entire project has shifted to later years due to the Airport Traffic Control Tower Project (SS)

Taxiway B Reconstruction

Department: SALES TAX - AIRPORT

Project Years: 2028 - 2028

Project Description

Associated with Runway 04/22 Shift restores full useful life.

Includes Construction $1,954,810 Engineering $266,565 Admin $5,000 (ss)

Project Uses

	2026	2027	2028	2029	2030	Total
Taxiway B Reconstruction	0	0	2,226,376	0	0	2,226,376
Total	**0**	**0**	**2,226,376**	**0**	**0**	**2,226,376**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	0	192,025	0	0	192,025
Federal Funding	0	0	1,713,196	0	0	1,713,196
State Funding	0	0	321,155	0	0	321,155
Total	**0**	**0**	**2,226,376**	**0**	**0**	**2,226,376**

Project Timeline

n/a

3030 S Airport Rd Hangar (Piston Shop) Roof Replacement

Department: SALES TAX - AIRPORT

Project Years: 2029 - 2029

Project Description

The existing roof has been in need of replacement for some time. A coating was applied to the seams and certain leaking areas in 2023 to provide us a few extra years until replacement could be budgeted. The existing metal roof will be removed and a new roof will be installed.

Project Uses

	2026	2027	2028	2029	2030	Total
3030 S Airport Rd Hangar (Piston Shop) Roof Replacement	0	0	0	160,000	0	160,000
Total	**0**	**0**	**0**	**160,000**	**0**	**160,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	0	0	160,000	0	160,000
Total	**0**	**0**	**0**	**160,000**	**0**	**160,000**

Project Timeline

- February - Request Quotat i ons
- June - Construct i on

Rehabilitate Airfield Electrical Vault

Department: SALES TAX - AIRPORT

Project Years: 2029 - 2029

Project Description

Replace and expand the electrical vault which houses the controls for the runway lights. The electrical vault and emergency generator are housed in a building located just south of the Airport Beacon adjacent to Airport Maintenance and Terminal Facilities. Both the Electrical Vault and emergency generator, which was replaced in 2001, provides back-up power to the terminal, maintenance, CFR and gray electrical building as well as all taxiway and runway lights. As part of the airport masterplan, upgrades to the older vault regulators are recommended in addition to vault expansion.

Engagement Strategy

Community projects, including sales tax items. Community Investment Plan open house (future opportunities--detailed on overall Community Investment Plan communications and engagement action plan). City website (Community Investment Plan project pages and respective webpage). Direct mail to area residents living near project. Focus groups. Pop-up events. Informational materials (print and electronic). Online newsletter. News release and email notification asking for input. Utility insert. Online engagement tools. Surveys (online). Online city calendar. Social media Video. Other. City projects, including sales tax items. Community Investment Plan open house. City website (Community Investment Plan project pages).

Project Uses

	2026	2027	2028	2029	2030	Total
Construction	0	0	0	200,000	0	200,000
Total	**0**	**0**	**0**	**200,000**	**0**	**200,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	0	0	10,000	0	10,000
Federal Funding	0	0	0	180,000	0	180,000
State Funding	0	0	0	10,000	0	10,000
Total	**0**	**0**	**0**	**200,000**	**0**	**200,000**

Project Timeline

Timeline extended from 2027

- 2029 - Design
- 2029 - Construct i on

Runway 15/33 Pavement Reconstruction

Department: SALES TAX - AIRPORT

Project Years: 2029 - 2029

Project Description

N/A

Project Uses

	2026	2027	2028	2029	2030	Total
Reconstruction	0	0	0	6,000,000	0	6,000,000
Total	**0**	**0**	**0**	**6,000,000**	**0**	**6,000,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	0	0	300,000	0	300,000
Federal Funding	0	0	0	5,400,000	0	5,400,000
State Funding	0	0	0	300,000	0	300,000
Total	**0**	**0**	**0**	**6,000,000**	**0**	**6,000,000**

Project Timeline

N/A

Runway 15/33 Rehabilitate Runway Lights

Department: SALES TAX - AIRPORT

Project Years: 2029 - 2029

Project Description

N/A

Project Uses

	2026	2027	2028	2029	2030	Total
Replacement	0	0	0	1,500,000	0	1,500,000
Total	**0**	**0**	**0**	**1,500,000**	**0**	**1,500,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	0	0	75,000	0	75,000
Federal Funding	0	0	0	1,350,000	0	1,350,000
State Funding	0	0	0	75,000	0	75,000
Total	**0**	**0**	**0**	**1,500,000**	**0**	**1,500,000**

Project Timeline

N/A

Taxiway A Reconstruction

Department: SALES TAX - AIRPORT

Project Years: 2029 - 2029

Project Description

N/A

Project Uses

	2026	2027	2028	2029	2030	Total
Reconstruction	0	0	0	2,500,000	0	2,500,000
Total	**0**	**0**	**0**	**2,500,000**	**0**	**2,500,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	0	0	125,000	0	125,000
Federal Funding	0	0	0	2,250,000	0	2,250,000
State Funding	0	0	0	125,000	0	125,000
Total	**0**	**0**	**0**	**2,500,000**	**0**	**2,500,000**

Project Timeline

N/A

Construct Service Road

Department: SALES TAX - AIRPORT

Project Years: 2030 - 2030

Project Description

Construct service road.

Project Uses

	2026	2027	2028	2029	2030	Total
Construct Service Road	0	0	0	0	900,000	900,000
Total	**0**	**0**	**0**	**0**	**900,000**	**900,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	0	0	0	45,000	45,000
Federal Funding	0	0	0	0	810,000	810,000
State Funding	0	0	0	0	45,000	45,000
Total	**0**	**0**	**0**	**0**	**900,000**	**900,000**

Project Timeline

N/A

Construct Wildlife Fencing

Department: SALES TAX - AIRPORT

Project Years: 2030 - 2030

Project Description

Construct wildlife fencing.

Project Uses

	2026	2027	2028	2029	2030	Total
Construct Wildlife Fence	0	0	0	0	2,250,000	2,250,000
Total	**0**	**0**	**0**	**0**	**2,250,000**	**2,250,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	0	0	0	112,500	112,500
Federal Funding	0	0	0	0	2,025,000	2,025,000
State Funding	0	0	0	0	112,500	112,500
Total	**0**	**0**	**0**	**0**	**2,250,000**	**2,250,000**

Project Timeline

N/A

Sales Tax - Civic Center

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Mankato Civic Center

	2026	2027	2028	2029	2030
Projected fund balance	$ 1,263,044	$ 1,468,044	$ 1,113,204	$ 1,209,204	$ 1,277,204
Interest on Investments	$ 12,000	$ 12,000	$ 12,000	$ 12,000	$ 12,000
Transfer In - Sales Tax	$ 595,000	$ 607,000	$ 619,000	$ 631,000	$ 643,000
Arena Audio & Banquet Hall Lighting					
Revenue Total	$ 607,000	$ 619,000	$ 631,000	$ 643,000	$ 655,000
Available Funds	$ 1,870,044	$ 2,087,044	$ 1,744,204	$ 1,852,204	$ 1,932,204

Project Name	2026	2027	2028	2029	2030	Total	Illustrative
Mankato Civic Center - Fixtures, Furniture, and Equipment	$ (100,000)	$ (50,000)	$ (100,000)	$ (100,000)	$ (100,000)	**$ (450,000)**	
Mankato Civic Center - Fire & Exterior Door Replacement	$ (120,000)		$ (50,000)	$ (50,000)	$ (50,000)	**$ (270,000)**	
Mankato Civic Center - ARMER Radio Replacements	$ (32,000)	$ (27,500)	$ (60,000)			**$ (119,500)**	
Mankato Civic Center - HVAC Replacements			$ (50,000)	$ (55,000)	$ (55,000)	**$ (160,000)**	
Mankato Civic Center - Building Automation System Controls Upgrades				$ (100,000)		**$ (100,000)**	
Mankato Civic Center - Loading Dock Pedestrian Gates		$ (28,000)				**$ (28,000)**	
Mankato Civic Center - Ice Plant Ammonia Valve Replacement		$ (60,000)				**$ (60,000)**	
Mankato Civic Center - Restroom Refresh Phase 2 - Banquet Hall		$ (325,000)				**$ (325,000)**	
Mankato Civic Center - Restroom Refresh Phase 3 - Arena Concourse East						**$ -**	$ (225,000)
Mankato Civic Center - Restroom Refresh Phase 4 - Arena Concourse West						**$ -**	$ (275,000)
Mankato Civic Center - Restroom Refresh Phase 5 - Arena Concourse South						**$ -**	$ (325,000)
Mankato Civic Center - Restroom Refresh Phase 6 - Arena Concourse North						**$ -**	$ (450,000)
Mankato Civic Center - Restroom Refresh Phase 7 - Arena Lobby West						**$ -**	$ (325,000)
Mankato Civic Center - Escalator Controller Replacement					$ (160,000)	**$ (160,000)**	
Mankato Civic Center - Air Handler #10 Fresh Air Intake Design		$ (25,000)				**$ (25,000)**	
Mankato Civic Center - Air Handler #10 Fresh Air Intake Construction			$ (100,000)			**$ (100,000)**	
Mankato Civic Center - Arena First Floor Restroom ADA changing table reconfiguration						**$ -**	$ (80,000)
Mankato Civic Center - Fire Panel Upgrade				$ (100,000)		**$ (100,000)**	
Mankato Civic Center - Grand Hall Exhaust						**$ -**	$ (275,000)
Mankato Civic Center - Dehumidification Wheel Replacement				$ (70,000)		**$ (70,000)**	
Mankato Civic Center - Reception Hall Exterior Tuckpointing		$ (308,340)				**$ (308,340)**	
Mankato Civic Center - Reception Hall Interior Stone Repairs					$ (120,000)	**$ (120,000)**	
Mankato Civic Center - Building Exterior Base Lime Stone Replacement						**$ -**	$ (300,000)
Mankato Civic Center - Walk In Cooler/Freezer Replacements						**$ -**	$ (200,000)
Mankato Civic Center - Arena Chair Replacement						**$ -**	$ (300,000)
Mankato Civic Center - Arena Lobby Glass Curtain Wall Window Resealing						**$ -**	$ (350,000)
Mankato Civic Center - Main Boiler Plant Replacement Design				$ (100,000)		**$ (100,000)**	
Mankato Civic Center - Main Boiler Plant Replacement						**$ -**	$ (2,600,000)
Mankato Civic Center - Reverse Osmosis Water System for Arena Ice						**$ -**	$ (120,000)
Mankato Civic Center - Terrazzo Replacement						**$ -**	$ (425,000)
Mankato Civic Center - Elevator Code Upgrades	$ (150,000)	$ (150,000)	$ (175,000)			**$ (475,000)**	
Mankato Civic Center - Arena Stage Replacement						**$ -**	$ (100,000)
Total	**$ (402,000)**	**$ (973,840)**	**$ (535,000)**	**$ (575,000)**	**$ (485,000)**	**$ (2,970,840)**	**$ (6,350,000)**
Fund Balance	$ 1,468,044	$ 1,113,204	$ 1,209,204	$ 1,277,204	$ 1,447,204		
Fund Balance Target	$ 1,060,000	$ 1,090,000	$ 1,120,000	$ 1,150,000	$ 1,180,000		
Project Count	4	8	6	7	5		

CIP Fund Overview 2026

Project Name	Project Year	Project Cost
Mankato Civic Center - ARMER Radio Replacements	2026	32,000
Mankato Civic Center - Elevator Code Upgrades	2026	150,000
Mankato Civic Center - Fire & Exterior Door Replacement	2026	120,000
Mankato Civic Center - Fixtures, Furniture, and Equipment	2026	100,000
Total		**402,000**

CIP Fund Overview 2027

Project Name	Project Year	Project Cost
Mankato Civic Center - Air Handler #10 Fresh Air Intake Design	2027	25,000
Mankato Civic Center - ARMER Radio Replacements	2027	27,500
Mankato Civic Center - Elevator Code Upgrades	2027	150,000
Mankato Civic Center - Fire & Exterior Door Replacement	2027	0
Mankato Civic Center - Fixtures, Furniture, and Equipment	2027	50,000
Mankato Civic Center - Ice Plant Ammonia Valve Replacement	2027	60,000
Mankato Civic Center - Loading Dock Pedestrian Gates	2027	28,000
Mankato Civic Center - Reception Hall Exterior Tuckpointing	2027	308,340
Mankato Civic Center - Restroom Refresh Phase 2 - Banquet Hall	2027	325,000
Total		**973,840**

CIP Fund Overview 2028

Project Name	Project Year	Project Cost
Mankato Civic Center - Air Handler #10 Fresh Air Intake Construction	2028	100,000
Mankato Civic Center - ARMER Radio Replacements	2028	60,000
Mankato Civic Center - Elevator Code Upgrades	2028	175,000
Mankato Civic Center - Fire & Exterior Door Replacement	2028	50,000
Mankato Civic Center - Fixtures, Furniture, and Equipment	2028	100,000
Mankato Civic Center - HVAC Replacements	2028	50,000
Total		**535,000**

CIP Fund Overview 2029

Project Name	Project Year	Project Cost
Mankato Civic Center - Building Automation System Controls Upgrades	2029	100,000
Mankato Civic Center - Dehumidification Wheel Replacement	2029	70,000
Mankato Civic Center - Fire & Exterior Door Replacement	2029	50,000

Project Name	Project Year	Project Cost
Mankato Civic Center - Fire Panel Upgrade	2029	100,000
Mankato Civic Center - Fixtures, Furniture, and Equipment	2029	100,000
Mankato Civic Center - HVAC Replacements	2029	55,000
Mankato Civic Center - Main Boiler Plant Replacement Design	2029	100,000
Total		**575,000**

CIP Fund Overview 2030

Project Name	Project Year	Project Cost
Mankato Civic Center - Escalator Controller Replacement	2030	160,000
Mankato Civic Center - Fire & Exterior Door Replacement	2030	50,000
Mankato Civic Center - Fixtures, Furniture, and Equipment	2030	100,000
Mankato Civic Center - HVAC Replacements	2030	55,000
Mankato Civic Center - Reception Hall Interior Stone Repairs	2030	120,000
Total		**485,000**

Illustrative CIP Fund Overview

Project Name	Project Year	Project Cost
Mankato Civic Center - Arena Chair Replacement	2031	300,000
Mankato Civic Center - Arena First Floor Restroom ADA changing table reconfiguration	2031	80,000
Mankato Civic Center - Arena Lobby Glass Curtain Wall Window Resealing	2031	350,000
Mankato Civic Center - Arena Stage Replacement	2031	100,000
Mankato Civic Center - Building Exterior base lime stone replacement	2031	300,000
Mankato Civic Center - Grand Hall Exhaust	2031	275,000
Mankato Civic Center - Main Boiler Plant Replacement	2031	2,600,000
Mankato Civic Center - Restroom Refresh Phase 3 - Arena Concourse East	2031	225,000
Mankato Civic Center - Restroom Refresh Phase 4 - Arena Concourse West	2031	275,000
Mankato Civic Center - Restroom Refresh Phase 5 - Arena Concourse South	2031	325,000
Mankato Civic Center - Restroom Refresh Phase 6 - Arena Concourse North	2031	450,000
Mankato Civic Center - Restroom Refresh Phase 7 - Arena Lobby West	2031	325,000
Mankato Civic Center - Reverse Osmosis Water System for Arena Ice	2031	120,000
Mankato Civic Center - Terrazzo Replacement	2031	425,000
Mankato Civic Center - Walk In Cooler/Freezer Replacements	2031	200,000
Total		**6,350,000**

Mankato Civic Center - ARMER Radio Replacements

Department: SALES TAX - CIVIC CENTER

Project Years: 2026 - 2028

Project Description

This project will replace all of the existing used radios currently being utilized by Civic Center and event security staff. Year 1 will include all full time staff radios. Year 2 will include all part time staff radios. Year 3 will include all security personnel radios. The current radios are no longer supported by the manufacturer and can not be updated.

Project Uses

	2026	2027	2028	2029	2030	Total
New ARMER Radios	32,000	27,500	60,000	0	0	119,500
Total	**32,000**	**27,500**	**60,000**	**0**	**0**	**119,500**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Other Sources	32,000	27,500	60,000	0	0	119,500
Total	**32,000**	**27,500**	**60,000**	**0**	**0**	**119,500**

Project Timeline

- February - Purchase equipment each year
- April - Public Safety staf f pr ogr a mt he ne w r adi os
- May - Equipment ready for use

Mankato Civic Center - Elevator Code Upgrades

Department: SALES TAX - CIVIC CENTER

Project Years: 2026 - 2028

Project Description

Replacement of the elevator mechanical equipment and button stations at the Civic Center. The elevator mechanical equipment will be nearing the end of its useful life in the coming years. Pro-active replacement of the equipment is critical to maintaining sufficient access for the public to use this critical facility.

Project Uses

	2026	2027	2028	2029	2030	Total
Elevator Code Upgrades	150,000	150,000	175,000	0	0	475,000
Total	**150,000**	**150,000**	**175,000**	**0**	**0**	**475,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Sales Tax	150,000	150,000	175,000	0	0	475,000
Total	**150,000**	**150,000**	**175,000**	**0**	**0**	**475,000**

Project Timeline

One elevator per year with each following the same schedule:

- February - Feasibility hearing
- April - Bid Award
- July - Construct i on

Mankato Civic Center - Fire & Exterior Door Replacement

Department: SALES TAX - CIVIC CENTER

Project Years: 2026 - 2030

Project Description

Multi-year project to replace the aging fire and exterior doors within the facility The fire doors throughout the original facility are beginning to fail as normal wear and tear has taken its toll. These doors see considerable use and need to be kept in good condition to maintain their fire rating. A needs based multi year approach will be undertaken to fund the complete replacement of the original 1995 doors throughout the facility. Additionally, the exterior doors are starting to fail and replacement is warranted due to security concerns within the facility.

Project Uses

	2026	2027	2028	2029	2030	Total
Door Replacements	120,000	0	50,000	50,000	50,000	270,000
Total	**120,000**	**0**	**50,000**	**50,000**	**50,000**	**270,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Sales Tax	120,000	0	50,000	50,000	50,000	270,000
Total	**120,000**	**0**	**50,000**	**50,000**	**50,000**	**270,000**

Project Timeline

Installation will occur around event load each year.

Mankato Civic Center - Fixtures, Furniture, and Equipment

Department: SALES TAX - CIVIC CENTER

Project Years: 2026 - 2030

Project Description

This is funding set aside for various furniture, fixtures, and smaller projects that may arise during the year. As the original portion of the building ages, the furniture and fixtures that were purchased with the original construction continue to wear out and require replacement.

Project Uses

	2026	2027	2028	2029	2030	Total
FF&E Replacement	100,000	50,000	100,000	100,000	100,000	450,000
Total	**100,000**	**50,000**	**100,000**	**100,000**	**100,000**	**450,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Sales Tax	100,000	50,000	100,000	100,000	100,000	450,000
Total	**100,000**	**50,000**	**100,000**	**100,000**	**100,000**	**450,000**

Project Timeline

Throughout Fiscal Year

Mankato Civic Center - Air Handler #10 Fresh Air Intake Design

Department: SALES TAX - CIVIC CENTER

Project Years: 2027 - 2027

Project Description

Design will be undertaken for a fresh air intake servicing the office area of the civic center. Design drawings will be extensive given the large amount of existing mechanical lines in the area and conflict avoidance during design will save on overall project costs.

Project Uses

	2026	2027	2028	2029	2030	Total
Mankato Civic Center - Air Handler #10 Fresh Air Intake Design	0	25,000	0	0	0	25,000
Total	**0**	**25,000**	**0**	**0**	**0**	**25,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Sales Tax	0	25,000	0	0	0	25,000
Total	**0**	**25,000**	**0**	**0**	**0**	**25,000**

Project Timeline

February - Hire Mechanical Engineer

September - Final Plan Set ready

Mankato Civic Center - Ice Plant Ammonia Valve Replacement

Department: SALES TAX - CIVIC CENTER

Project Years: 2027 - 2027

Project Description

There are roughly a dozen valves that will be in need of replacement. This project will also include some relabeling to bring it into conformity with the new plant at All Seasons Arena so shared staff are working with the same terminology and color coding.

Project Uses

	2026	2027	2028	2029	2030	Total
Ammonia Valve Replacement	0	60,000	0	0	0	60,000
Total	**0**	**60,000**	**0**	**0**	**0**	**60,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Sales Tax	0	60,000	0	0	0	60,000
Total	**0**	**60,000**	**0**	**0**	**0**	**60,000**

Project Timeline

- March - Request quotations
- May - install valves after plant shutdown in April

Mankato Civic Center - Loading Dock Pedestrian Gates

Department: SALES TAX - CIVIC CENTER

Project Years: 2027 - 2027

Project Description

During safety walk thrus performed by staff and our safety consultant, this was identified as a potential fall hazard and needs to be addressed. These pedestrian gates fold up when not in use and do not interfere with the use of the dock. There are currently 2 loading docks on the arena side that will have these installed and 2 on the Grand Hall side of the building.

Project Uses

	2026	2027	2028	2029	2030	Total
Loading dock gates	0	28,000	0	0	0	28,000
Total	**0**	**28,000**	**0**	**0**	**0**	**28,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Sales Tax	0	28,000	0	0	0	28,000
Total	**0**	**28,000**	**0**	**0**	**0**	**28,000**

Project Timeline

- January - Request quotat i on
- April - Receive gates and install

Mankato Civic Center - Reception Hall Exterior Tuckpointing

Department: SALES TAX - CIVIC CENTER

Project Years: 2027 - 2027

Project Description

Tuckpointing of the exterior brick and stone of the Reception Hall (Former First National Bank building/Ellerbe Room). In 2021, a facility audit was conducted by a local architecture firm to identify a 10 year needs assessment to ensure the upkeep of this historic structure. Tuckpointing was identified as a near term improvement to ensure the structural integrity of the building envelope is preserved.

Project Uses

	2026	2027	2028	2029	2030	Total
Exterior Tuckpointing Reception Hall	0	308,340	0	0	0	308,340
Total	**0**	**308,340**	**0**	**0**	**0**	**308,340**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Sales Tax	0	308,340	0	0	0	308,340
Total	**0**	**308,340**	**0**	**0**	**0**	**308,340**

Project Timeline

- February - Feasibility Hearing and hiring of an architect
- April - Bid Award
- July/August - Construct i on

Mankato Civic Center - Restroom Refresh Phase 2 - Banquet Hall

Department: SALES TAX - CIVIC CENTER

Project Years: 2027 - 2027

Project Description

This project will include the complete remodel of the Banquet Hall restrooms located on the 1st and 2nd floors of the original building. The piping in this area has seen several failures over the last few years. Due to the location of the piping in the walls, the restrooms will be demoed and reconstructed with new finishes. If the fixtures can be salvaged, they will be reused. The faucets and flushometers were replaced a few years ago and will be salvaged and reused.

Project Uses

	2026	2027	2028	2029	2030	Total
Restroom Refresh Phase 2	0	325,000	0	0	0	325,000
Total	**0**	**325,000**	**0**	**0**	**0**	**325,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Sales Tax	0	325,000	0	0	0	325,000
Total	**0**	**325,000**	**0**	**0**	**0**	**325,000**

Project Timeline

- January - Feasibility Hearing and hiring of an architect
- April - Bid Award
- July/August - Construct i on

Mankato Civic Center - Air Handler #10 Fresh Air Intake Construction

Department: SALES TAX - CIVIC CENTER

Project Years: 2028 - 2028

Project Description

Design will be undertaken for a fresh air intake servicing the office area of the civic center. Design drawings will be extensive given the large amount of existing mechanical lines in the area and conflict avoidance during design will save on overall project costs. Construction will occur in 2028 and include a new fresh air duct with electronic controlled damper tied to the building automation system.

Project Uses

	2026	2027	2028	2029	2030	Total
Air Handler #10 Fresh Air Intake Construction	0	0	100,000	0	0	100,000
Total	**0**	**0**	**100,000**	**0**	**0**	**100,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Sales Tax	0	0	100,000	0	0	100,000
Total	**0**	**0**	**100,000**	**0**	**0**	**100,000**

Project Timeline

- February - Request for Quotat i ons
- April - Construct i onf dl o wng hockey seas on

Mankato Civic Center - HVAC Replacements

Department: SALES TAX - CIVIC CENTER

Project Years: 2028 - 2030

Project Description

There are 24 unit heaters that have small leaks and need replacement. Unit heaters will eventually fail.

Project Uses

	2026	2027	2028	2029	2030	Total
HVAC Replacements	0	0	50,000	55,000	55,000	160,000
Total	**0**	**0**	**50,000**	**55,000**	**55,000**	**160,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Sales Tax	0	0	50,000	55,000	55,000	160,000
Total	**0**	**0**	**50,000**	**55,000**	**55,000**	**160,000**

Project Timeline

Replacements will occur in the spring/summer of each calendar year.

Mankato Civic Center - Building Automation System Controls Upgrades

Department: SALES TAX - CIVIC CENTER

Project Years: 2029 - 2029

Project Description

The controllers in the building are aging and many are in need of replacement. We will begin replacing them starting in 2029.

Project Uses

	2026	2027	2028	2029	2030	Total
Mankato Civic Center - Building Automation System Controls Upgrades	0	0	0	100,000	0	100,000
Total	**0**	**0**	**0**	**100,000**	**0**	**100,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Sales Tax	0	0	0	100,000	0	100,000
Total	**0**	**0**	**0**	**100,000**	**0**	**100,000**

Project Timeline

- February - Receive quotat i on
- May/June - Construct i on

Mankato Civic Center - Dehumidification Wheel Replacement

Department: SALES TAX - CIVIC CENTER

Project Years: 2029 - 2029

Project Description

Replacement of the desiccant dehumidification unit wheel. The wheel will reach the end of its 10 year lifespan and will be in need of replacement in 2028-2029.

Project Uses

	2026	2027	2028	2029	2030	Total
Desiccant Wheel	0	0	0	70,000	0	70,000
Total	**0**	**0**	**0**	**70,000**	**0**	**70,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Sales Tax	0	0	0	70,000	0	70,000
Total	**0**	**0**	**0**	**70,000**	**0**	**70,000**

Project Timeline

Purchase and install - Summer 2029

Mankato Civic Center - Fire Panel Upgrade

Department: SALES TAX - CIVIC CENTER

Project Years: 2029 - 2029

Project Description

The panel would be replaced and the system migrated to one location. With the addition of the Grand Hall, it was decided for cost savings to leave the old fire panel in the existing location but make it report to the new Grand Hall fire panel. Upon activation, staff is required to go to both panel locations to identify where the issue is as they don't communicate correctly with each other thus slowing response times. The new system will be tied into one system at one location and be brought up to current code.

Project Uses

	2026	2027	2028	2029	2030	Total
Fire Panel Upgrade	0	0	0	100,000	0	100,000
Total	**0**	**0**	**0**	**100,000**	**0**	**100,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Sales Tax	0	0	0	100,000	0	100,000
Total	**0**	**0**	**0**	**100,000**	**0**	**100,000**

Project Timeline

- January - Obtain quotat i ons
- June/July - Construct i on

Mankato Civic Center - Main Boiler Plant Replacement Design

Department: SALES TAX - CIVIC CENTER

Project Years: 2029 - 2029

Project Description

Replacement of the original facility boiler plant. The original boiler plant is inefficient and aging.The boiler plant would be replaced with new condensing boiler technology allowing for a 95%+ efficiency and creating a smaller footprint within the building. The decrease in required floor space will free up space for a new use.

An architect and mechanical engineer would be hired to design the new plant and create contract documents in anticipation of a project in the near future.

Project Uses

	2026	2027	2028	2029	2030	Total
Main Boiler Replacement Design	0	0	0	100,000	0	100,000
Total	**0**	**0**	**0**	**100,000**	**0**	**100,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Sales Tax	0	0	0	100,000	0	100,000
Total	**0**	**0**	**0**	**100,000**	**0**	**100,000**

Project Timeline

- March - Hire a design f i r m
- October - Documents complete

Mankato Civic Center - Escalator Controller Replacement

Department: SALES TAX - CIVIC CENTER

Project Years: 2030 - 2030

Project Description

Update the two escalator controllers in the front lobby of the Civic Center. The two escalators in the front lobby of the Civic Center still have the original mechanical relay control equipment. Replacement parts are no longer being manufactured and even though after market parts are still available, facilities staff is recommending the upgrade of these controllers to solid state equipment. Staff continue to see significant repairs to these units and delays in obtaining necessary parts.

Project Uses

	2026	2027	2028	2029	2030	Total
Escalator Obsolete Controller Replacement	0	0	0	0	160,000	160,000
Total	**0**	**0**	**0**	**0**	**160,000**	**160,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Sales Tax	0	0	0	0	160,000	160,000
Total	**0**	**0**	**0**	**0**	**160,000**	**160,000**

Project Timeline

- January - Feasibility Hearing
- March - Award Bids
- June/July - Construct i on

Mankato Civic Center - Reception Hall Interior Stone Repairs

Department: SALES TAX - CIVIC CENTER

Project Years: 2030 - 2030

Project Description

Repairs to the interior stone in the Reception Hall (former First National Bank building/Ellerbe Room). In 2021, a facility audit was conducted by a local architecture firm to identify a 10 year needs assessment to ensure the upkeep of this historic structure. Repairs to the interior stone was identified as a near term improvement to ensure the preservation of the historic interior features of the building.The existing limestone slabs installed on the lower portions of the walls are hung with original wire hangers which are deteriorating and have the potential for future failure. Four pieces of stone were reset in 2020 in the bar area of the Reception Hall after some of these hangers failed.

Project Uses

	2026	2027	2028	2029	2030	Total
Interior Stone Repairs Reception Hall	0	0	0	0	120,000	120,000
Total	**0**	**0**	**0**	**0**	**120,000**	**120,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Sales Tax	0	0	0	0	120,000	120,000
Total	**0**	**0**	**0**	**0**	**120,000**	**120,000**

Project Timeline

- January - Request for Quotat i ons
- June - Construct i on

Sales Tax - Parking

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Sales Tax - Parking	2026	2027	2028	2029	2030		
Projected fund balance	$ 1,343,324	$ 1,409,324	$ 1,279,324	$ 1,003,324	$ 1,131,324		
Sales Tax - Parking	$ 216,000	$ 220,000	$ 224,000	$ 228,000	$ 232,000		
Available Funds	$ 1,559,324	$ 1,629,324	$ 1,503,324	$ 1,231,324	$ 1,363,324		
Project Name	**2026**	**2027**	**2028**	**2029**	**2030**	**Total**	**Illustrative**
Mankato Place Ramp - Center Stairwell Reconstruction			$ (500,000)			**$ (500,000)**	
Ramp Structural Repairs		$ (100,000)		$ (100,000)	$ (100,000)	**$ (300,000)**	
Skyway Repairs	$ (75,000)					**$ (75,000)**	
Stairway Roof Replacements		$ (75,000)				**$ (75,000)**	
Civic Center Ramp - Tunnel Improvements	$ (75,000)					**$ (75,000)**	
Civic Center Ramp - Elevator Code Upgrades		$ (175,000)				**$ (175,000)**	
Civic Center Ramp - Aesthetic Improvements						**$ -**	$ (1,500,000)
Mankato Place Ramp - Elevator Code Upgrades					$ (200,000)	**$ (200,000)**	
Civic Center Ramp - Drive Lane Coating Replacement						**$ -**	$ (300,000)
Mankato Place Ramp - Drive Lane Coating Replacement						**$ -**	$ (300,000)
Civic Center Ramp - Riverfront Drive Stairwell Reconstruction						**$ -**	$ (650,000)
Total	**$ (150,000)**	**$ (350,000)**	**$ (500,000)**	**$ (100,000)**	**$ (300,000)**	**$ (1,400,000)**	$ (2,750,000)
Fund Balance	$ 1,409,324	$ 1,279,324	$ 1,003,324	$ 1,131,324	$ 1,063,324		
Fund Balance Target	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 1,000,000		
Project Count	2	3	1	1	2		

CIP Fund Overview 2026

Project Name	Project Year	Project Cost
Civic Center Ramp - Tunnel Improvements	2026	75,000
Skyway Repairs	2026	75,000
Total		**150,000**

CIP Fund Overview 2027

Project Name	Project Year	Project Cost
Civic Center Ramp - Elevator Code Upgrades	2027	175,000
Ramp Structural Repairs	2027	100,000
Stairway Roof Replacements	2027	75,000
Total		**350,000**

CIP Fund Overview 2028

Project Name	Project Year	Project Cost
Mankato Place Ramp - Center Stairwell Reconstruction	2028	500,000
Ramp Structural Repairs	2028	0
Total		**500,000**

CIP Fund Overview 2029

Project Name	Project Year	Project Cost
Ramp Structural Repairs	2029	100,000
Total		**100,000**

CIP Fund Overview 2030

Project Name	Project Year	Project Cost
Mankato Place Ramp - Elevator Code Upgrades	2030	200,000
Ramp Structural Repairs	2030	100,000
Total		**300,000**

Illustrative CIP Fund Overview

Project Name	Project Year	Project Cost
Civic Center Ramp - Aesthetic Improvements	2031	1,500,000
Civic Center Ramp - Drive Lane Coating Replacement	2030	300,000
Civic Center Ramp - Riverfront Drive Stairwell Reconstruction	2030	650,000
Mankato Place Ramp - Drive Lane Coating Replacement	2030	300,000
Total		**2,750,000**

Civic Center Ramp - Tunnel Improvements

Department: SALES TAX - PARKING

Project Years: 2026 - 2026

Project Description

The project will include a new concrete raised sidewalk on the existing northbound lane of travel, a reconfigured storm sewer intake structure, painting, and electrical improvements.

Project Uses

	2026	2027	2028	2029	2030	Total
Tunnel Improvements	75,000	0	0	0	0	75,000
Total	**75,000**	**0**	**0**	**0**	**0**	**75,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Sales Tax	75,000	0	0	0	0	75,000
Total	**75,000**	**0**	**0**	**0**	**0**	**75,000**

Project Timeline

- January - request for quotations will be released
- September - Construction

Skyway Repairs

Department: SALES TAX - PARKING

Project Years: 2026 - 2026

Project Description

Installation of a slip joint expansion seal will be installed at the T intersection by the ramp and the windows will be recaulked from both the interior and exterior.

Project Uses

	2026	2027	2028	2029	2030	Total
Skyway Repairs	75,000	0	0	0	0	75,000
Total	**75,000**	**0**	**0**	**0**	**0**	**75,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	75,000	0	0	0	0	75,000
Total	**75,000**	**0**	**0**	**0**	**0**	**75,000**

Project Timeline

- April - Request for Quotations released
- July - Construction

Civic Center Ramp - Elevator Code Upgrades

Department: SALES TAX - PARKING

Project Years: 2027 - 2027

Project Description

Replacement of the elevator mechanical equipment and button stations at the Civic Center Ramp. The elevator mechanical equipment will be nearing the end of its useful life in the coming years. Proactive replacement of the equipment is critical to maintaining sufficient access for the public to use this critical facility.

Project Uses

	2026	2027	2028	2029	2030	Total
Elevator Code Upgrades	0	175,000	0	0	0	175,000
Total	**0**	**175,000**	**0**	**0**	**0**	**175,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Sales Tax	0	175,000	0	0	0	175,000
Total	**0**	**175,000**	**0**	**0**	**0**	**175,000**

Project Timeline

- February - Feasibility hearing
- April - Bid Award
- July - Construct i on

Ramp Structural Repairs

Department: SALES TAX - PARKING

Project Years: 2027 - 2030

Project Description

Every year, staff and a consultant do a visual walk thru of each of the downtown parking ramps as well as an in depth review of one ramp each year. During these reviews, any items of note are identified and staff reach out to contractors for quotes to repair them as soon as practical. Any larger items will be submitted separately through the standard budget process.

Project Uses

	2026	2027	2028	2029	2030	Total
Structural Repairs	0	100,000	0	100,000	100,000	300,000
Total	**0**	**100,000**	**0**	**100,000**	**100,000**	**300,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	100,000	0	100,000	100,000	300,000
Total	**0**	**100,000**	**0**	**100,000**	**100,000**	**300,000**

Project Timeline

Work will be completed as staff time allows each year.

Stairway Roof Replacements

Department: SALES TAX - PARKING

Project Years: 2027 - 2027

Project Description

Roof inspections will assist in determining which roofs are replaced next however the north and south stairwell of the Mankato Place Ramp are identified as needing improvement due to previous leaks.

Project Uses

	2026	2027	2028	2029	2030	Total
Stairway Roof Replacements	0	75,000	0	0	0	75,000
Total	**0**	**75,000**	**0**	**0**	**0**	**75,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	75,000	0	0	0	75,000
Total	**0**	**75,000**	**0**	**0**	**0**	**75,000**

Project Timeline

- April - Request for quotat i ons
- June/July - Construct i on

Mankato Place Ramp - Center Stairwell Reconstruction

Department: SALES TAX - PARKING

Project Years: 2028 - 2028

Project Description

Reconstruction of the center stairwell to incorporate a wider, more accessible staircase. Improve accessibility and aesthetics of the Mankato Place Ramp. City staff receive numerous complaints about this area and improving the look and use of the space will increase the foot traffic thereby reducing the likelihood of continued vandalism.

Engagement Strategy

Community Investment Plan open house

City website (Community Investment Plan project pages)

Engagement with members of the Parking Special Service District

Project Uses

	2026	2027	2028	2029	2030	Total
Parking ramp improvements	0	0	500,000	0	0	500,000
Total	**0**	**0**	**500,000**	**0**	**0**	**500,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Capital Replacement Account	0	0	500,000	0	0	500,000
Total	**0**	**0**	**500,000**	**0**	**0**	**500,000**

Project Timeline

- Design: Winter 2024
- Construction: Spring/Summer 2025

Mankato Place Ramp - Elevator Code Upgrades

Department: SALES TAX - PARKING

Project Years: 2030 - 2030

Project Description

Replacement of the elevator mechanical equipment and button stations at the Mankato Place Ramp. The elevator mechanical equipment will be nearing the end of its useful life in the coming years. Proactive replacement of the equipment is critical to maintaining sufficient access for the public to use this critical facility.

Project Uses

	2026	2027	2028	2029	2030	Total
Elevator Code Upgrades	0	0	0	0	200,000	200,000
Total	**0**	**0**	**0**	**0**	**200,000**	**200,000**

Funding and Sources

	2026	2027	2028	2029	2030	Total
Sales Tax	0	0	0	0	200,000	200,000
Total	**0**	**0**	**0**	**0**	**200,000**	**200,000**

Project Timeline

- February - Feasibility hearing
- April - Bid Award
- July - Construct i on

Sales Tax - Riverfront Park

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Riverfront Park

	2026	2027	2028	2029	2030	
Projected fund balance	$ 2,595,000	$ 2,595,000	$ 2,801,000	$ 3,013,000	$ 3,231,000	
Transfer In - Sales Tax	$ 200,000	$ 206,000	$ 212,000	$ 218,000	$ 224,000	
Available Funds	$ 2,795,000	$ 2,801,000	$ 3,013,000	$ 3,231,000	$ 3,455,000	
Project Name	**2026**	**2027**	**2028**	**2029**	**2030**	Total
						$ -
						$ -
						$ -
Total	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
Fund Balance	$ 2,795,000	$ 2,801,000	$ 3,013,000	$ 3,231,000	$ 3,455,000	

Sales Tax - Special Projects

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Master Cash Flow
City Sales Tax
Existing and Future Cash Flow
August 2025 Version

			2026	2027	2028	2029	2030	Totals	2031	2032	2033	2034	2035	2036	2037	2038	Total
Balance on January 1			**7,145,671**	**8,202,950**	**10,203,135**	**12,246,026**	**14,329,524**		**16,405,049**	**18,463,275**	**16,369,106**	**14,311,749**	**12,293,974**	**10,258,683**	**8,264,787**	**6,299,078**	**3,129,987**
Cash Inflows:																	-
Interest			5,000	5,000	5,000	5,000	5,000	**25,000**	5,000	5,000	5,000	5,000	5,000	5,000	5,000	10,000	**75,000**
Vehicle Tax			190,000	195,000	200,000	205,000	210,000	**1,000,000**	215,000	220,000	225,000	230,000	230,000	230,000	230,000	230,000	**3,020,000**
Sales Tax Proceeds			6,438,750	6,503,138	6,568,169	6,633,851	6,700,189	**32,844,096**	6,767,191	6,834,863	6,903,211	6,972,244	7,041,966	7,112,386	7,183,510	7,255,345	**95,615,000**
Available Funds			**13,779,421**	**14,906,088**	**16,976,304**	**19,089,877**	**21,244,714**		**23,392,240**	**25,523,137**	**23,502,318**	**21,518,993**	**19,570,940**	**17,606,069**	**15,683,297**	**13,794,423**	**181,836,129**
Cash Outflows:																	
Debt Service - 2015 Expansion - Principal only																	-
*2022A New Debt Service (issue bonds in 2022)		**$6.41 million; 3%, 16 years**	(546,775)	(540,150)	(538,275)	(540,525)	(536,900)	**(2,702,625)**	(539,400)	(538,100)	(541,100)	(538,400)	(540,000)	(535,900)	(536,100)	(535,500)	**(7,544,025)**
*2022C New Debt Service (issue bonds in 2022)		**$11.955 million, 3.73%, 16 years**	(1,122,175)	(1,120,675)	(1,122,550)	(1,117,800)	(1,116,425)	**(5,599,625)**	(1,118,175)	(1,117,925)	(1,115,675)	(1,116,300)	(1,114,675)	(1,110,800)	(1,114,800)	(1,116,900)	**(15,641,300)**
*2024B ASA Debt Service (issue bonds in 2024)		**$1.515 million, 3.47%, 14 years**	(129,025)	(138,128)	(134,453)	(136,028)	(137,340)	**(674,973)**	(138,390)	(133,927)	(134,715)	(135,240)	(135,503)	(135,503)	(135,240)	(408,660)	**(2,169,490)**
**2031 New Debt Service (issue bonds in 2031)		**$25 million, 4.2%, 6 years**							-	(4,196,079)	(4,196,079)	(4,196,079)	(4,196,079)	(4,196,079)	(4,196,079)	(4,196,079)	**(29,372,553)**
Bond Interest / Core Block / Admin			(1,012,496)	(930,000)	(930,000)	(930,000)	(930,000)	**(4,732,496)**	(930,000)	(930,000)	(930,000)	(930,000)	(930,000)	(930,000)	(930,000)	(930,000)	**(13,102,496)**
Existing Depreciation Funds:																	
Capital Replacement Transfer - RFP			(200,000)	(206,000)	(212,000)	(218,000)	(224,000)	**(1,060,000)**	(231,000)	(238,000)	(245,000)	(252,000)	(260,000)	(268,000)	(276,000)	(284,000)	**(3,338,000)**
Capital Replacement Transfer - Parking			(216,000)	(220,000)	(224,000)	(228,000)	(233,000)	**(1,121,000)**	(238,000)	(243,000)	(248,000)	(253,000)	(258,000)	(263,000)	(268,000)	(273,000)	**(3,398,000)**
Capital Replacement Transfer - Airport			(432,000)	(441,000)	(450,000)	(459,000)	(468,000)	**(2,250,000)**	(477,000)	(487,000)	(497,000)	(507,000)	(517,000)	(527,000)	(538,000)	(549,000)	**(6,817,000)**
Capital Replacement Transfer - Civic Center			(595,000)	(607,000)	(619,000)	(631,000)	(644,000)	**(3,096,000)**	(657,000)	(670,000)	(683,000)	(697,000)	(711,000)	(725,000)	(740,000)	(755,000)	**(9,378,000)**
Capital Project Repayments:																	-
Capital Repayment- SE Water Quality Land		**$390k Balance**	(390,000)					**(390,000)**									**(390,000)**
Capital Repayment - LOM Riverbank Stabilization		**$3.1 MM balance**		(200,000)	(200,000)	(200,000)	(200,000)	**(800,000)**	(250,000)	(250,000)	(250,000)	(250,000)	(250,000)	(250,000)	(250,000)	(550,000)	**(3,100,000)**
Capital Repayment - Kerns Bridge		**$880k Balance**	(880,000)					**(880,000)**									**(880,000)**
Building Capital Repayments - Internal Financing:																	-
Capital Repayment - CC Expansion		**$2.6 Balance**		(150,000)	(150,000)	(150,000)	(150,000)	**(600,000)**	(150,000)	(150,000)	(150,000)	(150,000)	(200,000)	(200,000)	(200,000)	(800,000)	**(2,600,000)**
Capital Repayment - Franklin Rogers Park		**$2.8 Balance**		(150,000)	(150,000)	(150,000)	(200,000)	**(650,000)**	(200,000)	(200,000)	(200,000)	(200,000)	(200,000)	(200,000)	(200,000)	(750,000)	**(2,800,000)**
Pre-2009 Deficits (Civic Center)		**$53k Balance**	(53,000)					**(53,000)**									**(53,000)**
Projected Expenditures			(5,576,471)	(4,702,953)	(4,730,278)	(4,760,353)	(4,839,665)	**(24,609,719)**	(4,928,965)	(9,154,031)	(9,190,569)	(9,225,019)	(9,312,256)	(9,341,281)	(9,384,219)	(11,148,139)	**(101,133,863)**
								-									
Balance on December 31			**8,202,950**	**10,203,135**	**12,246,026**	**14,329,524**	**16,405,049**		**18,463,275**	**16,369,106**	**14,311,749**	**12,293,974**	**10,258,683**	**8,264,787**	**6,299,078**	**2,646,284**	
Minimum Bond Reserve			1,798,953	1,795,278	1,794,353	1,790,665	1,795,965		5,986,031	5,987,569	5,986,019	5,986,256	5,978,281	5,982,219	6,257,139	0	
Regional Rec Fund Balance			440,000	440,000	440,000	440,000	440,000		440,000	440,000	440,000	440,000	440,000	440,000	440,000	440,000	

2026 Community Investment Plan (CIP)

2026 -2030

City of Mankato

Leading the way...



Role of Planning Commission in CIP

Minnesota Statues- Section 462.356 - Subdivision.2

"After a comprehensive municipal plan or section thereof has been recommended by the planning agency and a copy filed with the governing body, no publicly owned interest in real property within the municipality shall be acquired or disposed of, nor shall any capital improvement be authorized by the municipality or special district or agency thereof or any other political subdivision having jurisdiction within the municipality until after the planning agency has reviewed the proposed acquisition, disposal, or capital improvement and reported in writing to the governing body or other special district or agency or political subdivision concerned, its findings as to compliance of the proposed acquisition, disposal or improvement with the comprehensive municipal plan."

Purpose of Community Investment Plan

Ensure the timely repair and replacement of aging infrastructure.

Hedge against unanticipated, poorly planned or unnecessary capital expenditures.

Ensure that patterns of growth are consistent with the comprehensive plan and adequately supported with infrastructure.

Balance desired improvements with ability and willingness to pay.

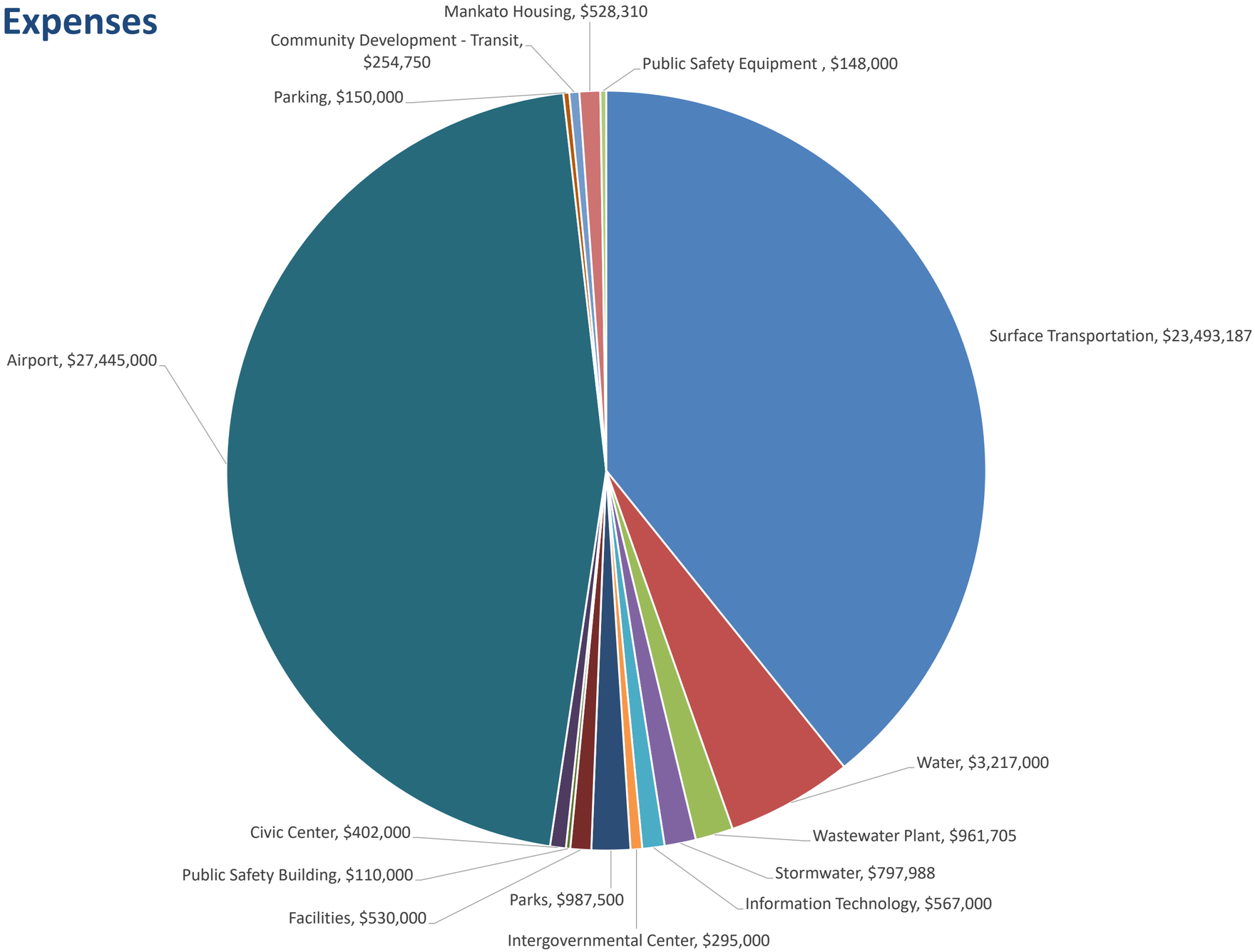
Provide an opportunity for public to inform, consult and collaborate to make informed decisions.

Plan new facilities strategically to ensure that both operating and replacement costs are financially sustainable.

Annual Community Investmen Plan Budgeting

- Preparation of the Community Investment Plan and annual budget are closely linked. The annual Community Investment Plan budget outlines specific projects and appropriate funding for those projects.
- Annual Community Investment Plan budget is adopted in conjunction with city of Mankato’s annual operating budget. Projects and financing sources outlined are not authorized until the annual budget has been approved.
- Worth noting is that as part of the city’s final procurement, project final design and feasibility will again come before the council for final consideration.

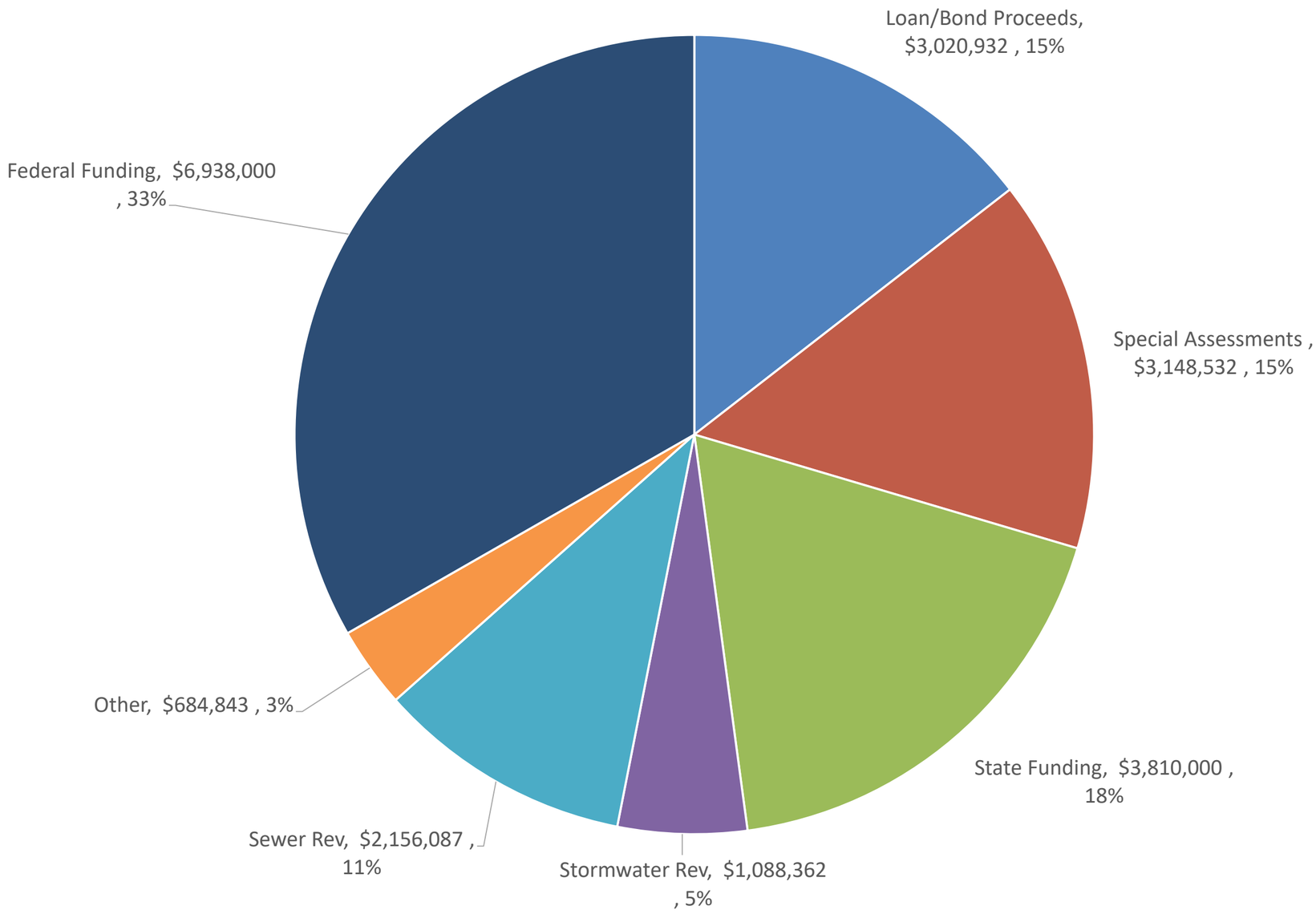
2026 CIP Expenses



SURFACE TRANSPORTATION 2026 CIP PROJECTS

Project Title	Project Cost	Project Type
Main Street Resurfacing	$2,448,765	Reinvestment
Belleview Avenue, Jayro Court, and Riverview Street	$1,597,000	Reinvestment
Hiniker Park Parking Lot	$400,000	Reinvestment
Hiniker Parkway	$1,295,455	Reinvestment
Long St. and Emerson Ln	$2,541,577	Reinvestment
MN Rivertrail Northstar to Main Street	$843,554	Reinvestment
Petition, Expansion and Major Streets	$150,000	Reinvestment
Plum Street	$863,554	Reinvestment
Riverfront and Main Signal Replacement	$425,000	Reinvestment
Sidewalk Improvements	$100,000	Reinvestment
Third Ave - Riverfront to Summit	$3,105,000	Reinvestment
Veteran's Bridge Redecking	$9,723,000	Reinvestment
TOTAL COST	**$23,493,187**	

Surface Transportation Funding Sources



MANKATO HOUSING 2026 CIP PROJECTS

Project Title	Project Cost	Project Type
Appliance, Furnace, & Water Heater Replacement	$31,000	Reinvestment
Driveway & Misc. Site Improvements	$23,000	Reinvestment
RAD Conversion Critical Repairs	$24,310	Reinvestment
Unit Electrical Code Upgrades	$50,000	Reinvestment
Unit Renovations	$400,000	Reinvestment
TOTAL COST	**$528,310**	

MANKATO HOUSING 2026-2030 CIP PROJECTS

Housing - Mankato

	2026	2027	2028	2029	2030
Projected fund balance	$ -	$ 1,507,655	$ 1,098,655	$ 708,655	$ 736,655
Prior CFP Grants - Federal Aid	$ 1,535,965				
Transfer-In	$ 500,000	$ 500,000	$ 500,000	$ 500,000	$ 500,000
Available Funds	$ 2,035,965	$ 2,007,655	$ 1,598,655	$ 1,208,655	$ 1,236,655

Project Name	2026	2027	2028	2029	2030	Total	Illustrative
Mankato Unit Renovations	$ (400,000)	$ (400,000)	$ (400,000)	$ (400,000)	$ (400,000)	**$ (2,000,000)**	
Mankato RAD Conversion Critical Repairs	$ (24,310)					**$ (24,310)**	
Orness Plaza Boiler Replacement						**$ -**	$ (100,000)
Orness Plaza HVAC Replacement Phase 1		$ (400,000)				**$ (400,000)**	
Orness Plaza HVAC Replacement Phase 2			$ (375,000)			**$ (375,000)**	
Appliance, Furnace, & Water Heater Replacement	$ (31,000)	$ (34,000)	$ (37,000)	$ (41,000)	$ (45,000)	**$ (188,000)**	
Driveway & Misc. Site Improvements	$ (23,000)	$ (25,000)	$ (28,000)	$ (31,000)	$ (35,000)	**$ (142,000)**	
Orness Plaza EIFS Repairs						**$ -**	$ (100,000)
Unit Electrical Code Upgrades	$ (50,000)	$ (50,000)	$ (50,000)			**$ (150,000)**	
Parking Lot Repairs & Sealcoating						**$ -**	$ (80,000)
Total	**$ (528,310)**	**$ (909,000)**	**$ (890,000)**	**$ (472,000)**	**$ (480,000)**	**$ (3,279,310)**	$ (280,000)

Fund Balance	$ 1,507,655	$ 1,098,655	$ 708,655	$ 736,655	$ 756,655
Fund Balance Target	$ 500,000	$ 515,000	$ 530,000	$ 545,000	$ 560,000

INTERGOVERNMENTAL CENTER
2026 CIP PROJECTS

Project Title	Project Cost	Project Type
3rd Floor Remodel	$265,000	Reinvestment
Building Exterior Cleaning & Repairs	$30,000	Reinvestment
TOTAL COST	**$295,000**	

INTERGOVERNMENTAL CENTER 2026-2030 CIP PROJECTS

IGC Replacement Fund	2026	2027	2028	2029	2030
Projected fund Balance	$ 1,200,497	$ 1,109,497	$ 503,497	$ 360,497	$ 446,497
Transfer-in IGC	$ 204,000	$ 208,000	$ 212,000	$ 216,000	$ 220,000
Available Funds	$1,404,497	$1,317,497	$715,497	$576,497	$666,497

Project Name	2026	2027	2028	2029	2030	Total	Illustrative
Intergovernmental Center - Building Exterior Cleaning & Repairs	$ (30,000)	$ (30,000)	$ (30,000)	$ (30,000)	$ (30,000)	$ (150,000)	
Intergovernmental Center - AED Replacement		$ (7,000)				$ (7,000)	
Intergovernmental Center - Roof Safety Improvements Phase 1		$ (100,000)				$ (100,000)	
Intergovernmental Center - Floor Scrubber Replacement		$ (18,000)				$ (18,000)	
Intergovernmental Center - Front Door Replacement						$ -	$ (100,000)
Intergovernmental Center - 3rd Floor Remodel	$ (265,000)					$ (265,000)	
Intergovernmental Center - Roof Replacement - 3rd Floor		$ (474,000)				$ (474,000)	
Intergovernmental Center - Roof Replacement - 1st Floor			$ (225,000)			$ (225,000)	
Intergovernmental Center - Server Room HVAC Replacement			$ (100,000)			$ (100,000)	
Intergovernmental Center - HVAC Unit Replacement				$ (100,000)		$ (100,000)	
Intergovernmental Center - Council Chambers Seating Replacement						$ -	$ (125,000)
Intergovernmental Center - Carpet Replacement and Painting on the 2nd Floor						$ -	$ (500,000)
Intergovernmental Center - Eastern EIFS Replacement					$ (325,000)	$ (325,000)	
Intergovernmental Center - Western & 3rd Floor EIFS Replacement						$ -	$ (500,000)
Intergovernmental Center - Elevator Code Upgrades		$ (185,000)				$ (185,000)	
Total	$ (295,000)	$ (814,000)	$ (355,000)	$ (130,000)	$ (355,000)	$ (1,949,000)	$ (1,225,000)

Fund Balance	$ 1,109,497	$ 503,497	$ 360,497	$ 446,497	$ 311,497
Fund Balance Target	$ 265,000	$ 272,500	$ 280,000	$ 287,500	$ 295,000

INFORMATION TECHNOLOGY 2026 CIP PROJECTS

Project Title	Project Cost	Project Type
Conference Room(s) Technology	$40,000	Reinvestment
Fiber Communications Infrastructure Expansion and Maintenance	$106,000	Reinvestment
IT Security Solutions	$20,000	Reinvestment
Network Equipment Upgrades	$25,000	Reinvestment
Security Access Control System Upgrades and Expansion	$95,000	Expansion/Reinvestment
Security Camera System Upgrades and Expansion	$96,000	Expansion/Reinvestment
Server Virtualization Upgrades	$25,000	Reinvestment
Video Storage Solution	$135,000	Expansion/Reinvestment
VoIP Phone System & 311 Call Center Upgrades	$25,000	Expansion/Reinvestment
TOTAL COST	**$567,000**	

INFORMATION TECHNOLOGY 2026-2030 CIP PROJECTS

IT Replacement Fund	2026	2027	2028	2029	2030
Projected Fund Balance	$931,024	$545,024	$587,024	$637,024	$770,024
Interest on Investments	$2,000	$2,000	$2,000	$2,000	$2,000
Transfer-in IT	$319,000	$328,000	$337,000	$346,000	$346,000
Cell Phone Tower Rent	$235,000	$235,000	$235,000	$235,000	$235,000
Fund Balance - Special Assessment Reserve		$220,000			
Available Funds	$1,487,024	$1,330,024	$1,161,024	$1,220,024	$1,353,024

Project Title	2026	2027	2028	2029	2030	Total
Conference Room(s) Technology	$40,000	$20,000	$20,000	$20,000	$20,000	**$120,000**
Fiber Communications Infrastructure Expansion and Maintenance	$106,000	$109,000	$112,000	$115,000	$118,000	**$560,000**
Network Equipment Upgrades	$25,000	$25,000	$45,000	$45,000	$45,000	**$185,000**
Security Access Control System Upgrades and Expansion	$95,000	$95,000	$70,000	$70,000	$70,000	**$400,000**
Security Camera System Upgrades and Expansion	$96,000	$99,000	$102,000	$105,000	$108,000	**$510,000**
Server Virtualization Upgrades	$25,000	$25,000	$25,000	$25,000	$25,000	**$125,000**
IT Security Solutions	$20,000	$20,000	$20,000	$20,000	$20,000	**$100,000**
Video Storage Solution	$135,000	$80,000	$80,000	$25,000	$25,000	**$345,000**
VoIP Phone System & 311 Call Center Upgrades	$25,000	$50,000	$50,000	$25,000	$25,000	**$175,000**
Special Assessment Software	$0	$220,000	$0	$0	$0	**$220,000**
Total	**$567,000**	**$743,000**	**$524,000**	**$450,000**	**$456,000**	**$2,740,000**
Fund Balance - Special Assessment Reserve	$375,000	$155,000	$155,000	$155,000	$155,000	
Fund Balance	$545,024	$587,024	$637,024	$770,024	$897,024	
Fund Balance Target	$ 515,000	$ 530,000	$ 545,000	$ 560,000	$ 575,000	

MASS TRANSIT 2026 CIP PROJECTS

Project Title	Project Cost	Local Share	Project Type
Bus Stop Improvement Project - Planning and Design	$137,500	20%	Expansion/Reinvestment
Bus Stop Maintenance	$25,000	100%	Reinvestment
Replace ARMER Portable Radios	$92,250	20%	Reinvestment
TOTAL COST	**$254,750**		

MASS TRANSIT 2026-2030 CIP PROJECTS

Transit	2026	2027	2028	2029	2030
Projected Fund Balance	$ 692,927	$ 871,977	$ 657,777	$ 742,777	$ 707,777
Transfer In	$ 250,000	$ 250,000	$ 250,000	$ 250,000	$ 250,000
Available Funds	$ 942,927	$ 1,121,977	$ 907,777	$ 992,777	$ 957,777

Project Name	2026	2027	2028	2029	2030	Total	Illustrative
Transit Maintenance Facility - Replace Window Sealant						$ -	$ (75,000)
Bus Stop Improvement Project - Construction		$ (50,000)	$ (50,000)	$ (50,000)		$ (150,000)	
Bus Stop Improvement Project - Planning and Design	$ (27,500)	$ (30,000)	$ (30,000)			$ (87,500)	
Bus Stop Maintenance	$ (25,000)	$ (25,000)	$ (25,000)	$ (25,000)	$ (25,000)	$ (125,000)	
Transit - Overhead Door Replacement		$ (80,000)				$ (80,000)	
Public Works Center - Fuel Island Relocation Design - 50% Share Transit			$ (20,000)			$ (20,000)	
Public Works Center - Fuel Island Relocation Construction- 50% Share Transit				$ (90,000)		$ (90,000)	
Transit - Electric Vehicle Charging Stations						$ -	$ (110,000)
Transit - Unit Heater Replacement		$ (40,000)	$ (40,000)			$ (80,000)	
Transit - Vehicle Wash System Replacement		$ (180,000)				$ (180,000)	
Transit - Facility Wall Concrete Joint Sealant Replacement					$ (75,000)	$ (75,000)	
Transit - Boiler Replacement					$ (40,000)	$ (40,000)	
Transit - Lighting Control Panel Replacement					$ (25,000)	$ (25,000)	
Transit - MAU/Exhaust Replacement				$ (120,000)		$ (120,000)	
Transit - Roof Replacement						$ -	$ (407,000)
5 - Year Transit Development Plan		$ (59,200)				$ (59,200)	
Replace ARMER Portable Radios	$ (18,450)					$ (18,450)	
Total	**$ (70,950)**	**$ (464,200)**	**$ (165,000)**	**$ (285,000)**	**$ (165,000)**	**$ (1,131,700)**	**$ (592,000)**
Fund Balance	$ 871,977	$ 657,777	$ 742,777	$ 707,777	$ 792,777		
Fund Balance Target	$515,000	$530,000	$545,000	$560,000	$575,000		

PUBLIC SAFETY BUILDING 2026 CIP PROJECTS

Project Title	Project Cost	Project Type
Public Safety Impound Lot - 117 Rogers St.	$110,000	Expansion/Reinvestment
TOTAL COST	**$110,000**	

PUBLIC SAFETY BUILDING 2026-2030 CIP PROJECTS

Public Safety Center	2026	2027	2028	2029	2030
Fund Balance	$1,982,805	$2,331,805	$1,290,805	$1,374,805	$1,428,805
Transfer-In PSC	$459,000	$474,000	$489,000	$504,000	$519,000
Available Funds	$2,441,805	$2,805,805	$1,779,805	$1,878,805	$1,947,805

Project Name	2026	2027	2028	2029	2030	Total	Illustrative
Fire Station #2 - Roof Replacement							$ (357,500)
Fire Station #3 - Building Envelope Improvements				$ (200,000)		**$ (200,000)**	
Fire Station #3 - Kitchen/Living Room Renovation		$ (30,000)				**$ (30,000)**	
Fire Station #3 - Paint Apparatus Bay Interior			$ (75,000)			**$ (75,000)**	
Fire Station Landscaping		$ (75,000)				**$ (75,000)**	
Public Safety Center - Apparatus Bay Apron Concrete Replacement		$ (40,000)				**$ (40,000)**	
Public Safety Center - Replace Concrete Stairs		$ (25,000)				**$ (25,000)**	
Public Safety Center - Admin Conference Room/Office Reconfiguration						**$ -**	$ (250,000)
Public Safety Center - Door Hardware Replacement and Rekey		$ (35,000)	$ (35,000)	$ (35,000)		**$ (105,000)**	
Public Safety Center - Dynamic Message Sign						**$ -**	$ (125,000)
Public Safety Center - Emergency Operations Center Furniture Replacement				$ (150,000)		**$ (150,000)**	
Public Safety Center - Exterior Service Door Replacement			$ (30,000)	$ (40,000)		**$ (70,000)**	
Public Safety Center - Fire Living Quarters Furniture Replacement		$ (35,000)				**$ (35,000)**	
Public Safety Center - HVAC Overhaul			$ (200,000)			**$ (200,000)**	
Public Safety Center - HVAC Over Pressurization Engineering Study & Repairs		$ (75,000)				**$ (75,000)**	
Public Safety Center - Interior Rear Stairwell Improvements		$ (75,000)				**$ (75,000)**	
Public Safety Center - Office Furniture Replacement		$ (25,000)	$ (25,000)	$ (25,000)		**$ (75,000)**	
Public Safety Center - Roof Replacement						**$ -**	$ (1,375,000)
Public Safety Impound Lot - 117 Rogers Street	$ (110,000)					**$ (110,000)**	
Public Safety Parking - Lot Sealcoating - Fire Station #2 & #3			$ (40,000)			**$ (40,000)**	
Public Safety - Apartments Fire Station #2		$ (1,100,000)				**$ (1,100,000)**	
Total	$ (110,000)	$ (1,515,000)	$ (405,000)	$ (450,000)	$ -	**$ (2,480,000)**	$ (2,107,500)
Fund Balance	$ 2,331,805	$ 1,290,805	$ 1,374,805	$ 1,428,805	$ 1,947,805		
Fund Balance Target	$ 794,000	$ 816,000	$ 838,000	$ 860,000	$ 882,000		

PUBLIC SAFETY EQUIPMENT 2026 CIP PROJECTS

Project Title	Project Cost	Project Type
Public Safety Door Training Prop	$10,000	Reinvestment
Public Safety Radio Replacement	$50,000	Reinvestment
Replacement of LUCAS Machine	$34,000	Reinvestment
SCBA Replacement	$54,000	Reinvestment
TOTAL COST	**$148,000**	

PUBLIC SAFETY EQUIPMENT 2026-2030 CIP PROJECTS

Public Safety Capital Equipment Replacement	2026	2027	2028	2029	2030
Fund balance	$ 893,759	$ 844,759	$ 762,759	$ 700,759	$ 704,759
Transfer-in	$ 99,000	$ 102,000	$ 105,000	$ 108,000	$ 111,000
Available Funds	$ 992,759	$ 946,759	$ 867,759	$ 808,759	$ 815,759

Project Name	2026	2027	2028	2029	2030	Total
Body Worn Cameras						$ -
Replacement of LUCAS CPR Device	$ (34,000)					$ (34,000)
Replacement of Public Safety Automated External Defibrillators			$ (63,000)			$ (63,000)
Radios Replacement	$ (50,000)	$ (50,000)	$ (50,000)	$ (50,000)	$ (50,000)	$ (250,000)
SCBA Replacement	$ (54,000)	$ (54,000)	$ (54,000)	$ (54,000)	$ (54,000)	$ (270,000)
Public Safety Door Training Prop	$ (10,000)					$ (10,000)
Live Fire Training Prop		$ (80,000)				$ (80,000)
Total	**$ (148,000)**	**$ (184,000)**	**$ (167,000)**	**$ (104,000)**	**$ (104,000)**	**$ (707,000)**

SCBA	$ 270,000	$ 324,000	$ 378,000	$ 432,000	$ 486,000
Radios	$ 250,000	$ 300,000	$ 350,000	$ 400,000	$ 450,000
Fund Balance - Unallocated	$ 844,759	$ 762,759	$ 700,759	$ 704,759	$ 711,759
Fund Balance Target	$400,000	$400,000	$400,000	$400,000	$400,000

FACILITIES 2026 CIP PROJECTS

Project Title	Project Cost	Project Type
Caledonia Community Center - Facility Audit	$30,000	Reinvestment
Parks Restroom Maintenance	$50,000	Reinvestment
Public Works Center - Floor Grate Repairs	$50,000	Reinvestment
Public Works Center - Master Planning Design	$100,000	Expansion/Reinvestment
Public Works Center - Welding Bay Exhaust & Tool Replacement	$300,000	Reinvestment
TOTAL COST	**$530,000**	

FACILITIES 2026-2030 CIP PROJECTS

Facilities	2026	2027	2028	2029	2030
Projected Fund Balance	$1,474,712	$1,524,712	$1,283,712	$1,646,212	$1,961,212
Transfer-In Facilities	$580,000	$595,000	$610,000	$625,000	$640,000
Available Funds	$2,054,712	$2,119,712	$1,893,712	$2,271,212	$2,601,212

Project Name	2026	2027	2028	2029	2030	Total	Illustrative
Building Automation System Upgrades & Expansion		$ (25,000)	$ (35,000)		$ (35,000)	**$ (95,000)**	
Caledonia Community Center - Drainage Improvements		$ (80,000)				**$ (80,000)**	
Caledonia Community Center - Exterior Waterproofing & Repairs		$ (125,000)				**$ (125,000)**	
Caledonia Community Center - Facility Audit	$ (30,000)					**$ (30,000)**	
Central Garage - Mobile Truck Lift					$ (100,000)	**$ (100,000)**	
Facilities - AED Replacement		$ (21,000)				**$ (21,000)**	
Facilities - Fire Alarm Panel Replacements			$ (40,000)	$ (35,000)		**$ (75,000)**	
Hubbard House - Waterproofing, Restoration, & ADA Improvements		$ (25,000)				**$ (25,000)**	
Park Pavilion - Appliance Replacement				$ (25,000)		**$ (25,000)**	
Parks Restroom Maintenance	$ (50,000)	$ (75,000)	$ (75,000)	$ (75,000)	$ (75,000)	**$ (350,000)**	
Public Works Center - Central Garage In-Floor Exhaust Fan Replacement				$ (30,000)		**$ (30,000)**	
Public Works Center - Central Garage Office Floor Improvements		$ (30,000)				**$ (30,000)**	
Public Works Center - Eastern Fence Replacement		$ (170,000)				**$ (170,000)**	
Public Works Center - Electrical Panel Upgrade		$ (50,000)	$ (50,000)	$ (50,000)	$ (50,000)	**$ (200,000)**	
Public Works Center - Elevator Code Upgrades		$ (125,000)				**$ (125,000)**	
Public Works Center - Fire Door Replacement			$ (22,500)	$ (25,000)	$ (25,000)	**$ (72,500)**	
Public Works Center - Floor Grate Repairs	$ (50,000)					**$ (50,000)**	
Public Works Center - Heated Storage Building						**$ -**	$ (2,750,000)
Public Works Center - Insulate and Resheet Parks Cold Storage Building						**$ -**	$ (300,000)
Public Works Center - Master Planning Design	$ (100,000)					**$ (100,000)**	
Public Works Center - Material Storage Building						**$ -**	$ (1,200,000)
Public Works Center - Welding Bay Exhaust & Tool Replacement	$ (300,000)					**$ (300,000)**	
Sibley Park - Pavilion HVAC Improvements		$ (60,000)				**$ (60,000)**	
Tourtellotte Pool FF&E		$ (50,000)	$ (25,000)	$ (25,000)	$ (25,000)	**$ (125,000)**	
Tourtellotte Pool Pump Rebuild				$ (45,000)		**$ (45,000)**	
Total	**$ (530,000)**	**$ (836,000)**	**$ (247,500)**	**$ (310,000)**	**$ (310,000)**	**$ (2,233,500)**	$ (4,250,000)
Fund Balance	$ 1,524,712	$ 1,283,712	$ 1,646,212	$ 1,961,212	$ 2,291,212		
Fund Balance Target	$ 1,160,000	$ 1,190,000	$ 1,220,000	$ 1,250,000	$ 1,280,000		

PARKS 2026 CIP PROJECTS

Project Title	Project Cost	Project Type
Bike Racks - replacement & additions	$5,000	Expansion/Reinvestment
Land of Memories - New Playground Improvements	$150,000	Expansion/Reinvestment
Pickleball Court Replacements - Tourtellotte Park	$750,000	Expansion/Reinvestment
Shelter Improvements	$50,000	Expansion/Reinvestment
Thomas Park Playground, Rink and Flagpole	$32,500	Reinvestment
TOTAL COST	**$987,500**	

PARKS 2026 -2030 CIP PROJECTS

Parks	2026	2027	2028	2029	2030
Projected Fund Balance	$ 2,324,366	$1,281,866	$1,261,866	$ 1,000,866	$ 1,199,366
Budgeted Amount for Parks CIP Projects (General Fund) Note: these funds may only be used for existing parks	$525,000	$540,000	$555,000	$570,000	$585,000
Guaranteed Available Funds	$2,849,366	$1,821,866	$1,816,866	$1,570,866	$1,784,366
Less Restricted (Splash Pad & Pickleball)	($580,000)				
CBDG Funds (*) If qualifying project	$0	$0	$0	$0	$0
Grants (awarded**)	$0	$0	$0	$0	$0
Available Funds	$2,269,366	$1,821,866	$1,816,866	$1,570,866	$1,784,366

Project Name	2026	2027	2028	2029	2030	Total	Illustrative
Shelter Improvements * Note: Rasmussen Shelter planned for 2026; Sibley Park backside for 2027	$ (50,000)	$ (55,000)	$ (60,000)	$ (65,000)	$ (70,000)	$ (300,000)	
Rasmussen Floating Trail*** ($250K CIP, $250 Grant applied for in 2022; not successful; moved to 2029; 2028 design costs)	$ -		$ (50,000)	$ (250,000)		$ (300,000)	
Land of Memories New Playground Improvements *** (DNR $200K/CIP $350K - $200 in 2025/150K in 2026)	$ (150,000)					$ (150,000)	
Land of Memories Existing Playground Replacement		$ (150,000)				$ (150,000)	
West Mankato Park Upgrades (playground and shelter relocation)*** Apply for DNR grant for this park ($300k CIP, $300k Grant)		$ (25,000)	$ (600,000)			$ (625,000)	
Tennis Court Resurfacing (Alexander and Erlandson)		$ (150,000)				$ (150,000)	
Jaycee Park Improvements (50K for overall park design in 2028)			$ (50,000)			$ (50,000)	$ -
Thomas Park Playground, Rink and Flagpole	$ (32,500)		$ -		$ -	$ (32,500)	
Pilot project for engagement of new/expanded groups in parks - Phase 3		$ (50,000)	$ (50,000)	$ (50,000)	$ (50,000)	$ (200,000)	
Alexander Park - upgrade tennis court lights retrofit (repaint light poles; redo light kits; new electric lines)		$ (75,000)				$ (75,000)	
Erlandson Park - upgrade tennis court lights (repaint light poles; redo light kits; new electric lines)		$ -				$ -	$ 50,000
Thomas Park - upgrade hockey rink lights					$ (100,000)	$ (100,000)	$ -
Stoltzman Park - upgrade rink lights (repaint light poles; redo light kits; new electric lines)		$ (50,000)				$ (50,000)	
Bike Racks - replacement & additions	$ (5,000)	$ (5,000)	$ (6,000)	$ (6,500)	$ (7,000)	$ (29,500)	
Surface Upgrades - Caledonia		$ -				$ -	$ 465,000
Groh Park Development (DNR Grant $250K, Charter bonds $500K) ***	$ -	$ -				$ -	$ 1,000,000
PW Parks *@ (100K CDBG, 125K PIL, 325K Charter Bonds, 200K DNR Grant)	$ -	$ -				$ -	$ 1,000,000
Pickleball Court Replacements - Tourtellotte Park	$ (750,000)						
CIP funding incurred	$ (987,500)	$ (560,000)	$ (816,000)	$ (371,500)	$ (227,000)	$ (2,962,000)	
Kearney Pond Park !@ (10K Other, 440K Charter,)						$ -	$ 450,000
Proposed Charter Bond Funding Incurred	$ -	$ -				$ -	
Total Capital Enhancement	$ (987,500)	$ (560,000)	$ (816,000)	$ (371,500)	$ (227,000)	$ (5,174,000)	$ 2,965,000
Fund Balance - Restricted (Splash Pad)	$ 580,000	$ 580,000	$ 580,000	$ 580,000	$ 580,000		
Fund Balance	$ 1,281,866	$ 1,261,866	$ 1,000,866	$ 1,199,366	$ 1,557,366		
Fund Balance Target	$ 775,000	$ 798,000	$ 822,000	$ 847,000	$ 872,000		

WATER CAPITAL 2026 CIP PROJECTS

Project Title	Project Cost	Project Type
Balcerzak Tower Rehab	$1,950,000	Reinvestment
Dolph Station Driveway Rehab	$175,000	Reinvestment
Highway 14 Watermain Lining	$650,000	Reinvestment
RO Pilot test	$275,000	Expansion/Reinvestment
Water Meter Replacement	$100,000	Reinvestment
Well 13 Lateral installation	$50,000	Expansion/Reinvestment
WHF Overhead Door Replacement	$17,000	Reinvestment
TOTAL COST	**$3,217,000**	

WATER CAPITAL 2026-2030 CIP PROJECTS

Water Capital	2026	2027	2028	2029	2030
Projected Fund Balance	$8,731,994	$6,614,994	$4,464,994	$1,102,994	$2,387,994
Transfer-In Water	$1,000,000	$2,000,000	$2,000,000	$2,000,000	$2,000,000
Transfer-In Meter Replacement	$100,000	$100,000	$100,000	$100,000	$100,000
Available Funds	$9,831,994	$8,714,994	$6,564,994	$3,202,994	$4,487,994

Project Title	2026	2027	2028	2029	2030	Total	Illustrative
Balcerzak Tower Rehab	$1,950,000					$1,950,000	
Softener HVAC Replacement			$300,000			$300,000	
Water Handling Facility (WHF) HVAC Replacement			$80,000			$80,000	
Surge protection devices on the incoming power to buildings and MCC's				$125,000		$125,000	
High Lift Pump Station HVAC Replacement				$215,000		$215,000	
Madison Tower Rehab - RFP 2030 rehab 2031					$50,000	$50,000	
Well 13 Lateral Installation	$50,000	$3,915,000				$3,965,000	
RO Pilot test	$275,000					$275,000	
Deep Well Emergency Connection		$35,000	$1,112,000			$1,147,000	
RFP for new water tower design/build		$75,000				$75,000	
Dolph Reservoir Roof Replacement			$200,000			$200,000	
Booster installation at North City Reservoir		$50,000	$3,015,000			$3,065,000	
Dolph Booster Pump upgrade					$900,000	$900,000	
Rehab Dolph reservoir driveway	$175,000					$175,000	
Membrane Filter Replacement			$575,000			$575,000	
Remote site PLC upgrade		$75,000		$75,000	$90,000	$240,000	
WHF Overhead Door Replacement	$17,000					$17,000	
Well 15 rehab and inspection			$80,000			$80,000	
WTP Upper Roof Replacement				$300,000		$300,000	
HWY 14 Watermain Lining	$650,000					$650,000	
Water Meter Replacement	$100,000	$100,000	$100,000	$100,000	$100,000	$500,000	
Total	**$3,217,000**	**$4,250,000**	**$5,462,000**	**$815,000**	**$1,140,000**	$14,884,000	$ -

Water Meter Reserve	$400,000	$500,000	$600,000	$700,000	$800,000
Fund Balance	$6,614,994	$4,464,994	$1,102,994	$2,387,994	$3,347,994
Reserve Target	$1,000,000	$1,030,000	$1,060,000	$1,090,000	$1,120,000

WASTEWATER CAPITAL 2026 CIP PROJECTS

Project Title	Project Cost	Project Type
Upgrade regional trunk line - Thompson Ravine to WRRF (customer community line)	$500,000	Expansion/Reinvestment
Chlorine analyzer replacement	$52,648	Reinvestment
Disc filter panel replacement 22 - 2028	$65,000	Reinvestment
Influent VFD replacement	$94,057	Reinvestment
Reclaim Pump Rebuilds	$50,000	Reinvestment
Secondary scum station removal	$200,000	Expansion/Reinvestment
TOTAL COST	**$961,705**	

WASTEWATER CAPITAL 2026-2030 CIP PROJECTS

Wastewater Plant Capital Impr	2026	2027	2028	2029	2030
Projected Fund Balance	$5,299,412	$6,337,707	$7,913,947	$5,442,250	$7,333,367
Transfer-In Wastewater	**$2,000,000**	**$2,000,000**	**$2,000,000**	**$2,000,000**	**$2,000,000**
Blower Reserve - Release			**$1,537,500**		
Available Funds	$ 7,299,412	$ 8,337,707	$ 11,451,447	$ 7,442,250	$ 9,333,367

Project Title	2026	2027	2028	2029	2030	Total
Blower Replacement with turbo blowers			$5,300,000			**$5,300,000**
Disc filter panel replacement	$65,000		$68,000			**$133,000**
EQ Tank Propeller Mixers					$85,963	**$85,963**
Influent Pumps VFD replacement	$94,057	$98,760	$103,698	$108,883		**$405,398**
Chlorine Analyzer replacement	$52,648					**$52,648**
20 Year Facility plan			$500,000			**$500,000**
WRF Reclaim pump rebuilds	$50,000		$37,500		$55,000	**$142,500**
WRF Actiflo lamella tube replacement		$325,000				**$325,000**
Secondary Scum Pump station removal	$200,000					**$200,000**
Regional trunk line - engineering work / construction 3rd ave	$500,000					**$500,000**
Total	**$961,705**	**$423,760**	**$6,009,198**	**$108,883**	**$140,963**	**$7,644,508**
Blower Replacement Reserve	$1,537,500	$1,537,500	$0	$0	$0	
Fund Balance	$6,337,707	$7,913,947	$5,442,250	$7,333,367	$9,192,404	
Reserve Target	$ 1,000,000	$ 1,030,000	$ 1,060,000	$ 1,090,000	$ 1,120,000	

STORMWATER CAPITAL 2026 CIP PROJECTS

Project Title	Project Cost	Project Type
Honeymead Pump Station Facility & Electrical	$697,988	Expansion/Reinvestment
Private Property BMPs	$100,000	Expansion/Reinvestment
TOTAL COST	**$797,988**	

STORMWATER CAPITAL 2026-2030 CIP PROJECTS

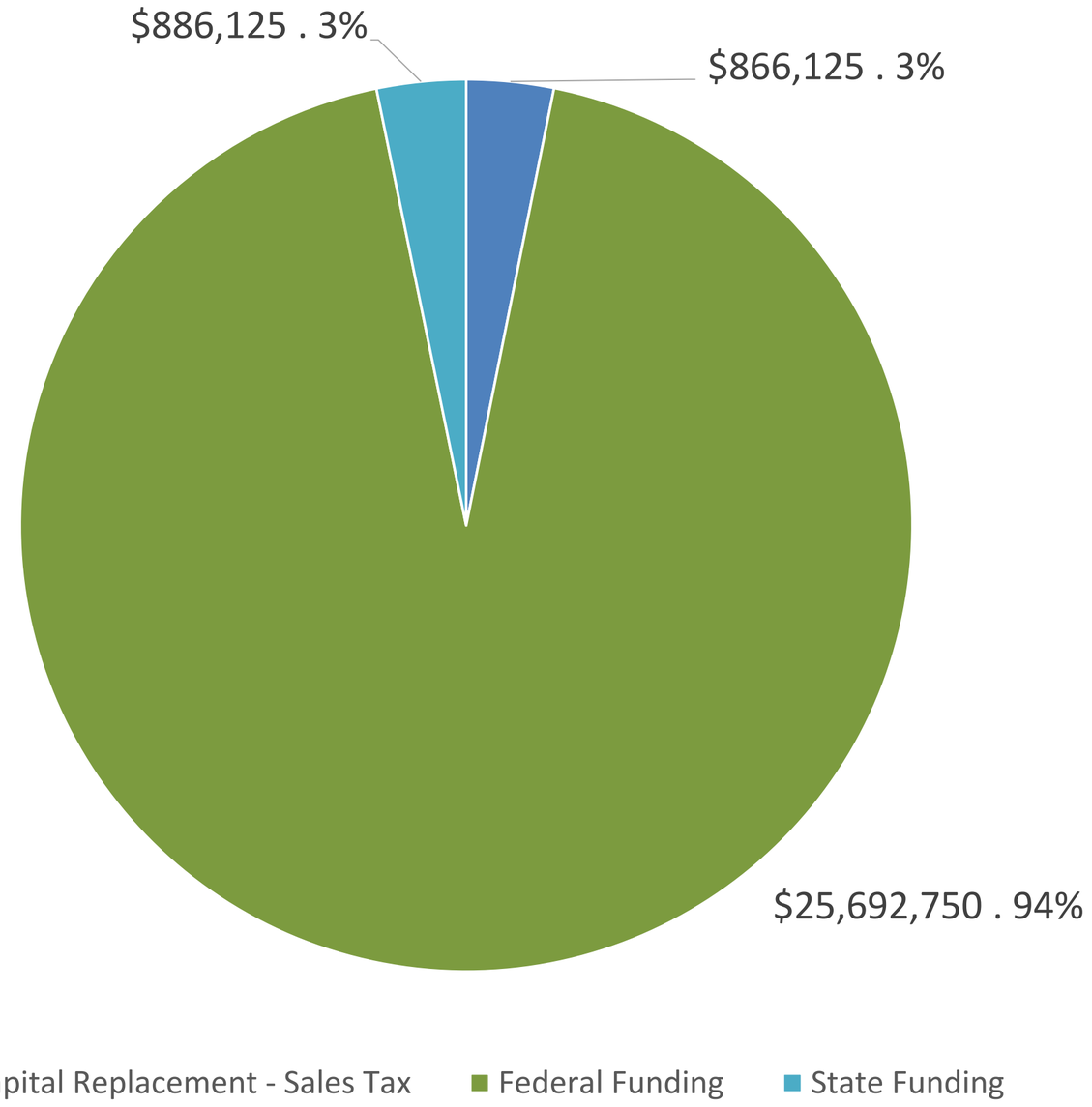
Stormwater Capital	2026	2027	2028	2029	2030
Projected Fund Balance	$2,862,647	$2,914,660	$3,639,660	$2,881,534	$2,833,928
Transfer-In Stormwater	$850,000	$925,000	$950,000	$850,000	$850,000
Available Funds	$3,712,647	$3,839,660	$4,589,660	$3,731,534	$3,683,928

Project Title	2026	2027	2028	2029	2030	Total	Illustrative
Honeymead Pump Station Facility & Electrical	$697,988					**$697,988**	
Indian Creek Pump Station Facility & Electrical		$100,000	$1,508,126			**$1,608,126**	
Mulberry Pumping Station Facility & Electrical			$100,000	$797,606		**$897,606**	
Warren Creek Facility & Electrical						**$0**	$1,523,833
Private Property BMPs	$100,000	$100,000	$100,000	$100,000		**$400,000**	
Total	**$797,988**	**$200,000**	**$1,708,126**	**$897,606**	**$0**	**$3,603,719**	$1,523,833
Fund Balance	$2,914,660	$3,639,660	$2,881,534	$2,833,928	$3,683,928		
Reserve Target	$ 1,750,000	$ 2,000,000	$ 2,060,000	$ 2,120,000	$ 2,180,000		

AIRPORT 2026 CIP PROJECTS

Project Title	Project Cost	Local Share	Project Type
Acquire Snow Removal Equipment (SRE) Loader and Plow	$450,000	2.5%	Expansion/Reinvestment
Construct New Federal Contract Airport Traffic Control Tower	$25,302,000	2.5%	Expansion/Reinvestment
Enhanced Taxiway Markings (Part 139)	$83,000	2.5%	Expansion/Reinvestment
Airport Facility Rekey	$30,000	100%	Reinvestment
Heater & Exhaust Fan Replacement	$30,000	100%	Reinvestment
Overhead Door Maintenance	$30,000	100%	Reinvestment
Parking Lot / Entrance Road Pavement Rehabilitation	$300,000	30%	Reinvestment
Runway 04-22 Shift Planning Study	$50,000	2.5%	Expansion/Reinvestment
Taxiway A/D/E Intersection Reconstruction	$1,160,000	2.5%	Expansion/Reinvestment
TOTAL COST	**$27,445,000**		

AIRPORT 2026 CIP FUNDING SOURCES



AIRPORT 2026–2030 CIP PROJECTS

Airport Capital Improvement Fund	**2026**	**2027**	**2028**	**2029**	**2030**		
Projected Fund Balance	($118,650)	($552,775)	($558,625)	($903,525)	($1,117,525)		
Transfer-In Airport	$432,000	$440,000	$448,000	$456,000	$456,000		
Available Funds	$ 313,350	$ (112,775)	$ (110,625)	$ (447,525)	$ (661,525)		
Project Title	**2026**	**2027**	**2028**	**2029**	**2030**	**Total**	Illustrative
Acquire Airport Tractor/Mower		(37,500)				**(37,500)**	
Runway 04-22 Shift Planning Study	(1,250)					**(1,250)**	
Air Traffic Control Tower Construction	(632,550)					**(632,550)**	
Flail Mower Attachment		(39,000)				**(39,000)**	
Acquire Snow Removal Equipment (SRE) Loader and Plow	(11,250)					**(11,250)**	
Acquire Snow Removal Equipment (SRE) Self Propelled Snowblower		(18,750)				**(18,750)**	
Parking Lot/Entrance Road Pavement Rehabilitation	(90,000)					**(90,000)**	
Runway 04-22 Shift Environmental Assessment		(7,500)				**(7,500)**	
Runway 04/22 Shift / Temporary Extension Design			(15,000)			**(15,000)**	
Runway 04/22 Shift, Reconstruction, Runway Lighting & Signage			(359,625)			**(359,625)**	
Runway 15/33 Pavement Reconstruction				(300,000)		**(300,000)**	
Runway 15/33 Rehabilitate Runway Lights				(75,000)		**(75,000)**	
Taxiway A/D/E Intersection Reconstruction	(29,000)					**(29,000)**	
Construct Wildlife Fencing					(112,500)	**(112,500)**	
Remove Temporary End Runway 04 and 400' of Taxiway B1					(15,000)	**(15,000)**	
Construct Service Road					(45,000)	**(45,000)**	
Replace Airfield Electrical Vault				(10,000)		**(10,000)**	
Taxilane Pavement Reconstruction J/K/N/O/P/Q		(243,100)				**(243,100)**	
Taxiway A Reconstruction				(125,000)		**(125,000)**	
Runway Protection Zone (RPZ) Land Acquisition			(6,250)			**(6,250)**	
Taxiway B Reconstruction			(192,025)			**(192,025)**	
Acquire Snow Removal Equipment (SRE) - Boom Truck with Jets			(120,000)			**(120,000)**	
3030 S Airport Rd Hangar (Piston Shop) Roof Replacement				(160,000)		**(160,000)**	
Overhead Door Maintenance	(40,000)	(50,000)	(30,000)		(50,000)	**(170,000)**	
Heater & Exhaust Fan Replacement	(30,000)		(30,000)		(30,000)	**(90,000)**	
Airport Facility Rekey & Hardware Replacement	(30,000)	(50,000)	(40,000)		(20,000)	**(140,000)**	
Enhanced Taxiway Markings (Part 139)	(2,075)					**(2,075)**	
Airport Terminal HVAC Replacement						**-**	(1,200,000)
Airport Terminal Roof Replacement						**-**	(960,000)
Total	**(866,125)**	**(445,850)**	**(792,900)**	**(670,000)**	**(272,500)**	**(3,047,375)**	**($2,160,000)**
Fund Balance	($552,775)	($558,625)	($903,525)	($1,117,525)	($934,025)		

CIVIC CENTER 2026 CIP PROJECTS

Project Title	Project Cost	Project Type
ARMER Radio Replacements	$32,000	Reinvestment
Elevator Code Upgrades	$150,000	Reinvestment
Fire & Exterior Door Replacement	$120,000	Reinvestment
Fixtures, Furniture, and Equipment	$100,000	Reinvestment
TOTAL COST	**$402,000**	

CIVIC CENTER 2026-2030 CIP PROJECTS

Mankato Civic Center							
	2026	2027	2028	2029	2030		
Projected fund balance	$ 1,263,044	$ 1,468,044	$ 1,113,204	$ 1,209,204	$ 1,277,204		
Interest on Investments	$ 12,000	$ 12,000	$ 12,000	$ 12,000	$ 12,000		
Transfer In - Sales Tax	$ 595,000	$ 607,000	$ 619,000	$ 631,000	$ 643,000		
Revenue Total	$ 607,000	$ 619,000	$ 631,000	$ 643,000	$ 655,000		
Available Funds	$ 1,870,044	$ 2,087,044	$ 1,744,204	$ 1,852,204	$ 1,932,204		
Project Name	2026	2027	2028	2029	2030	Total	Illustrative
Mankato Civic Center - Fixtures, Furniture, and Equipment	$ (100,000)	$ (50,000)	$ (100,000)	$ (100,000)	$ (100,000)	$ (450,000)	
Mankato Civic Center - Fire & Exterior Door Replacement	$ (120,000)		$ (50,000)	$ (50,000)	$ (50,000)	$ (270,000)	
Mankato Civic Center - ARMER Radio Replacements	$ (32,000)	$ (27,500)	$ (60,000)			$ (119,500)	
Mankato Civic Center - HVAC Replacements			$ (50,000)	$ (55,000)	$ (55,000)	$ (160,000)	
Mankato Civic Center - Building Automation System Controls Upgrades				$ (100,000)		$ (100,000)	
Mankato Civic Center - Loading Dock Pedestrian Gates		$ (28,000)				$ (28,000)	
Mankato Civic Center - Ice Plant Ammonia Valve Replacement		$ (60,000)				$ (60,000)	
Mankato Civic Center - Restroom Refresh Phase 2 - Banquet Hall		$ (325,000)				$ (325,000)	
Mankato Civic Center - Restroom Refresh Phase 3 - Arena Concourse East						$ -	$ (225,000)
Mankato Civic Center - Restroom Refresh Phase 4 - Arena Concourse West						$ -	$ (275,000)
Mankato Civic Center - Restroom Refresh Phase 5 - Arena Concourse South						$ -	$ (325,000)
Mankato Civic Center - Restroom Refresh Phase 6 - Arena Concourse North						$ -	$ (450,000)
Mankato Civic Center - Restroom Refresh Phase 7 - Arena Lobby West						$ -	$ (325,000)
Mankato Civic Center - Escalator Controller Replacement					$ (160,000)	$ (160,000)	
Mankato Civic Center - Air Handler #10 Fresh Air Intake Design		$ (25,000)				$ (25,000)	
Mankato Civic Center - Air Handler #10 Fresh Air Intake Construction			$ (100,000)			$ (100,000)	
Mankato Civic Center - Arena First Floor Restroom ADA changing table reconfiguration						$ -	$ (80,000)
Mankato Civic Center - Fire Panel Upgrade				$ (100,000)		$ (100,000)	
Mankato Civic Center - Grand Hall Exhaust						$ -	$ (275,000)
Mankato Civic Center - Dehumidification Wheel Replacement				$ (70,000)		$ (70,000)	
Mankato Civic Center - Reception Hall Exterior Tuckpointing		$ (308,340)				$ (308,340)	
Mankato Civic Center - Reception Hall Interior Stone Repairs					$ (120,000)	$ (120,000)	
Mankato Civic Center - Building Exterior Base Lime Stone Replacement						$ -	$ (300,000)
Mankato Civic Center - Walk In Cooler/Freezer Replacements						$ -	$ (200,000)
Mankato Civic Center - Arena Chair Replacement						$ -	$ (300,000)
Mankato Civic Center - Arena Lobby Glass Curtain Wall Window Resealing						$ -	$ (350,000)
Mankato Civic Center - Main Boiler Plant Replacement Design				$ (100,000)		$ (100,000)	
Mankato Civic Center - Main Boiler Plant Replacement						$ -	$ (2,600,000)
Mankato Civic Center - Reverse Osmosis Water System for Arena Ice						$ -	$ (120,000)
Mankato Civic Center - Terrazzo Replacement						$ -	$ (425,000)
Mankato Civic Center - Elevator Code Upgrades	$ (150,000)	$ (150,000)	$ (175,000)			$ (475,000)	
Mankato Civic Center - Arena Stage Replacement						$ -	$ (100,000)
Total	$ (402,000)	$ (973,840)	$ (535,000)	$ (575,000)	$ (485,000)	$ (2,970,840)	$ (6,350,000)
Fund Balance	$ 1,468,044	$ 1,113,204	$ 1,209,204	$ 1,277,204	$ 1,447,204		
Fund Balance Target	$ 1,060,000	$ 1,090,000	$ 1,120,000	$ 1,150,000	$ 1,180,000		

PARKING 2026 CIP PROJECTS

Project Title	Project Cost	Project Type
Civic Center Ramp - Tunnel Improvements	$75,000	Reinvestment
Skyway Repairs	$75,000	Reinvestment
TOTAL COST	**$150,000**	

PARKING 2026 – 2030 CIP PROJECTS

Sales Tax - Parking	2026	2027	2028	2029	2030		
Projected fund balance	$ 1,343,324	$ 1,409,324	$ 1,279,324	$ 1,003,324	$ 1,131,324		
Sales Tax - Parking	$ 216,000	$ 220,000	$ 224,000	$ 228,000	$ 232,000		
Available Funds	$ 1,559,324	$ 1,629,324	$ 1,503,324	$ 1,231,324	$ 1,363,324		
Project Name	**2026**	**2027**	**2028**	**2029**	**2030**	**Total**	**Illustrative**
Mankato Place Ramp - Center Stairwell Reconstruction			$ (500,000)			$ (500,000)	
Ramp Structural Repairs		$ (100,000)		$ (100,000)	$ (100,000)	$ (300,000)	
Skyway Repairs	$ (75,000)					$ (75,000)	
Stairway Roof Replacements		$ (75,000)				$ (75,000)	
Civic Center Ramp - Tunnel Improvements	$ (75,000)					$ (75,000)	
Civic Center Ramp - Elevator Code Upgrades		$ (175,000)				$ (175,000)	
Civic Center Ramp - Aesthetic Improvements						$ -	$ (1,500,000)
Mankato Place Ramp - Elevator Code Upgrades					$ (200,000)	$ (200,000)	
Civic Center Ramp - Drive Lane Coating Replacement						$ -	$ (300,000)
Mankato Place Ramp - Drive Lane Coating Replacement						$ -	$ (300,000)
Civic Center Ramp - Riverfront Drive Stairwell Reconstruction						$ -	$ (650,000)
Total	$ (150,000)	$ (350,000)	$ (500,000)	$ (100,000)	$ (300,000)	$ (1,400,000)	$ (2,750,000)
Fund Balance	$ 1,409,324	$ 1,279,324	$ 1,003,324	$ 1,131,324	$ 1,063,324		
Fund Balance Target	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 1,000,000		



THANK YOU

ANY QUESTIONS?

Meeting Date: 10/22/2025

Title

CY53-25

Request of APX Construction Group, with permission of the owner, for a preliminary plat review of Evenson Subdivision; for annexation; and for the rezoning of the subject parcel from T, Transition, to B-3, Highway Business. The subject property is generally described as being in the east ½ of the northwest ¼, Section 21, Township 108 N, Range 26 W lying south of Highway 83 and east of Highway 22 excluding Stanley Subdivision, Blue Earth County (Blue Earth County PID R430921177001).

The anticipated date of Council action is November 10, 2025.

Applicant

The applicant is APX Construction Group, who has obtained permission from the property owner.

Request

The applicant is seeking a preliminary plat review of Evenson Subdivision and the rezoning of the subject parcel from T, Transition, to B-3, Highway Commercial.

Location

The subject property is located at 901 S. Victory Drive and is described as as being in the east ½ of the northwest ¼, Section 21, Township 108 N, Range 26 W lying south of Highway 83 and east of Highway 22 excluding Stanley Subdivision, Blue Earth County. The Blue Earth County parcel identification number is R430921177001.

Existing Land Use

The property is currently vacant.

Zoning

The subject property is located in Mankato Township, where it is currently zoned Highway Business District. Upon annexation to the City, the property will be given a temporary T, Transition, zoning classification. This request seeks to change the zoning from T, Transition, to the City's B-3, Highway Business zoning designation.

Other Board or Commission

The Mankato Township Board reviewed the petition for annexation at their October 14, 2025, meeting. The Board adopted a resolution outlining that they have no objection to the annexation.

Environmentally Sensitive Areas

There are areas on the site that have delineated wetlands.

Public Utilities

Upon annexation, the subject site will connect to public utilities.

City Code

Mankato City Code related to Subdivision and Development Regulations (Platting) can be found in Chapter 10, Article XII, as linked here: https://library.municode.com/mn/mankato/codes/code_of_ordinances?nodeId=PTIICOOR_CH10LAUSDE_ARTXIISUDEREPL

Mankato City Code related to B-3, Highway Business, zoning criteria can be found in Chapter 10, Article V, Division 8, as linked here: https://library.municode.com/mn/mankato/codes/code_of_ordinances?nodeId=PTIICOOR_CH10LAUSDE_ARTVCODI_DIV8HIBUDI

Site Plan Review Comments

The Site Plan and Traffic Advisory Committee evaluated the request at their October 14, 2025, meeting and provided comments. The comments, along with the applicant's response, are included in the Attachments section of this report.

Review

APX Construction Group, with permission of the owner, is requesting review of a preliminary plat review of Evenson Subdivision; for annexation; and for the rezoning of the subject parcel from T, Transition, to B-3, Highway Business.

The subject parcels are located at 901 S. Victory Drive and are generally described as being located in the east ½ of the northwest ¼, Section 21, Township 108 N, Range 26 W lying south of Highway 83 and east of Highway 22 excluding Stanley Subdivision, Blue Earth County. The Blue Earth County parcel identification number is R430921177001.

Preliminary Plat

The preliminary plat of Evenson Subdivision depicts a new one-lot, one-block subdivision that encompasses 3.89 acres.

The proposed subdivision, having a block length of approximately 550 feet, meets the Code block standards, which outline the maximum block length is 1,200 feet. The Code block standards outline that blocks over 600 feet may require pedestrian ways at least ten feet wide at their approximate centers. As a result of

the existing wetland located along South Victory Drive which would be the location necessary to put the sidewalk at the approximate center of the block, the applicant is proposing a pedestrian sidewalk that traverses northerly out to the Stadium Road right of way, then proceeds westerly where it connects to the existing pedestrian facilities at the roundabout area. As a result of the new proposed pedestrian connection being in the right of way, a subdividers agreement will be required. The Complete Streets Plan does not show a sidewalk connection along this segment of Stadium Road or along this side of Victory Drive and instead places it on the western side of South Victory Drive. However, the block standard outlined above and the proposed future use of the site as 72 units of residential requires access to pedestrian facilities and connectivity to transit stop locations.

The lot standards outlined in the Mankato City Code are achieved with the proposed subdivision. The one lot as shown exceeds the Code minimum standards of at least 30 feet on the frontage on a publicly dedicated street.

No new public dedication is shown on the plat for streets or other public infrastructure. Access to the site is proposed to be off of Victory Drive at the existing access location and will provide access to the development as well as the southerly property via a shared driveway area. The applicant has provided a Mutual Driveway Easement that extends 15' on the southerly side of this parcel and 15' on the northerly side of the adjacent parcel for a total private access easement area of 30'. Updated civil plans show that the existing approach on Stadium Road, on the northern side of the property, will be removed as part of the project and no access will be permitted to the subject parcel from Stadium Road.

Standard easements are shown on the north, south and east sides of the plat. The applicant has indicated that there may not be sufficient room on the westerly side for an easement based on the proposed location of the structure. A recommended condition is included herein that, in conjunction with the submission of the final plat.

The plat contains two wetland areas, one on the western side of the parcel and one on the eastern side of the parcel, and an easement is shown to represent the required16.5' wetland setback around each of the wetland areas. The applicant will be required to submit a No Loss request with the submission of the final plat to ensure that the existing wetlands will not be impacted by the proposed project, or if there are impacts proposed, the appropriate application will be required.

The applicant will be required to make a payment in lieu of parkland dedication based on commercial subdivision standards. Thus, a payment in lieu of a parkland dedication fee will be required at a rate of five percent of the total gross area based on the 2025 assessed rates. Additionally, because of the design standards within the criteria for the development of a multifamily development on a commercial parcel, the applicant will be required to install recreational amenities on the subject site and those will be evaluated in conjunction with a future submission for a conditional use permit.

The concept plans for the site show a new grouped housing project that has two multifamily apartment buildings. Each building is proposed to contain 36 units for a total of a 72-unit development. The applicant will be required to submit a conditional use permit and a certificate of design compliance for the proposal at the subject location. During the review process for the conditional use permit and certificate of design compliance, components applicable to those requests will be reviewed, including the details of the proposed internal recreational amenities, finishes, etc.

The concept plans also show a stormwater pond in the northwest corner of the subject parcel. Based on the Site Plan and Traffic Advisory comments, the applicant has made modifications to the pond in an updated drainage plan. In conjunction with the submission for a final plat, a recommendation is included that any additional drainage or utility modification necessary shall be implemented and a drainage and utility plan submitted that complies with engineering standards.

A traffic study has been submitted with the request. The findings of the study indicate that the number of new vehicle trips estimated to be generated by the Proposed Project is 30 trips during the morning peak hour (7 entering and 23 exiting), 37 trips during the evening peak hour (23 entering and 14 exiting), and 447 trips daily. This volume is low, resulting in roughly one new trip every two minutes during peak hours. The operational analyses show acceptable conditions in the study area for both existing and 2027 No-Build scenarios. The crash history review revealed no safety issues. Further, the study finds that the operation analyses for 2027 Build Conditions with the Proposed Project indicate acceptable study area operations. The Victory Drive and access intersection function acceptably with single-lane approaches.

Rezoning

The subject site is currently located in Mankato Township, and the applicant has requested annexation of said parcel. Upon annexation, the parcel will be given a temporary zoning classification of T, Transition.

With this request, the applicant is seeking the permanent City of Mankato zoning classification of the parcel as B-3, Highway Commercial. The B-3 district is designed and intended to provide for automobile-oriented commercial developments within the vicinity of streets with functional classifications of either arterials or major collectors. Such commercial developments are generally characterized by large parking areas. The district also encourages a broad range of business and light industrial activities. Permitted uses within the district include a wide range of commercial uses. Conditional uses within the B-3 also include a range of uses, including the recently amended ordinance to include multifamily housing. As noted previously, the applicant will be required to obtain a conditional use permit in order to implement their concept plan.

The rezoning request is consistent with the underlying land use classification of the parcel, which is "commercial". The parcels located directly to the east and south of the subject site also have an underlying land use designation of "commercial". The use of the properties in the immediate vicinity to the east, while still located in the township, is commercial in nature. A building supply company and an automobile sales business is located to the east of the subject parcel.

Findings

Staff respectfully submits the following findings regarding the proposed rezone from T, Transition, to B-3, Highway Commercial.

1. The rezoning from T, Transition, to B-3, Highway Commercial, is consistent with the goals, objectives, and policies of the comprehensive land use plan, as adopted and amended from time to time by the City Council.
2. The rezoning is compatible with the overall character of existing development in the immediate vicinity of the affected property.
3. The proposed B-3 zoning classification is consistent with adjacent properties in the immediate vicinity.
4. The proposed rezoning will not interfere with or diminish the use of property in the immediate vicinity.
5. The properties will be served by public utilities.

Staff respectfully submits the following findings of fact regarding the proposed preliminary plat of Evenson Subdivision.

1. General Requirements
    1. The subdivided site will be used for purposes permitted or conditionally permitted as a multiple family dwelling site.
    2. Drainage and storm water management for Lot One, Block 1 of the development, will be required to conform to City drainage requirements. Concept plans for the future site development show a private stormwater pond in the northwest corner of Lot 1, Block 1.
    3. The site provides storm connections.
    4. On-site wetlands are shown on the plat.
2. Streets

    1. New streets are not being dedicated with the subject plat. The street right-of-way widths from the previously approved Right of Way plat are in line with the existing street right-of-way widths.
3. Easements
    1. The plat will be required to provide standard drainage and utility easements around the subject site, and a recommended condition is included herein.
4. Block Standards
    1. The blocks within the subdivision were designed for the intended end use as commercial property. The proposed Lot 1, Block 1 achieves the Block standard as it is approximately 550 feet, which is less than the maximum block length of 1,200 feet.
5. Lot Standards
    1. The lot within the subdivision is intended for commercial use and provides an adequate size to allow off-street parking, loading and other facilities for the intended end use.
6. Public Sites and Open Spaces
    1. The applicant will be required to pay a payment-in-lieu of parkland dedication fee as the subject parcel has not previously been platted.

Recommendation

Staff recommends approval of the preliminary plat of Evenson Subdivision with the following conditions:

1. The final plat submission shall reflect easements around the subject site in conformance with the Mankato City Code.
2. The applicant shall enter into a subdividers agreement for any public improvements or improvements located in the public right of way.
3. The applicant shall provide a payment in lieu of a parkland dedication fee based on the 2025 commercial assessed market rates.
4. In conjunction with the submission of the final plat, the applicant shall provide updated drainage and utility plans conforming to engineering standards and other applicable standards.
5. In conjunction with the submission of the final plat, the applicant shall address the wetlands on the site and obtain a no loss finding or the applicable wetland impact approvals.
6. The applicant will be required to obtain a conditional use permit and a certificate of design compliance for the use shown on the proposed concept plan.

Staff recommends approval of the rezoning of the subject parcel from T, Transition, to B-3, Highway Commercial.

Attachments

General Location Map

Aerial Plan

Preliminary Plat

Preliminary Plat w adjacent properties

Preliminary Plat with aerial imagery

Civil Plans v2

Grading and Drainage Report

Wetland Delineation

Traffic Study

Trip Generation Memo

Concept Plans

Proposed Private Recreational Amenities

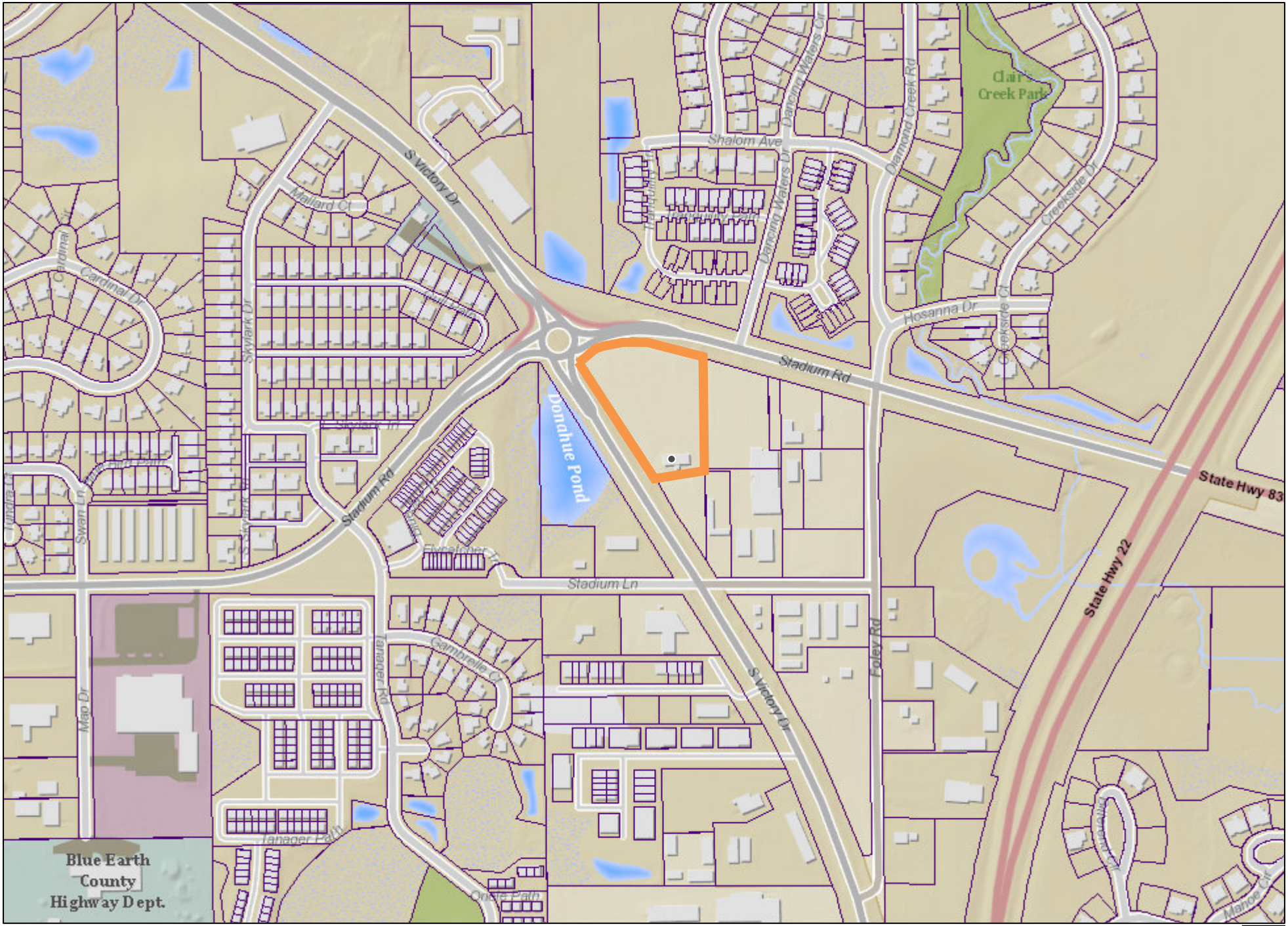
Existing Zoning

Proposed Zoning

Site Plan and Traffic Advisory Committee comments and applicant responses

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General Location Map



Date: September 2025

Author:

This information is to be used for reference purposes only. The City of Mankato does not guarantee accuracy of the material contained herein and is not responsible for misuse or misinterpretation.

N

Aerial Map



Date: September 2025

Author:

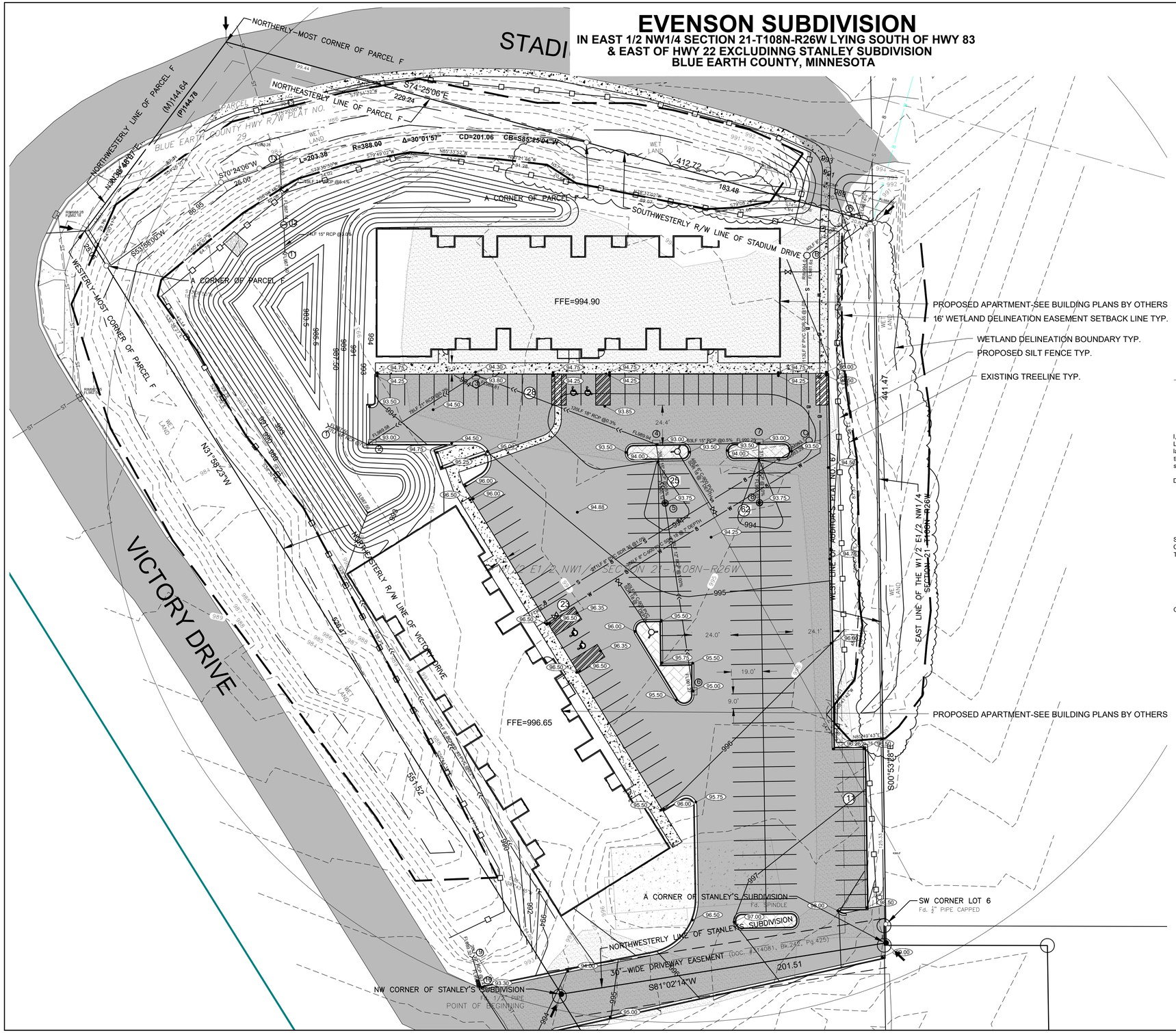
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PRELIMINARY_PLAT

EVENSON SUBDIVISION

IN EAST 1/2 NW1/4 SECTION 21-T108N-R26W LYING SOUTH OF HWY 83 & EAST OF HWY 22 EXCLUDINNG STANLEY SUBDIVISION BLUE EARTH COUNTY, MINNESOTA



LEGEND

- = 5/8"Ø X 16" iron stake monument
- =Iron stake monument-Found
- W = Water Main
- S = Sanitary Sewer
- = Storm Sewer
- G = Gas Main
- UT = Underground Telephone
- OT = Overhead Telephone
- FO = Fiber-Optics
- UE = Underground Electric
- OE = Overhead Electric
- X = Chain Link Fence
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- = Gate Post
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- G = Gas Meter
- F = Fiber-Optics Box
- T = Telephone Pedestal
- = Light Tower
- = Silt Fence
- F&I = Furnish & Install
- 1272 = Existing Elevation Contour Line
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- = Sign-Handicap
- = Light Pole
- = Power Pole
- = Guy Anchor
- = Fire hydrant
- = Water Main Valve
- = Fire Sprinkler
- = Cleanout
- = Culvert
- = Gas Main Valve
- = Catch Basin
- = Manholes
- 1271.23 = Spot Elevation
- RM1270.89 = Rim Elevation
- FL1262.34 = Line Elevation
- =Concrete Surface
- =Bituminous Surface
- =Gravel Surface
- 27.00 =Pavement Elevation

SURVEYOR'S CERTIFICATE

I, Steven J. Thompson, do hereby certify that this plat was prepared by me or under my direct supervision; that I am a duly Licensed Land Surveyor in the State of Minnesota; that this plat is a correct representation of the boundary survey; that all mathematical data and labels are correctly designed on this plat; that all monuments depicted on this plat have been, or will be correctly set within one year; that all water boundaries and wetlands, as defined in Minnesota Statutes, Section 505.01, Subd. 3, as of the date of this certificate are shown and labeled on this plat; and all public ways are shown and labeled on this plat.

Dated _____ day of _____, ____.

_____
Licensed Land Surveyor
Minnesota Licensed No. 22705

STATE OF MINNESOTA
COUNTY OF BLUE EARTH
This Instrument was acknowledged before me on this _____ day of _____, ____ by Steven J. Thompson.

_____, Notary Public
My Commission Expires _____

Owner: Victory Mankato, LLC, Kyle Smith, Chief Manager, 1531 Madison Avenue Suite 200, Mankato, MN 56001

SCALE 1"=30'

0' 30'
15' 60'
SCALE IN FEET

AREA
3.89 ACRES±

JONES, HAUGH & SMITH INC.
CONSULTING ENGINEERS & LAND SURVEYORS
515 SOUTH WASHINGTON AVENUE ALBERT LEA, MINNESOTA 56007

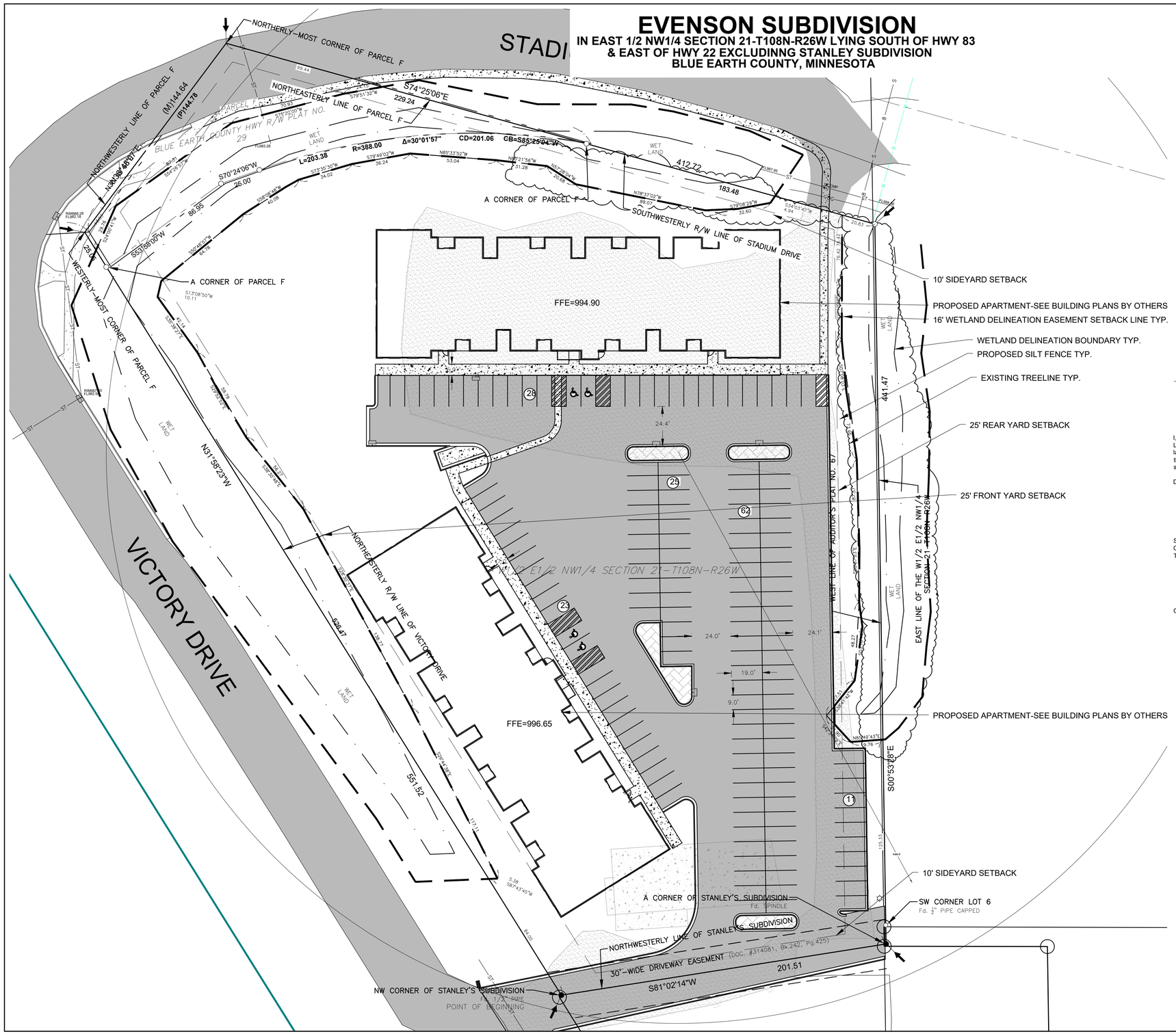
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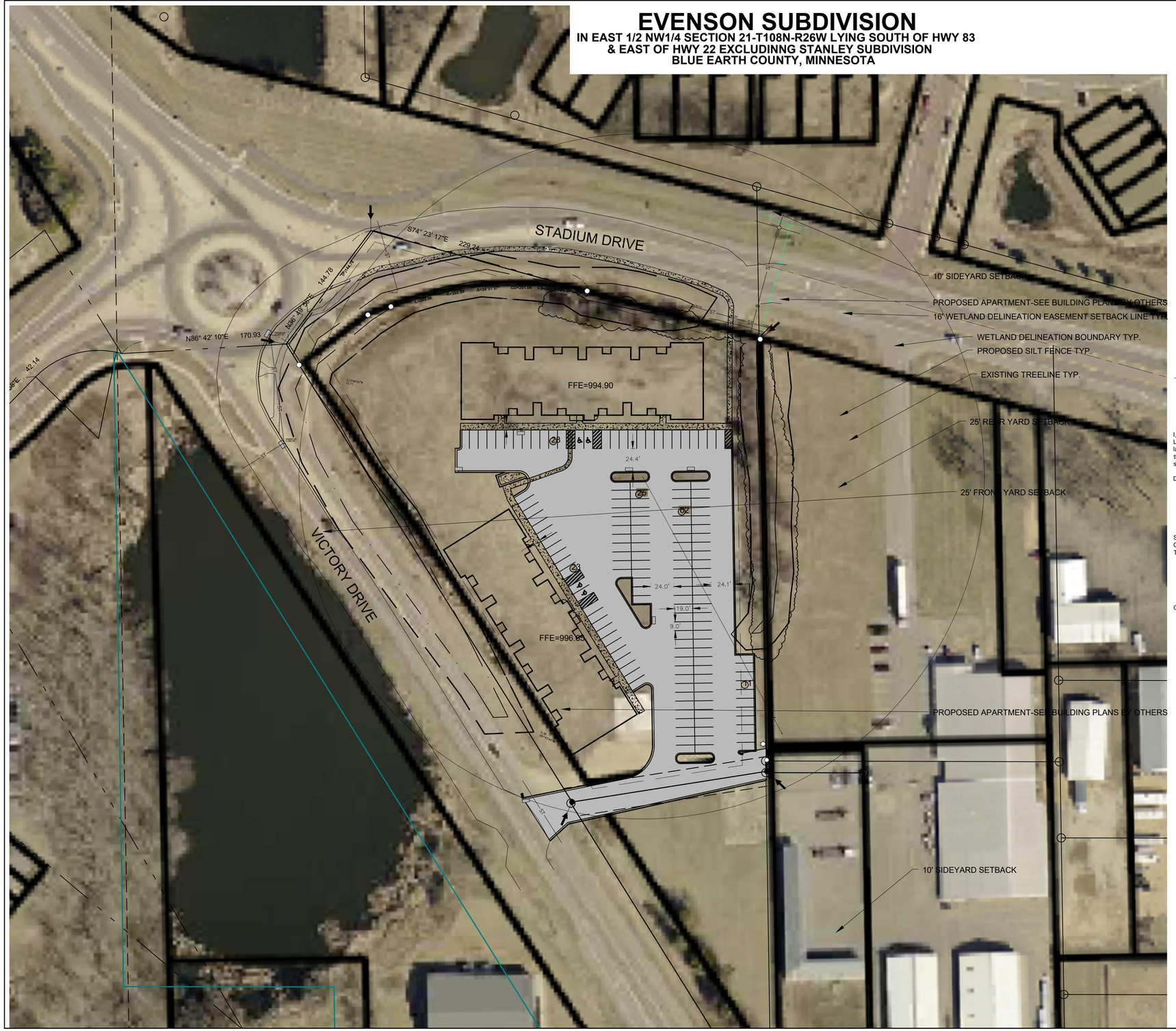
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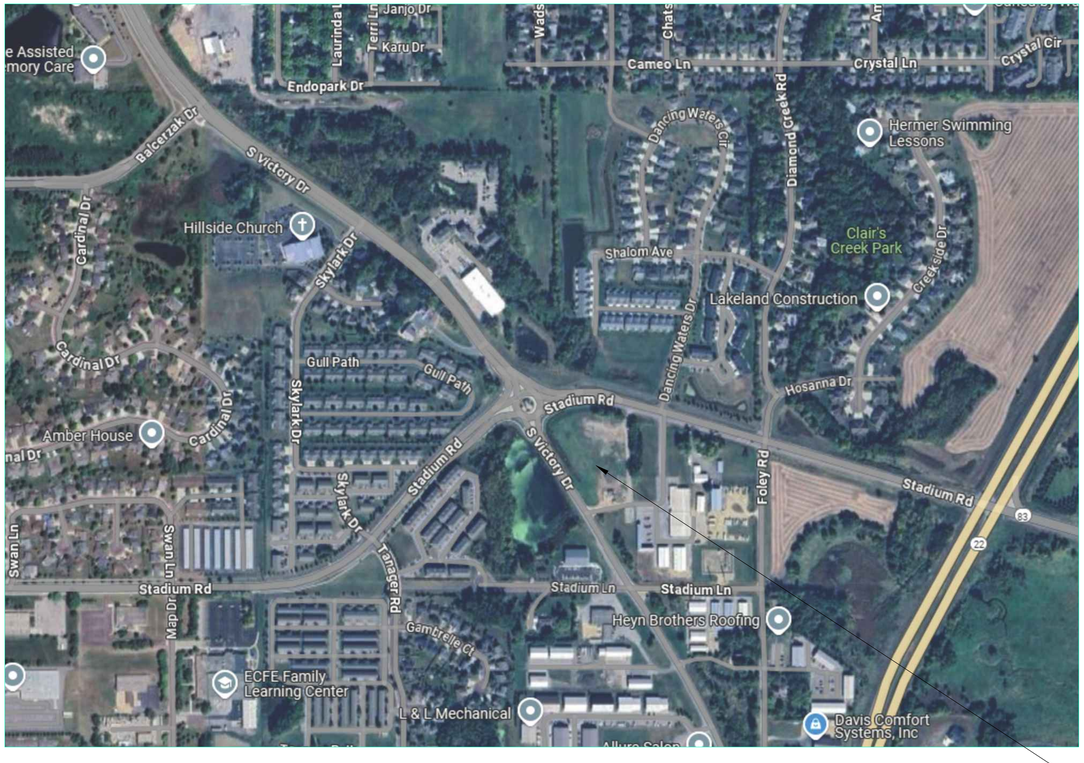
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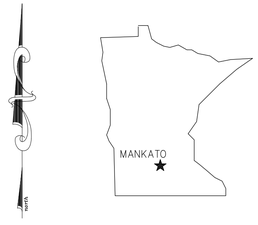
SEPTEMBER_2025

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MANKATO APARTMENTS
MANKATO, MN



PROJECT LOCATION



INDEX TO SHEETS

C1: TITLE SHEET
C2: EXISTING CONDITIONS
C3: HARDSCAPE PLAN
C4: UTILITY PLAN
C5: GRADING PLAN
C6: LANDSCAPE PLAN
C7: DETAILS
C8: SWPPP NARRATIVE
C9–C10: SPECIFICATIONS

THIS PLAN CONTAINS 10 SHEETS

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	=Gravel Surface
27.00	=Proposed Pavement Elevation
T28.0 B24.0	=Proposed Top/Bottom of Retaining Wall Elevation

APPLICABLE CONSTRUCTION PERMITS

ALL CONSTRUCTION WITHIN ROAD RIGHT-OF-WAY SHALL BE DONE IN ACCORDANCE WITH THE APPLICABLE PERMIT AS ISSUED BY THE ROAD AUTHORITY.

GENERAL NOTES

DEVELOPER, CONTRACTOR AND ALL SUBCONTRACTORS SHALL COMPLY WITH ALL APPLICABLE CODES AND ORDINANCES GOVERNED BY STATE AND LOCAL JURISDICTION.
SITE IRRIGATING, LIGHTING, LANDSCAPING, SIGNING ARE NOT A PART OF THIS PLAN.
PROVIDE EROSION CONTROL PER NPDES PERMIT REQUIREMENTS AND AS SHOWN.
PROVIDE HANDICAP CURB RAMPS & SIGNAGE. COMPLY WITH ALL AMERICAN DISABILITY ACT REQUIREMENTS.
ALL CONCRETE OR ASHPALTIC PAVEMENT CONSTRUCTION SHALL COMPLY WITH THE PROVISIONS OF MN/DOT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, LATEST EDITION.
A ROCK CONSTRUCTION ENTRANCE IS REQUIRED AT ALL ENTRANCES FROM BITUMINOUS PAVEMENT.
ACCESS FOR LOCAL RESIDENTS/BUSINESSES SHALL ALWAYS BE MAINTAINED.
PROVIDE PAVEMENT STRIPING AS SHOWN
CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS FOR CONSTRUCTION.
SEE BOUNDARY SURVEY BY OTHERS FOR SITE BOUNDARIES.
ANY ALTERATIONS OR REVISIONS TO THE SITE DEVELOPMENT PLAN AS SHOWN SHALL NOT BE THE RESPONSIBILITY OF JONES, HAUGH & SMITH INC. AND SHALL RELEASE JONES, HAUGH & SMITH INC. OF ANY LIABILITY FOR ANY DAMAGES CAUSED THEREFROM UNLESS WRITTEN AUTHORIZATION OR PLAN REVISION HAS BE APPROVED BY JONES, HAUGH & SMITH INC. PRIOR.

BENCHMARK 1
Top head of spike in power pole at southeast corner of property.
Elevation = 1001.49

BASIS OF BEARING SYSTEM
All bearings are based upon the MnDot Blue Earth County Coordinate System Nad 83 (96) Harn Adjustment Grid

Consultant:
JONES HAUGH SMITH
Engineers • Surveyors
515 South Washington Ave. Albert Lea, MN 507-373-4876

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the State of Minnesota.

Brian J. Johnson
Reg. No. 42744
Date: 9/20/25

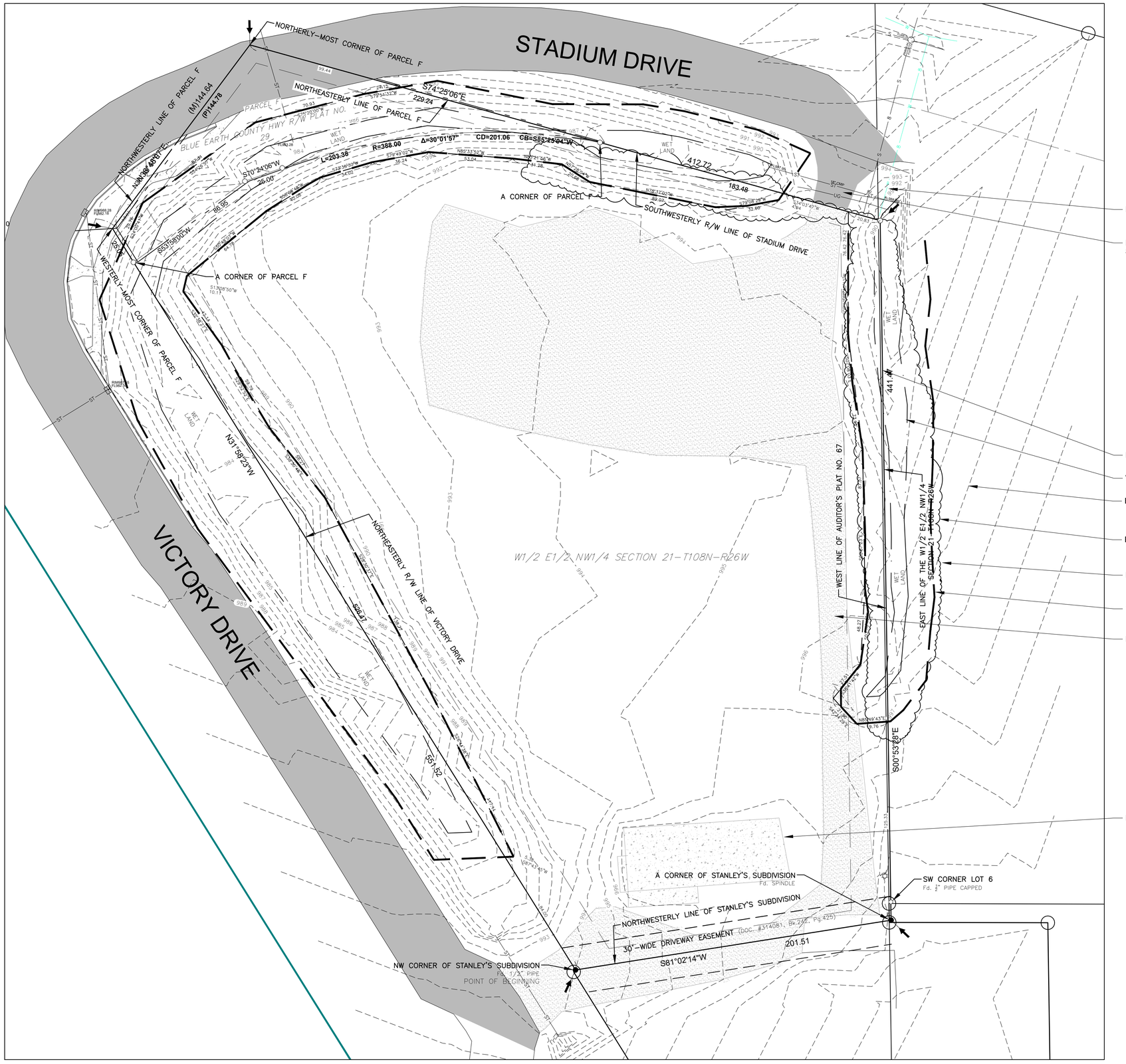
Project: MANKATO APARTMENTS

Revision:

No.: 25-188	Date: 9/20/2025
Drawn: bjj	Checked:
Project Manager:	
Project Status: CD	

Sheet Title: TITLE SHEET

Sheet No.: C1



EXISTING SEWER/WATER SERVICES-FIELD VERIFY LOCATION

REMOVE EXISTING DRIVEWAY APPROACH-GRADE TO MATCH EXISTING DITCH SLOPES
SEE GRADING PLAN-REMOVE EXISTING DRIVEWAY CULVERT

PROPERTY LINE TYP.

WETLAND DELINEATION LINE TYP.

EXISTING ELEVATION CONTOUR TYP.

EDGE OF TREES TYP.

EXISTING GROUND SPOT ELEVATION TYP.

16.5' WETLAND BUFFER LINE TYP.

REMOVE OR SALVAGE EXISTING GRAVEL SURFACING

REMOVE EXISTING CONCRETE SLABS & WALKS AS REQUIRED FOR CONSTRUCTION TYP.

1"=30'

30 0 30

HORIZ. SCALE FEET

Consultant:

JONES HAUGH SMITH
Engineers • Surveyors
515 South Washington Ave. Albert Lea, MN 507-373-4876

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the State of Minnesota.

Brian J. Johnson
Reg. No. 42744
Date: 9/20/25

Project:

MANKATO APARTMENTS

Revision:

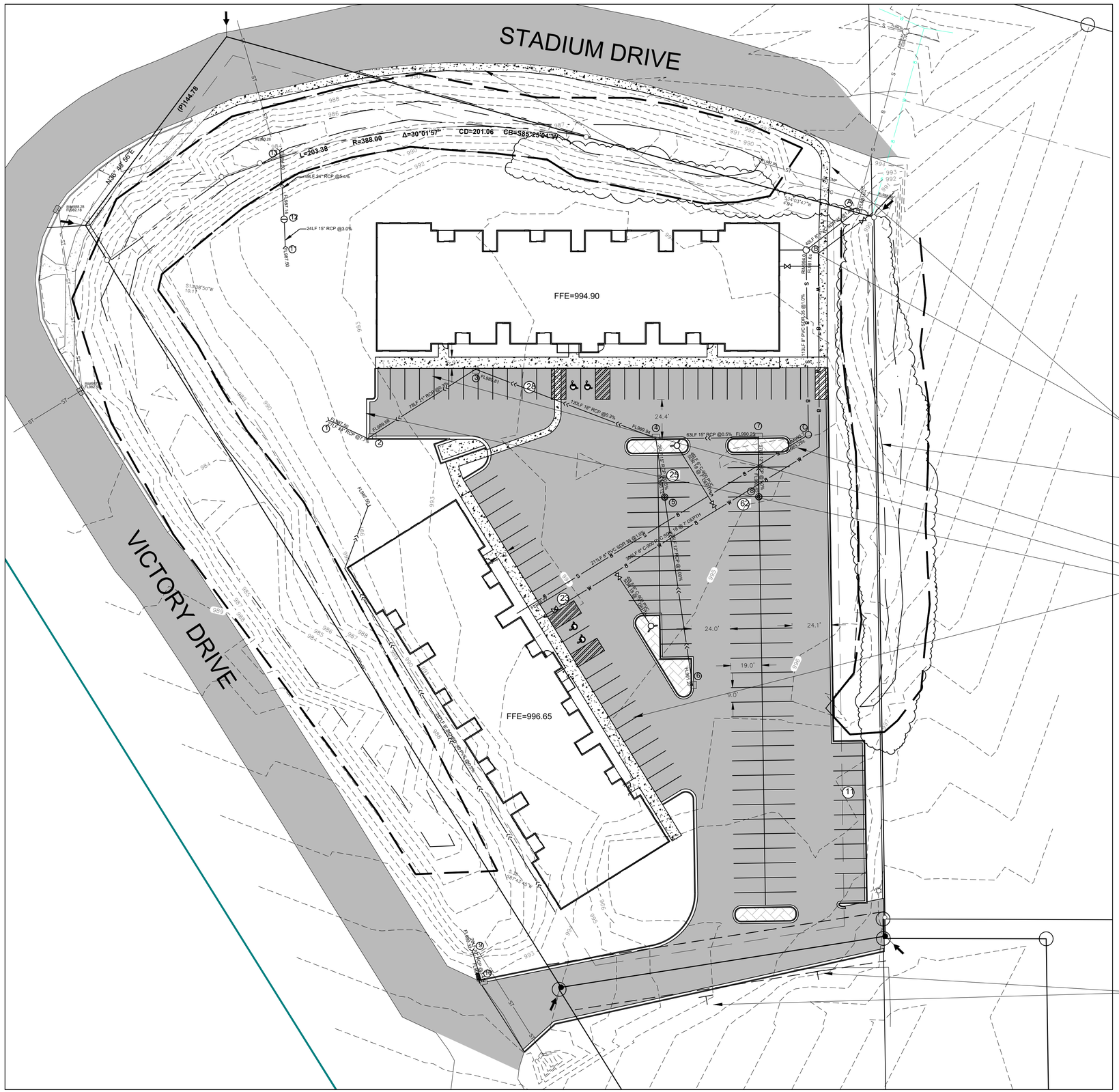
No.: 25-188	Date: 9/20/2025
Drawn: bjj	Checked:
Project Manager:	
Project Status: CD	

Sheet Title:

EXISTING CONDITIONS

Sheet No.:

C2



F&I NEW 5' WIDE X 4" THICK CONCRETE WALK FROM PARKING LOT TO EXISTING SIDEWALK AT EXISTING ROUNDABOUT. INSTALL AT 2% SLOPE AWAY FROM STADIUM DRIVE BITUMINOUS. F&I THICKENED EDGE WALK ON DOWNSTREAM SIDE OF WALK AS NEEDED TO AVOID DISTURBING WETLAND/EASEMENT
F&I WOOD RAIL FENCE WHEREVER SLOPE IS 4:1 OR GREATER ALONG SIDEWALK-SEE DETAIL

NEW CONCRETE B618 CURB & GUTTER TYP.

F&I LATEX PAVEMENT STRIPING/MESSAGES TYP.

F&I CONCRETE PAVEMENT SECTION WITHIN TRASH ENCLOSURE TYP.

F&I CURB CUT FOR POND MAINTENANCE ACCESS

F&I THICKENED EDGE WALK ALONG BUILDING EXCEPT AT ADA STALLS TYP.
SEE THICKENED EDGE WALK DETAIL AND RAISED PAVEMENT DETAIL

F&I (2) R3-2 NO LEFT TURN SIGNS
PER MUTCD MANUAL

1"=30'

30 0 30

HORIZ. SCALE FEET

Consultant:

JONES HAUGH SMITH
Engineers • Surveyors
515 South Washington Ave. Albert Lea, MN 507-373-4876

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the State of Minnesota.

Brian J. Johnson
Reg. No. 42744
Date: 9/20/25

Project:

MANKATO APARTMENTS

Revision:

No.:	Date: 9/20/2025
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Sheet Title:

HARDSCAPE PLAN

Sheet No.:

C3



STORM SEWER STRUCTURE SCHEDULE

NO.	RIM EL.	INVERT EL.	HEIGHT	CASTING	DESIGN	REMARKS
1	–	987.50	–	–	–	F&I 24" RC APRON & TRASH GUARD, 10 CY CL. III RIPRAP
2	993.00	988.58	5.58	R3067	48–4022	
3	993.80	989.81	3.99	R3067	48–4022	
4	993.00	989.94	3.06	R3067	48–4022	
5	993.75	990.12	3.63	R2532	G	
6	995.00	991.27	3.73	R3067	2X3	
7	993.00	990.25	2.75	R3067	2X3	
8	993.75	990.62	3.13	R2532	G	
9	–	989.32	–	–	–	F&I 12" RC APRON & TRASH GUARD, 5 CY CL. III RIPRAP
10	993.30	989.32	3.98	R3067	2X3	
11	–	987.50	–	–	–	F&I 18" RC APRON & TRASH GUARD
12	991.00	987.50	3.50	–	–	SEE OUTLET STRUCTURE DETAIL
13	–	984.50	–	–	–	F&I 12" RC APRON & TRASH GUARD, 10 CY CL. III RIPRAP

F&I CL. III RIPRAP AS NOTED WITHIN 24 HOURS OF OUTLET INSTALLATION

SANITARY SEWER STRUCTURE SCHEDULE

NO.	RIM EL.	INVERT EL.	HEIGHT	CASTING	DESIGN	REMARKS
A	992.50	981±	11.50	1772	4007C	FIELD VERIFY EXISTING PIPE INVERT
B	994.00	981.6	12.4	1772	4007C	
C	993.75	983.29	10.46	1772	4007C	

CONNECT TO EXISTING WATERMAIN-F&I 8X8 TEE, 45° BEND, (2) 8" GATE VALVES
CONNECT TO EXISTING SANITARY-F&I MANHOLES AS SHOWN-SEE STRUCTURE SCHEDULE

F&I 8" 45° BEND

F&I (2) 8X6 TEES, 6" GATE VALVES, HYDRANT LEGS AND 6" HYDRANTS
CONNECT TO EXISTING SANITARY-F&I MANHOLES AS SHOWN-SEE STRUCTURE SCHEDULE

NEW CONCRETE B618 CURB & GUTTER TYP.

F&I STORM SEWER PIPING AND STRUCTURE TYP.-SEE STRUCTURE SCHEDULE FOR MORE INFO.

F&I LATEX PAVEMENT STRIPING/MESSAGES TYP.

F&I CONCRETE PAVEMENT SECTION WITHIN TRASH ENCLOSURE TYP.

F&I THICKENED EDGE WALK ALONG BUILDING EXCEPT AT ADA STALLS TYP.
SEE THICKENED EDGE WALK DETAIL AND RAISED PAVEMENT DETAIL

WET BASIN SUMMARY

NET INCREASE IN IMPERVIOUSE SURFACE=1.25 ACRES
1.1" WQV VOLUME REQUIRED: 0.115 AC.-FT.
WQV VOLUME PROVIDED: 0.185 AC.-FT.
WQV ELEVATION=988.50
DISCHARGE RATE AT WQV: 2.28 CFS
BASIN 100 YR. HWL=990.42
TOP OF BERM=993.00
EOF=992.00

DISCHARGE RATES (CFS):

	PRE-DEVELOPMENT	POST-DEVELOPMENT
2 YEAR	5.10	2.85
10 YEAR	9.41	8.02
100 YEAR	23.21	15.71

F&I 287LF 8" SCHED. 40 PVC @0.2%. CONNECT ROOF DRAIN DOWNSPOUTS TO TO PVC AND OUTLET INTO PROPOSED POND.

1"=25'
25 0 25
HORIZ. SCALE FEET

Consultant:

JONES HAUGH SMITH
Engineers • Surveyors
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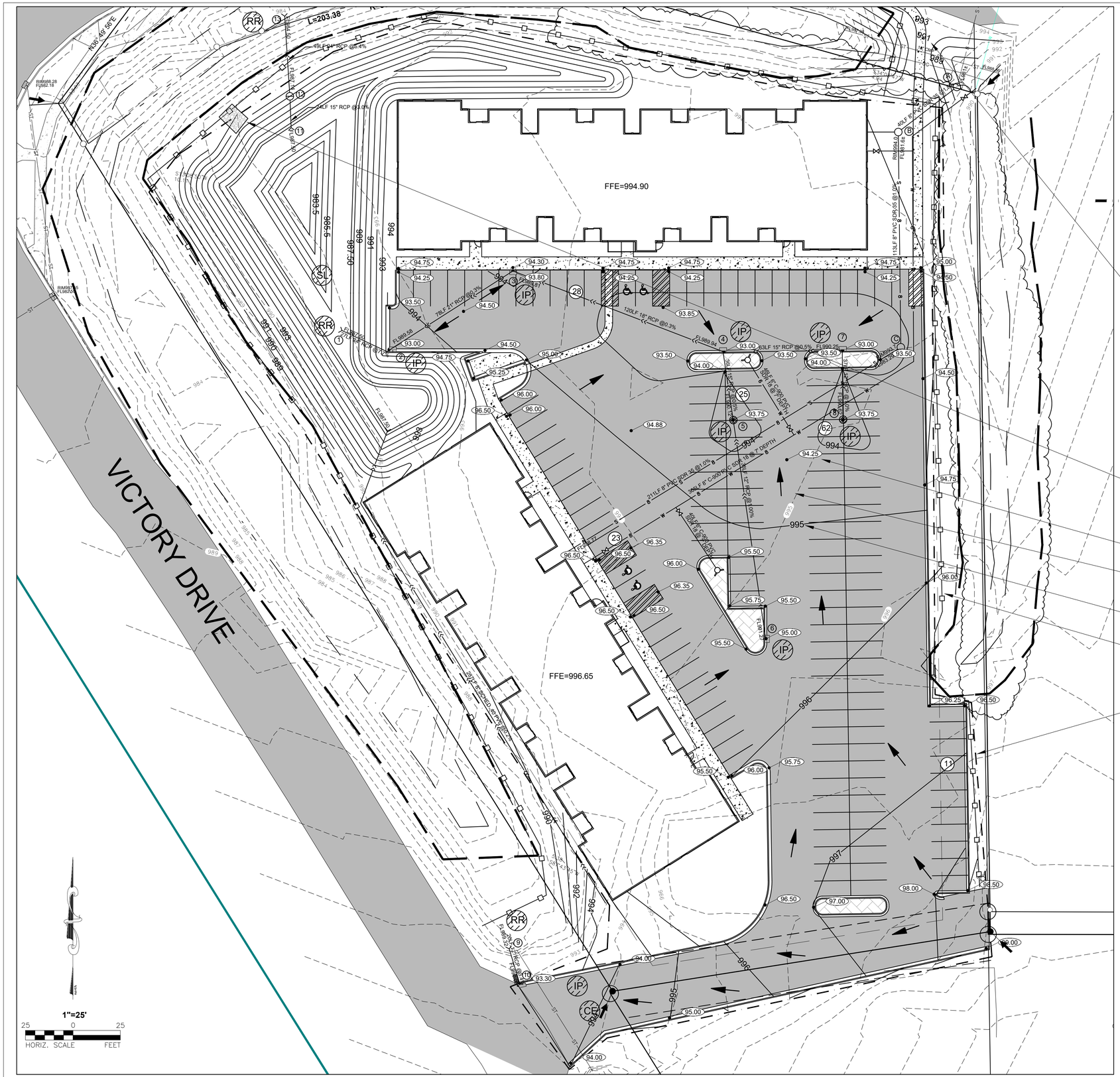
No.:	Date: 9/20/2025
Drawn: bjj	Checked:

Project Manager:

Project Status: CD

Sheet Title:
UTILITY PLAN

Sheet No.:
C4


VICTORY DRIVE
FFE=994.90
FFE=996.65
L=203.38
N36° 49' 56"E
78LF 21" RCP @0.3%
120LF 18" RCP @0.3%
83LF 15" RCP @0.5%
14LF 15" RCP @3.4%
19LF 8" RCP @5.4%
113LF 8" PVC S-DR-35 @1.0%
211LF 8" PVC SDR-35 @1.0%
206LF 6" C-900 PVC SDR-18 @1.0%
20LF 8" RCP @1.0%
20LF 8" BENCHED WITH RIPRAP
RIM=998.28
FL982.18
RIM=995.15
FL982.65
RIM=994.21
FL981.86
RIM=988.47
FL984.47
RIM=989.58
FL985.58
RIM=989.58
FL985.68
RIM=989.58
FL985.78
RIM=989.58
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FL987.18
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FL987.28
RIM=989.58
FL987.38
RIM=989.58
FL987.48
RIM=989.58



LANDSCAPING NOTES

Sec. 10-1740 PERIMETER OFF STREET PARKING LOT
(1) SHADE TREE/ 50 LF OF FRONTAGE
(1) EVERGREEN TREE/ 25 LF OF FRONTAGE
80% OPAQUE ALONG ALL PARKING FRONTING STREET

PLANTING BEDS SHALL BE MULCHED WITH BARK CHIPS, ROCK MULCH, FEATHER ROCKS OR SIMILAR MATERIAL.

PERIMETER LANDSCAPING & TRANSITIONAL YARDS SHALL CONSIST OF A COMBINATION OF GROUND COVER, SHADE TREES OR EVERGREEN TREES, SHRUBS AND APPROPRIATE SCREENING DEVICES SUCH AS DECORATIVE WALLS, FENCES OR BERMS.

LANDSCAPING LEGEND

=DENOTES EVERGREEN TREE

=DENOTES SHRUB

=DENOTES ARBOVITAE HEDGE (4' MIN. - 8' MAX)
(80% OPAQUE ALONG ALL PARKING FRONTING PREMIER DR.)

=DENOTES SHADE TREE

=DENOTES PLANTING BED W/ MULCH

=DENOTES EXISTING TREELINE

1"=25'
25 0 25
HORIZ. SCALE FEET

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MANKATO APARTMENTS

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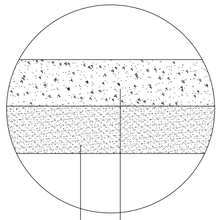
No.:	Date: 9/20/2025
Drawn: bjj	Checked:

Project Manager:

Project Status: CD

Sheet Title:
LANDSCAPE PLAN

Sheet No.:
C6



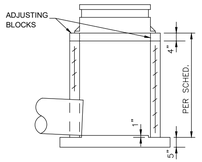
ALL JOINTS SHALL BE SEALED USING AN APPROVED MN/DOT HOT POUR ELASTIC SEALANT (3723) (INCIDENTAL)

7" CONCRETE PAVEMENT (MN/DOT 2301)

3" AGGREGATE BASE CLASS V (MN/DOT 2211)

ALL CONCRETE SHALL BE PORTLAND CEMENT CONCRETE PAVEMENT WITH A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS, A 4" MAXIMUM SLUMP AND 5% – 7% ENTRAINED AIR.

CONCRETE PAVEMENT SECTION



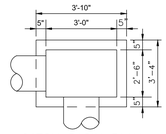
SECTIONAL VIEW
CATCH BASIN & BASE SLAB

NOTES:

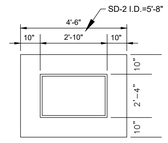
1. TO BE USED WITH NEENAH R3067 FRAMED COVER WITH 3" RAD. CURB BOX OR APPROVED EQUAL.
2. PIPE CUT-OUTS TO BE LOCATED WHERE REQUIRED.
3. ALTERNATE CAST-IN-PLACE BASE CAN BE USED.
4. MINIMUM REINFORCING SHALL BE WIRE FABRIC HAVING AN AREA OF NOT LESS THAN 0.12 SQ. IN. PER FOOT IN BOTH DIRECTIONS.

FOR USE WITH R3067 CASTING

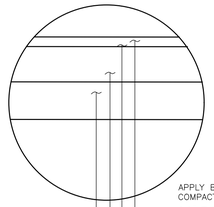
CATCH BASIN 2X3



CATCH BASIN PLAN

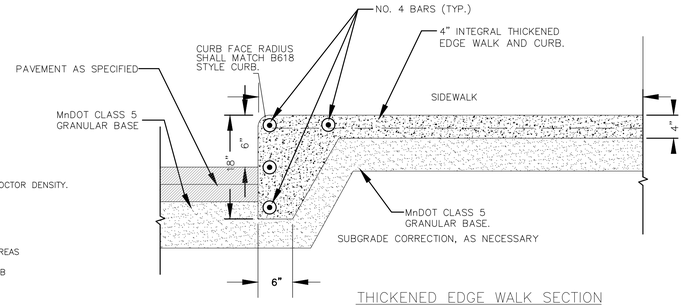


BASE SLAB PLAN

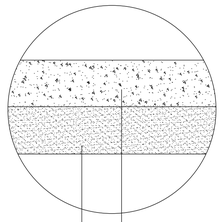


APPLY BITUMINOUS TACK COAT BETWEEN LIFTS
COMPACT ALL GRANULAR MATERIAL TO 100% OF PROCTOR DENSITY.
2.0" TYPE SPWEA240B WEAR COURSE
2.0" TYPE SPNWB230B BASE COURSE
12" CLASS V AGGREGATE BASE (2211)
SCARIFY THE UPPER 12" OF SUBGRADE IN "CUT" AREAS
ALL GRAVEL BASE SHALL EXTEND A MINIMUMN OF 1' BEHIND ALL CURB

PARKING LOT PAVEMENT SECTION



THICKENED EDGE WALK SECTION



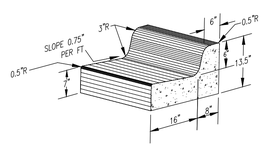
ALL JOINTS SHALL BE SEALED USING AN APPROVED MN/DOT HOT POUR ELASTIC SEALANT (3723) (INCIDENTAL)

4" CONCRETE PAVEMENT (MN/DOT 2301)

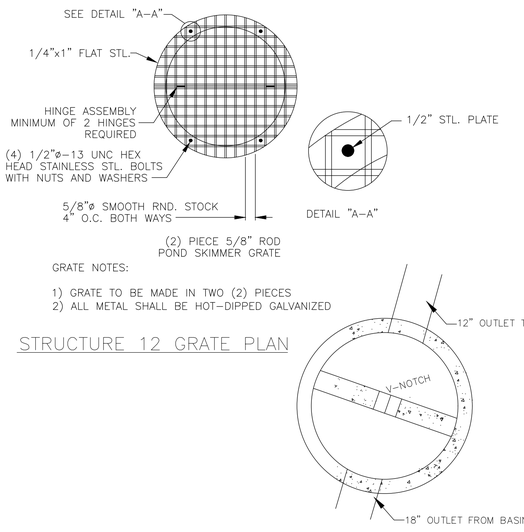
3" AGGREGATE BASE CLASS V (MN/DOT 2211)

ALL CONCRETE SHALL BE PORTLAND CEMENT CONCRETE PAVEMENT WITH A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS, A 4" MAXIMUM SLUMP AND 5% – 7% ENTRAINED AIR.

CONCRETE SIDEWALK SECTION



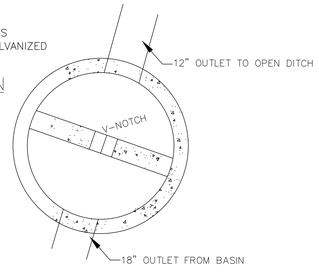
CONCRETE CURB & GUTTER DESIGN B618



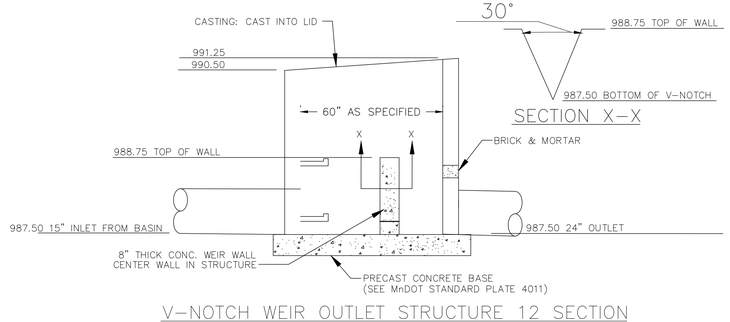
GRATE NOTES:

1) GRATE TO BE MADE IN TWO (2) PIECES
2) ALL METAL SHALL BE HOT–DIPPED GALVANIZED

STRUCTURE 12 GRATE PLAN

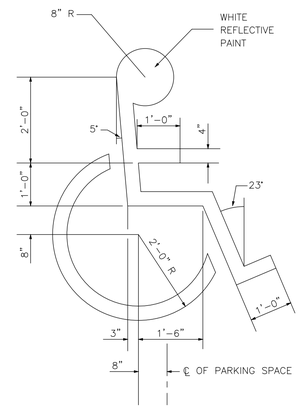


V–NOTCH WEIR OUTLET STRUCTURE PLAN



SECTION X–X

V–NOTCH WEIR OUTLET STRUCTURE 12 SECTION

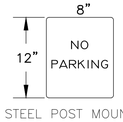


INTERNATIONAL HANDICAP SYMBOL



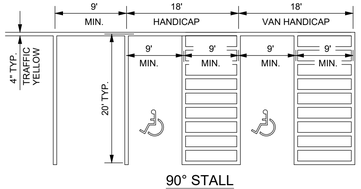
STEEL POST MOUNTED
(PERMANENT)
INSTALL AT ALL HANDICAP STALLS
60"–66" ABOVE FINISH GRADE
CENTERED AT THE HEAD OF THE STALL

SIGN PANEL DETAIL

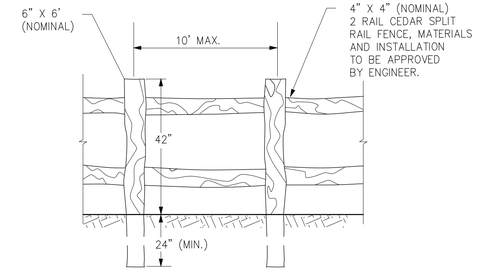


STEEL POST MOUNTED
(PERMANENT)
INSTALL AT ALL HANDICAP ACCESS
AILSES–60"–66" ABOVE FINISH GRADE
CENTERED AT THE HEAD OF THE STALL

SIGN PANEL DETAIL



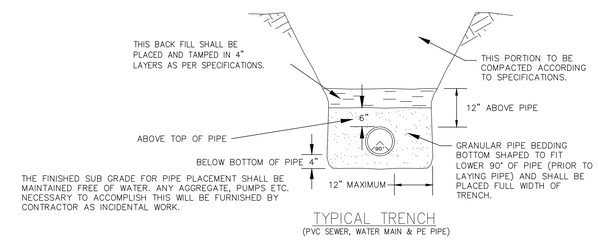
90° STALL



SPLIT RAIL WOOD FENCE REQUIRED ALONGSIDE SIDEWALK INSTALLED WITH ADJACENT 4:1 SLOPES

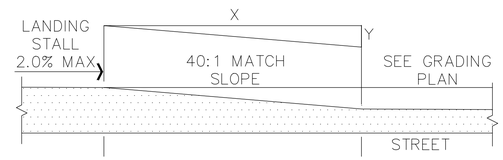
SPLIT RAIL WOOD FENCE

NOTE:
SHEETING, SHORING, BRACING AND SIDE SLOPES REQUIRED BY SAFETY CODES AND REGULATIONS, STATE INDUSTRIAL COMMISSION AND O.S.H.A. ARE NOT SHOWN. CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR THIS.

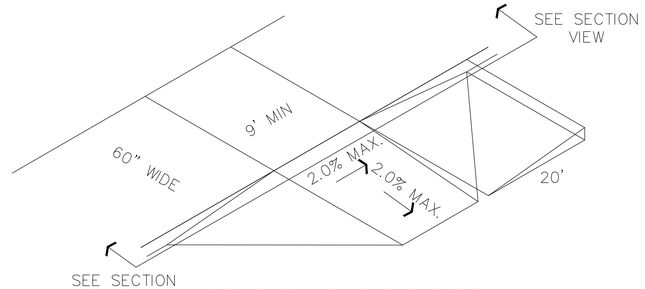


THE FINISHED SUB GRADE FOR PIPE PLACEMENT SHALL BE MAINTAINED FREE OF WATER. ANY AGGREGATE, PUMPS ETC. NECESSARY TO ACCOMPLISH THIS WILL BE FURNISHED BY CONTRACTOR AS INCIDENTAL WORK.

TYPICAL TRENCH
(PVC SEWER, WATER MAIN & PE PIPE)



CROSS SECTION



CURB RAMP – BUILT UP PAVEMENT

Consultant
JONES HAUGH SMITH
Engineers • Surveyors
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Date: 9/20/25

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MANKATO APARTMENTS

Revision:

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Drawn: bjj	Checked:
Project Manager:	
Project Status: CD	

Sheet Title:
DETAILS

Sheet No.:
C7

SWPPP NARRATIVE

CONSTRUCTION ACTIVITY INFORMATION

PROJECT NAME: MANKATO APARTMENTS
FACILITY IMPROVEMENT PROJECT

PROJECT LOCATION: MANKATO, MN

PROJECT SIZE: PARCEL SIZE: 2.0 DISTURBED ACRES

PROJECT TYPE: RESIDENTIAL BUILDING CONSTRUCTION

MAJOR SOIL TYPE: SILTY LOAM, KLOSSNER MUCK

CUMULATIVE IMPERVIOUS SUFACE:
EXISTING - 1.26 ACRES
POST CONSTRUCTION - 2.5 ACRES

DIRECT DISCHARGE FROM IMPERVIOUS SURFACE: 0.2 ACRES

RECEIVING WATERS:
CITY STORM SEWER

DATES OF CONSTRUCTION: 2025

OWNER: GROWTH HOLDINGS LLC

UNDERGROUND UTILITY/GRADING CONTRACTOR:

TO BE DETERMINED

PARTY RESPONSIBLE FOR LONG TERM O&M:
OWNER: GROWTH HOLDINGS LLC

GENERAL SITE INFORMATION

IMMEDIATELY FOLLOWING GRADING OF SLOPES OF 3:1 OR GREATER, SLOPES MUST BE STABILIZED WITH WOOD FIBER BLANKET (OR OTHER METHOD APPROVED BY THE ENGINEER) OVER APPROVED SEED MIXTURE AND A MINIMUM OF 4" OF TOPSOIL.

ALL EROSON CONTROL MEASURES SHALL REMAIN IN PLACE AND BE MAINTAINED IN GOOD CONDITION UNTIL THE SITE HAS BEEN RE-VEGETATED, AT WHICH TIME THE CONTRACTOR MAY REMOVE NECESSARY SILT FENCING TO CONSTRUCT ROADWAYS WHILE MAINTAINING ADEQUATE EROSION CONTROL IN ADJACENT AREAS. SUFFICIENT TOPSOIL SHALL BE STOCKPILED OR IMPORTED TO ALLOW FOR THE REPLACEMENT OF A MINIMUM OF 4" OF TOPSOIL FOR DISTURBED AREAS TO BE RE-VEGETATED.

CONTRACTOR SHALL SCHEDULE SITE GRADING, UTILITY INSTALLATION, AND ROADWAY CONSTRUCTION SO THAT THE GENERAL SITE CAN BE MULCHED AND RE-SEEDED SOON AFTER DISTURBANCE. DISTURBED AREAS SHALL BE SEEDED AND MULCHED OR SODDED WITHIN: 7 DAYS

INSPECT SILT FENCES AND BALE CHECKS AFTER EACH RAIN EVENT AND DAILY DURING A PROLONGED RAINFALL. IMMEDIATELY REPAIR FAILED OR FAILING MEASURES.

REMOVE SEDIMENT DEPOSITS FROM SILT FENCE AND BALE CHECKS WHEN SEDIMENT REACHES APPROXIMATELY 1/3 THE HEIGHT OF THE BARRIER.

BARRIERS WILL BE REPLACED WHEN THEY DECOMPOSE OR BECOME INEFFECTIVE BEFORE THE BARRIERS ARE NO LONGER NECESSARY. ANY SEDIMENT REMAINING IN-PLACE AFTER THE BARRIERS ARE NO LONGER NECESSARY WILL BE DRESSED TO CONFORM TO EXISTING GRADE, AND PREPARED AND SEEDED WITH THE APPROPRIATE SEED MIX, AS DIRECTED BY THE ENGINEER.

IN THOSE AREAS WHERE WOOD FIBER BLANKET OR OTHER SLOPE STABILIZATION METHODS HAVE FAILED, THE SLOPE SHALL BE RE-ESTABLISHED, SEED AND TOPSOIL REPLACED, AND ADDITIONAL SLOPE TREATMENT INSTALLED.

BARRIERS WILL BE REMOVED WHEN FINAL STABILIZATION OF THE SLOPES HAS BEEN COMPLETED AS DETERMINED BY THE ENGINEER.

NO STORMWATER MITIGATION MEASURES WERE REQUIRED AS A PART OF ENVIRONMENTAL, ARCHAEOLOGICAL OR OTHER REQUIRED LOCAL, STATE, OR FEDERAL REVIEW OF THIS PROJECT.

THIS PROJECT IS NOT LOCATED IN A KARST AREA NECESSITATING MEASURES TO PROTECT DRINKING WATER SUPPLY.

THIS PROJECT DOES DISCHARGE WATER TO AN IMPAIRED WATER.

PROVIDE SILT FENCE AROUND ALL SOIL STOCKPILES

SWPPP IMPLEMENTATION CHAIN OF RESPONSIBILITY

EACH CONTRACTOR ON-SITE WILL DESIGNATE AN EMPLOYEE AS ITS PROJECT SWPPP OFFICER. A LIST OF THESE OFFICERS WITH CONTACT INFORMATION WILL BE AVAILABLE ON-SITE. IT WILL BE SOLEY THE SWPPP OFFICERS' RESPONSIBILITY TO ENSURE THAT ALL ON-SITE ACTIVITIES PERFORMED BY ITS COMPANY COMPLY WITH THE SWPPP. THE GENERAL CONTRACTOR'S SWPPP OFFICER WILL HAVE AUTHORITY OVER ALL SUB-CONTRACTOR'S SWPPP OFFICERS FOR WORK PERTAINING TO COMPLIANCE.

SHOULD A SWPPP OFFICER FAIL TO ENSURE COMPLIANCE, THAT OFFICER'S FOREMAN OR DIRECT SUPERVISOR WILL ASSUME ALL RESPONSIBILITY.

SHOULD A SUB-CONTRACTOR FAIL TO COMPLY WITH THE SWPPP, THE GENERAL CONTRACTOR WILL ASSUME ALL RESPONSIBILITY FOR COMPLIANCE.

SHOULD THE GENERAL CONTRACTOR FAIL TO COMPLY WITH THE SWPPP, THE OWNER WILL ASSUME ALL RESPONSIBILITY FOR COMPLIANCE.

EROSION PREVENTION PRACTICES

CONTRACTOR SHALL PHASE CONSTRUCTION, MAINTAIN VEGETATIVE BUFFER STRIPS, AND PROVIDE HORIZONTAL SLOPE STAKING IN ORDER TO MINIMIZE EROSION.

SILT FENCE SHALL BE INSTALLED BEFORE WORK BEGINS. SILT FENCE LIMITS SHALL COINCIDE WITH DOWNGRADE GRADING LIMITS UNLESS OTHERWISE NOTED.

THIS PROJECT DOES NOT HAVE EXPOSED POSITIVE SLOPES WITHIN 200' OF SURFACE WATER.

THE WETTED PERIMETER OF DRAINAGE SWALES WILL BE STABILIZED WITH WOOD FIBER BLANKETS AND/OR DITCH CHECKS WITHIN 200' OF THE SITE BOUNDARY LINE OR WETTED PERIMETER OF DITCHES WITHIN 24 HOURS..

TEMPORARY OR PERMANENT DITCHES THAT ARE BEING USED AS A SEDIMENT CONTAINMENT SYSTEM DURING CONSTRUCTION MUST BE STABILIZED WITHIN 24 HOURS AFTER NON-USE

PIPE OUTLETS MUST HAVE ENERGY DISSIPATION IN PLACE WITHIN 24 HOURS OF INSTALLATION

MULCH, HYDROMULCH, TACKIFIER, POLYACRYLAMIDE EROSION PREVENT PRACTICES CANNOT BE BE USED WITHIN THE NORMAL WETTED PERIMETER OF OF DRAINAGE DITCHES OR SWALE SECTIONS WITH A CONTINUOUS SLOPE GREATER THAN 2%

SEDIMENT CONTROL PRACTICES

CONTRACTOR SHALL FURNISH, INSTALL, AND MAINTAIN:
SEDIMENT CONTROLS FOR TEMPORARY AND PERMANENT DRAINAGE BASINS AND DRAINAGE DITCHES THAT ARE A PART OF THIS DESIGN

CHECK DAMS AND/OR WOOD FIBER BLANKETS TO ENSURE SHEET FLOW AND PREVENT RILLS FOR SLOPE LENGTHS GREATER THAN 75' WITH A SLOPE OF 3:1 OR GREATER

SILT FENCE AT ALL DOWN GRADIENT PERIMETERS INSTALLED PRIOR TO ALL LAND DISTURBING ACTIVITIES

INLET PROTECTION AT ALL DRAIN INLETS

SILT FENCING AROUND TEMPORARY SOIL STOCKPILES

ROCK CONSTRUCTION SITE ENTRANCES

STREET SWEEPING OF TRACKED SEDIMENT ONTO PAVED SURFACES

SEDIMENT CONTROL PRACTICES MUST BE IN PLACE AT ALL DOWN GRADIENT PERIMETERS AND UPGRADIENT OF ANY BUFFER ZONES

SEDIMENT CONTROL PRACTICES ARE ESTABLISHED AT THE BASE OF STOCKPILES ON DOWN GRADIENT PERIMETER

STOCKPILES ARE LOCATED OUTSIDE OF NATURAL BUFFERS OR SURFACE WATER, INCLUDEING STORM WATER CONVEYANCES UNLESS THERE IS A BYPASS

THIS PROJECT DOES NOT INCLUDE DEWATERING OR BASIN DRAINING
PERMANENT SEDIMENT BASINS WILL BE USED AS TEMPORARY BASINS DURING CONSTRUCTION

ADDITIONAL BMP'S FOR SPECIAL WATERS

THIS PROJECT DOES NOT DISCHARGE TO SPECIAL WATERS OR HAVE SIGNIFICANT IMPACTS TO WETLANDS

INSPECTIONS AND MAINTAINANCE

CONTRACTOR SHALL INSPECT AND MAINTAIN MEASURES AT MINIMUM ONCE EVERY (7) DAYS DURING ACTIVE CONSTRUCTION, AND WITHIN 24 HOURS AFTER A RAINFALL EVENT OF 0.5" IN 24 HOURS.

INSPECTIONS WILL INCLUDE STABILIZED AREAS, EROSION PREVENTION AND SEDIMENT CONTROLS, AND INFILTRATION AREAS.

REFER TO MPCA'S COMPLIANCE GUIDE FOR EROSION AND SEDIMENT CONTROL FOR INSPECTION LOG REQUIREMENTS.

MAINTENANCE RECORDS SHOULD INCLUDE: DATES & TIMES IF INSPECTION, NAME OF PERSON CONDUCTING THE INSPECTION, FINDINGS & LOCATIONS OF CORRECTIVE ACTIONS, PARTY COMPLETING MAINTENANCE ACTIVITIES, DATES & AMOUNTS OF RAINFALL EVENTS GREATER THAN 0.5" RAINFALL AMOUNTS ARE TO BE RECORDED WITH RAIN GAUGE ON SITE OR WEATHER STATION WITHIN 1 MILE OF SITE. ANY DISCHARGES OBSERVED SHOULD BE DESCRIBED & PHOTOGRAPHED.

RECORDS RETENTION

CONTRACTOR SHALL MAINTAIN RECORDS OF THE SEDIMENT RETENTION PROCEDURES ON-SITE. RECORDS WILL INCLUDE:
COPY OF THE SWPPP AND ALL REVISIONS
INSPECTION AND MAINTAINANCE RECORDS
PERMANENT OPERATION AND MAINTAINANCE AGREEMENTS
CALCULATIONS FOR THE DESIGN OF TEMPORARY AND PERMANENT STORMWATER MANAGEMENT SYSTEMS
COPIES OF THE SWPPP MUST BE RETAINED ON SITE BY THE PERMITTEE

POLLUTION PREVENTION MEASURES

SOLID WASTE:
COLLECTED SEDIMENT, ASPHALT AND CONCRETE MILLINGS, FLOATING DEBRIS, PAPER, PLASTIC, FABRIC, CONSTRUCTION AND DEMOLITION DEBRIS AND OTHER WASTES MUST BE DISPOSED OF PROPERLY AND MUST COMPLY WITH MPCA DISPOSAL REQUIREMENTS.

CONCRETE AND OTHER WASHOUTS:
PERFORM ALL CONCRETE TRUCK WASHOUTS IN PROPER CONTAINMENT FACILITIES.
SOILID AND LIQUID WASHOUT WASTE FROM OTHER MATERIALS (STUCCO, PAINT, FORM RELEASE OILS CURING COMPOUNDS ETC.) WILL BE DISPOSED OF IN A PROPERLY DESIGNATED LANDFILL.

PERFORM ALL WASHOUTS INCLUDING HANDTOOLS IN A LEAKPROOF CONTAINMENT FACILITY OR IMPERMEABLE LINER THAT PREVENTS RUNOFF ONTO ADJACENT SOILS. DEBRIS/SEDIMENT WILL NOT CONTACT THE GROUND SURFACE.

A SIGNE REQUIRING USE OF PROPER WASHOUT FACILITIES WILL BE INSTALLED ADJACENT TO SAID FACILITIES.

HAZARDOUS MATERIALS:
OIL, GASOLINE, PAINT AND ANY HAZARDOUS SUBSTANCES MUST BE PROPERLY STORED, INCLUDING SECONDARY CONTAINMENT TO PREVENT SPILLS, LEAKS, OR OTHER DISCHARGE. RESTRICTED ACCESS TO STORAGE AREAS MUST BE PROVIDED TO PREVENT VANDALISM. STORAGE AND DISPOSAL OF HAZARDOUS WASTE MUST BE IN COMPLIANCE THE MPCA REGULATIONS.

EXTERNAL WASHING OF TRUCKS AND OTHER CONSTRUCTION VEHICLES MUST BE LIMITED TO A DEFINED AREA OF THE SITE. RUNOFF MUST BE CONTAINED OF AND WASTE PROPERLY DISPOSED OF. NO ENGINE DEGREASING IS ALLOWED ON SITE.

SWPPP AMENDMENTS

AMENDMENTS MADE IN THE FIELD TO THE SWPPP SHOULD BE UPDATED ON THE SWPPP. REFER TO PROCEDURES OUTLINED IN SECTION 6.1 OF THE PERMIT.

SWPPP IMPLEMENTATION CHAIN OF RESPOSIBILITY

THE GENERAL CONTRACTOR SHALL PROVIDE A TRAINED, CERTIFIED, KNOWLEDGEABLE PERSON WHO SHALL SERVE AS THE SITE'S EROSION CONTROL INSPECTOR. THIS PERSON SHALL BE RESPONSIBLE FOR INSTALLATION AND MAINTENANCE OF EROSION AND SEDIMENT CONTROL BMP'S, AND SHALL MAINTAIN THE INSPECTION LOG AT THE PROJECT SITE.

EACH SUBCONTRACTOR ON-SITE WILL DESIGNATE AN EMPLOYEE AS ITS PROJECT SWPPP OFFICER. A LIST OF THESE OFFICERS WITH CONTACT INFORMATION WILL BE AVAILABLE ON-SITE. IT WILL BE SOLELY THE SWPPP OFFICERS' RESPONSIBILITY TO ENSURE THAT ALL ON-SITE ACTIVITIES PERFORMED BY ITS COMPANY COMPLY WITH THE SWPPP. THE GENERAL CONTRACTOR'S SWPPP INSPECTOR WILL HAVE AUTHORITY OVER ALL SUBCONTRACTOR'S SWPPP OFFICERS FOR WORK PERTAINING TO COMPLIANCE.

SHOULD A SWPPP OFFICER FAIL TO ENSURE COMPLIANCE, THAT OFFICER'S FOREMAN OR DIRECT SUPERVISOR WILL ASSUME ALL RESPONSIBILITY.

SHOULD A SUBCONTRACTOR FAIL TO COMPLY WITH THE SWPPP, THE GENERAL CONTRACTOR WILL ASSUME ALL RESPONSIBILITY FOR COMPLIANCE.

SHOULD THE GENERAL CONTRACTOR FAIL TO COMPLY WITH THE SWPPP, THE OWNER WILL ASSUME ALL RESPONSIBILITY FOR COMPLIANCE.

CHANGES IN PERMIT AND NOTICE OF TERMINATION

THE CONTRACTOR WILL BE A CO-PERMITEE DURING THE CONSTRUCTION OF THE PROJECT. AFTER GRAVEL SURFACING OF THE PROJECT HAS BEEN COMPLETED, AND 70% PERMANENT VEGETATIVE COVER HAS BEEN ESTABLISHED OVER THE PERVOUS AREAS OF THE SITE, AND THE WARRANTY PERIOD HAS ELAPSED, THE CONTRACTOR MAY SUBMIT A MPCA (NOT)F ORM TO THE OWNER FOR SIGNATURE AND SUBMITTAL TO THE MPCA.

THE OWNER WILL SUBMIT THE NOTICE OF TERMINATION (NOT) AFTER ONE FINAL ESTABLISHMENT OF ALL PERVIOUS SURFACES ACCORDING TO THE MPCA GENERAL PERMIT REQUIREMENTS

NOTIFICATION OF THE MPCA IN CASE OF POLLUTION

IT IS THE DUTY OF THE CONTRACTOR TO NOTIFY THE MPCA IMMEDIATELY OF ANY DISCHARGE, ACCIDENTAL OR OTHERWISE, OF ANY SUBSTANCE OR MATERIAL UNDER HIS CONTROL WHICH, IF NOT RECOVERED, MAY CAUSE POLLUTION OF WATERS OF THE STATE, AND THE CONTRACTOR SHALL RECOVER AS RAPIDLY AND THOROUGHLY AS POSSIBLE SUCH SUBSTANCE OR MATERIAL AND TAKE IMMEDIATELY SUCH OTHER ACTION AS MAY BE REASONABLY POSSIBLE TO MINIMIZE OR ABATE POLLUTION OF WATERS OF THE STATE CAUSED THEREBY.

SEDIMENT LEAVING THE CONSTRUCTION SITE AND ENTERING A PUBLIC WATER IS CAUSE FOR NOTIFICATION.

MPCA DUTY OFFICER: 800-422-0798

QUALIFIED SWPPP PERSONNEL INFORMATION

SWPPP DESIGNER: BRIAN J. JOHNSON, PE
JONES HAUGH & SMITH, INC.
515 SOUTH WASHINGTON AVE
ALBERT LEA, MN 56007
(507) 373-4876

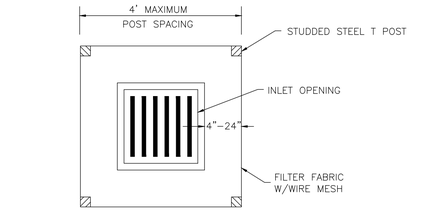
SWPPP INSTALLER:
NAME: _____
FIRM: _____
ADDRESS: _____
_____
PHONE: _____

SWPPP INSPECTOR:
NAME: _____
FIRM: _____
ADDRESS: _____
_____
PHONE: _____

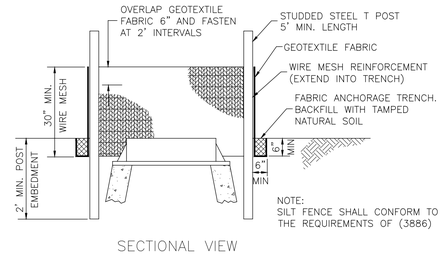
GRADING CONTRACTOR:
NAME: _____
FIRM: BCM CONTRACTING_____
ADDRESS: _____
_____
PHONE: _____

OTHER LAND DISTURBING CONTRACTOR:
NAME: _____
FIRM: _____
ADDRESS: _____
_____
PHONE: _____

OTHER LAND DISTURBING CONTRACTOR:
NAME: _____
FIRM: _____
ADDRESS: _____
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PHONE: _____

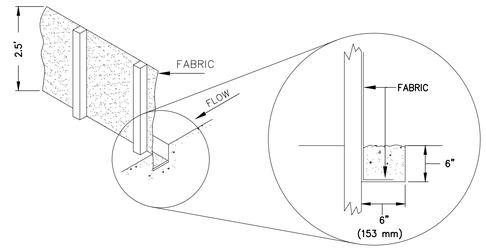


PLAN VIEW



SECTIONAL VIEW

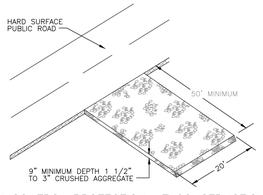
INLET PROTECTION - HEAVY DUTY



NOTES:
- PLACE BOTTOM EDGE OF FENCE INTO 6" (153 mm) DEEP
- POSTS SHALL BE:
  - 4' (1.22 m) ON CENTER
  - 2" (50.8 mm) X 2" (50.8 mm) HARDWOOD, PINE OR STANDARD STEEL FENCE POSTS
  - DRIVEN 2' (0.61 m) INTO THE GROUND.

EROSION CONTROL FENCE

(MACHINE SLICED)



EROSION CONTROL PROTECTION AT CONSTRUCTION ACCESS

Consultant
JONES HAUGH SMITH
Engineers • Surveyors
515 South Washington Ave. Albert Lea, MN 507-373-4876

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the State of Minnesota.

Brian J. Johnson
Reg. No. 42744
Date: 9/20/25

Project:
MANKATO APARTMENTS

Revision:

No.:	Date: 9/20/2025
Drawn: bjj	Checked:
Project Manager:	
Project Status: CD	

Sheet Title:
SWPPP NARRATIVE & DETAILS

Sheet No.:
C8

GOVERNING SPECIFICATIONS
The Minnesota Department of Transportation's "Standard Specifications for Construction" 2018 Edition, including the Mn/DOT Special Provisions modified for this project, Minnesota Plumbing Code and the City Engineers Association of Minnesota Standard Specification, 2018 Edition, will govern except as modified or altered in the Special Provisions. All references to "State of Minnesota" or "Commissioner of Transportation" or "Department" are hereby revised to mean "Owner."

WORK WITHIN PROPERTY
The Contractor will work only in areas secured by the Owner, and will comply with all requirements of access agreements.

MATERIALS TESTING

Materials Testing will be by the Contractor. The Contractor will hire an independent testing consultant, approved by the Engineer, prior to the start of work to be tested.

1. The following materials tests will be provided by the Testing Company:

Work to be Tested	Method	Reference Spec.	Testing Rate
Sewer & Water Service Trenches	Specified Density	MnDOT 2105, 2451, 2501	1 test per 500 lf
Storm Sewer Trench Compaction	Specified Density	MnDOT 2105, 2451, 2501	1 test per 500 lf
Subgrade/Embankment Compaction	Specified Density	MnDOT 2105	1 test per 2500 cy placed (Clay, Sand, etc.)
Test Rolling	Fully Loaded Dump Truck		1 test per road
Select Granular Borrow	Specified Density	MnDOT 3149	1 per 5000 ton
	Gradation	MnDOT 3149	1 per Source
Aggregate Base (CL 3, CL 5)	Modified DCP	MnDOT 2211	2 tests per 1000 ton
	Gradation	MnDOT 2211	1 per 5000 ton
Bituminous Paving	Ordinary Comp.-Control Strip	MnDOT 2360	1 control strip per mobilization and/or per workday
Concrete Curb & Gutter	Air, Slump, Temp, Strength	MnDOT 2461	If non-integrant
Air, Temp, - 1 per day			
Slump, Strength - 1 per day; and each time water is added at the site			
Concrete Driveway or Sidewalk	Air, Slump, Temp, Strength	MnDOT 2461	
Air, Temp, - 1 per day			
Slump, Strength - 1 per day; and each time water is added at the site			
Concrete Paving		MnDOT 2301	
All Concrete Field testing or Concrete Pavement per 2012 MnDOT Schedule of Materials Control (page 32), except Pavement Texture and Smoothness.			

Table Notes:

- Specified Density also requires Moisture-Density and Relative Density
- The Engineer may omit duplicative trench compaction tests at his discretion

MAINTENANCE OF TRAFFIC (1404)
The Contractor will be responsible for traffic control on the Project, and will furnish, erect, and maintain all necessary traffic control devices required to provide safe movement of vehicular traffic through the Project. Any traffic control device installed will meet the requirements of the Minnesota Manual on Uniform Traffic Control Devices, Field Manual, latest edition, and the latest MnDOT specifications approved at the time of bid.

The Contractor will prepare and submit to the City Engineer and County Engineer for Approval a Traffic Control Plan for any work in or utilization of traveled Right-of-Way. The plan will be submitted a minimum of 48 hours prior to the commencement of work. No work in the Right-of-Way will commence without an Approved Traffic Control Plan.

Traffic control will be in accordance with the Traffic Control Layout Plan and the following:
Traffic control devices include, but are not limited to, barricades, warning signs, lane markings, trailers, flashers, cones, and drums, as required, and sufficient barricade weights to maintain barricade stability.
No material will be deposited on a traveled roadway.
Materials will not be placed on road right of way more than one week in advance of their use.
Contractor will notify the affected parties at least one week prior to commencement of disturbance of the private or business drives.
Coordination will be maintained with the Fire and Police Departments to ensure that passage is maintained for emergency vehicles at all times.
The Contractor will make one person responsible for the maintenance of all signs. The Contractor will check each intersection at the end of each day whether it is a working day or not. The name and telephone number of this person will be left with the Police, the City Engineer, and the Fire Departments.

UTILITY PROPERTY AND SERVICE (1507)
Construction operations in the proximity of utility properties will be performed in accordance with the Provisions of 1507, except as modified below:

The first paragraph of 1507 is deleted and the following substituted therefore:

It will be the Contractor's responsibility to contact all local utility companies and ascertain the location of all existing underground utilities, if any, prior to performing any excavation operations. The Contractor will conduct his/her operations in the vicinity of any such facilities, which may exist, in a manner that will prevent damage thereto.

It will be the Contractor's responsibility to utilize the One-Call Excavation Notice System at 'Gopher State One Call' (1-800-252-1166) required under Minnesota Statute Chapter 216D, 48 hours prior to performing any excavation adjacent to any underground facility, which may exist, in a manner that will prevent damage thereto.

CONSTRUCTION STAKES, LINES AND GRADES (1508)

All construction staking will be provided by the Contractor and performed by or under the direct supervision of a Land Surveyor licensed in the State of Minnesota.

Field Fit Adjustments to Grade Stakes
The Engineer may make minor adjustments (< 0.5') to the grade stakes after they have been placed, in order to adjust to actual conditions in the field or to ensure proper or better drainage. Any adjustments to proposed or in-place materials required due to minor adjustments made by the Engineer are incidental to the work.

CONTROL OF HAUL ROADS (1515), LAWS TO BE OBSERVED (1701)

In addition to the requirements of 1515 and 1701, the Contractor will abide by all weight restrictions implemented by the governing road authorities in the performance of the work and in delivering materials and equipment to the project site.

AIR LAND AND WATER POLLUTION (1717)

The provisions of Mn/DOT 1717 are hereby modified and supplemented as follows:

DEWATERING
Any dewatering necessary to construct the work will be done by the Contractor. The Contractor is responsible to determine the type and method of dewatering and to provide and implement all equipment and materials necessary to accomplish the work on this project. Discharged water from dewatering will be routed through a temporary sediment basin. Sediment trapped in the temporary basins will be removed and disposed of on-site.

PROTECTION OF SURFACE STRUCTURES
The Contractor will not trespass on any private property without the express written consent of the Owner thereof. Trees, shrubs, fences, poles and all other private property will be protected unless their removal is authorized. Any property damaged will be satisfactorily restored at the expense of the Contractor. Any land survey or property monuments destroyed, covered, moved, bent or disturbed will be replaced by a Licensed Land Surveyor at the expense of the Contractor.

Wherever construction is planned to cross private property, an easement for the construction has been acquired from the property owner. The Contractor will familiarize himself with the terms of such easements, which the Owner will have on file.

Ground surface, trees, shrubbery, fences and other private property will be restored to the same condition as existed prior to the beginning of construction. This will include consolidating backfill, graveling driveways and any other leveling and landscaping required to restore the premises to original condition. The topsoil will be piled separately from subsoil material and will be replaced in the trench above the subsoil material.

Except where sodding is required, all grassed areas disturbed during the construction will be seeded following landscaping.

The Contractor will restore at his own expense streets, roads, alleys, private or public structures such as water mains, water connections and appurtenances, culverts, drain tiles, sewers, manholes, catch basins, sewer connections, curb, gutter, sidewalk, street signs, or other structures designated to remain in place which are damaged or injured in any way by his acts, and will be responsible for all damages to other utilities he may encounter.

The Contractor will not claim, or be entitled to receive, compensation for any damages sustained by reason of the inaccuracy or omission of any of the information given on the drawings relative to surface, overhead, or underground structures, or by reason of his failure to properly protect such structures.

PROTECTION OF SIDE STREETS AND HAUL ROUTES

The Contractor will be responsible for any damage of the side streets in the area and any other streets that are used as haul routes. The Contractor will discuss all haul route possibilities with the City Engineer and County Engineer prior to their use. The City Engineer, County Engineer, and the Contractor together will inspect the condition of the proposed routes before, during and after their use. The Contractor will correct any damage that is caused by the hauling activities at no cost to the Owner.

DEWATERING

Any dewatering necessary to construct the work will be done by the Contractor. The Contractor is responsible to determine the type and method of dewatering and to provide and implement all equipment and materials necessary to accomplish the work on this project. Discharged water from dewatering will be routed through a temporary sediment basin. Sediment trapped in the temporary basins will be removed and disposed of on-site.

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Wherever construction is planned to cross private property, an easement for the construction has been acquired from the property owner. The Contractor will familiarize himself with the terms of such easements, which the Owner will have on file.

Ground surface, trees, shrubbery, fences and other private property will be restored to the same condition as existed prior to the beginning of construction. This will include consolidating backfill, graveling driveways and any other leveling and landscaping required to restore the premises to original condition. The topsoil will be piled separately from subsoil material and will be replaced in the trench above the subsoil material.

Except where sodding is required, all grassed areas disturbed during the construction will be seeded following landscaping.

The Contractor will restore at his own expense streets, roads, alleys, private or public structures such as water mains, water connections and appurtenances, culverts, drain tiles, sewers, manholes, catch basins, sewer connections, curb, gutter, sidewalk, street signs, or other structures designated to remain in place which are damaged or injured in any way by his acts, and will be responsible for all damages to other utilities he may encounter.

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INTERFERENCE OF UNDERGROUND STRUCTURES

Existing utilities crossed by the new construction will be protected against damage, and/or replaced to original grade. Protection, temporary support and maintenance of existing utilities will be furnished by the Contractor at his own expense. The final installation will provide permanent support to prevent any settlement or movement, which may result in damage to these utilities.

Whenever existing pipe is replaced, the material of replacement will be DIP or PVC pipe of the same diameter as the original, long enough to extend at least one foot into the solid bank on either side of the excavation. The backfill under and around such pipe will be thoroughly compacted by mechanical means to preclude settlement. All connections between different types or sizes of pipe or improperly matched joint types will be encased in concrete with a minimum thickness of 6 inches.

Should it become necessary during the progress of the work to remove or relocate existing utilities or structures, the Owner will cause the same to be done at no expense to the Contractor, except as otherwise provided herein. The Contractor will notify those who maintain utilities sufficiently in advance of construction so they may make the necessary location, disclosure, relocation or other preparation. Where necessary to locate existing underground utilities, the Contractor, upon order of the Engineer, will make any required subsurface explorations and excavation, and will be allowed compensation therefore. Where relocation or reconstruction of existing utilities is impracticable, a change in line and/or grade of the new construction will be ordered, and the change will be made as directed. No deviation from the line or grade set by the Engineer will be made without his approval.

CONNECT TO EXISTING SANITARY SEWER

The Contractor will connect to the existing sanitary sewer at the locations shown on the plan. Exploratory excavation for determining the location of existing utilities and the connection to the existing sanitary sewer are incidental to the work. The Contractor will verify the connection elevation at the main is reasonably close to the elevation shown on the plan prior to beginning work. If the elevation is substantially different, the Contractor will notify the Owner and Engineer.

Where new connections are made to existing sanitary sewer manholes, the contractor will core drill the manhole wall and invert to the existing flow line, construct and shape a new invert for the new pipe, and provide a waterproof boot through the wall of the manhole for the new pipe.

SANITARY SEWER CONSTRUCTION REQUIREMENTS

1. Noise -- The Contractor will insure all equipment is properly fitted with mufflers to reduce noise to the minimum attainable to avoid creating a nuisance in the residential and business area.
2. Trench Compaction -- All trenches will be tamped using the existing material that has been excavated. Tamping will not be paid as a bid item, therefore the cost of this work will be included in the price bid for furnishing and installing the pipe.
3. Piling Excavated Materials -- Excavated material will not be piled on private property without the express permission of the owner thereof, except where easements for the sewer construction or for related work have been obtained; nor will it be piled in any location that will require backfilling machinery to operate on private property. Where excavated material is piled on private property it will be placed to cause the least possible inconvenience to the property owner. Any damage caused thereby, including damage to buildings, walls, sidewalks, driveways, trees, shrubs, lawns, or any other property, will be repaired at the expense of the Contractor. Backcasting in order to minimize disturbance is incidental to the work.
4. It will be the Contractor's responsibility to protect adjacent pipes in and around manholes to be reconstructed, and will replace any pipes damaged, cracked, or broken by the Contractor at their expense.
5. All excavations, trenching and/or jacking and boring pits will be sheeted and/or shored as per OSHA requirements. No unsheeted trench will be left open overnight.
6. Backfilling of all trenches within the limits of street excavation will comply with the provisions of MN/DOT Specification 2112 including achieving 100% compacted density in the upper three feet of subgrade (below aggregate base) and 95% below the upper three feet. Density testing will be performed as directed by the Owner to verify compaction. Trench areas that are determined by the Owner to have yielded due to improper compaction will be deemed as Unacceptable Work and will be corrected by the contractor at no additional cost.
7. Removal of former service lines. -- Service lines no longer being utilized will be removed to the main, as directed by the City. Removal and restoration of street surfacing required for the service removal is incidental.
8. RECORDS OF LATERALS: The Contractor will maintain a complete and accurate record of the location and depth of each lateral. The Contractor will make measurements from the end of each service to prominent permanent features to facilitate its location in the future. The end of each lateral will be located in plan and elevation, and a sketch made to show the plan location. These records will be turned over to the Owner.
9. Contractor shall televise all sewer main to be owned by the City.

MATERIALS FOR SANITARY SEWER CONSTRUCTION:

The project calls for the use of Poly-Vinyl Chloride (PVC). Pipe and fittings should be properly bedded and encased in accordance with the Standard Detail Sheets and Standard Specifications for Sanitary Sewer Installation. All 8" and larger sanitary sewer shall be SDR 35, pipe smaller than 8" shall be SDR 26
Bedding and encasement beneath, along the sides, and above the pipe will be Select Granular material, tamped in place. The only deviation will be in poor soil conditions, as approved by the Engineer, where foundation rock will be substituted. Pipe bedding is incidental to pipe installation. Foundation rock is incidental to pipe installation.
Joints for PVC-SDR 35, and PVC-SDR 26 gravity sewer pipe will be made using Elastomeric gaskets conforming to the requirements of ASTM D3212.
Joints in precast concrete manholes will be made using a joint compound equal to Ram-Nek or rubber gasketed conforming to ASTM C443.
All manhole castings will be equipped with solid lid covers, self-sealing, with concealed pick holes. Manhole casting will be Neenah R1772, or equal and will be labeled 'SANITARY' on casting.

CONNECT TO EXISTING WATERMAIN

The Contractor will connect to existing watermain at the locations shown on the plan. All connections to existing water main are incidental to the work. All exploratory excavation in determining the location of existing water main is incidental to the work. The Contractor will coordinate with the utility owner and be responsible for any fees due for connections.

WATERMAIN CONSTRUCTION REQUIREMENTS

1. Noise -- The Contractor will insure all equipment is properly fitted with mufflers to reduce noise to the minimum attainable to avoid creating a nuisance in the residential and business area.
2. Bedding and encasement beneath, along the sides, and above the pipe will be Select Granular material, tamped in place. The only deviation will be in poor soil conditions, as approved by the Engineer, where foundation rock will be substituted. Pipe bedding is incidental to pipe installation. Foundation rock will be paid at the unit price per ton. No payment will be made for bedding materials which, in the opinion of the Engineer, was unnecessary for proper pipe installation.
3. Trench Compaction -- All trenches will be tamped using the existing material that has been excavated. Tamping will not be paid as a bid item, therefore the cost of this work will be included in the price bid for furnishing and installing the pipe.
4. Piling Excavated Materials -- Excavated material will not be piled on private property without the express permission of the owner thereof, except where easements for the sewer construction or for related work have been obtained; nor will it be piled in any location that will require backfilling machinery to operate on private property. Where excavated material is piled on private property it will be placed to cause the least possible inconvenience to the property owner. Any damage caused thereby, including damage to buildings, walls, sidewalks, driveways, trees, shrubs, lawns, or any other property, will be repaired at the expense of the Contractor.
5. It will be the Contractor's responsibility to protect adjacent pipes in and around manholes to be reconstructed, and will replace any pipes damaged, cracked, or broken by the Contractor at their expense.
6. All excavations, trenching and/or jacking and boring pits will be sheeted and/or shored as per OSHA requirements. No unsheeted trench will be left open overnight.
7. Backfilling of all trenches within the limits of street excavation will comply with the provisions of MN/DOT Specification 2112 including achieving 100% compacted density in the upper three feet of subgrade (below aggregate base) and 95% below the upper three feet. Density testing will be performed as directed by the Engineer to verify compaction. Trench areas that are determined by the Engineer to have yielded due to improper compaction will be deemed as Unacceptable Work and will be corrected by the contractor at no additional cost.
8. The Contractor will coordinate the construction of all private and municipal utilities.
9. The Contractor will be responsible for all tapping or other fees paid to public or private utilities as work incidental to the contract.
10. RECORDS OF LATERALS: The Contractor will maintain a complete and accurate record of the location and depth of each water lateral. The Contractor will make measurements from the end of each service to prominent features to facilitate its location in the future. The end of each lateral will be located in plan and elevation, and a sketch made to show the plan location. These records will be turned over to the Owner.

MATERIALS FOR WATERMAIN CONSTRUCTION- City standards shall govern over all material specs listed below if discrepancies exist.

1. Watermain shall be DIP meeting the requirements of AWWA C-900. Pipe and fittings should be properly bedded and encased in accordance with manufacturer's requirements. Foundation rock will be used in poor soil conditions.
2. Bedding and encasement for pipe, beneath, along the sides, and above the pipe will be Select Granular material, tamped in place. The only deviation will be in poor soil conditions, as approved by the Engineer, where foundation rock will be substituted. Pipe bedding is incidental to pipe installation. All joints between pipe, fittings, valves, and hydrants will be equipped to provide electrical conductivity.
3. Gaskets will be mechanical joint rubber gaskets, unless otherwise specified.
4. Hyrdants shall be Waterous Pacer WB-67-250 with 6" mechanical joint inlet and valve boxes as manufactured by American Flow Control Series 2500 or US Metro Pipe Seal with the Top marked WATER.
5. The furnishing and installing of disinfection materials to disinfect the watermains will be the responsibility of the Contractor. The City Utilities Department will assist the Contractor in flushing and testing the watermains.
6. The Contractor will use restrained joint mechanical joint flanges with mega lug retainer glands or equal on all hydrants, watermain offsets, bends, or other mechanical fittings. STAINLESS STEEL BOLTS will be required on all mechanical joints and sleeves.
7. All exposed parts of the bolts and nuts will be completely coated with an approved asphaltic type rust preventive material. Any parts of the fittings that have been scraped will also be coated with an approved asphaltic type rust preventive material. Watermain fittings will conform to ANSI Standard A21.10. All watermain fittings, hydrants and retaining rods will be protected by using sacrificial zinc anode caps such as 175P190 Protecto Caps as manufactured by Ebba Iron or an approved equal. Two caps per mechanical joint will be used.

TESTING OF WATER MAIN

Hydrostatic pressure testing of water main and services will be conducted as follows:
After the pipe has been laid, including fittings and valves and blocking, all newly laid pipe or any valved section thereof, unless directed otherwise by the Engineer, will be subject to hydrostatic pressure of 150 pounds per square inch. The duration of each such test will be at least two hours.

Each section of pipe to be tested will be filled with water and all air expelled at the highest point. The required taps to expel air or to fill the water main will be supplied and installed by the Contractor and will be 3/4 inch and will include an approved service saddle when required.

The test apparatus will be applied at the lowest elevation on the section to be tested. The apparatus will be connected to the main at a service tap or special tap location.
The pressure gauge will be a standard pressure gauge. The dial will register from 0 - 200 psi and have a dial size of 4 1/2 inches with 1-psi increments.

The hydrostatic test, pressure requirement for an acceptable test will be a maximum pressure drop of 2 psi during the last hour of the two-hour pressure test.
If this test requirement cannot be met, the Contractor will investigate the cause, make corrections, and retest until the pressure drop requirement can be met.

Only if several consecutive tests indicate a consistent pressure drop and only after the Contractor has made numerous attempts to resolve the problem, acceptable to the Engineer, may the Contractor request in writing and the Engineer consider the use of the leakage test. The leakage test may be performed by the Contractor to determine the magnitude of the leak, however, meeting the leakage allowance will not automatically be considered acceptance, in lieu of the pressure test, for the section being tested. Final acceptance will be at the discretion of the Engineer.

When allowed, the leakage test will be performed in accordance with AWWA C-600, Section 4.1.5, 4.1.6 and the line will be accepted as per Section 4.1.7.

Operational Testing will be conducted as follows:
At the completion of the project and in the presence of the Engineer and the Contractor, representatives of the Owner will operate all valves, hydrants, and water services to ascertain that the entire facility is in good working order; that all valve boxes are centered and valves are opened; that all hydrants operate and drain properly; that all curb boxes are plumb and centered; and that water is available at all curb stops.

Disinfection Testing:
Before being placed in service, the completed water main will be disinfected. Disinfection materials and procedures, and the collection and testing of water samples, will be in accordance with the provisions of AWWA C-651. After the final flushing the water will be tested for bacteriologic quality and found to meet the standards prescribed by the Minnesota Department of Health.
Samples will be taken and tested after 24 and 48 hours of disinfection. Both tests must be returned with passing results prior to approval for service.

Where an existing water main is cut for the installation of any fitting, the pipe and fittings proposed to be installed will be disinfected prior to installation as follows:

The interior of the pipe and fittings will be cleaned of all dirt and foreign material.

The interior of the pipe and fittings will be thoroughly swabbed or sprayed with a 1 percent minimum hypochlorite solution.

Unless otherwise indicated in the Plans, Specifications, and Special Provisions, the Contractor will furnish all materials and perform the disinfecting, flushing, and testing as necessary for meeting the water quality requirements.

The flushing operations and the form of chlorine and method of application to be used will be subject to approval by the Engineer.

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the State of Minnesota.
Brian J. Johnson
Reg. No. 42744
Date: 9/20/25

Consultant:
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Project:
MANKATO APARTMENTS

Revision:

No.:	Date: 9/20/2025
Drawn: bjj	Checked:

Project Manager:

Project Status: CD

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SPECIFICATIONS

Sheet No.:
C9

MATERIALS FOR STORM SEWER CONSTRUCTION

1. All drainage structures with a depth of greater than 5' from top of casting elevation to bottom of structure elevation will be provided with steps.
2. Reinforced Concrete Pipe will be bedded and encased in accordance with plans and with material meeting the requirements of 2503. All RCP storm sewer pipe 15" in diameter or less will be Class 5, all other RCP storm sewer pipe will be Class 3 unless otherwise noted.
3. All PVC storm sewer will be Schedule 40 PVC, unless otherwise noted.

STORM SEWER CONSTRUCTION REQUIREMENTS

1. Unless otherwise noted, all existing drain tile encountered during the course of the work will be repaired if damaged by the work, or if the existing outlet is known to be removed or made dysfunctional, hooked up to the new storm sewer improvements. This work is incidental to the contract.
2. Where existing tile lines, sump pump lines, or other existing drainage lines are tied into RCP storm sewer lines, a hole will be created in the upper 1/3 of the side of the new storm sewer, the existing line will be inserted into the side of the new RCP to a depth of not greater than 2", geotextile fabric will be blanketed around or stuffed into the opening around the new pipe, and cement grout will be formed around the connection, so as to ensure water tightness. A maximum of 3 rings shall be used per standard plate 5043.
3. Where existing tile lines, sump pump lines, or other existing drainage lines are tied into HPDE storm sewer, fittings specifically manufactured for the connection of these lines will be used.
4. All existing drainage structures receiving new pipe will be cemented water tight around all pipes entering or exiting the structure. In addition, the inverts of all structures will be cemented so that all water entering the structure has a direct line out of the structure.
5. All new drainage structures will have integrally cast rubber boots to accept pipes and to ensure water-tightness. Worm screw stainless steel bands will be affixed to the boots to secure the pipe to the structure.
6. HDPE pipe will be installed accordance with ASTM F230

CASTING ASSEMBLIES (2506)

Casting assemblies will be of size and design noted on the plans. The work will include the cost of installing to final street surface grade on the manhole or inlet, including pavement removal and replacement if installed after paving.

Contractor will use at least two and not more than six standard adjusting rings immediately below the casting assemble which will be set in a mortar bed. Each adjusting ring will also be set in mortar. All adjusting rings will be plastered with a minimum of ½" of mortar on the interior and exterior, such that the casting is water tight from both the interior and exterior.

When bituminous paving lifts are scheduled for sequential construction seasons, castings will be set to the elevation of the non-wear course for the winter season, and then adjusted to final grade the following year. This work is incidental to construction.

Chimney Seal

Chimney seal will be furnished and installed on all sanitary manhole and ring casting assemblies. Seals will consist of rubberized sleeves or collars specially designed for covering manhole frames, rings and castings. Seals will be exterior seals with mechanical restraint as manufactured by Cretex Products or equal.

Furnish and installation of Chimney Seal is incidental to manhole castings and no additional payment will be made therefore.

Chimney Seal will not be required until final adjustment of castings at the time the final lift of bituminous paving is constructed.

ADJUST WATER VALVE BOX

This work will consist of the adjustment of all water valve boxes to conform to each grade of the bituminous pavement. This work includes multiple adjustments and is incidental to construction. If any structures are damaged by the Contractor's operations, the cost of repairs and replacement will be at the Contractor's expense. Final valve box adjustment at the final lift of paving will be by the paving contractor.

REMOVALS (2104)

Saw-cut Bituminous and/or Saw-cut Concrete

The edges of paving at the locations shown on the plan or directed as directed by the Engineer in the field will be full-depth saw-cut, typically at right angles to the faces to remain, in order to produce a clean edge of which to match the replacement paving or other surface to. Saw-cutting is incidental to the removals.

Remove Bituminous and/or Concrete Surface

After removal of bituminous or concrete surfacing in the traveled way, an aggregate surface will be provided in the removal area to the elevation of the removed materials. A minimum thickness of 6" of aggregate at the surface will be provided. This work is incidental to removals.

Disposal of Removed Materials

The removed materials will become property of the Contractor and be removed from the project site at the Contractor's expense.

Remove Storm Sewer

When existing storm sewer is designated to be removed, the existing pipe will be removed in its entirety, or crushed in its entirety and backfilled over, if directed by the Engineer.

EXCAVATION AND EMBANKMENT (2105)

1. The area designated for excavation will be excavated to sufficient depth to allow construction of the typical section shown on the plans except as otherwise directed by the Owner. The Contractor will verify to the Owner that the subgrade has been constructed to the proper elevation before base construction proceeds. The subgrade must be within 0.10' plus or minus of plan elevation before the construction is allowed to proceed. A subgrade elevation consistently above or below plan elevation will not be considered acceptable work. On average, the subgrade will be at about plan elevation.
2. Excess excavated material will be disposed of by the Contractor. Excess topsoil material will be stockpiled separately or leveled, as directed by the Owner. Stockpiling and leveling will be considered incidental to the excavation, and will not be paid for directly.
3. The contractor will salvage and stockpile suitable topsoil and surface material to the satisfaction of the Owner as necessary to provide for final seed and turf establishment and restoration. Topsoil salvage will be considered incidental to excavation and no direct compensation will be made therefore.
4. Removal of rocks, boulders, masonry or concrete within the excavated area will be considered common excavation. All roots, stumps, rubbish, rocks and other waste materials will be hauled to the nearest landfill. This work will be considered incidental to the construction and will not be paid for directly.
5. Paving sections will be required to allow construction of the typical cross-section. Embankment will be constructed in accordance with the provisions of 2105. Suitable excess excavated materials will be utilized for embankment to the fullest extent practicable. The remaining embankment material will be granular borrow conforming to the provisions of 3149.2A.
6. Site grading will be performed as required to establish plan grade. All excess becomes property of the Contractor to be disposed of off-site.
7. The Contractor will be responsible for ensuring that all areas within the limits of lot grading have a minimum of 6" of salvaged topsoil material on the final grade. It will be the Contractor's responsibility to coordinate and designate topsoil salvaging operations and stockpiling to ensure adequate topsoil is available for a 12" cover. All existing topsoil will be removed in all areas which will be filled with any material other than topsoil except that topsoil depths will not exceed two feet.
8. All borrow or salvaged excavated material to be used as embankment within the limits of paving construction will be approved by the Owner prior to placement. Embankment will comply with the provisions of Minnesota Department of Transportation Spec. 2112 including achieving 100% compacted density in the upper 3 feet of subgrade and 95% below the upper 3 feet of subgrade.
9. All natural topsoils will be removed from below all paving construction areas.
10. Suitable excavated material will be used as backfill. Embankments and boulevards not being seeded or sodded will be dragged or raked smooth prior to completion of each project.
11. Excess excavated material, excluding rocks, boulders, debris and organic material, will be the property of the Owner and will be stockpiled on site as directed by the Owner. All other excess material will be disposed of by the Contractor offsite.
12. When embankment materials are placed on existing ground with an existing slope of greater than 4:1, the embankment will be placed in accordance with 2105.3.B.
13. Where excavation is performed to the subgrade without the placing of embankment materials, the contractor will work the upper 1' of the subgrade to within 2% of optimum moisture prior to the test-rolling stated below. When the existing moisture content is greater or less than 2% of optimum, the contractor will "farm" the material to dry it, or add water and mix the materials until the subgrade reaches the desired moisture content. This work will be incidental to construction.
14. Backfill construction of concrete curb and gutter in accordance with 2531.J is incidental. The contractor will note that when this work is complete, continuous positive drainage is provided to the curb & gutter, which is defined by the MPCA as a stormwater conveyance.

TOPSOIL SALVAGE

All areas to be seeded will be finished with no less than 6 inches of topsoil salvage. This topsoil will be raked to a smooth surface free of roots, rocks and soil clumps. Topsoil salvage will be incidental to the project. All areas to receive fill material are subject to topsoil salvage. Topsoil may be placed over existing topsoil.

SUBGRADE PREPARATION (2112)

1. The provisions of 2112 will be follows and as outlined in 2112.
2. The final shaping and compacting of the subgrade will be done just prior to placing any base or surface course.
3. At the time the subgrade preparation operations have been completed, the prepared surface will be in reasonably close conformity with the cross sections shown in the Plans and the lines and grades shown on the plan.
4. Where excavation is performed to the subgrade with or without the placing of embankment materials, the contractor will work the subgrade to within 2% of optimum moisture. When the existing moisture content is greater or less than 2% of optimum, the contractor will "farm" the material to a minimum depth of 12" to dry it, or add water and mix the materials until the subgrade reaches the desired moisture content. This work will be incidental to construction.
5. The required stability will be such that when any material for base or surface courses is deposited on the subgrade, no rutting or displacement will occur.
6. The subgrade preparation prior to construction of underground utilities will not be subject to elevation tolerances.
7. Subgrade preparation is incidental to the contract

S-7 SUBGRADE COMPACTION

The subgrade when exposed will be compacted with a tamping roller, compactor or other means to not less than 100% Maximum Density and 2% Optimum Moisture. The Contractor will work the upper 1' of the subgrade to within 2% of optimum moisture during compaction. When the existing moisture content is greater or less than 2% of optimum, the contractor will "farm" the material to dry it, or add water and mix the materials until the subgrade reaches the desired moisture content. This work will be incidental to construction. Prior to placement of any stabilized base, a fully loaded dual axel dump truck will be driven over the completed sub-grade in the presence of the Contractor and Engineer present. The subgrade will be found suitable for placement when no rutting or displacment occurs. The test-rolling will be incidental to stabilized base and no specific payment will be made therefore.

S-8 SUBGRADE CORRECTION

If after substantial efforts by the contractor to correct the moisture content of the subgrade and re-compact the materials, the subgrade displays evidence of rutting or yielding prior to, during, or after this compactive effort, additional material will be excavated as directed by the Owner to the depth required to provide a stable foundation for the base material. Suitable material removed during excavation will be utilized for subgrade correction. This work will not be paid as Extra Work if it was or would have been, or could have been performed as part of any other grading activity.

STABILIZED BASE CONSTRUCTION (2211)

This work will consist of the excavation and embankment of existing subgrade and surface materials, and the construction of aggregate base.

1. Aggregate base will be either MnDOT Class 2 or Class 5, at the Contractor's option. Class 7 recycled base is acceptable where alllowed in the MnDOT standard specifictations.
2. Any damage by the Contractor's operations to any existing improvements which have not been designated for removal or disturbance will be repaired at the expense of the Contractor.
3. AGGREGATE: Aggregate for the purposes required by this contract will be furnished by the Contractor from sources selected by him.
4. AGGREGATE BASE: Aggregate base, will be constructed in accordance with the provisions of 2211. Aggregate will conform to the requirements of 3138.
5. Compaction will be obtained by the Modified Penetration Index Method modified as follows: The Owner will hire an independent testing laboratory to perform density and moisture testing. Moisture tests will be performed with each density test. Tests will be performed in accordance with the Materials Testing Section above. Penetration and moisture content testing will be performed along with to the density tests. No payment will be made for work tested that fail to meet the specified density. The Contractor will be responsible for any additional tests due to the failure of work. Water will be applied to the base material during mixing, spreading and compaction operations for proper compaction and will be considered incidental work.
6. Test rolling will be performed on the aggregate base in the presence of the Owner's testing subconsultant. Test rolling will be as specified in Mn/DOT specification 2111 except that the test will be performed with a fully loaded tandem axel dump truck in lieu of the test roller. The Owner may delete the requirement for test-rolling on all or portions of the stabilized base, at his discretion, after consultation with the Contractor.
7. Furnish and install Aggregate Base, Class 5 meeting MN/DOT Specification No. 3138 under all concrete or bituminous pavements and a minimum of 2 inches of Aggregate Base, Class 5 under all curb and curb and gutter.

MAINTENANCE OF COMPLETED BASE

After completion of any part of the base, such base will be maintained in a dust free condition. It will be the Contractor's responsibility to repair at his expense all prepared and shaped surfaces until project is complete. Any water applied to keep the base dampened or reshaped will be at the Contractor's expense. The Contractor will maintain the completed aggregate base after rain events, and replace and recompact any eroded aggregate as work incidental to the contract. Maintenance of completed base is incidental to construction.

APPLICATION OF WATER (2130)

Application of water will be in accordance with the provisions of 2130 except as herein modified. No direct compensation will be made for water used in conjunction with the mixing, placing and compacting operations for base construction. The contractor is responsible for application of water for dust control in accordance with Mn/DOT 1717 and with the NPDES permit. Application of water for dust control is incidental to the work and no additional payment will be made therefore.

CONCRETE PAVEMENT (2301)

Jointed Type 3 Grade A Plain Concrete Pavement will be placed in accordance with the Mn/DOT standard specifications except as modified herein. Loading dock pavement will be reinforced.

The mix designs for concrete paving for this project are:
- Standard Paving - 3A41
- High Early Strength (if directed by Owner) - 3A41HE
- Flexural strength at 28 days will be 750 psi.
- Compressive strength at 28 days will be per the mix designations above.

High Early concrete areas will remain closed to traffic for 3 days or until they have achieved a flexural strength of 450 psi, whichever is shorter.
Concrete will be supplied from a Mn/DOT certified producer. The Contractor will be responsible for supplying the mix designs. The Contractor will provide the Engineer with the mix designs a minimum of 24 hours prior to the first pour.
Concrete will be cured by the use of membrane curing compound meeting the requirements of MnDOT 3754 AMS.
All joint sealant will conform to 3723, Concrete Joint and Crack Sealer (Hot-Poured Elastic Type) sealant.
Transverse metal-tine finishing will not be required.
The location of transverse joints may be adjusted in the field by the Engineer. An increase in the number of transverse joints of up to five percent (5%) compared to the number shown on the plans will be incidental.
All coarse aggregate for concrete pavement will meet the gradation requirements of MnDOT 3137 CA-50.

BITUMINOUS TACK COAT (2357)

Treating existing bituminous or concrete surfaces preparatory to placing a bituminous course thereon will be performed in accordance with the provisions of MN/DOT 2357 and the following:

A bituminous tack coat consisting of emulsified asphalt will be applied between all bituminous surfaces. A tack coat will be placed on the existing pavement prior to placing the next layer of bituminous and the edges of concrete pavement and curb and gutter that will come into contact with the new bituminous will be tacked. All surfaces will be cleaned of all dirt, debris and loose material prior to the application of the bituminous tack coat.

PLANT MIXED ASPHALT PAVEMENT (2350/2360)

Plant mixed asphalt pavement density will be constructed in accordance with Mn/DOT specification 2360, as published by Mn/DOT at the time of bid.After placement of the base course of bituminous paving at the bus parking area and car parking area, the Contractor will flood the work area with water to identify possible "bird bath" locations where the pavement has not been placed at enough grade to ensure proper drainage. Prior to or during placment of the wear course, the Contractor will ensure that these areas are graded to properly drain.

CONCRETE MIX FOR CURB & GUTTER, WALKS, & DRIVEWAYS (2461)

Concrete for this Contract will be as follows and as outlined in 2461:
The concrete mix number to be used for slip form curb and gutter will be 3A22. The concrete mix number for hand formed curb and gutter, sidewalks, and driveways will be 3A32.

	Minnesota Highway Designation	Minnesota Highway Designation
Mix Number	3A32B	3A22B
Type of Concrete	Type 3 (Air Entrained)	Type 3 (Air Entrained)
Grade	Grade A	Grade A
28 Day Strength	27 Mpa (3900 psi)	27 Mpa (3900 psi)
Slump	50 mm to 75 mm (2" to 3")	25 mm to 50 mm (1" to 2")
Coarse Aggregate Composition	100% Class "B"	100% Class "B"
Gradation of Coarse Aggregate	CA25 or CA50 For Structural Concrete	CA25 or CA50 For Structural Concrete

Concrete will be supplied from a Mn/DOT certified producer. The Contractor will supply the mix designs. The Contractor will provide the Engineer with the mix design a minimum of 24 hours prior to the first pour.

WALKS (2521)

Concrete sidewalks will be constructed in accordance with 2521 and Standard Plate 7035M. Preformed joint filler material will be placed in accordance with Standard Plate 7035M. Concrete sidewalks will be mix design 3A32 with a maximum slump of 3". No water will be added to the mix to reduce the slump beyond 3" for temporary workability, as stated in 2461.B3. Colored concrete shall be as manufactured by Scofield with coloring as determined by the Landscape Plan.

CONCRETE CURING AND PROTECTION (2521, 2531)

All sidewalk, driveway, curb and gutter will be cured using a membrane curing compound conforming to the requirement of Minnesota Highway Department #3754. For concrete curb and gutter poured after October 1st, blanket or extreme service membrane methods of curing will be substituted for membrane curing, in accordance with 2531.

EXTREME TEMPERATURE CONCRETE

The following additional measures will be required for extreme temperature concrete construction, as work incidental to the contract:

Hot Weather Concrete Construction
1. Do not place concrete with a placing temperature that will cause difficulty from loss of slump, flash set, or cold joints.
2. Maintain a concrete temperature during placement of less than 90 degrees F.
3. Use all means necessary to avoid drying the concrete prior to the completion of finishing operations.
4. Provide and use windbreaks, sunshades, fog sprays, and other devices to protect the concrete.

Cold Weather Concrete Construction
1. Provide adequate protection when temperatures are 40 degrees F or lower occur durin ghte placing and early curing periods.
2. Comply with all pertinent recommendations of ACI 306 (Recommended Practice for Cold Weather Concreting).
3. Type IIIA cement may be used.
4. The use of Calcium Chloride or other accelerators will not be permitted.
5. Maintain a concrete temperature during placement of more than 60 degrees F.
6. Use all means necessary to avoid exposure of concrete to freezing temperatures during placement, finishing, and curing.
7. Concrete will not be placed on a frozen subgrade.
8. Provide and maintain heated enclosures, insulating blankets, tarpaulins, heaters, fuel, and all other protective equipment required.
9. Maintain favorable curing temperature at all times until the concrete gains sufficient strength to withstand exposure to low temperature and applied loads.

CONCRETE CURBING & GUTTER (2531)

Concrete curb and gutter will be constructed in accordance with the provisions of 2531 and the following: Curing will be by the Membrane Curing Method as specified in 2531.3G (2). The sealing of joints in concrete curb and gutter will not be required.

Construction joints in curb and gutter will be installed at 10-foot intervals. Preformed joint filler material (1/2-inch) will be place at the ends of all street returns, at the ends of concrete driveway approaches, and in accordance with MN/Dot Standard Plate 7035N.

Concrete curb and gutter will be the style shown on the plans.

PEDESTRIAN CURB RAMPS (2531)

Unless otherwise dome sections will be red.

STORM WATER MANAGEMENT (2573)

The Stormwater Pollution Prevention Plan (SWPPP) required by the NPDES permit has been provided by the Owner and is incorporated into the plans and specifications.

The Minnesota Department of Transportation's Specification 2573 - Stormwater Management is hereby modified as follows:

1. The Contractor will apply for and comply with the provisions of the NPDES permit and the SWPPP (Stormwater Pollution Prevention Plan).
2. The Stormwater Pollution Prevention Plan provided by the Owner is meant and provided as a guide in the provision of Erosion and Sediment Control (ESC) Best Management Practices (BMP's) as required by the NPDES permit. The SWPPP is based on finish grade contours. Additional ESC measures, although not shown by the plan, may be required to comply with the provisions of the NPDES permit. Provision and maintenance of the ESC BMP's in accordance with the NPDES permit is the responsibility of the contractor, regardless of what is shown on the SWPPP. Interim ESC BMP's and updating of the SWPPP are the responsibility of the contractor. Maintenance of the ESC BMP's is incidental to the work and will be performed in accordance with 2573.M.
3. When updates to the SWPPP are required, the Contractor will provide the Engineer with sketches of the updated areas, so that the Engineer can update the SWPPP.
4. No additional payment will be made for additional ESC BMP's required by the NPDES permit but not shown on the SWPPP.
5. The contractor will obtain the NPDES permit from the MPCA and pay any applicable fees as work incidental to the contract. The contractor will remain named on the NPDES permit until the warranty period expires, at which time he/she may submit an NPDES Permit Modification/Transfer Form to the Owner for completion and submission to the MPCA.
6. The contractor will maintain the NPDES site inspection log.
7. The contractor will be responsible for all fines imposed by regulating agencies for failure to comply with the provisions of the NPDES permit.
8. If the Engineer determines that ESC BMP's have failed or require maintenance, the Contractor will correct the cause of failure, maintain the BMP's, and alleviate all sediment deposition outside the construction limits, to the fullest extent possible. If the Contractor fails to install or maintain erosion or sediment control measures required by the NPDES permit, fails to conduct required inspections, or fails to take action ordered by the Engineer to correct ESC problems, the Engineer will issue a written order to the Contractor. The Contractor will respond within 24 hours with sufficient personnel, equipment, and/or materials and conduct the required work or be subject to a $500 per calendar day penalty for noncompliance. In addition, the Engineer may recommend that the Owner withhold payment from all work until the ESC BMP's are constructed or maintained.
9. The Engineer may require the Contractor to submit a site plan for certain portions of the work detailing proposed ESC BMP's, and a schedule indicating start and completion dates. The Contractor will not start work within these areas until the Engineer has accepted the site plan and schedule. No additional payment will be made for preparation of site plans required by the Engineer, or reasonable delays or production losses caused by this requirement.
10. Sediment removal required due to the failures to implement or maintain ESC BMP's will not be considered Extra Work. The Contractor will remove all sediment from areas accrued due to actions or inactions by the Contractor, at no cost to the Owner
11. The Contractor will designate a concrete washout area on-site and inform the Engineer of the chosen location at the pre-construction meeting. This area must be constructed so that it drains towards itself. Concrete debris will be removed from the concrete washout and removed from the site prior to final acceptance.

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the State of Minnesota.

Brian J. Johnson
Reg. No. 42744
Date: 9/20/25

Consultant:
JONES HAUGH SMITH
Engineers • Surveyors
515 South Washington Ave. Albert Lea, MN 507-373-4876

Project:
MANKATO APARTMENTS

Revision:

No.: | Date: 9/20/2025
Drawn: bjj | Checked:
Project Manager:
Project Status: CD
Sheet Title:
SPECIFICATIONS

Sheet No.:
C10

Applicant:
APX Construction
3 Civic Center Plaza Suite 400
Mankato, MN 56001

Project Description
APX Construction is proposing to construct 2 36 unit apartment buildings in the West 1. Of the East ½ of Section S21-T108-26W near the roundabout at Victory Drive and Stadium Road in Mankato, MN. An existing street access off Victory Drive will be utilized for egress to the parcel.

Existing Conditions
The current condition of the site is a previously developed site which now appears vacant. Wetlands are present on the site and were recently delineated. An undisturbed buffer of 16.5' will be maintained from the wetland delineation lines as part of development. The site is relatively flat with a high point in the southern portion of the site with slope northerly and primarily westerly from the high point. The soils on site consist of silty clays and muck near the north as outlined by the attached NRCS soils report. Approximately 1.25 acres of existing gravel surfacing exists on the site.

Adjacent Areas
Victory Drive and Stadium Road front the property on the two sides while developed commercial parcels abut the south and east sides of the site.

The site is not located within a 100 year flood plain as defined by FEMA Flood Insurance Rate Maps.

Areas and Volumes
The parcel consists of approximately 3.9 acres and approximately 2 acres of new impervious surfaces consisting of parking lots and the buildings will be constructed.

Stormwater Management Considerations
Storm water treatment for the proposed construction is proposed via a wet retention basin located in the northwest side of the development. Stormwater off the new roof and parking areas will be collected with curb inlets and be transported via underground storm sewer to the basin. The attached plans illustrate the locations and grades of proposed storm sewer utilities. The proposed bottom of the basin is proposed at elevation 982.50. The basin would have a control structure at the outlet with a 30 degree V-notch weir wall at elevation 987.50 and an overflow weir wall at elevation 988.75 with a basin emergency overflow elevation of 992.00 as outlined in the attached hydro cad calculations. The top of berm for the basin is at 993.00 elevation allowing for a freeboard of at least 2 feet for the 100 year high water elevation of 990.42.

The basin will provide rate control for the 2,10 and 100 year rain events thereby keeping post development rates of runoff the same or less than pre-development rates. This basin will also serve to provide removal of total suspended solids, particulate phosphorus and to a lesser degree, dissolved phosphorus. Consideration was given to implementing infiltration practices, however the onsite silty clay loams are not suitable for infiltration due to being HSG D soils with a shallow water table.

The basin should provide total suspended solids (TSS) on the order of 80% removal as well as particulate phosphorus as shown on the attached Minimal Impact Design Standards (MIDS) pre and post development calculations.

The proposed impervious surface tributary to the new basin will be approximately 4 acres. Storm water runoff will enter the basin via underground storm sewer piping and surface runoff. A dry storage volume of approximately 35,000 cubic feet will be provided via the basin. A WQV of 1.25 acres of new impervious surface * 3600 cu. ft = 0.104 acre ft will be retained. The 1.1" water quality volume (approximately water elevation 988.50) discharge rate will be approximately 2.28 cfs.

Predevelopment and post development rates discharging from the new basin are summarized below. Discharge for the new basin will occur via a 12" outlet pipe into an existing roadway ditch that is currently tributary to existing City storm sewer.

	Pre Development	Post Development
2 Year	5.10 cfs	2.85 cfs
10 Year	9.41 cfs	8.02 cfs
100 Year	23.21 cfs	15.71 cfs

A summary of the treatment calculations and rate calculations is appended to this report.

Maintenance
Seasonal maintenance of the storm water basin will be required to remove accumulated sediment, removal of undesired vegetation and to ensure all upstream and downstream areas are stabilized. Sediment removal can be accomplished via long reach backhoe.

Signatures and Acceptance
We hereby acknowledge we have prepared the grading plan associated with this report.

Brian J. Johnson, Jones Haugh & Smith, Inc. Date: 6/25/2025

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Project Information

Calculator Version:	Version 4: July 2020
Project Name:	Mankato Apartments Existing
User Name / Company Name:	Jones, Haugh & Smith Inc
Date:	6/25/2025
Project Description:	Mankato Apartments
Construction Permit?:	Yes

Site Information

Retention Requirement (inches):	1.1
Site's Zip Code:	56001
Annual Rainfall (inches):	30.7
Phosphorus EMC (mg/l):	0.3
TSS EMC (mg/l):	54.5

Total Site Area

Land Cover	A Soils (acres)	B Soils (acres)	C Soils (acres)	D Soils (acres)	Total (acres)
Forest/Open Space - Undisturbed, protected forest/open space or reforested land				0	0
Managed Turf - disturbed, graded for yards or other turf to be mowed/managed				2.74	2.74
			Impervious Area (acres)		1.26
				Total Area (acres)	4

Site Areas Routed to BMPs

Land Cover	A Soils (acres)	B Soils (acres)	C Soils (acres)	D Soils (acres)	Total (acres)
Forest/Open Space - Undisturbed, protected forest/open space or reforested land					0
Managed Turf - disturbed, graded for yards or other turf to be mowed/managed					0
			Impervious Area (acres)		
				Total Area (acres)	0

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Summary Information

Performance Goal Requirement

Performance goal volume retention requirement:	5031	ft3
Volume removed by BMPs towards performance goal:		ft^3
Percent volume removed towards performance goal		**%**

Annual Volume and Pollutant Load Reductions

Post development annual runoff volume	4.3333	acre-ft
Annual runoff volume removed by BMPs:		acre-ft
Percent annual runoff volume removed:		**%**
Post development annual particulate P load:	1.9448	lbs
Annual particulate P removed by BMPs:		lbs
Post development annual dissolved P load:	1.591	lbs
Annual dissolved P removed by BMPs:	0	lbs
Total P removed by BMPs	0	lbs
Percent annual total phosphorus removed:		**%**
Post development annual TSS load:	642.4	lbs
Annual TSS removed by BMPs:		lbs
Percent annual TSS removed:		**%**

BMP Summary

Performance Goal Summary

BMP Name	BMP Volume Capacity (ft3)	Volume Recieved (ft3)	Volume Retained (ft3)	Volume Outflow (ft3)	Percent Retained

Annual Volume Summary

BMP Name	Volume From Direct Watershed (acre-ft)	Volume From Upstream BMPs (acre-ft)	Volume Retained (acre-ft)	Volume outflow (acre-ft)	Percent Retained (%)

Particulate Phosphorus Summary

BMP Name	Load From Direct Watershed (lbs)	Load From Upstream BMPs (lbs)	Load Retained (lbs)	Outflow Load (lbs)	Percent Retained

Dissolved Phosphorus Summary

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BMP Name	Load From Direct Watershed (lbs)	Load From Upstream BMPs (lbs)	Load Retained (lbs)	Outflow Load (lbs)	Percent Retained

Total Phosphorus Summary

BMP Name	Load From Direct Watershed (lbs)	Load From Upstream BMPs (lbs)	Load Retained (lbs)	Outflow Load (lbs)	Percent Retained

TSS Summary

BMP Name	Load From Direct Watershed (lbs)	Load From Upstream BMPs (lbs)	Load Retained (lbs)	Outflow Load (lbs)	Percent Retained

BMP Schematic

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Project Information

Calculator Version:	Version 4: July 2020
Project Name:	Mankato Apartments Proposed Conditions
User Name / Company Name:	Jones, Haugh & Smith Inc
Date:	6/25/2025
Project Description:	Mankato Apartments
Construction Permit?:	Yes

Site Information

Retention Requirement (inches):	1.1
Site's Zip Code:	56001
Annual Rainfall (inches):	30.7
Phosphorus EMC (mg/l):	0.3
TSS EMC (mg/l):	54.5

Total Site Area

Land Cover	A Soils (acres)	B Soils (acres)	C Soils (acres)	D Soils (acres)	Total (acres)
Forest/Open Space - Undisturbed, protected forest/open space or reforested land				0	0
Managed Turf - disturbed, graded for yards or other turf to be mowed/managed				1.5	1.5
			Impervious Area (acres)		2.5
				Total Area (acres)	4

Site Areas Routed to BMPs

Land Cover	A Soils (acres)	B Soils (acres)	C Soils (acres)	D Soils (acres)	Total (acres)
Forest/Open Space - Undisturbed, protected forest/open space or reforested land					0
Managed Turf - disturbed, graded for yards or other turf to be mowed/managed				1.5	1.5
			Impervious Area (acres)		2.5
				Total Area (acres)	4

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Summary Information

Performance Goal Requirement

Performance goal volume retention requirement:	9982	ft3
Volume removed by BMPs towards performance goal:		ft^3
Percent volume removed towards performance goal		**%**

Annual Volume and Pollutant Load Reductions

Post development annual runoff volume	6.3319	acre-ft
Annual runoff volume removed by BMPs:	0	acre-ft
Percent annual runoff volume removed:	**0**	**%**
Post development annual particulate P load:	2.8417	lbs
Annual particulate P removed by BMPs:	1.705	lbs
Post development annual dissolved P load:	2.325	lbs
Annual dissolved P removed by BMPs:	0	lbs
Total P removed by BMPs	1.705	lbs
Percent annual total phosphorus removed:	**33**	**%**
Post development annual TSS load:	938.6	lbs
Annual TSS removed by BMPs:	563.2	lbs
Percent annual TSS removed:	**60**	**%**

BMP Summary

Performance Goal Summary

BMP Name	BMP Volume Capacity (ft3)	Volume Recieved (ft3)	Volume Retained (ft3)	Volume Outflow (ft3)	Percent Retained
1 - Constructed stormwater pond	0	9982	0	9982	0

Annual Volume Summary

BMP Name	Volume From Direct Watershed (acre-ft)	Volume From Upstream BMPs (acre-ft)	Volume Retained (acre-ft)	Volume outflow (acre-ft)	Percent Retained (%)
1 - Constructed stormwater pond	6.3319	0	0	6.3319	0

Particulate Phosphorus Summary

BMP Name	Load From Direct Watershed (lbs)	Load From Upstream BMPs (lbs)	Load Retained (lbs)	Outflow Load (lbs)	Percent Retained
1 - Constructed stormwater pond	2.8417	0	1.705	1.1367	60

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Dissolved Phosphorus Summary

BMP Name	Load From Direct Watershed (lbs)	Load From Upstream BMPs (lbs)	Load Retained (lbs)	Outflow Load (lbs)	Percent Retained
1 - Constructed stormwater pond	2.3251	0	0	2.3251	0

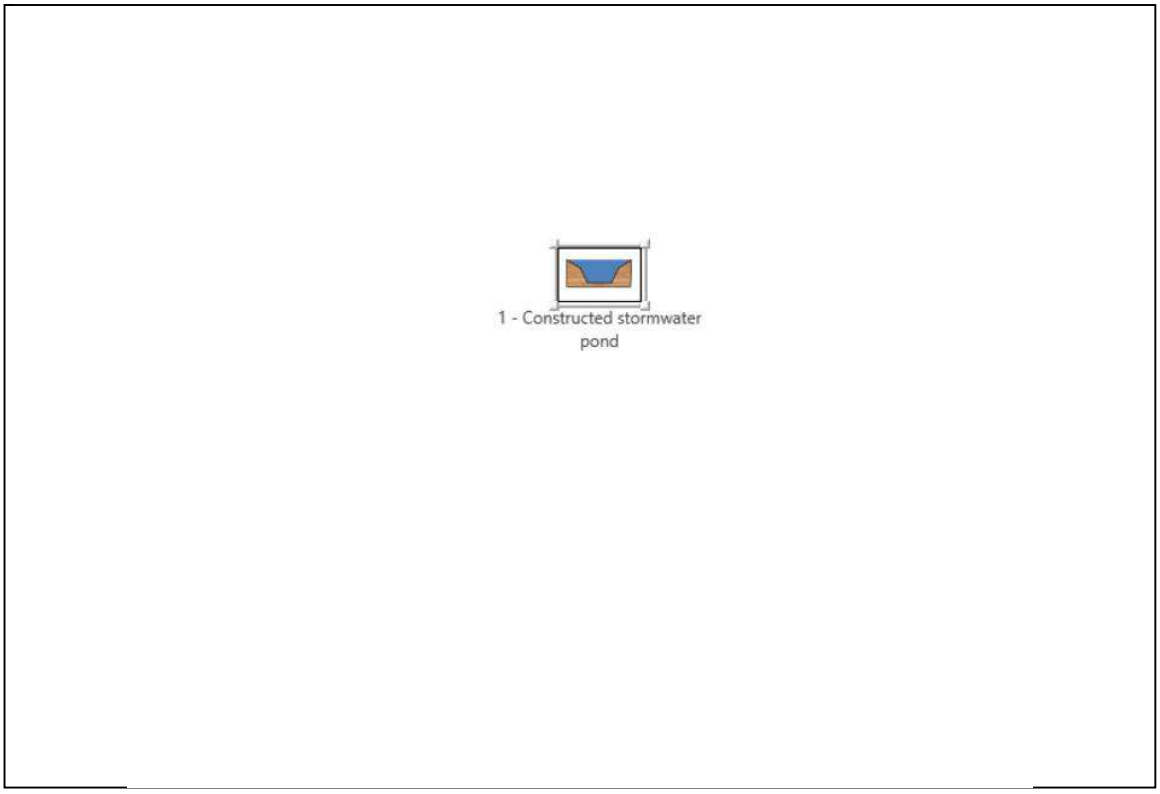
Total Phosphorus Summary

BMP Name	Load From Direct Watershed (lbs)	Load From Upstream BMPs (lbs)	Load Retained (lbs)	Outflow Load (lbs)	Percent Retained
1 - Constructed stormwater pond	5.1668	0	1.705	3.4618	30

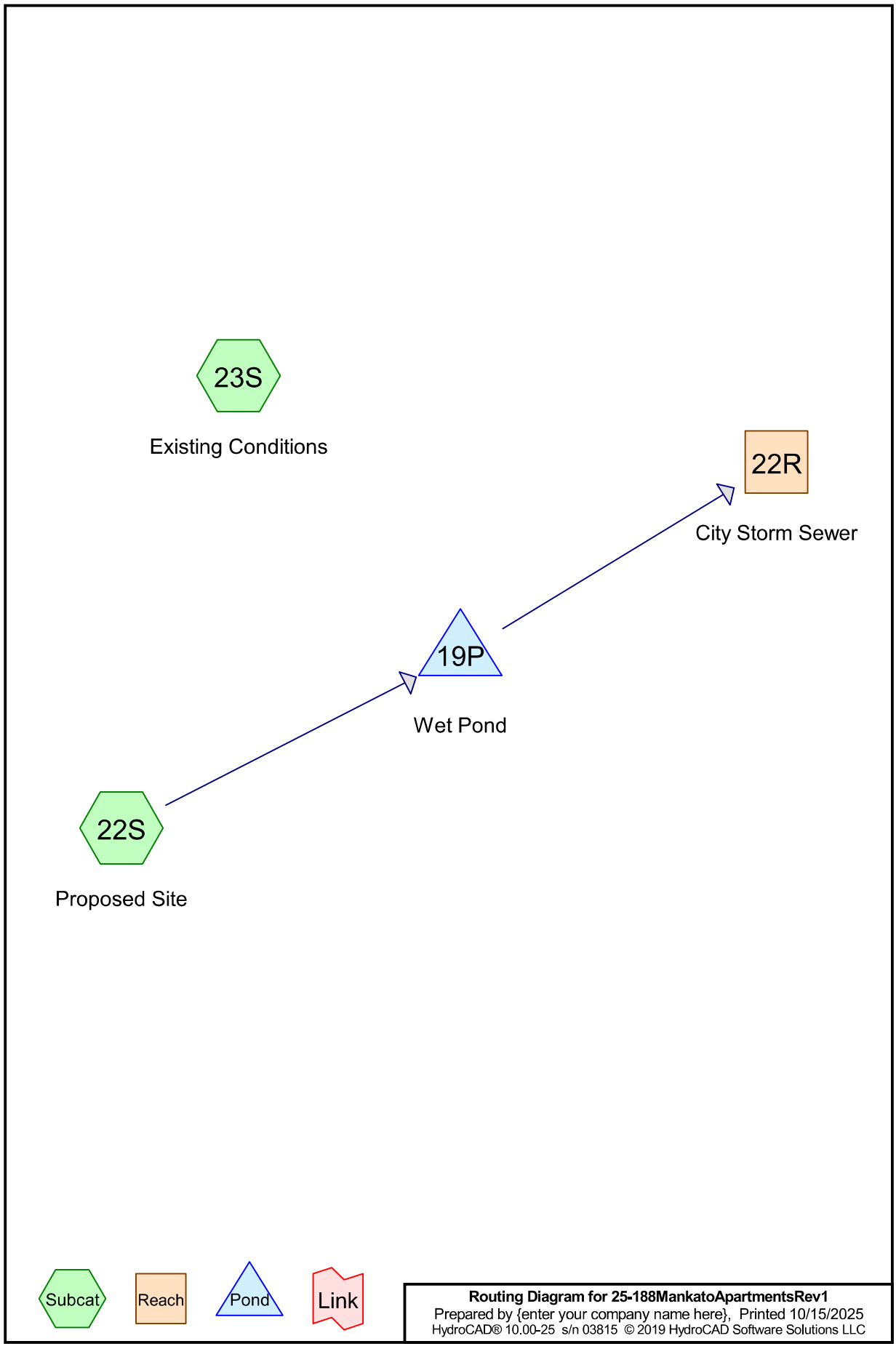
TSS Summary

BMP Name	Load From Direct Watershed (lbs)	Load From Upstream BMPs (lbs)	Load Retained (lbs)	Outflow Load (lbs)	Percent Retained
1 - Constructed stormwater pond	938.64	0	563.18	375.46	60

BMP Schematic



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Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
4.240	80	>75% Grass cover, Good, HSG D (22S, 23S)
1.260	96	Gravel surface, HSG D (23S)
1.500	98	Paved parking, HSG D (22S)
1.000	98	Roofs, HSG D (22S)
8.000	**88**	**TOTAL AREA**

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Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.000	HSG A	
0.000	HSG B	
0.000	HSG C	
8.000	HSG D	22S, 23S
0.000	Other	
8.000		**TOTAL AREA**

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Ground Covers (all nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
0.000	0.000	0.000	4.240	0.000	4.240	>75% Grass cover, Good	22S, 23S
0.000	0.000	0.000	1.260	0.000	1.260	Gravel surface	23S
0.000	0.000	0.000	1.500	0.000	1.500	Paved parking	22S
0.000	0.000	0.000	1.000	0.000	1.000	Roofs	22S
0.000	**0.000**	**0.000**	**8.000**	**0.000**	**8.000**	**TOTAL AREA**	

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Pipe Listing (all nodes)

Line#	Node Number	In-Invert (feet)	Out-Invert (feet)	Length (feet)	Slope (ft/ft)	n	Diam/Width (inches)	Height (inches)	Inside-Fill (inches)
1	19P	987.50	984.00	50.0	0.0700	0.012	24.0	0.0	0.0
2	19P	987.50	987.50	20.0	0.0000	0.013	15.0	0.0	0.0

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Time span=0.00-48.00 hrs, dt=0.05 hrs, 961 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 22S: Proposed Site Runoff Area=4.000 ac 62.50% Impervious Runoff Depth=1.95"
Tc=20.0 min CN=91 Runoff=10.61 cfs 0.650 af

Subcatchment 23S: Existing Conditions Runoff Area=4.000 ac 0.00% Impervious Runoff Depth=1.48"
Tc=30.0 min CN=85 Runoff=6.42 cfs 0.493 af

Reach 22R: City Storm Sewer Inflow=4.38 cfs 0.641 af
Outflow=4.38 cfs 0.641 af

Pond 19P: Wet Pond Peak Elev=988.91' Storage=0.307 af Inflow=10.61 cfs 0.650 af
Outflow=4.38 cfs 0.641 af

Total Runoff Area = 8.000 ac Runoff Volume = 1.143 af Average Runoff Depth = 1.72"
68.75% Pervious = 5.500 ac 31.25% Impervious = 2.500 ac

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Summary for Subcatchment 22S: Proposed Site

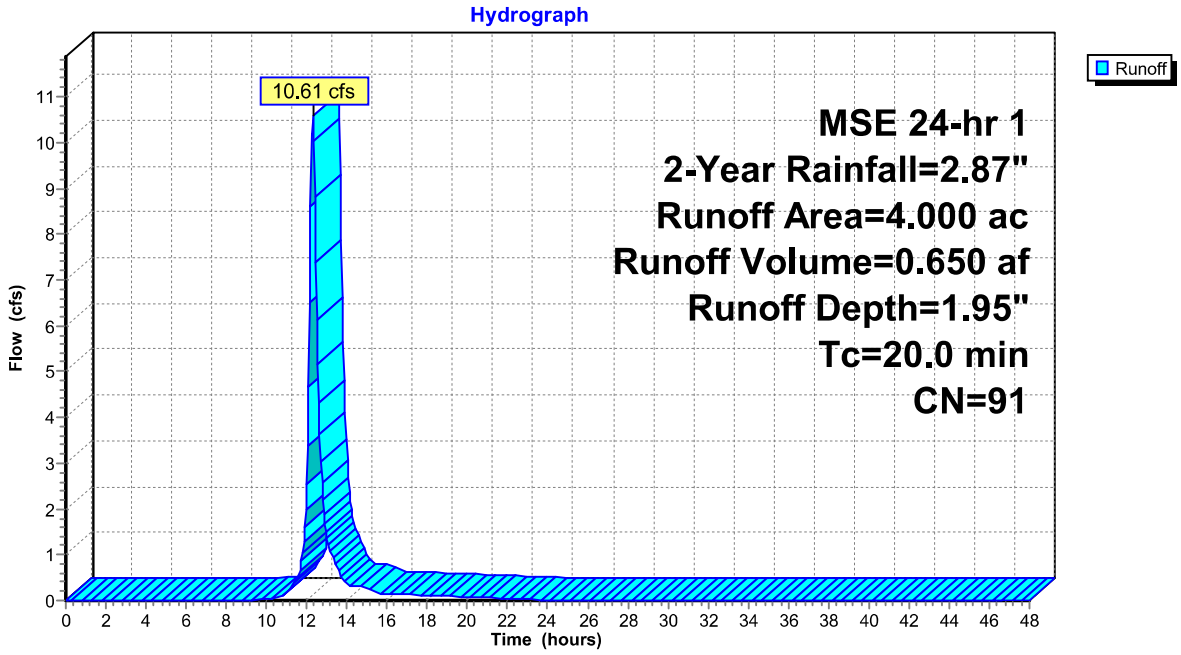
Runoff = 10.61 cfs @ 12.30 hrs, Volume= 0.650 af, Depth= 1.95"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 1 2-Year Rainfall=2.87"

Area (ac)	CN	Description
1.000	98	Roofs, HSG D
1.500	98	Paved parking, HSG D
1.500	80	>75% Grass cover, Good, HSG D
4.000	91	Weighted Average
1.500		37.50% Pervious Area
2.500		62.50% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
20.0					**Direct Entry,**

Subcatchment 22S: Proposed Site



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Summary for Subcatchment 23S: Existing Conditions

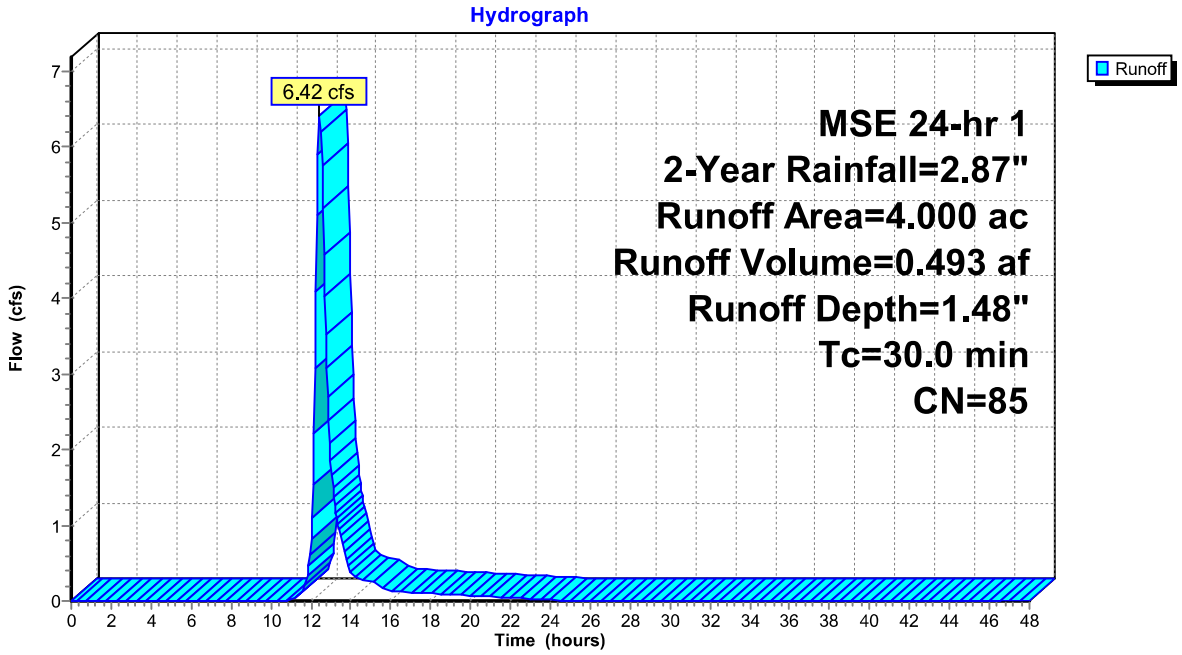
Runoff = 6.42 cfs @ 12.44 hrs, Volume= 0.493 af, Depth= 1.48"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 1 2-Year Rainfall=2.87"

Area (ac)	CN	Description
2.740	80	>75% Grass cover, Good, HSG D
1.260	96	Gravel surface, HSG D
4.000	85	Weighted Average
4.000		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
30.0					**Direct Entry,**

Subcatchment 23S: Existing Conditions



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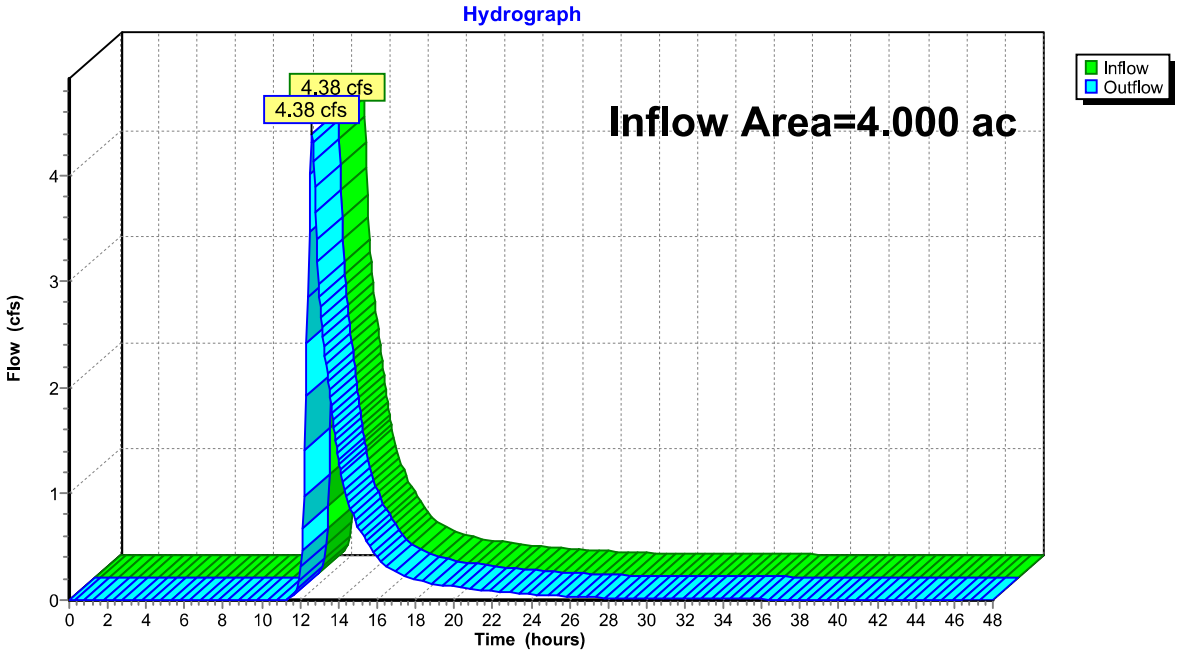
Summary for Reach 22R: City Storm Sewer

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 4.000 ac, 62.50% Impervious, Inflow Depth > 1.92" for 2-Year event
Inflow = 4.38 cfs @ 12.60 hrs, Volume= 0.641 af
Outflow = 4.38 cfs @ 12.60 hrs, Volume= 0.641 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

Reach 22R: City Storm Sewer



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Summary for Pond 19P: Wet Pond

[95] Warning: Outlet Device #1 rise exceeded

Inflow Area = 4.000 ac, 62.50% Impervious, Inflow Depth = 1.95" for 2-Year event
Inflow = 10.61 cfs @ 12.30 hrs, Volume= 0.650 af
Outflow = 4.38 cfs @ 12.60 hrs, Volume= 0.641 af, Atten= 59%, Lag= 18.2 min
Primary = 4.38 cfs @ 12.60 hrs, Volume= 0.641 af

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs / 2
Peak Elev= 988.91' @ 12.60 hrs Surf.Area= 0.256 ac Storage= 0.307 af

Plug-Flow detention time= 115.1 min calculated for 0.641 af (99% of inflow)
Center-of-Mass det. time= 107.3 min (892.3 - 785.0)

Volume	Invert	Avail.Storage	Storage Description
#1	987.50'	1.708 af	**Custom Stage Data (Prismatic)** Listed below

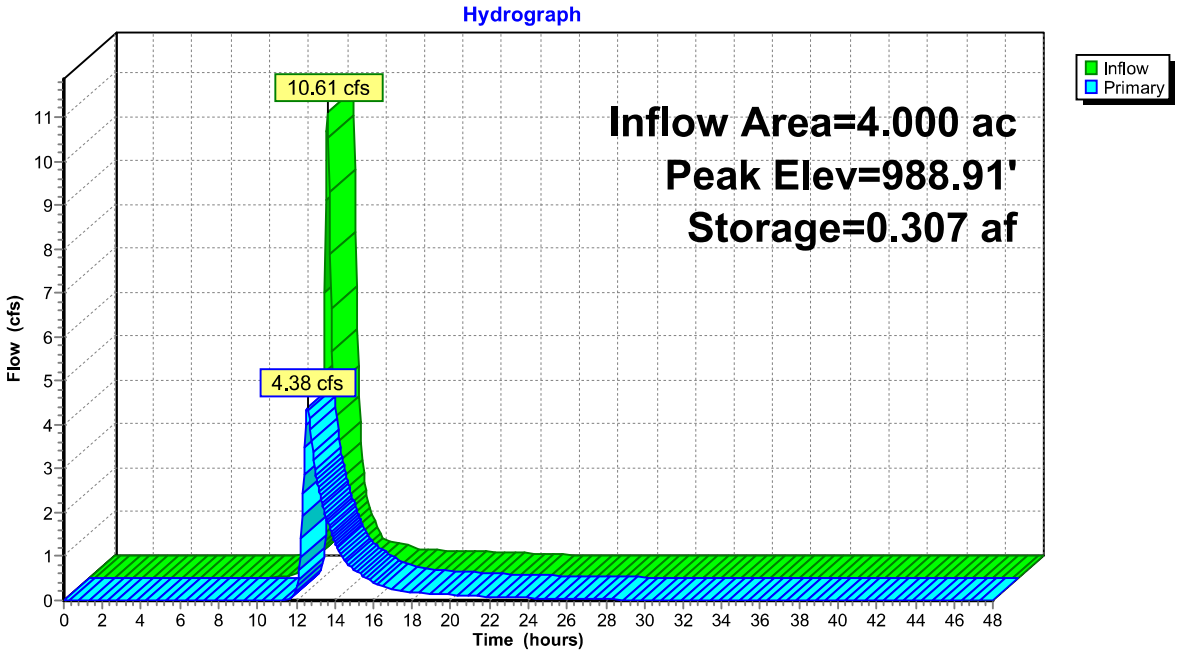
Elevation (feet)	Surf.Area (acres)	Inc.Store (acre-feet)	Cum.Store (acre-feet)
987.50	0.160	0.000	0.000
988.00	0.210	0.093	0.093
989.00	0.260	0.235	0.328
990.00	0.310	0.285	0.612
991.00	0.350	0.330	0.943
992.00	0.370	0.360	1.302
993.00	0.440	0.405	1.708

Device	Routing	Invert	Outlet Devices
#1	Device 2	987.50'	**30.0 deg x 0.7' long x 1.00' rise Sharp-Crested Vee/Trap Weir** Cv= 2.61 (C= 3.26)
#2	Primary	987.50'	**24.0" Round Culvert** L= 50.0' Ke= 1.000 Inlet / Outlet Invert= 987.50' / 984.00' S= 0.0700 '/' Cc= 0.900 n= 0.012 Concrete pipe, finished, Flow Area= 3.14 sf
#3	Device 2	988.75'	**5.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32
#4	Device 1	987.50'	**15.0" Round Culvert** L= 20.0' Ke= 1.000 Inlet / Outlet Invert= 987.50' / 987.50' S= 0.0000 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=4.38 cfs @ 12.60 hrs HW=988.91' (Free Discharge)
- **2=Culvert** (Passes 4.38 cfs of 7.21 cfs potential flow)
  - **1=Sharp-Crested Vee/Trap Weir** (Passes 3.45 cfs of 4.35 cfs potential flow)
    - **4=Culvert** (Barrel Controls 3.45 cfs @ 3.11 fps)
  - **3=Broad-Crested Rectangular Weir** (Weir Controls 0.93 cfs @ 1.13 fps)

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Pond 19P: Wet Pond



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Time span=0.00-48.00 hrs, dt=0.05 hrs, 961 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 22S: Proposed Site Runoff Area=4.000 ac 62.50% Impervious Runoff Depth=3.30"
Tc=20.0 min CN=91 Runoff=17.57 cfs 1.099 af

Subcatchment 23S: Existing Conditions Runoff Area=4.000 ac 0.00% Impervious Runoff Depth=2.72"
Tc=30.0 min CN=85 Runoff=11.79 cfs 0.906 af

Reach 22R: City Storm Sewer Inflow=10.46 cfs 1.089 af
Outflow=10.46 cfs 1.089 af

Pond 19P: Wet Pond Peak Elev=989.34' Storage=0.424 af Inflow=17.57 cfs 1.099 af
Outflow=10.46 cfs 1.089 af

Total Runoff Area = 8.000 ac Runoff Volume = 2.005 af Average Runoff Depth = 3.01"
68.75% Pervious = 5.500 ac 31.25% Impervious = 2.500 ac

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Summary for Subcatchment 22S: Proposed Site

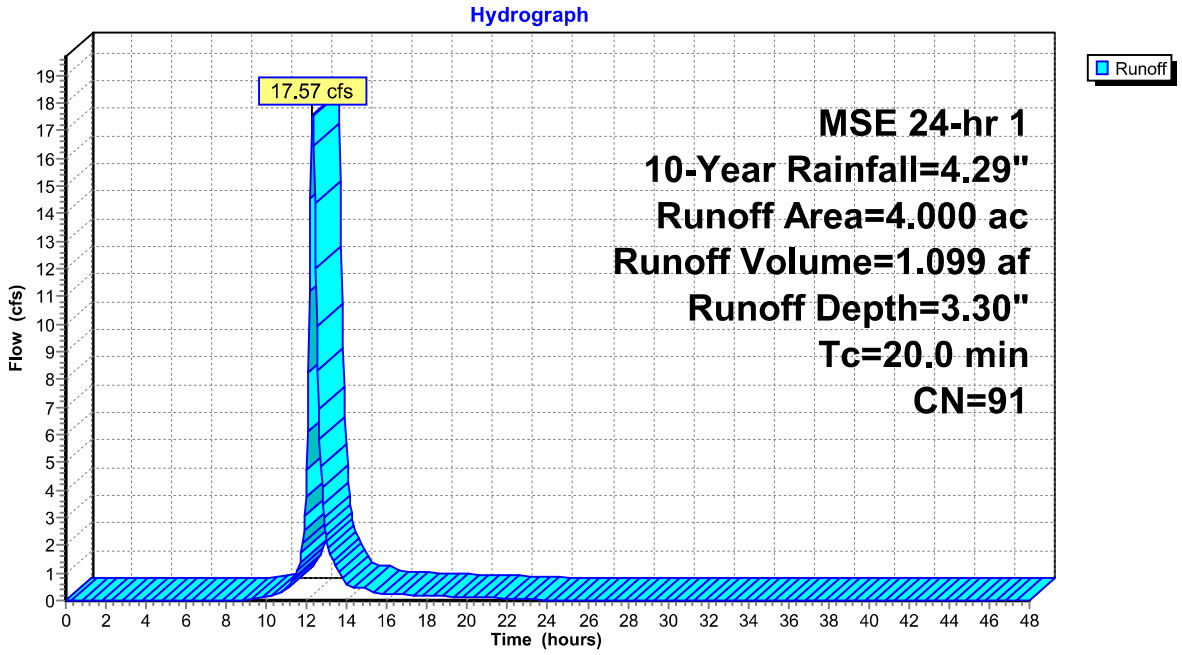
Runoff = 17.57 cfs @ 12.29 hrs, Volume= 1.099 af, Depth= 3.30"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 1 10-Year Rainfall=4.29"

Area (ac)	CN	Description
1.000	98	Roofs, HSG D
1.500	98	Paved parking, HSG D
1.500	80	>75% Grass cover, Good, HSG D
4.000	91	Weighted Average
1.500		37.50% Pervious Area
2.500		62.50% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
20.0					**Direct Entry,**

Subcatchment 22S: Proposed Site



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Summary for Subcatchment 23S: Existing Conditions

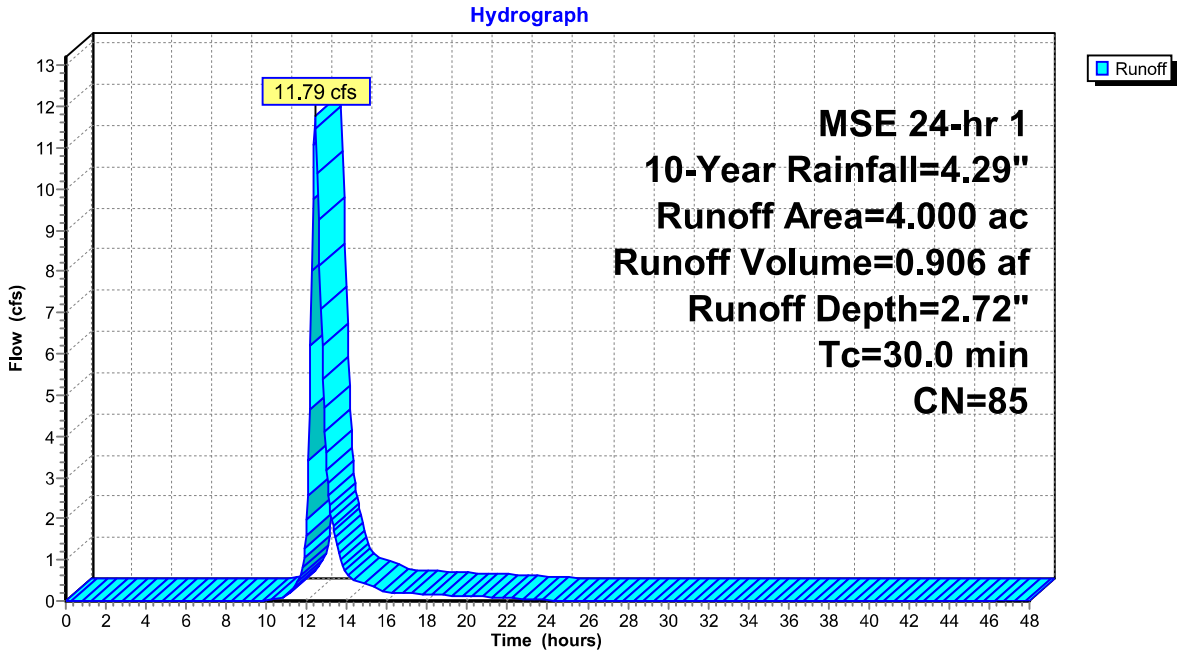
Runoff = 11.79 cfs @ 12.43 hrs, Volume= 0.906 af, Depth= 2.72"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 1 10-Year Rainfall=4.29"

Area (ac)	CN	Description
2.740	80	>75% Grass cover, Good, HSG D
1.260	96	Gravel surface, HSG D
4.000	85	Weighted Average
4.000		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
30.0					**Direct Entry,**

Subcatchment 23S: Existing Conditions



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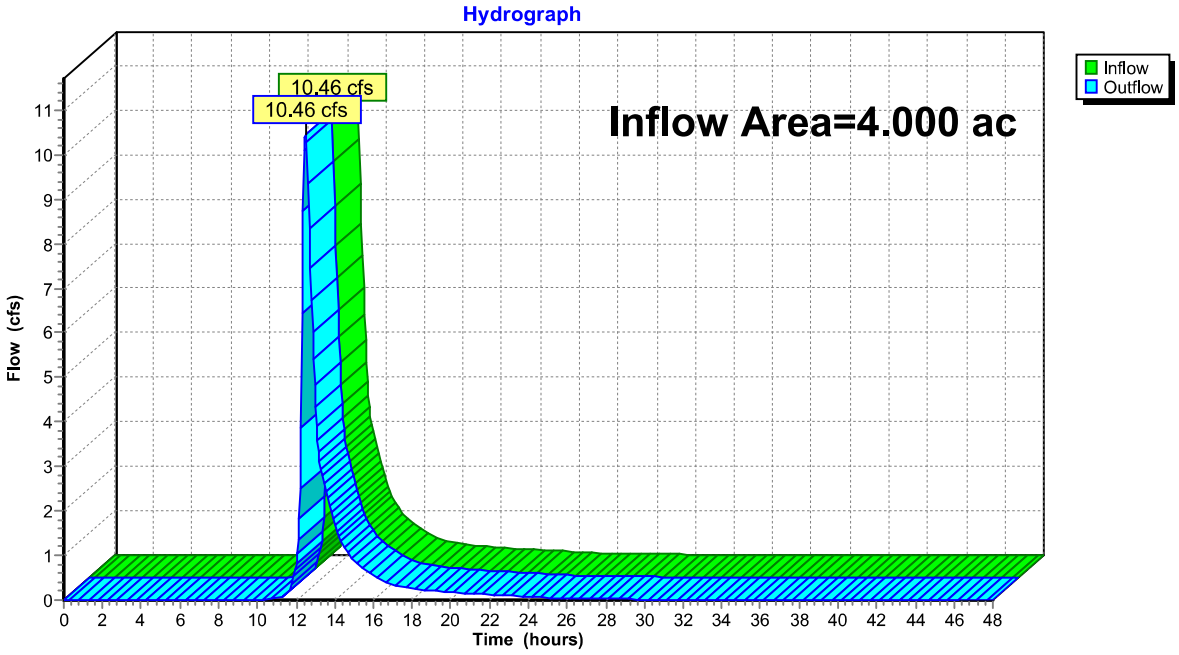
Summary for Reach 22R: City Storm Sewer

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 4.000 ac, 62.50% Impervious, Inflow Depth > 3.27" for 10-Year event
Inflow = 10.46 cfs @ 12.49 hrs, Volume= 1.089 af
Outflow = 10.46 cfs @ 12.49 hrs, Volume= 1.089 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

Reach 22R: City Storm Sewer



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Summary for Pond 19P: Wet Pond

[95] Warning: Outlet Device #1 rise exceeded

Inflow Area = 4.000 ac, 62.50% Impervious, Inflow Depth = 3.30" for 10-Year event
Inflow = 17.57 cfs @ 12.29 hrs, Volume= 1.099 af
Outflow = 10.46 cfs @ 12.49 hrs, Volume= 1.089 af, Atten= 40%, Lag= 11.9 min
Primary = 10.46 cfs @ 12.49 hrs, Volume= 1.089 af

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs / 2
Peak Elev= 989.34' @ 12.49 hrs Surf.Area= 0.277 ac Storage= 0.424 af

Plug-Flow detention time= 83.0 min calculated for 1.088 af (99% of inflow)
Center-of-Mass det. time= 79.4 min (857.6 - 778.2)

Volume	Invert	Avail.Storage	Storage Description
#1	987.50'	1.708 af	**Custom Stage Data (Prismatic)** Listed below

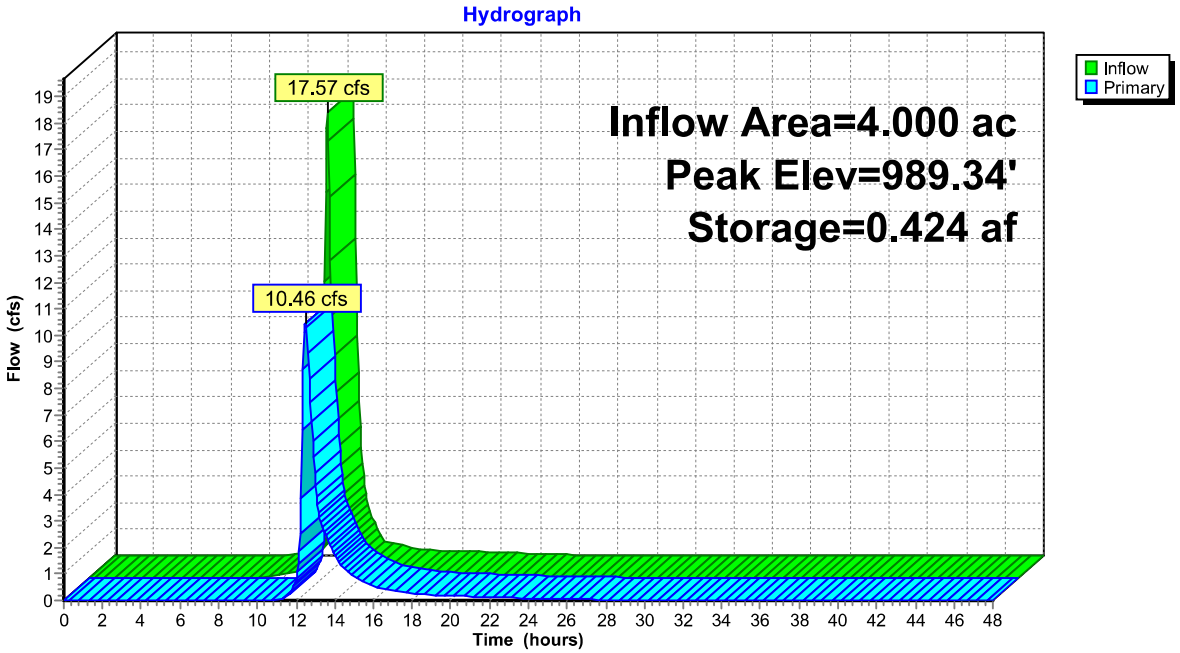
Elevation (feet)	Surf.Area (acres)	Inc.Store (acre-feet)	Cum.Store (acre-feet)
987.50	0.160	0.000	0.000
988.00	0.210	0.093	0.093
989.00	0.260	0.235	0.328
990.00	0.310	0.285	0.612
991.00	0.350	0.330	0.943
992.00	0.370	0.360	1.302
993.00	0.440	0.405	1.708

Device	Routing	Invert	Outlet Devices
#1	Device 2	987.50'	**30.0 deg x 0.7' long x 1.00' rise Sharp-Crested Vee/Trap Weir** Cv= 2.61 (C= 3.26)
#2	Primary	987.50'	**24.0" Round Culvert** L= 50.0' Ke= 1.000 Inlet / Outlet Invert= 987.50' / 984.00' S= 0.0700 '/' Cc= 0.900 n= 0.012 Concrete pipe, finished, Flow Area= 3.14 sf
#3	Device 2	988.75'	**5.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32
#4	Device 1	987.50'	**15.0" Round Culvert** L= 20.0' Ke= 1.000 Inlet / Outlet Invert= 987.50' / 987.50' S= 0.0000 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=10.45 cfs @ 12.49 hrs HW=989.34' (Free Discharge)
└**2=Culvert** (Inlet Controls 10.45 cfs @ 3.46 fps)
  ├**1=Sharp-Crested Vee/Trap Weir** (Passes < 5.35 cfs potential flow)
  │ └**4=Culvert** (Passes < 4.80 cfs potential flow)
  └**3=Broad-Crested Rectangular Weir** (Passes < 6.88 cfs potential flow)

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Pond 19P: Wet Pond



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Time span=0.00-48.00 hrs, dt=0.05 hrs, 961 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 22S: Proposed Site Runoff Area=4.000 ac 62.50% Impervious Runoff Depth=6.14"
Tc=20.0 min CN=91 Runoff=31.70 cfs 2.045 af

Subcatchment 23S: Existing Conditions Runoff Area=4.000 ac 0.00% Impervious Runoff Depth=5.44"
Tc=30.0 min CN=85 Runoff=23.21 cfs 1.815 af

Reach 22R: City Storm Sewer Inflow=15.71 cfs 2.035 af
Outflow=15.71 cfs 2.035 af

Pond 19P: Wet Pond Peak Elev=990.42' Storage=0.750 af Inflow=31.70 cfs 2.045 af
Outflow=15.71 cfs 2.035 af

Total Runoff Area = 8.000 ac Runoff Volume = 3.860 af Average Runoff Depth = 5.79"
68.75% Pervious = 5.500 ac 31.25% Impervious = 2.500 ac

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Summary for Subcatchment 22S: Proposed Site

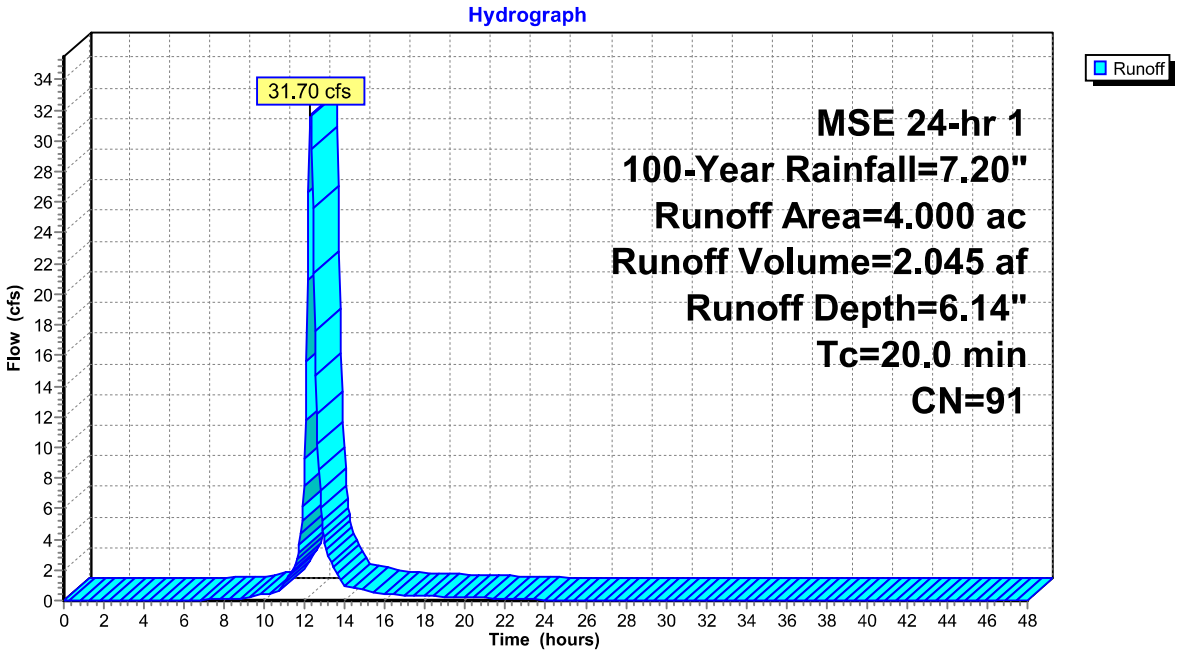
Runoff = 31.70 cfs @ 12.29 hrs, Volume= 2.045 af, Depth= 6.14"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 1 100-Year Rainfall=7.20"

Area (ac)	CN	Description
1.000	98	Roofs, HSG D
1.500	98	Paved parking, HSG D
1.500	80	>75% Grass cover, Good, HSG D
4.000	91	Weighted Average
1.500		37.50% Pervious Area
2.500		62.50% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
20.0					**Direct Entry,**

Subcatchment 22S: Proposed Site



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Summary for Subcatchment 23S: Existing Conditions

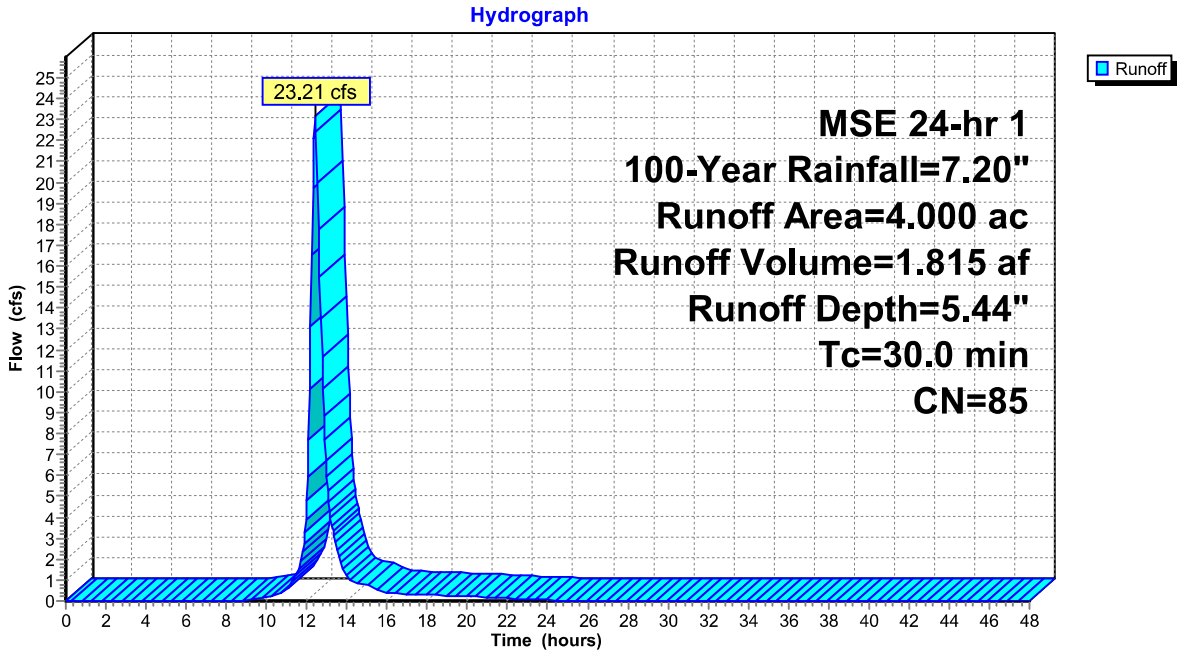
Runoff = 23.21 cfs @ 12.42 hrs, Volume= 1.815 af, Depth= 5.44"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 1 100-Year Rainfall=7.20"

Area (ac)	CN	Description
2.740	80	>75% Grass cover, Good, HSG D
1.260	96	Gravel surface, HSG D
4.000	85	Weighted Average
4.000		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
30.0					**Direct Entry,**

Subcatchment 23S: Existing Conditions



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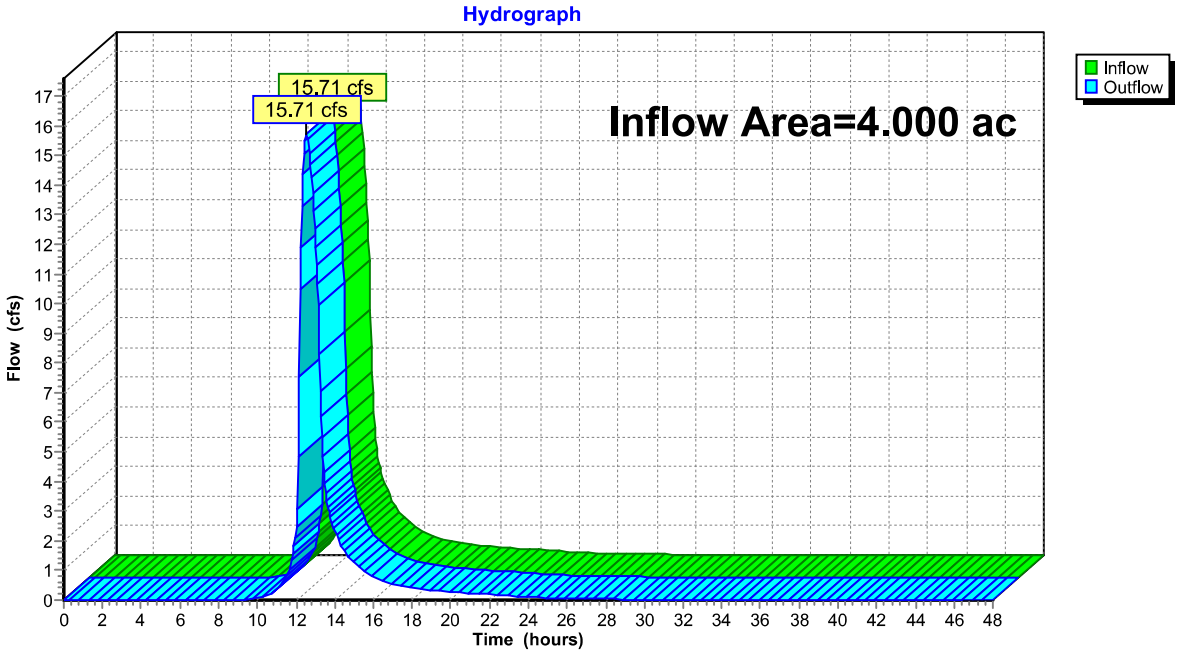
Summary for Reach 22R: City Storm Sewer

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 4.000 ac, 62.50% Impervious, Inflow Depth > 6.11" for 100-Year event
Inflow = 15.71 cfs @ 12.53 hrs, Volume= 2.035 af
Outflow = 15.71 cfs @ 12.53 hrs, Volume= 2.035 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

Reach 22R: City Storm Sewer



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Summary for Pond 19P: Wet Pond

[95] Warning: Outlet Device #1 rise exceeded

Inflow Area = 4.000 ac, 62.50% Impervious, Inflow Depth = 6.14" for 100-Year event
Inflow = 31.70 cfs @ 12.29 hrs, Volume= 2.045 af
Outflow = 15.71 cfs @ 12.53 hrs, Volume= 2.035 af, Atten= 50%, Lag= 14.7 min
Primary = 15.71 cfs @ 12.53 hrs, Volume= 2.035 af

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs / 2
Peak Elev= 990.42' @ 12.53 hrs Surf.Area= 0.327 ac Storage= 0.750 af

Plug-Flow detention time= 65.1 min calculated for 2.035 af (100% of inflow)
Center-of-Mass det. time= 62.2 min (832.4 - 770.1)

Volume	Invert	Avail.Storage	Storage Description
#1	987.50'	1.708 af	**Custom Stage Data (Prismatic)** Listed below

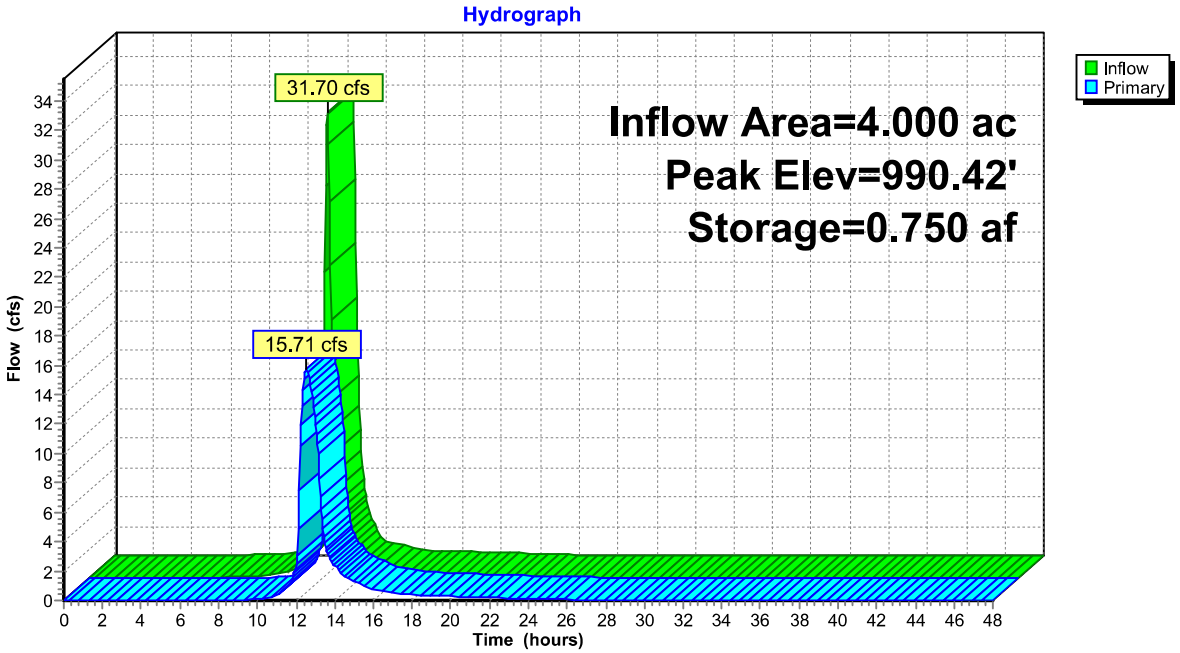
Elevation (feet)	Surf.Area (acres)	Inc.Store (acre-feet)	Cum.Store (acre-feet)
987.50	0.160	0.000	0.000
988.00	0.210	0.093	0.093
989.00	0.260	0.235	0.328
990.00	0.310	0.285	0.612
991.00	0.350	0.330	0.943
992.00	0.370	0.360	1.302
993.00	0.440	0.405	1.708

Device	Routing	Invert	Outlet Devices
#1	Device 2	987.50'	**30.0 deg x 0.7' long x 1.00' rise Sharp-Crested Vee/Trap Weir** Cv= 2.61 (C= 3.26)
#2	Primary	987.50'	**24.0" Round Culvert** L= 50.0' Ke= 1.000 Inlet / Outlet Invert= 987.50' / 984.00' S= 0.0700 '/' Cc= 0.900 n= 0.012 Concrete pipe, finished, Flow Area= 3.14 sf
#3	Device 2	988.75'	**5.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32
#4	Device 1	987.50'	**15.0" Round Culvert** L= 20.0' Ke= 1.000 Inlet / Outlet Invert= 987.50' / 987.50' S= 0.0000 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=15.69 cfs @ 12.53 hrs HW=990.41' (Free Discharge)
└**2=Culvert** (Inlet Controls 15.69 cfs @ 5.00 fps)
  ├**1=Sharp-Crested Vee/Trap Weir** (Passes < 7.28 cfs potential flow)
  │ └**4=Culvert** (Passes < 6.70 cfs potential flow)
  └**3=Broad-Crested Rectangular Weir** (Passes < 35.62 cfs potential flow)

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Pond 19P: Wet Pond



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Time span=0.00-48.00 hrs, dt=0.05 hrs, 961 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 22S: Proposed Site Runoff Area=4.000 ac 62.50% Impervious Runoff Depth=3.30"
Tc=20.0 min CN=91 Runoff=14.17 cfs 1.099 af

Subcatchment 23S: Existing Conditions Runoff Area=4.000 ac 0.00% Impervious Runoff Depth=2.72"
Tc=30.0 min CN=85 Runoff=9.41 cfs 0.906 af

Reach 22R: City Storm Sewer Inflow=8.02 cfs 1.089 af
Outflow=8.02 cfs 1.089 af

Pond 19P: Wet Pond Peak Elev=989.16' Storage=0.374 af Inflow=14.17 cfs 1.099 af
Outflow=8.02 cfs 1.089 af

Total Runoff Area = 8.000 ac Runoff Volume = 2.005 af Average Runoff Depth = 3.01"
68.75% Pervious = 5.500 ac 31.25% Impervious = 2.500 ac

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Summary for Subcatchment 22S: Proposed Site

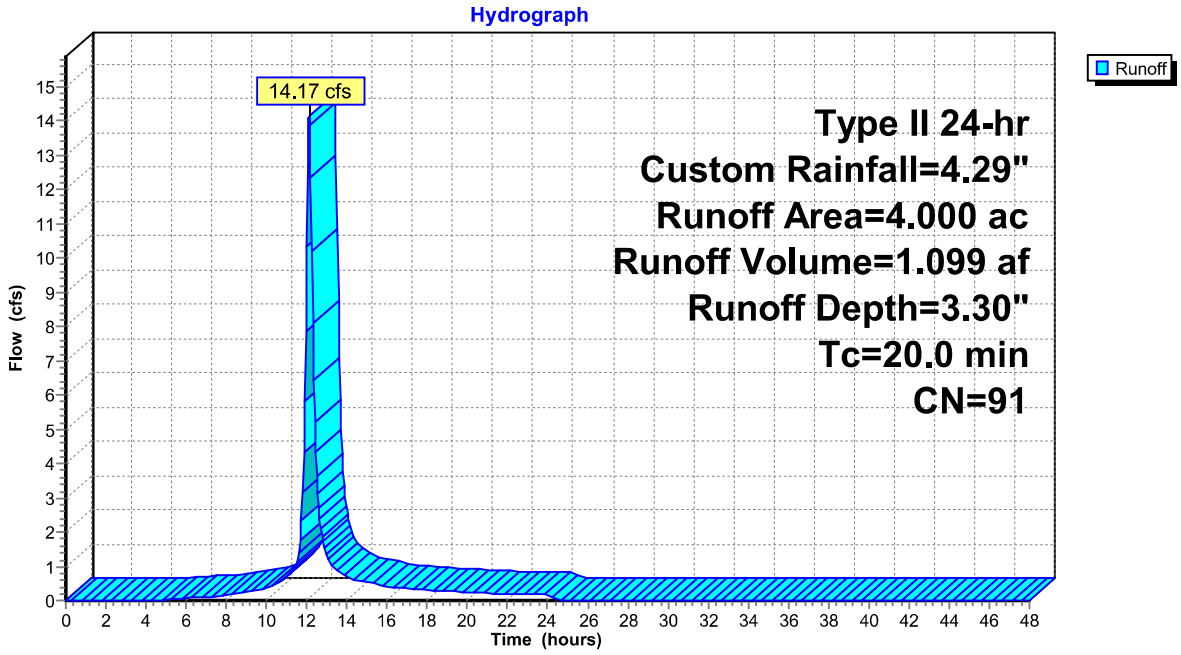
Runoff = 14.17 cfs @ 12.12 hrs, Volume= 1.099 af, Depth= 3.30"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Type II 24-hr Custom Rainfall=4.29"

Area (ac)	CN	Description
1.000	98	Roofs, HSG D
1.500	98	Paved parking, HSG D
1.500	80	>75% Grass cover, Good, HSG D
4.000	91	Weighted Average
1.500		37.50% Pervious Area
2.500		62.50% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
20.0					**Direct Entry,**

Subcatchment 22S: Proposed Site



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Summary for Subcatchment 23S: Existing Conditions

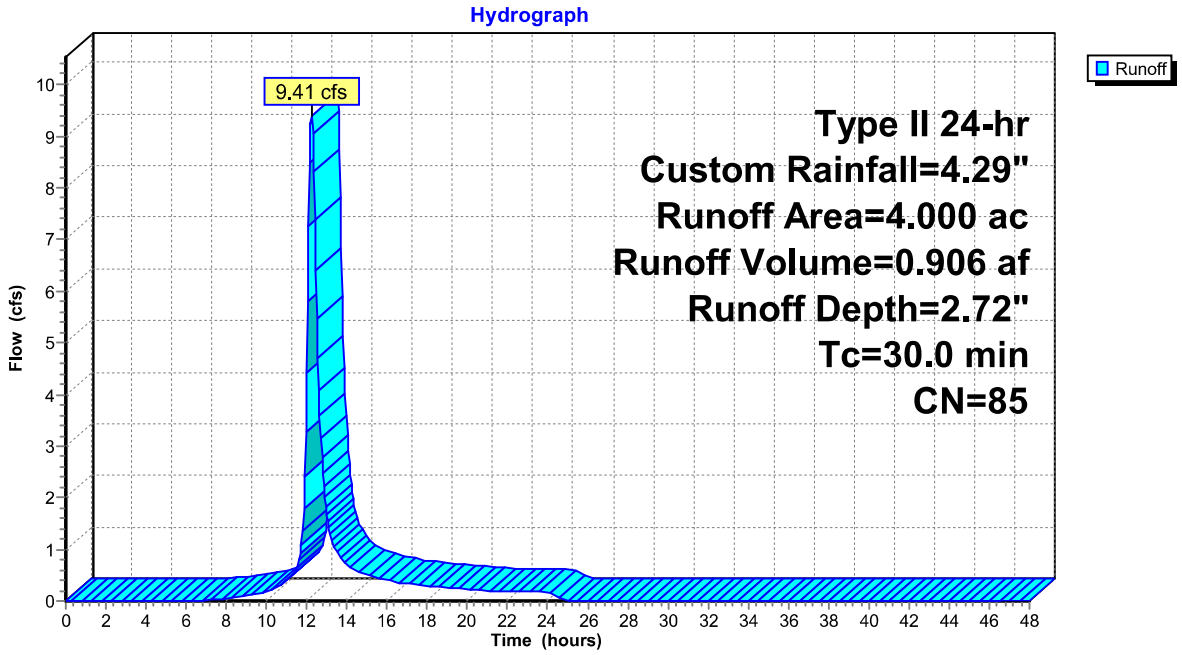
Runoff = 9.41 cfs @ 12.24 hrs, Volume= 0.906 af, Depth= 2.72"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Type II 24-hr Custom Rainfall=4.29"

Area (ac)	CN	Description
2.740	80	>75% Grass cover, Good, HSG D
1.260	96	Gravel surface, HSG D
4.000	85	Weighted Average
4.000		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
30.0					**Direct Entry,**

Subcatchment 23S: Existing Conditions



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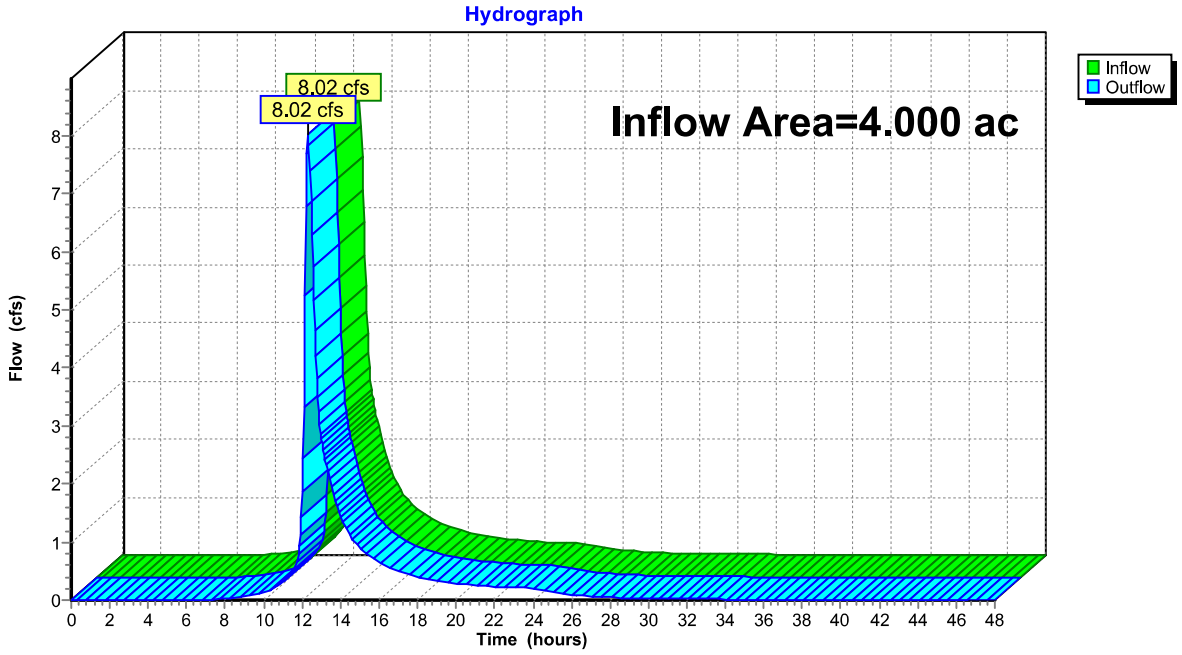
Summary for Reach 22R: City Storm Sewer

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 4.000 ac, 62.50% Impervious, Inflow Depth > 3.27" for Custom event
Inflow = 8.02 cfs @ 12.31 hrs, Volume= 1.089 af
Outflow = 8.02 cfs @ 12.31 hrs, Volume= 1.089 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

Reach 22R: City Storm Sewer



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Summary for Pond 19P: Wet Pond

[95] Warning: Outlet Device #1 rise exceeded

Inflow Area = 4.000 ac, 62.50% Impervious, Inflow Depth = 3.30" for Custom event
Inflow = 14.17 cfs @ 12.12 hrs, Volume= 1.099 af
Outflow = 8.02 cfs @ 12.31 hrs, Volume= 1.089 af, Atten= 43%, Lag= 11.3 min
Primary = 8.02 cfs @ 12.31 hrs, Volume= 1.089 af

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs / 2
Peak Elev= 989.16' @ 12.31 hrs Surf.Area= 0.268 ac Storage= 0.374 af

Plug-Flow detention time= 101.6 min calculated for 1.088 af (99% of inflow)
Center-of-Mass det. time= 97.2 min (898.9 - 801.7)

Volume	Invert	Avail.Storage	Storage Description
#1	987.50'	1.708 af	**Custom Stage Data (Prismatic)** Listed below

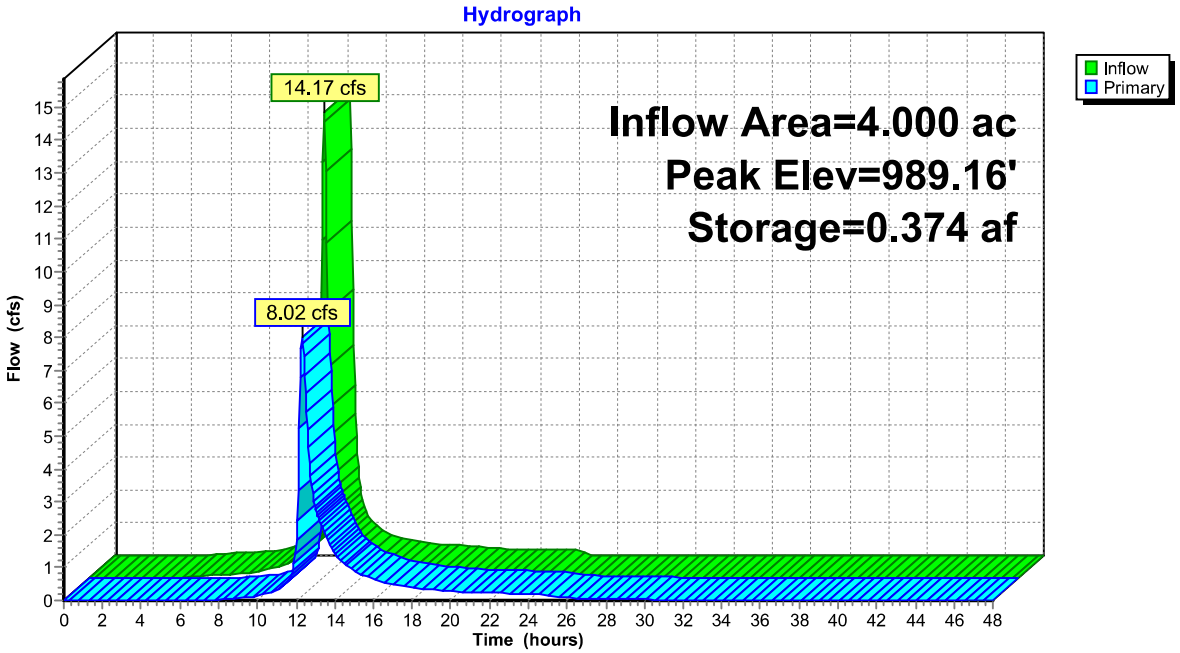
Elevation (feet)	Surf.Area (acres)	Inc.Store (acre-feet)	Cum.Store (acre-feet)
987.50	0.160	0.000	0.000
988.00	0.210	0.093	0.093
989.00	0.260	0.235	0.328
990.00	0.310	0.285	0.612
991.00	0.350	0.330	0.943
992.00	0.370	0.360	1.302
993.00	0.440	0.405	1.708

Device	Routing	Invert	Outlet Devices
#1	Device 2	987.50'	**30.0 deg x 0.7' long x 1.00' rise Sharp-Crested Vee/Trap Weir** Cv= 2.61 (C= 3.26)
#2	Primary	987.50'	**24.0" Round Culvert** L= 50.0' Ke= 1.000 Inlet / Outlet Invert= 987.50' / 984.00' S= 0.0700 '/' Cc= 0.900 n= 0.012 Concrete pipe, finished, Flow Area= 3.14 sf
#3	Device 2	988.75'	**5.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32
#4	Device 1	987.50'	**15.0" Round Culvert** L= 20.0' Ke= 1.000 Inlet / Outlet Invert= 987.50' / 987.50' S= 0.0000 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=7.95 cfs @ 12.31 hrs HW=989.16' (Free Discharge)
└**2=Culvert** (Passes 7.95 cfs of 9.19 cfs potential flow)
  ├**1=Sharp-Crested Vee/Trap Weir** (Passes 4.06 cfs of 4.96 cfs potential flow)
  │ └**4=Culvert** (Barrel Controls 4.06 cfs @ 3.31 fps)
  └**3=Broad-Crested Rectangular Weir** (Weir Controls 3.89 cfs @ 1.88 fps)

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Pond 19P: Wet Pond



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United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Blue Earth County, Minnesota



June 20, 2025

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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Contents

Preface.....2
How Soil Surveys Are Made.....5
Soil Map.....8
Soil Map.....9
Legend.....10
Map Unit Legend.....11
Map Unit Descriptions.....11
Blue Earth County, Minnesota.....13
106C—Lester loam, 6 to 10 percent slopes.....13
110—Marna silty clay loam, 0 to 2 percent slopes.....14
286—Shorewood silty clay loam, 1 to 6 percent slopes.....16
539—Klossner muck, lake plain, depressional, 0 to 1 percent slopes.....17
L113B—Reedslake-Le Sueur complex, 1 to 6 percent slopes.....19
References.....22

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map



Map Scale: 1:1,490 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 20 40 80 120

Feet: 0 50 100 200 300

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 15N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Blue Earth County, Minnesota
Survey Area Data: Version 22, Sep 7, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jul 2, 2023—Aug 8, 2023

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
106C	Lester loam, 6 to 10 percent slopes	0.6	10.7%
110	Marna silty clay loam, 0 to 2 percent slopes	1.9	32.1%
286	Shorewood silty clay loam, 1 to 6 percent slopes	0.5	9.2%
539	Klossner muck, lake plain, depressional, 0 to 1 percent slopes	2.0	34.4%
L113B	Reedslake-Le Sueur complex, 1 to 6 percent slopes	0.8	13.6%
Totals for Area of Interest		**5.8**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it

was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Blue Earth County, Minnesota

106C—Lester loam, 6 to 10 percent slopes

Map Unit Setting

National map unit symbol: 2ttc7
Elevation: 690 to 1,840 feet
Mean annual precipitation: 24 to 37 inches
Mean annual air temperature: 43 to 52 degrees F
Frost-free period: 140 to 180 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Lester and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Lester

Setting

Landform: Hillslopes, ground moraines
Landform position (two-dimensional): Summit, shoulder, backslope
Landform position (three-dimensional): Interfluve, rise
Down-slope shape: Convex
Across-slope shape: Convex, linear
Parent material: Fine-loamy till

Typical profile

Ap - 0 to 9 inches: loam
Bt - 9 to 30 inches: clay loam
C - 30 to 79 inches: loam

Properties and qualities

Slope: 6 to 10 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.20 to 2.00 in/hr)
Depth to water table: About 47 to 63 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 20 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 10.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: C
Ecological site: R103XY020MN - Loamy Upland Savannas
Forage suitability group: Sloping Upland, Acid (G103XS006MN)
Other vegetative classification: Sloping Upland, Acid (G103XS006MN)
Hydric soil rating: No

Minor Components

Le sueur

Percent of map unit: 10 percent
Landform: Ground moraines, hillslopes
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Interfluve, talf
Down-slope shape: Convex, linear
Across-slope shape: Linear
Ecological site: R103XY020MN - Loamy Upland Savannas
Other vegetative classification: Sloping Upland, Acid (G103XS006MN)
Hydric soil rating: No

Webster

Percent of map unit: 5 percent
Landform: Ground moraines
Down-slope shape: Concave
Across-slope shape: Concave
Ecological site: R103XY001MN - Loamy Wet Prairies
Other vegetative classification: Level Swale, Neutral (G103XS001MN)
Hydric soil rating: Yes

Storden, moderately eroded

Percent of map unit: 3 percent
Landform: Ground moraines
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Rise
Down-slope shape: Convex, linear
Across-slope shape: Linear, convex
Ecological site: R103XY020MN - Loamy Upland Savannas
Other vegetative classification: Sloping Upland, Calcareous (G103XS010MN)
Hydric soil rating: No

Lester

Percent of map unit: 2 percent
Landform: Ground moraines, hillslopes
Landform position (two-dimensional): Summit, shoulder, backslope
Landform position (three-dimensional): Interfluve, rise
Down-slope shape: Convex
Across-slope shape: Linear, convex
Ecological site: R103XY020MN - Loamy Upland Savannas
Other vegetative classification: Sloping Upland, Acid (G103XS006MN)
Hydric soil rating: No

110—Marna silty clay loam, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: 2vwk0
Elevation: 690 to 1,840 feet
Mean annual precipitation: 24 to 37 inches

Mean annual air temperature: 43 to 52 degrees F
Frost-free period: 140 to 180 days
Farmland classification: Prime farmland if drained

Map Unit Composition

Marna and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Marna

Setting

Landform: Lake plains, ground moraines, flats
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Glaciolacustrine deposits over till

Typical profile

Ap - 0 to 7 inches: silty clay loam
A - 7 to 18 inches: silty clay loam
Bg - 18 to 36 inches: silty clay
2Bkg - 36 to 45 inches: clay loam
2Cg - 45 to 79 inches: clay loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high (0.06 to 2.00 in/hr)
Depth to water table: About 0 to 8 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 20 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 9.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2w
Hydrologic Soil Group: C/D
Ecological site: R103XY008MN - Clayey Wet Prairies
Forage suitability group: Level Swale, Neutral (G103XS001MN)
Other vegetative classification: Level Swale, Neutral (G103XS001MN)
Hydric soil rating: Yes

Minor Components

Okoboji

Percent of map unit: 7 percent
Landform: Depressions, depressions
Down-slope shape: Concave
Across-slope shape: Concave
Ecological site: R103XY015MN - Depressional Marsh
Other vegetative classification: Ponded If Not Drained (G103XS013MN)
Hydric soil rating: Yes

Guckeen

Percent of map unit: 5 percent
Landform: Ground moraines, flats, lake plains
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Rise
Down-slope shape: Convex
Across-slope shape: Linear
Ecological site: R103XY005MN - Clayey Upland Prairies
Other vegetative classification: Level Swale, Neutral (G103XS001MN)
Hydric soil rating: No

Brownton

Percent of map unit: 3 percent
Landform: Lake plains, flats, ground moraines
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R103XY008MN - Clayey Wet Prairies
Other vegetative classification: Level Swale, Calcareous (G103XS009MN)
Hydric soil rating: Yes

286—Shorewood silty clay loam, 1 to 6 percent slopes

Map Unit Setting

National map unit symbol: f97m
Elevation: 700 to 1,570 feet
Mean annual precipitation: 23 to 35 inches
Mean annual air temperature: 43 to 50 degrees F
Frost-free period: 155 to 200 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Shorewood and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Shorewood

Setting

Landform: Rises on lake plains
Landform position (two-dimensional): Summit
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Clayey lacustrine deposits over fine-loamy till

Typical profile

Ap,A - 0 to 17 inches: silty clay loam
Bt - 17 to 39 inches: silty clay
C - 39 to 60 inches: loam

Properties and qualities

Slope: 1 to 6 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately high (0.00 to 0.57 in/hr)
Depth to water table: About 18 to 30 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 15 percent
Available water supply, 0 to 60 inches: High (about 9.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: C/D
Ecological site: R103XY021MN - Clayey Upland Savannas
Forage suitability group: Sloping Upland, Neutral (G103XS002MN)
Other vegetative classification: Sloping Upland, Neutral (G103XS002MN)
Hydric soil rating: No

Minor Components

Minnetonka

Percent of map unit: 5 percent
Landform: Flats
Hydric soil rating: Yes

Guckeen

Percent of map unit: 5 percent
Landform: Lake plains
Hydric soil rating: No

539—Klossner muck, lake plain, depressional, 0 to 1 percent slopes

Map Unit Setting

National map unit symbol: 2s8x1
Elevation: 690 to 1,840 feet
Mean annual precipitation: 24 to 37 inches
Mean annual air temperature: 43 to 52 degrees F
Frost-free period: 140 to 180 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Klossner, drained, and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Klossner, Drained

Setting

Landform: Depressions
Down-slope shape: Concave
Across-slope shape: Concave
Parent material: Organic material over glaciolacustrine deposits

Typical profile

Oap - 0 to 9 inches: muck
Oa - 9 to 24 inches: muck
2A - 24 to 46 inches: silty clay loam
2Cg - 46 to 79 inches: silty clay loam

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Very poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high (0.06 to 2.00 in/hr)
Depth to water table: About 0 to 12 inches
Frequency of flooding: None
Frequency of ponding: Occasional
Calcium carbonate, maximum content: 20 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Very high (about 17.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3w
Hydrologic Soil Group: C/D
Ecological site: R103XY016MN - Organic Marsh
Forage suitability group: Organic (G103XS014MN)
Other vegetative classification: Organic (G103XS014MN)
Hydric soil rating: Yes

Minor Components

Lura

Percent of map unit: 10 percent
Landform: Depressions, ground moraines, lake plains
Landform position (three-dimensional): Dip
Down-slope shape: Concave
Across-slope shape: Concave
Ecological site: R103XY015MN - Depressional Marsh
Other vegetative classification: Ponded If Not Drained (G103XS013MN)
Hydric soil rating: Yes

Brownton

Percent of map unit: 5 percent
Landform: Lake plains, flats, ground moraines
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R103XY008MN - Clayey Wet Prairies
Other vegetative classification: Level Swale, Calcareous (G103XS009MN)

Hydric soil rating: Yes

L113B—Reedslake-Le Sueur complex, 1 to 6 percent slopes

Map Unit Setting

National map unit symbol: 2y037
Elevation: 690 to 1,450 feet
Mean annual precipitation: 24 to 37 inches
Mean annual air temperature: 37 to 52 degrees F
Frost-free period: 140 to 168 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Reedslake and similar soils: 59 percent
Le sueur and similar soils: 30 percent
Minor components: 11 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Reedslake

Setting

Landform: Hillslopes
Landform position (two-dimensional): Summit, shoulder, backslope
Landform position (three-dimensional): Rise
Down-slope shape: Convex, linear
Across-slope shape: Linear, convex
Parent material: Fine-loamy till

Typical profile

Ap - 0 to 6 inches: loam
A - 6 to 15 inches: loam
Bt - 15 to 33 inches: loam
Bk - 33 to 54 inches: loam
C - 54 to 79 inches: loam

Properties and qualities

Slope: 2 to 6 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.20 to 2.00 in/hr)
Depth to water table: About 20 to 41 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 25 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 10.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2e

Hydrologic Soil Group: C
Ecological site: R103XY020MN - Loamy Upland Savannas
Forage suitability group: Sloping Upland, Neutral (G103XS002MN)
Other vegetative classification: Sloping Upland, Neutral (G103XS002MN)
Hydric soil rating: No

Description of Le Sueur

Setting

Landform: Hillslopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Talf
Down-slope shape: Concave, linear
Across-slope shape: Linear
Parent material: Fine-loamy till

Typical profile

Ap - 0 to 6 inches: clay loam
A - 6 to 11 inches: clay loam
Bt - 11 to 24 inches: clay loam
Bkg - 24 to 36 inches: loam
BC - 36 to 55 inches: loam
C - 55 to 79 inches: loam

Properties and qualities

Slope: 1 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high (0.06 to 2.00 in/hr)
Depth to water table: About 12 to 24 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 25 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 10.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 1
Hydrologic Soil Group: C/D
Ecological site: R103XY020MN - Loamy Upland Savannas
Forage suitability group: Sloping Upland, Acid (G103XS006MN)
Other vegetative classification: Sloping Upland, Acid (G103XS006MN)
Hydric soil rating: No

Minor Components

Cordova

Percent of map unit: 7 percent
Landform: Depressions
Landform position (three-dimensional): Talf
Down-slope shape: Concave
Across-slope shape: Concave
Ecological site: R103XY022MN - Loamy Wet Savannas
Other vegetative classification: Level Swale, Neutral (G103XS001MN)
Hydric soil rating: Yes

Swanlake

Percent of map unit: 4 percent
Landform: Hillslopes
Landform position (two-dimensional): Summit, shoulder, backslope
Landform position (three-dimensional): Rise
Down-slope shape: Convex, linear
Across-slope shape: Convex
Ecological site: R103XY020MN - Loamy Upland Savannas
Other vegetative classification: Sloping Upland, Calcareous (G103XS010MN)
Hydric soil rating: No

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robertmerila@arvig.net

Mankato Apartments Site

Mankato, Blue Earth County, Minnesota

for

Growth Holdings, LLC

Wetland Delineation Report

May 29, 2025
Number: 25024BJ

Mankato Apartments Site

Mankato, Blue Earth County, Minnesota
for
Growth Holdings, LLC

prepared by
Aquatic EcoSolutions, Inc.
Number: 25024BJ

The **Mankato Apartments Site** is located in the SE¼ of the NW¼ of Section 21, Township T 108 N., Range R 26 W., Mankato, Blue Earth County, Minnesota.

The property is located at the address of 901 S Victory Drive, immediately northeast of South Victory Drive and immediately south of 209th Street with an acute angle roundabout intersection at the northwest corner of the property. This site is located in the southeastern portion of Mankato.

The property examined appears to be PID R430921177001.

According to the BWSR "Land Resource Region Boundaries Fit to Closest Townships" map, Mankato is within the "Midwest" region.

The purpose of this project was to examine the site for wetlands, and delineate them if they are present.

The wetland delineation site visit occurred on May 27, 2025 by Robert J.F. Merila, *Wetland Delineator Certified* #1087.

Methodology

In Minnesota, wetlands are under two jurisdictions: State and Federal. The State jurisdiction guidelines were set by the Minnesota Wetland Conservation Act of 1991 (WCA). This State jurisdiction is administered by the Local Governmental Unit (LGU) with technical guidance provided by the Board of Water and Soil Resources (BWSR).

The Federal jurisdiction is administered by the U.S. Army Corps of Engineers (COE or Corps).

Starting in 1996, both jurisdictions agreed to use the ***Corps of Engineers Wetland Delineation Manual*** (Environmental Laboratory, 1987) along with supplemental guidance by the Corps. This manual is commonly referred to as the **1987 Manual**.

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The wetland delineation method used on this site was the Plant Community Assessment Procedure of the Routine Onsite Determination Method. The Routine Onsite Determination Forms (located in the back of the report) detail the three technical criteria (hydrophytic vegetation, hydric soils, and wetland hydrology) as described in the 1987 Manual.

The wetland edge(s) were delineated where one, two, or all three of these technical criteria drop out. If no wetland conditions are observed within the area examined, no wetland edge is delineated.

Where wetlands are observed, one sample point transect perpendicularly crosses the delineated edge. This transect consists of one sample point above the edge and one sample point below the edge.

Results

Two roadside ditches that have wetland characteristics were identified and delineated on the site.

According to the Department of Natural Resources (DNR) **Protected Water Inventory (PWI) of Blue Earth County (page 1 of 1)**, there were no Protected Waters on or adjacent to the property.

The **Simplified HGM layer of MN Wetland Finder** identified a Depression polygon that coincided with Basin 1, but it was shaped to fit the previous intersection prior to the conversion into a roundabout intersection. Basin 2 was not identified.

The **National Wetlands Inventory (NWI)** identified a PEM1C polygon that coincided with the western portion of Basin 1 in a shape that matched the previous configuration of the roadway intersection at the northwest corner of the site. There was no polygon at the location of Basin 2.

The **Minnesota NWI** (Landview Interactive Map) identified a PEMC polygon that coincided with the far northwestern corner of the site at the location of the new roundabout. No other polygons were mapped on the site.

Information from the **Soil Survey of Blue Earth County (online version)** is used on the Data Sheets. Soils mapped on the parcel include:

106C	Lester loam, 6 to 10 percent slopes
110	Marna silty clay loam, 0 to 2 percent slopes
286	Shorewood silty clay loam, 1 to 6 percent slopes
539	Klossner muck, lake plain, depressional, 0 to 1 percent slopes
L113B	Reedslake-Le Sueur complex, 1 to 6 percent slopes

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Hydrology

According to the Precipitation Worksheet Using Gridded Database for determining hydrology, the months leading up to the site examination was identified as being "normal."

Edge Description

Basin 1 was a Landscape Depression roadside ditch Fresh (Wet) Meadow with Shallow Marsh portion (Type 3, PEM1Cx) wetland dominated by reed canary grass and narrow cattail along with some stinging nettle and hummock sedge located along the west and north sides of the site. It looks like the intersection of the roadways in the northwest corner of the site was rebuilt after the NWI was prepared.

The adjacent upland included excavated and restored roadside ditch banks and some kind of previous business that no longer exists at the location. Plant species observed included smooth brome, Kentucky bluegrass, green foxtail, common dandelion, butter and eggs, bull thistle, Canada thistle, poison ivy, burdock, alfalfa, tall goldenrod, Canada goldenrod, common milkweed, common mullein, thicket creeper, wild geranium, ground ivy, and Cleaver's bedstraw ground cover; Tartarian honeysuckle, red elder, red cedar, box elder, and cottonwood saplings/shrubs; and red cedar, box elder, and cottonwood trees.

Basin 2 was a Landscape Depression roadside ditch Fresh (Wet) Meadow (Type 2, PEM1Ax) wetland dominated by reed canary grass and narrow cattail along with some stinging nettle located along the east side of the site in the northeast corner, east of an entrance road from the north.

The adjacent upland included excavated and restored roadside ditch banks and some kind of previous business that no longer exists at the location. Plant species observed included smooth brome, Kentucky bluegrass, green foxtail, common dandelion, butter and eggs, bull thistle, Canada thistle, poison ivy, burdock, alfalfa, tall goldenrod, Canada goldenrod, common milkweed, common mullein, thicket creeper, wild geranium, ground ivy, and Cleaver's bedstraw ground cover; Tartarian honeysuckle, red elder, red cedar, box elder, and cottonwood saplings/shrubs; and red cedar, box elder, and cottonwood trees.

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Conclusion

This wetland examination, determination, and report of the **Mankato Apartments Site** was performed in accordance with the generally accepted methodology of the 1987 Manual at the time of the services rendered. No warranty, express or implied, is made.

If unavoidable impacts to wetlands are planned on any project, permits or exemptions from **State** (WCA, DNR, Watershed District), **Federal** (Corps), and/or other applicable entities need to be granted before the impacts occur.

The wetland delineation was performed and report prepared by Robert J.F. Merila, *Wetland Delineator Certified* #1087.

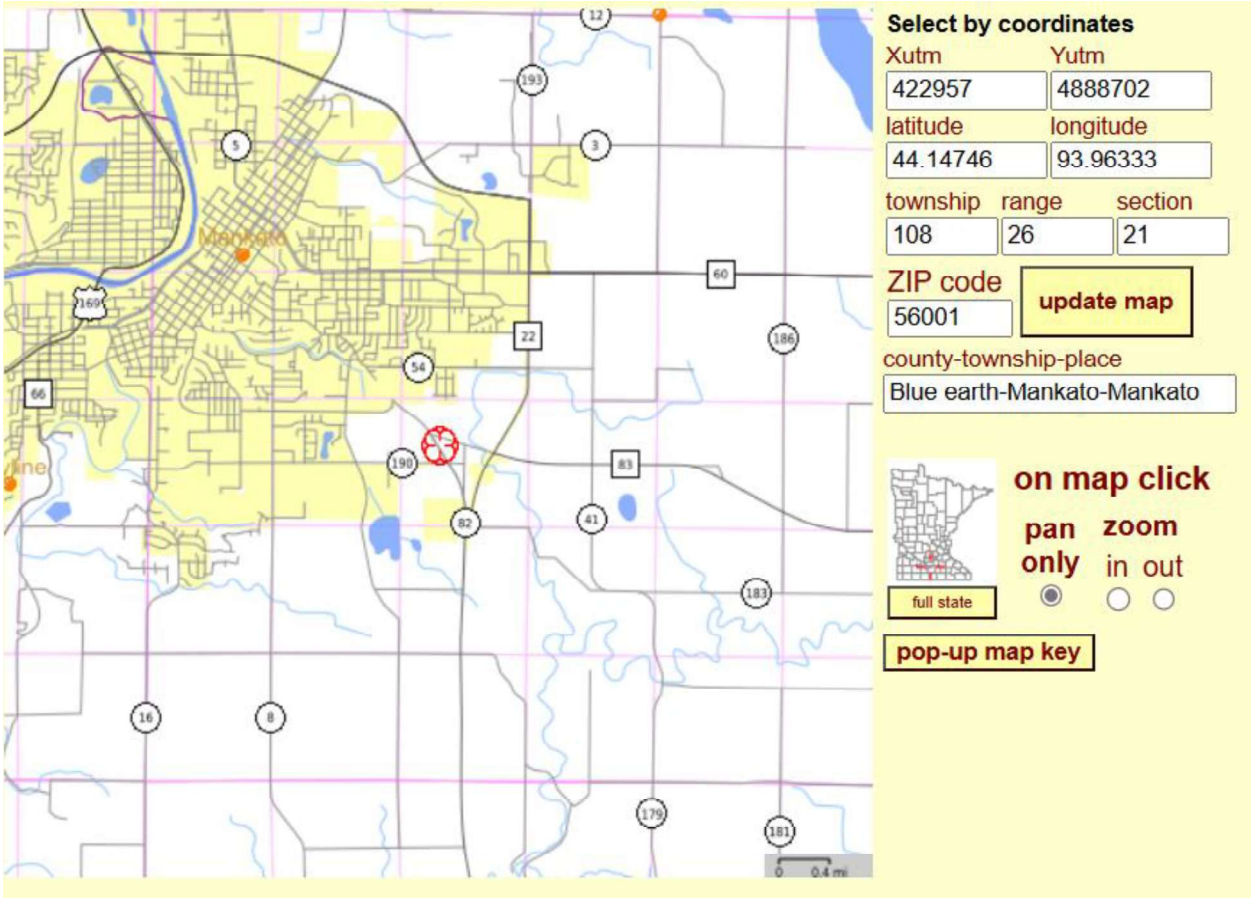
Robert J.F. Merila, President
Wetland Delineator, Certified #1087

May 29, 2025
Date

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Ecological Solutions to Environmental Challenges

Site Location



Precipitation Worksheet Using Gridded Database

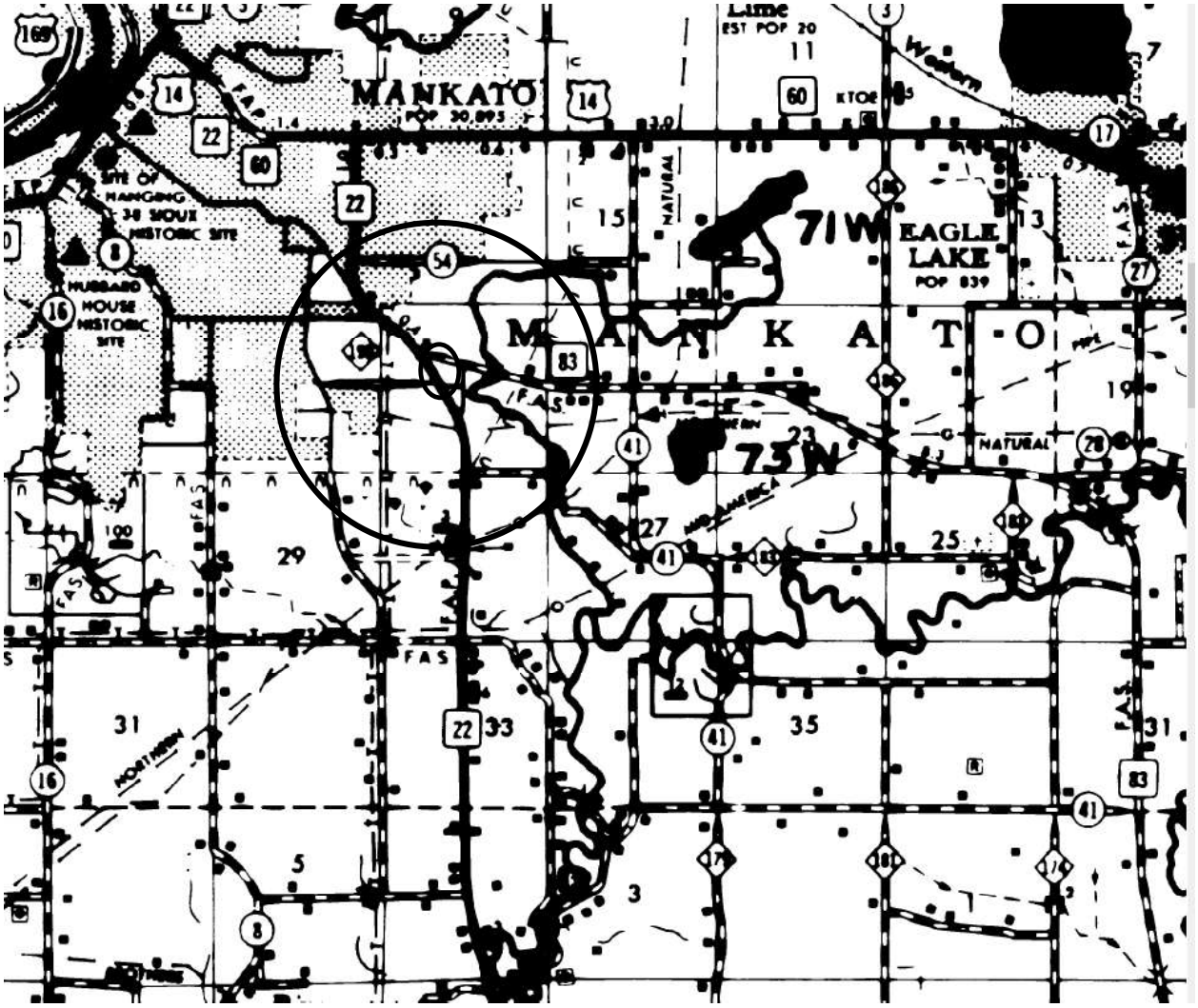
Precipitation data for target wetland location:
county: **Blue Earth** township number: **108N**
township name: **Mankato** range number: **26W**
nearest community: **Mankato** section number: **21**

Aerial photograph or site visit date:
Wednesday, May 28, 2025

Score using 1991-2020 normal period

values are in inches A 'R' following a monthly total indicates a provisional value derived from radar-based estimates.	first prior month: **April 2025**	second prior month: **March 2025**	third prior month: **February 2025**
estimated precipitation total for this location:	**3.66R**	**4.05R**	**0.23**
there is a 30% chance this location will have less than:	1.98	1.46	0.59
there is a 30% chance this location will have more than:	4.05	2.42	1.29
type of month: dry normal wet	**normal**	**wet**	**dry**
monthly score	**3 * 2 = 6**	**2 * 3 = 6**	**1 * 1 = 1**
multi-month score: 6 to 9 (dry) 10 to 14 (normal) 15 to 18 (wet)	**13 (Normal)**		

Period-of-Record Summary Statistics															
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	WARM	ANN	WAT
30%	0.44	0.47	1.07	1.73	2.63	3.53	2.55	2.69	1.94	1.11	0.66	0.51	16.63	26.63	26.42
70%	1.03	1.13	2.24	3.27	4.36	5.48	4.89	4.70	3.83	2.57	1.98	1.25	21.31	32.54	32.10
mean	0.84	0.87	1.74	2.60	3.73	4.77	3.80	3.92	3.23	2.10	1.44	1.02	19.46	30.04	30.10
1991-2020 Summary Statistics															
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	WARM	ANN	WAT
30%	0.77	0.59	1.46	1.98	3.58	4.40	3.65	3.59	1.89	1.53	0.98	0.71	18.35	30.19	30.86
70%	1.26	1.29	2.42	4.05	4.73	5.58	5.80	5.29	4.52	3.30	1.93	1.63	25.19	36.76	37.54
mean	1.00	1.04	1.90	3.15	4.18	5.48	4.59	4.38	3.64	2.59	1.63	1.28	22.26	34.86	34.79
Year-to-Year Data															
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	WARM	ANN	WAT
2025	0.03	0.23	4.05R	3.66R											
2024	0.31	0.45	1.88	4.62	6.92	13.47	4.59	4.14	0.46	1.01	2.42	0.94	29.58	41.21	42.68
2023	2.88	2.33	2.42	1.84	6.41	2.34	2.61	4.07	2.45	3.97	0.09	1.78	17.88	33.19	31.34
2022	1.29	0.69	2.25	4.10	3.02	1.54	2.71	3.89	0.60	0.31	2.04	1.64	11.76	24.08	25.71
2021	1.03	0.62	3.16	1.34	2.79	2.75	3.37	3.78	1.37	3.34	0.73	1.55	14.06	25.83	25.22
2020	1.34	1.41	2.92	1.42	4.26	4.65	8.22	6.78	1.88	3.19	1.15	0.67	25.79	37.89	41.92
2019	1.23	3.06	2.89	4.55	6.26	4.61	8.85	1.92	5.67	5.38	2.21	1.45	27.31	48.08	45.53
2018	1.48	1.22	1.80	2.97	4.50	9.94	5.07	3.51	8.68	2.83	1.56	2.10	31.70	45.66	44.95
2017	1.06	1.13	1.13	3.90	4.19	4.07	5.69	5.19	2.16	4.95	0.08	0.75	21.30	34.30	35.50
2016	0.32	0.88	2.41	3.01	3.70	5.48	6.60	10.29	13.11	3.55	1.49	1.94	39.18	52.78	54.93
2015	0.77	0.59	0.78	2.50	6.50	5.11	6.09	6.07	5.34	1.90	4.05	3.18	29.11	42.88	37.81
2014	1.21	1.83	1.44	5.70	3.70	11.72	0.70	3.63	1.89	2.05	1.01	1.00	21.64	35.88	37.42
2013	0.81	1.38	2.36	5.81	4.23	5.25	4.26	2.43	2.42	3.66	0.71	1.23	18.59	34.55	32.52
2012	0.77	2.28	1.87	3.23	7.56	1.25	1.24	1.49	0.77	1.31	0.58	1.68	12.31	24.03	23.21
2011	1.66	1.63	2.43	3.00	4.25	5.48	5.71	1.07	0.96	0.92	0.19	1.64	17.47	28.94	32.53
2010	1.15	1.25	1.77	1.69	2.80	9.83	4.95	4.51	10.48	0.88	2.03	3.43	32.57	44.77	49.38
2009	0.76	1.24	2.75	1.87	1.46	3.58	2.21	3.92	1.01	6.46	1.52	2.97	12.18	29.75	25.11
2008	0.36	0.42	1.88	4.41	4.05	3.91	5.07	1.94	1.68	2.49	2.02	1.80	16.65	30.03	29.54
2007	1.54	1.78	3.08	1.00	2.47	2.25	3.99	8.69	3.49	4.26	0.21	1.35	20.89	34.11	31.96
2006	1.01	0.45	1.60	4.01	1.17	5.65	2.14	3.87	3.07	0.48	1.47	1.72	15.90	26.64	28.63
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	WARM	ANN	WAT
2005	1.01	1.40	1.34	4.38	5.25	3.06	1.89	4.69	5.35	2.49	1.69	1.48	20.24	34.03	30.98
2004	0.51	1.25	2.55	1.56	6.20	6.89	5.40	5.90	5.72	1.24	1.16	0.21	30.11	38.59	38.13
2003	0.38	0.64	1.99	1.88	4.02	3.14	3.99	1.44	2.21	0.68	0.75	0.72	14.80	21.84	23.35
2002	0.24	0.49	1.64	2.76	2.41	5.61	2.00	5.54	2.24	3.19	0.25	0.22	17.80	26.59	28.33
2001	1.57	1.88	1.33	5.57	4.41	3.82	2.85	1.70	2.13	1.60	3.25	0.55	14.91	30.66	31.24
2000	0.82	1.13	1.20	0.80	5.63	7.42	4.23	2.23	0.82	1.11	3.24	1.63	20.33	30.26	27.54
1999	1.53	0.25	1.47	6.18	5.51	5.56	6.11	3.66	0.72	2.27	0.67	0.32	21.56	34.25	36.60



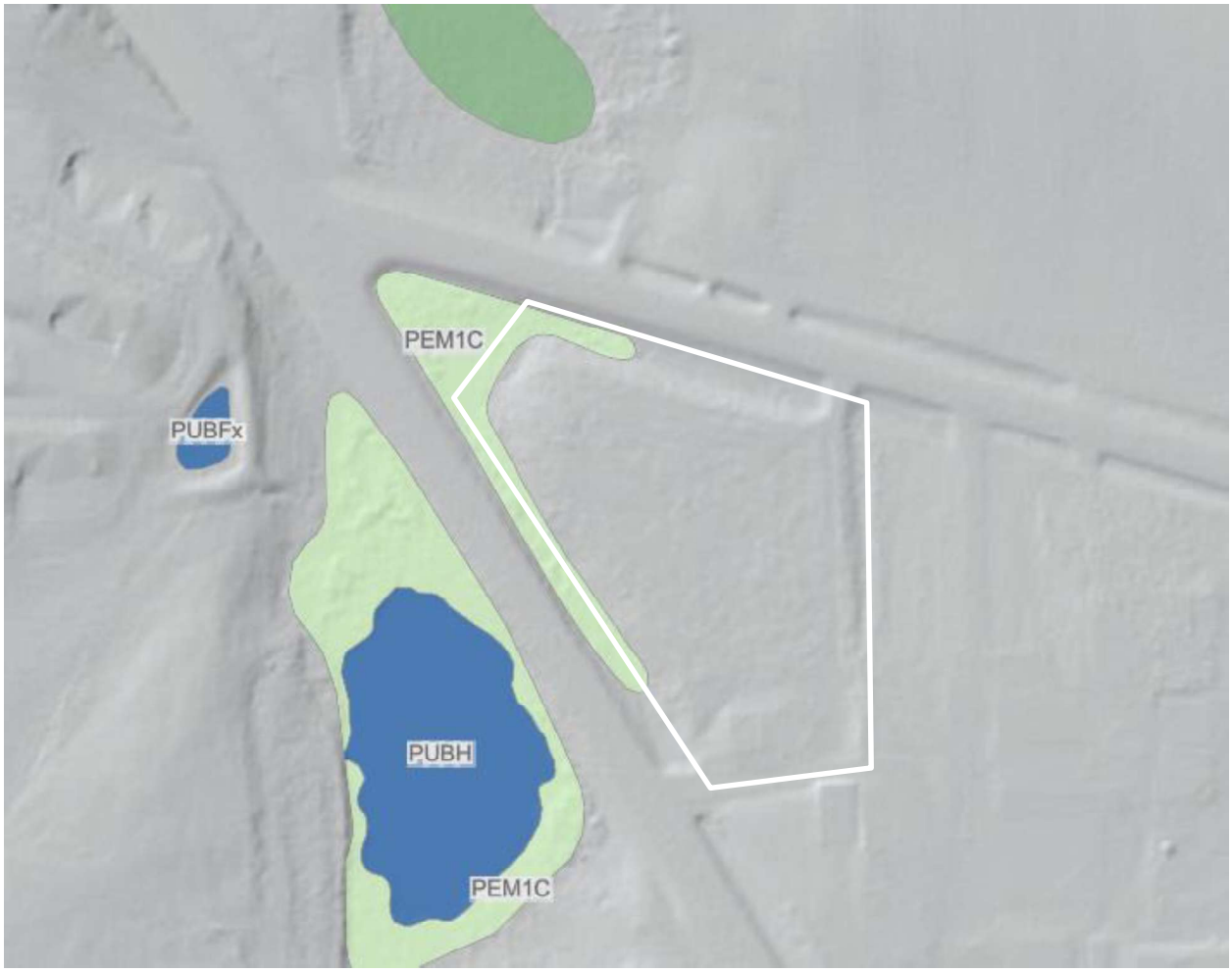
Public Waters Inventory of Blue Earth County

Minnesota Department of Natural Resources

(1"= 1 Mile Scale)

↑N

Mankato Apartments Site **Aquatic EcoSolutions, Inc.**



MN Wetland Finder Cowardin and PWI
MN DNR Interactive Map

↑N

Mankato Apartments Site **Aquatic EcoSolutions, Inc.**



National Wetland Delineation (NWI)
US Geological Survey/US Fish & Wildlife Service

↑N

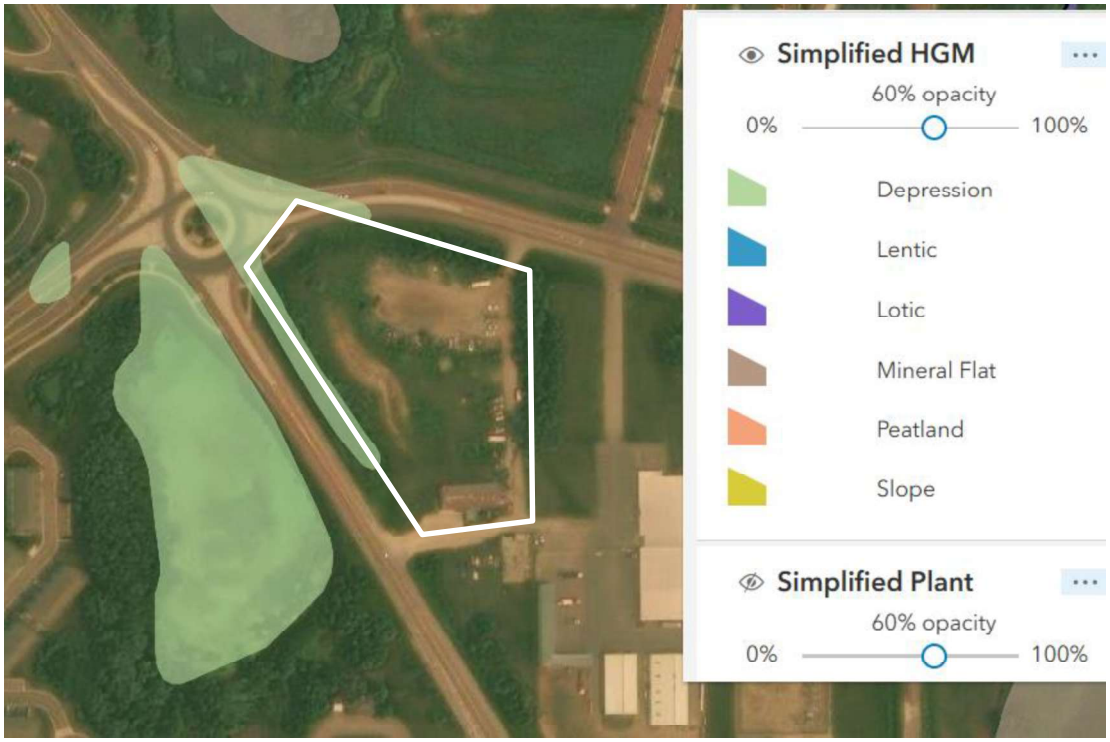
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Mn NWI Map
Landview Interactive Map

↑N

Mankato Apartments Site **Aquatic EcoSolutions, Inc.**

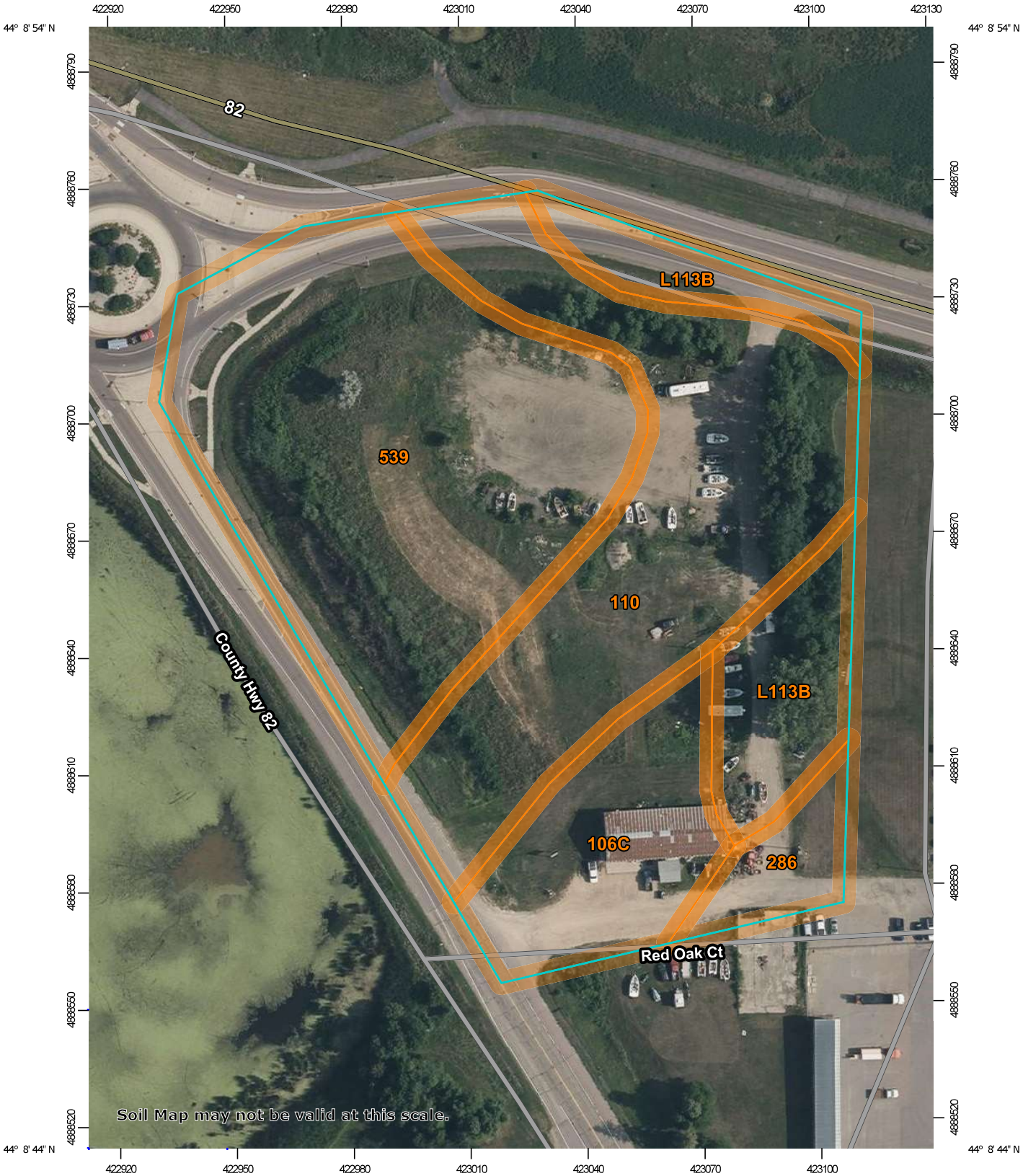


MN Wetland Finder Simplified HGM
MN DNR Interactive Map

↑N

Mankato Apartments Site **Aquatic EcoSolutions, Inc.**

Soil Map—Blue Earth County, Minnesota



Map Scale: 1:1,400 if printed on A portrait (8.5" x 11") sheet.

N

Meters: 0 20 40 80 120

Feet: 0 50 100 200 300

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 15N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Blue Earth County, Minnesota
Survey Area Data: Version 22, Sep 7, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jul 2, 2023—Aug 8, 2023

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
106C	Lester loam, 6 to 10 percent slopes	0.8	12.4%
110	Marna silty clay loam, 0 to 2 percent slopes	2.1	32.7%
286	Shorewood silty clay loam, 1 to 6 percent slopes	0.3	3.9%
539	Klossner muck, lake plain, depressional, 0 to 1 percent slopes	2.6	39.4%
L113B	Reedslake-Le Sueur complex, 1 to 6 percent slopes	0.8	11.6%
Totals for Area of Interest		**6.5**	**100.0%**



LiDAR Topography
MnTOPO Interactive Map

↑N

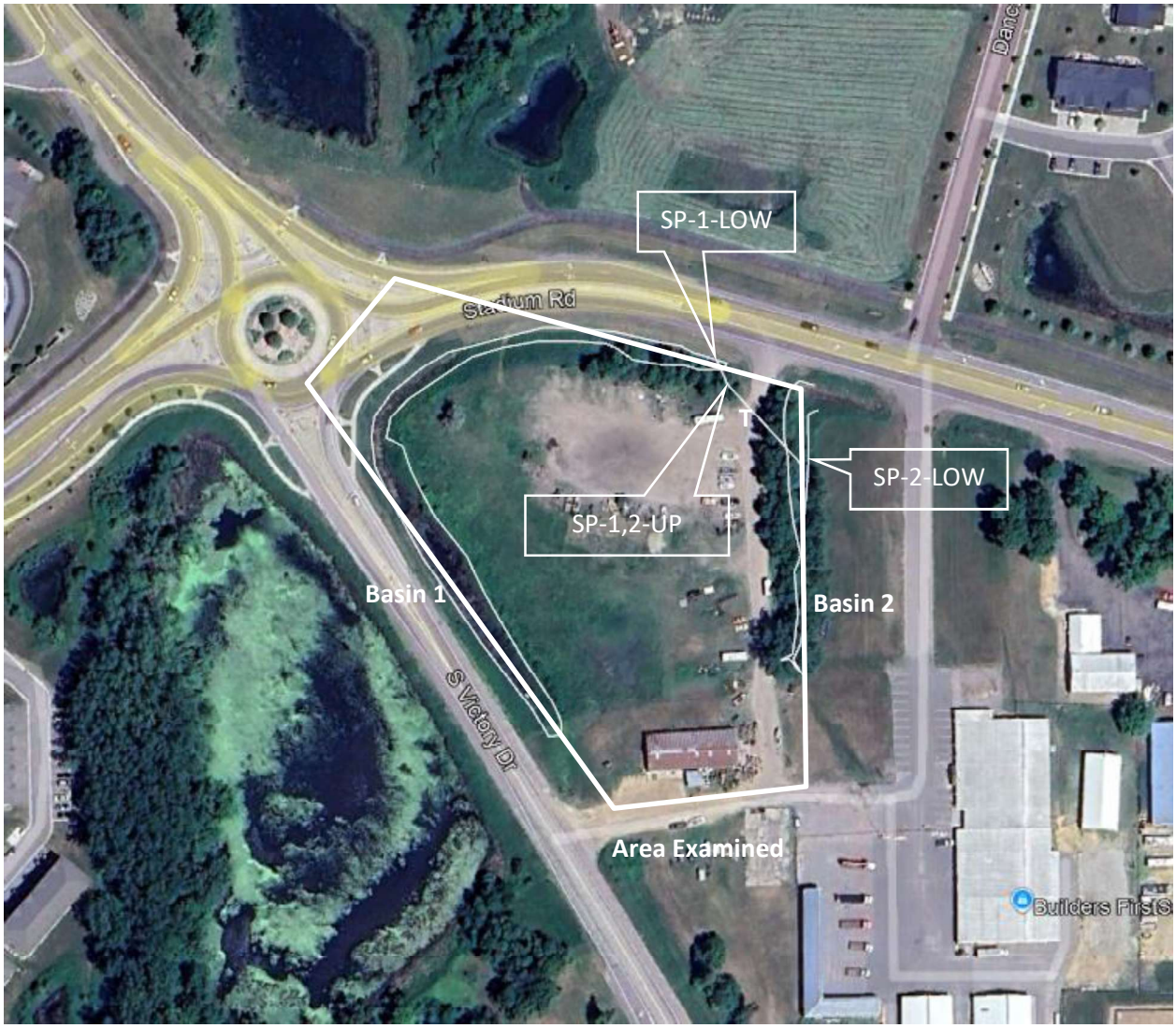
Mankato Apartments Site **Aquatic EcoSolutions, Inc.**



Approximate Parcel Location and County LiDAR
Blue Earth County Interactive Map

↑N

Mankato Apartments Site **Aquatic EcoSolutions, Inc.**



Approximate Edge Locations
6/10/2023 Aerial Photograph

↑N

Mankato Apartments Site **Aquatic EcoSolutions, Inc.**

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Mankato Apartments Site City/County: Mankato / Blue Earth County Sampling Date: 5 / 27 / 2025

Applicant/Owner: Growth Holdings, LLC State: MN Sampling Point: **1 UP**

Investigator(s): Robert Merila, Aquatic EcoSolutions, Inc. Section, Township, Range: Sec 21, T 108 N, R 26 W

Landform (hillslope, terrace, etc.): slope Local relief (concave, convex, none): none

Slope (%): 3 Lat: Long: Datum:

Soil Map Unit Name: 110 Marna silty clay loam, 0 to 2 percent slopes NWI classification: none / none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No (If no, explain in Remarks.)

Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes x No

Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes No x	**Is the Sampled Area within a Wetland?** Yes No x
Hydric Soil Present?	Yes No x	
Wetland Hydrology Present?	Yes No x	

Remarks: (Explain alternative procedures here or in a separate report)

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. Acer negundo	20	Y	FAC
2. Junipera virginiana	20	Y	FACU
3.			
4.			
5.			
	40 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15')			
1. Juniperus virginiana	10	Y	FACU
2. Acer negundo	10	Y	FAC
3.			
4.			
5.			
	20 = Total Cover		
Herb Stratum (Plot size: 5')			
1. Parthenocissus inserta	40	Y	FACU
2. Glechoma hederacea	30	Y	FACU
3. Bromus inermis	20	Y	FACU
4. Galium aparine	5	N	FACU
5.			
6.			
7.			
8.			
9.			
10.			
	95 = Total Cover		
Woody Vine Stratum (Plot size:)			
1.			
2.			
	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 7 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 29 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species 90	x 3 =	90
FACU species 125	x 4 =	500
UPL species	x 5 =	
Column Totals: 155 (A)		590 (B)

Prevalence Index = B/A = 3.81

Hydrophytic Vegetation Indicators:

___ Rapid Test for Hydrophytic Vegetation

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes No x

Remarks: (include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: 1 UP

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-14	7.5YR3/2	100					loam	
14-20	10YR4/3	100					silt loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF 12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No x

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No x Depth (inches): _____

Water Table Present? Yes _____ No x Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No x Depth (inches): _____

Wetland Hydrology Present? Yes _____ No x

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Mankato Apartments Site City/County: Mankato / Blue Earth County Sampling Date: 5 / 27 / 2025

Applicant/Owner: Growth Holdings, LLC State: MN Sampling Point: **1 LOW**

Investigator(s): Robert Merila, Aquatic EcoSolutions, Inc. Section, Township, Range: Sec 27, T 108 N, R 26 W

Landform (hillslope, terrace, etc.): excavated roadside ditch Local relief (concave, convex, none): none

Slope (%): 1 Lat: Long: Datum:

Soil Map Unit Name: L113B Reedslake-Le Sueur complex, 1 to 6 percent slopes NWI classification: none / none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes x No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes x No _____	**Is the Sampled Area within a Wetland?** **Yes x No _____**
Hydric Soil Present?	Yes x No _____	
Wetland Hydrology Present?	Yes x No _____	

Remarks: (Explain alternative procedures here or in a separate report)

Excavated roadside ditch

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: 15')			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
Herb Stratum (Plot size: 5')			
1. Phalaris arundinacea	85	Y	FACW
2. Carex stricta	10	N	OBL
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	95 = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species 10	x 1 =	10
FACW species 85	x 2 =	170
FAC species _____	x 3 =	_____
FACU species _____	x 4 =	_____
UPL species _____	x 5 =	_____
Column Totals: 95 (A)		180 (B)

Prevalence Index = B/A = 1.90

Hydrophytic Vegetation Indicators:

___ Rapid Test for Hydrophytic Vegetation

x Dominance Test is >50%

x Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes x No _____**

Remarks: (include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: 1 LOW

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-10	10YR2/1	100					loam	
10-17	10YR3/1	100					silt loam	
17-20	10YR4/1	100					silt loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- _x_ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF 12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _x_ No ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- _x_ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- _x_ Geomorphic Position (D2)
- _x_ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _x_ No ___ Depth (inches): 1

Water Table Present? Yes ___ No _x_ Depth (inches): -

Saturation Present? (includes capillary fringe) Yes ___ No _x_ Depth (inches): -

Wetland Hydrology Present? Yes _x_ No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Roadside ditch stormwater conveyance; water from recent rainfall.

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Mankato Apartments Site City/County: Mankato / Blue Earth County Sampling Date: 5 / 27 / 2025

Applicant/Owner: Growth Holdings, LLC State: MN Sampling Point: **2 UP**

Investigator(s): Robert Merila, Aquatic EcoSolutions, Inc. Section, Township, Range: Sec 21, T 108 N, R 26 W

Landform (hillslope, terrace, etc.): slope Local relief (concave, convex, none): none

Slope (%): 3 Lat: Long: Datum:

Soil Map Unit Name: 110 Marna silty clay loam, 0 to 2 percent slopes NWI classification: none / none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No (If no, explain in Remarks.)

Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes x No

Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes No x	**Is the Sampled Area within a Wetland?** **Yes No x**
Hydric Soil Present?	Yes No x	
Wetland Hydrology Present?	Yes No x	

Remarks: (Explain alternative procedures here or in a separate report)

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. Acer negundo	20	Y	FAC
2. Junipera virginiana	20	Y	FACU
3.			
4.			
5.			
	40 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15')			
1. Juniperus virginiana	10	Y	FACU
2. Acer negundo	10	Y	FAC
3.			
4.			
5.			
	20 = Total Cover		
Herb Stratum (Plot size: 5')			
1. Parthenocissus inserta	40	Y	FACU
2. Glechoma hederacea	30	Y	FACU
3. Bromus inermis	20	Y	FACU
4. Galium aparine	5	N	FACU
5.			
6.			
7.			
8.			
9.			
10.			
	95 = Total Cover		
Woody Vine Stratum (Plot size:)			
1.			
2.			
	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 7 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 29 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species 90	x 3 =	90
FACU species 125	x 4 =	500
UPL species	x 5 =	
Column Totals: 155 (A)		590 (B)

Prevalence Index = B/A = 3.81

Hydrophytic Vegetation Indicators:

- Rapid Test for Hydrophytic Vegetation
- Dominance Test is >50%
- Prevalence Index is ≤3.0[1]
- Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes No x**

Remarks: (include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: 2 UP

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-14	7.5YR3/2	100					loam	
14-20	10YR4/3	100					silt loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

___ Histosol (A1)
___ Histic Epipedon (A2)
___ Black Histic (A3)
___ Hydrogen Sulfide (A4)
___ Stratified Layers (A5)
___ 2 cm Muck (A10)
___ Depleted Below Dark Surface (A11)
___ Thick Dark Surface (A12)
___ Sandy Mucky Mineral (S1)
___ 5 cm Mucky Peat or Peat (S3)
___ Sandy Gleyed Matrix (S4)
___ Sandy Redox (S5)
___ Stripped Matrix (S6)
___ Loamy Mucky Mineral (F1)
___ Loamy Gleyed Matrix (F2)
___ Depleted Matrix (F3)
___ Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

___ Coast Prairie Redox (A16)
___ Dark Surface (S7)
___ Iron-Manganese Masses (F12)
___ Very Shallow Dark Surface (TF 12)
___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No x

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

___ Surface Water (A1)
___ High Water Table (A2)
___ Saturation (A3)
___ Water Marks (B1)
___ Sediment Deposits (B2)
___ Drift Deposits (B3)
___ Algal Mat or Crust (B4)
___ Iron Deposits (B5)
___ Inundation Visible on Aerial Imagery (B7)
___ Sparsely Vegetated Concave Surface (B8)
___ Water Stained Leaves (B9)
___ Aquatic Fauna (B13)
___ True Aquatic Plants (B14)
___ Hydrogen Sulfide Odor (C1)
___ Oxidized Rhizospheres on Living Roots (C3)
___ Presence of Reduced Iron (C4)
___ Recent Iron Reduction in Tilled Soils (C6)
___ Thin Muck Surface (C7)
___ Gauge or Well Data (D9)
___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

___ Surface Soil Cracks (B6)
___ Drainage Patterns (B10)
___ Dry-Season Water Table (C2)
___ Crayfish Burrows (C8)
___ Saturation Visible on Aerial Imagery (C9)
___ Stunted or Stressed Plants (D1)
___ Geomorphic Position (D2)
___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No x Depth (inches): _____

Water Table Present? Yes _____ No x Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No x Depth (inches): _____

Wetland Hydrology Present? Yes _____ No x

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Mankato Apartments Site City/County: Mankato / Blue Earth County Sampling Date: 5 / 27 / 2025

Applicant/Owner: Growth Holdings, LLC State: MN Sampling Point: **2 LOW**

Investigator(s): Robert Merila, Aquatic EcoSolutions, Inc. Section, Township, Range: Sec 27, T 108 N, R 26 W

Landform (hillslope, terrace, etc.): excavated roadside ditch Local relief (concave, convex, none): none

Slope (%): 1 Lat: Long: Datum:

Soil Map Unit Name: 110 Marna silty clay loam, 0 to 2 percent slopes NWI classification: none / none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes x No

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes x No	**Is the Sampled Area within a Wetland?** **Yes x No**
Hydric Soil Present?	Yes x No	
Wetland Hydrology Present?	Yes x No	

Remarks: (Explain alternative procedures here or in a separate report)

Excavated roadside ditch

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: 15')			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
Herb Stratum (Plot size: 5')			
1. Phalaris arundinacea	95	Y	FACW
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	95 = Total Cover		
Woody Vine Stratum (Plot size:)			
1.			
2.			
	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species 95	x 2 =	190
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals: 95 (A)		190 (B)

Prevalence Index = B/A = 2.00

Hydrophytic Vegetation Indicators:

___ Rapid Test for Hydrophytic Vegetation

x Dominance Test is >50%

x Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes x No**

Remarks: (include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: 2 LOW

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR2/1	100					loam	
3-15	10YR3/1	100					silt loam	
15-20	10YR4/1	100					silty clay loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

___ Histosol (A1)
___ Histic Epipedon (A2)
___ Black Histic (A3)
___ Hydrogen Sulfide (A4)
___ Stratified Layers (A5)
___ 2 cm Muck (A10)
___ Depleted Below Dark Surface (A11)
_x_ Thick Dark Surface (A12)
___ Sandy Mucky Mineral (S1)
___ 5 cm Mucky Peat or Peat (S3)
___ Sandy Gleyed Matrix (S4)
___ Sandy Redox (S5)
___ Stripped Matrix (S6)
___ Loamy Mucky Mineral (F1)
___ Loamy Gleyed Matrix (F2)
___ Depleted Matrix (F3)
___ Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

___ Coast Prairie Redox (A16)
___ Dark Surface (S7)
___ Iron-Manganese Masses (F12)
___ Very Shallow Dark Surface (TF 12)
___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _x_ No ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

___ Surface Water (A1)
___ High Water Table (A2)
___ Saturation (A3)
___ Water Marks (B1)
___ Sediment Deposits (B2)
_x_ Drift Deposits (B3)
___ Algal Mat or Crust (B4)
___ Iron Deposits (B5)
___ Inundation Visible on Aerial Imagery (B7)
___ Sparsely Vegetated Concave Surface (B8)
___ Water Stained Leaves (B9)
___ Aquatic Fauna (B13)
___ True Aquatic Plants (B14)
___ Hydrogen Sulfide Odor (C1)
___ Oxidized Rhizospheres on Living Roots (C3)
___ Presence of Reduced Iron (C4)
___ Recent Iron Reduction in Tilled Soils (C6)
___ Thin Muck Surface (C7)
___ Gauge or Well Data (D9)
___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

___ Surface Soil Cracks (B6)
___ Drainage Patterns (B10)
___ Dry-Season Water Table (C2)
___ Crayfish Burrows (C8)
___ Saturation Visible on Aerial Imagery (C9)
___ Stunted or Stressed Plants (D1)
_x_ Geomorphic Position (D2)
_x_ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No _x_ Depth (inches): _____-_____

Water Table Present? Yes _____ No _x_ Depth (inches): _____-_____

Saturation Present? (includes capillary fringe) Yes _____ No _x_ Depth (inches): _____-_____

Wetland Hydrology Present? Yes _x_ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Roadside ditch stormwater conveyance.

SSTS LLC
8112 W 16th St, St Louis Park, MN
www.s2traffic.com

September 19th, 2025

To: **Shawn Meschke, PE – APX Construction Group**

From: **Katie Schmidt, PE - SSTS LLC (MN PE #47147)**

Re: **Traffic Study – Mankato Apartments (901 S Victory Dr) Traffic Study, Mankato, MN**

SSTS, LLC has performed a traffic analysis for the Mankato Apartment Development located at 901 S Victory Dr, referred to as the Proposed Project. This development encompasses approximately 4.5 acres situated on the south side of Stadium Rd (CSAH 60) and east of S Victory Dr. The current land uses consist of a small engine repair shop and vacant land that will be redeveloped.

The Proposed Project consists of 72 apartment units distributed between two three-story buildings, along with a 150-stall surface parking lot. Access to the project is proposed via the existing driveway on S Victory Dr. Traffic will not be permitted to cut through to the eastern property. **Figure 1** illustrates the location and layout of the Proposed Project.

This study aims to assess the traffic impacts generated by the Proposed Project on the operations and safety of the adjacent roadway network and the proposed access driveway. Two existing intersections were analyzed: the Stadium Rd/S Victory Dr roundabout and the side-street stop-controlled intersection at S Victory Dr/Stadium Ln. Additionally, the proposed intersection of S Victory Dr and the Access Driveway was evaluated under Build conditions. Study years include Year 2025 (existing conditions) and Year 2027 without and with the Proposed Project. The following items will be reviewed to provide informed recommendations for safely accommodating traffic:

- Existing Conditions – Geometry and traffic volumes.
- Safety – Review of crash history.
- Future Conditions – Details on background growth and site-generated traffic. Descriptions of 2027 No-Build and 2027 Build Scenarios.
- Traffic Operations Analysis – Summary of Year 2025 Existing Conditions, and Year 2027 No-Build and Build Conditions.

EXISTING CONDITIONS

The existing conditions of the study area roadways and intersections are noted in **Table 1** and on **Figure 2**. Average Daily Traffic (ADT) volumes noted on Figure 2 are from MnDOT's traffic mapping application (MnDOT ADT Map).

Table 1. Study Roadway Characteristics

Roadway	Ownership	Functional Class*	Typical Section	Posted Speed
Stadium Rd (CSAH 60)	Blue Earth County	Minor Arterial	2-Lanes w/Turn Lanes (W of Victory Rd) 3-Lanes W/CLTL (E of Victory Rd)	40 mph
S Victory Dr	City of Mankato (S of Stadium Rd) Blue Earth County (N of Stadium Rd)	Major Collector	2-Lanes	45 mph
Stadium Ln	City of Mankato	Local	2-Lanes	30 mph

* Based on Enterprise MnDOT Mapping Application (EMMA) - EMMA Link

AM and PM peak hour turning movement counts were conducted at the two existing study area intersections (Stadium Rd/S Victory Dr roundabout and S Victory Dr/Stadium Ln side-street stop-controlled intersection) on Wednesday, September 10th, 2025. The AM peak traffic hour was found to occur from 7:15 to 8:15 AM, and the PM peak traffic hour was found to occur from 4:30 to 5:30 PM.

Figure 3 shows the existing traffic volumes at the study area intersections. Traffic volumes were balanced through the intersections as needed. Detailed traffic counts are included in Appendix A.

CRASH HISTORY REVIEW

Historical crash data from MnDOT's Crash Mapping Analysis Tool (MnCMAT) for the existing study area intersections was reviewed for 5 years (2020-2024) to note any existing safety concerns and to determine if the addition of site-generated traffic could exacerbate existing safety issues. Intersection Crash Rate (CR), MnDOT's Average Crash Rate for similar intersections, and Intersection Critical Crash Rate were reviewed. The Intersection Crash Rate is defined by the number of crashes occurring per million entering vehicles (MEV). MnDOT's Average Crash Rate is from published system-wide average crash rates for similar intersections. The Intersection Critical Crash Rate is used to determine if an intersection has a crash rate higher than similar facilities by a statistically significant amount. The critical rate is calculated by adjusting the system-wide average crash rate based on the amount of exposure and a statistical constant indicating the level of confidence. If the actual crash rate at a specific location exceeds the critical crash rate, it suggests that deficiencies in the intersection design or other factors may be contributing to the crashes. In such cases, further engineering investigation is recommended.

Table 2 summarizes the intersection crash data for the studied intersections and compares the overall crash rates to the critical crash rates. Based on the crash history at these intersections, there are no existing safety concerns, as the crash rates are lower than the critical crash rates.

Table 2. Intersection Crash Summary

Study Intersection and Control	Years of Data	Total Crashes	Crash Types	F&A Crashes*	Entering ADT	Intersection CR (per MEV)		
						CR	MnDOT Ave. CR	Critical CR
Stadium Rd & S Victory Dr Roundabout	5	5	Single Vehicle - 4 Rear End - 1	0	15,737	0.17	0.97	1.46
S Victory Dr & Stadium Ln Side-Street Stop	5	1	Rear End - 1	0	1,557	0.35	0.15	0.90

* F & A crashes are fatalities and serious injury crashes.

2027 NO-BUILD SCENARIO

Year 2027 was studied to correspond to the year after build-out of the Proposed Project, and No-Build and Build Scenarios were determined. The No-Build Scenario considers the traffic and geometric conditions that would be present at the time of completion of the Proposed Project, without the inclusion of the Proposed Project. The Build Scenario includes the volumes and geometric conditions with the Proposed Project.

To account for general background traffic growth in the area, an annual traffic growth rate was calculated based on historical AADT trends in the area from MnDOT's Traffic Mapping Application. An annual traffic growth rate of 2.35% was calculated and applied to the existing 2025 traffic volumes to estimate the 2027 No-Build traffic volumes shown on **Figure 4.**

2027 BUILD SCENARIO

The 2027 Build Scenario includes traffic from the Proposed Project. The volume of vehicle trips generated by the Proposed Project has been estimated for the weekday AM and PM peak traffic hours and on a daily basis using the data and methodology described in the Institute of Transportation Engineers' (ITE) **Trip Generation Manual**[1], which is a standard industry reference used by public a

[1] **Trip Generation Manual**, Institute of Transportation Engineers (ITE), 12th Edition

gencies to estimate trips generated by specific land uses. **Table 3** summarizes the trip generation estimates. ITE's Low Rise Multifamily land use corresponds to the proposed three-level apartment buildings.

Table 3. Trip Generation

Land Use	ITE Land Use Code	Size	Trips Generated:				
			AM Peak		PM Peak		Weekday ADT
			Enter	Exit	Enter	Exit	
Multifamily Housing (Low-Rise)	220	72 units	7	23	23	14	447
Totals			**7**	**23**	**23**	**14**	**447**
			30		**37**		

The Proposed Project is estimated to generate the following:

- 30 new trips (7 entering and 23 exiting) during the morning traffic peak hour,
- 37 new trips (23 entering and 14 exiting) during the evening traffic peak hour, and
- 447 daily trips.

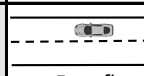
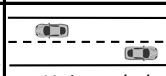
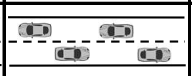
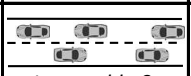
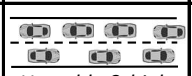
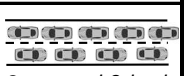
The primary travel pattern for residents of the Proposed Project is assumed to/from Minnesota State University via Stadium Rd, accounting for 70% of site-generated traffic. Additionally, it is estimated that 15% of the site-generated traffic is to/from the north on Victory Dr, 5% to/from the south on Victory Dr, and 10% to/from the east on Stadium Rd. **Figure 5** illustrates the distribution percentages of site-generated traffic and the resulting trip assignment at each intersection. The Build traffic volumes, shown on **Figure 6**, are formed when the No-Build traffic volumes are combined with the trip assignment traffic volumes.

Turning volumes at the S Victory Dr and the Access Driveway do not warrant turn lanes per industry references (NCHRP Reports) and the intersection was modeled with shared single lane approaches.

TRAFFIC OPERATIONS ANALYSIS

The operating conditions of intersections are assessed by comparing their capacity to the actual traffic volume. The industry standards for evaluating capacity are outlined in the **Highway Capacity Manual**[2]. These conditions are described in terms of driver delay, which is represented by a Level of Service (LOS) grade, where "A" indicates the best conditions and "F" signifies the worst. Generally, LOS "D" marks the threshold for acceptable operations. **Table 4** provides a summary of the LOS and delay criteria for unsignalized intersections and roundabouts.

Table 4. Level of Service Criteria – Unsignalized Intersections & Roundabouts

LOS	A	B	C	D	E	F
Delay	0-10 seconds	>10-15 seconds	>15-25 seconds	>25-35 seconds	>35-50 seconds	>50 seconds
Description	 *Free-flow operation*	 *Unimpeded operation*	 *Stable operation*	 *Less stable & more delay*	 *Unstable & high delay*	 *Congested & back-ups*

Another component of operational analyses is a study of queuing. An intersection can operate with an acceptable LOS, but if queues from the intersection extend back to block adjacent intersections, entrances to turn lanes, or access driveways, unsafe conditions could result. This study reports the industry design standard 95th Percentile Queue Length.

This study utilized the Synchro/SimTraffic software package (12th Edition) for the side-street stop control operational analyses and RODEL Roundabout Analysis Software for the roundabout operational

[2] **Highway Capacity Manual (HCM)**, Transportation Research Board, 7th Edition

analyses. LOS D was considered the threshold for acceptable operations. LOS, delay, and queues are reported for each intersection.

Intersection operational analysis results for Existing Conditions, 2027 No-Build Conditions, and 2027 Build Conditions are reported in **Table 5** and **Table 6** for the AM and PM peak hours, respectively.

Table 5. Operational Analysis Results – AM Peak Hour

Intersection	Lane	2025 Existing AM Peak Hour		2027 No-Build AM Peak Hour		2027 Build AM Peak Hour	
		Delay	*Queue (')*	*Delay*	*Queue (')*	*Delay*	*Queue (')*
Stadium Rd & Victory Dr (Roundabout)	*EB*	A 3.8	49	A 3.9	53	A 3.9	54
	WB	A 6.0	48	A 6.2	53	A 6.4	55
	NB	A 5.1	24	A 5.2	27	A 5.4	30
	SB	A 4.2	9	A 4.3	10	A 4.3	10
	Overall	A 4.5		A 4.6		A 4.7	
Victory Dr & Stadium Ln (Side-Street Stop)	*EB LTR*	B 10.5	3	B 10.7	3	B 10.7	3
	WB LTR	A 9.4	0	A 9.5	0	A 9.5	0
	NB LT	A 7.4	0	A 7.4	0	A 7.4	0
	NB R	A 0.0	0	A 0.0	0	A 0.0	0
	SB LT	A 7.7	0	A 7.7	0	A 7.7	0
	SB R	A 0.0	0	A 0.0	0	A 0.0	0
	Overall	A 0.7		A 0.7		A 0.7	
Victory Dr & Access (Side-Street Stop)	*WB LR*	NA		NA		A 9.8	3
	NB TR					A 0.0	0
	SB LT					A 7.8	0
	Overall					A 0.8	

Table 6. Operational Analysis Results – PM Peak Hour

Intersection	Lane	2025 Existing PM Peak Hour		2027 No-Build PM Peak Hour		2027 Build PM Peak Hour	
		Delay	*Queue (')*	*Delay*	*Queue (')*	*Delay*	*Queue (')*
Stadium Rd & Victory Dr (Roundabout)	*EB*	A 4.0	59	A 4.2	65	A 4.2	67
	WB	A 7.9	103	A 8.6	119	A 8.8	122
	NB	A 5.0	19	A 5.2	21	A 5.3	23
	SB	A 5.7	30	A 6.0	33	A 6.1	35
	Overall	A 5.5		A 5.8		A 5.9	
Victory Dr & Stadium Ln (Side-Street Stop)	*EB LTR*	B 11.1	3	B 11.3	3	B 11.3	3
	WB LTR	A 9.7	0	A 9.7	0	A 9.7	0
	NB LT	A 7.6	0	A 7.6	0	A 7.6	0
	NB R	A 0.0	0	A 0.0	0	A 0.0	0
	SB LT	A 7.5	0	A 7.6	0	A 7.6	0
	SB R	A 0.0	0	A 0.0	0	A 0.0	0
	Overall	A 0.7		A 1.0		A 1.0	
Victory Dr & Access (Side-Street Stop)	*WB LR*	NA		NA		A 9.5	3
	NB TR					A 0.0	0
	SB LT					A 7.7	3
	Overall					A 0.7	

The following summarizes the operational results for each study year:

- 2025 Existing Conditions - The two study area intersections function acceptably under existing conditions. LOS is B or better for all approach lanes. Queuing is safely managed by the current roadway geometry.
- 2027 No-Build Conditions - The two study area intersections also operate acceptably under 2027 No-Build conditions. The growth in background traffic slightly increases delays and queuing. LOS remains B or better for all approach lanes. Queuing continues to be safely managed by the current roadway geometry.
- 2027 Build Conditions - The intersections and proposed access within the study area function acceptably under 2027 Build conditions with the Proposed Project. The addition of site-generated traffic causes slight increases in delay and queuing. LOS remains B or better for all approach lanes. Queuing is safely accommodated by the existing roadway geometry. Mainline turn lanes at the access are not necessary on Victory Dr based on operations.

SUMMARY

- ★ The number of new vehicle trips estimated to be generated by the Proposed Project is 30 trips during the morning peak hour (7 entering and 23 exiting), 37 trips during the evening peak hour (23 entering and 14 exiting), and 447 trips daily. This volume is low, resulting in roughly one new trip every two minutes during peak hours.
- ★ The operational analyses show acceptable conditions in the study area for both existing and 2027 No-Build scenarios. The crash history review revealed no safety issues.
- ★ The operation analyses for 2027 Build conditions with the Proposed Project indicate acceptable study area operations. The Victory Dr and Access intersection functions acceptably with single-lane approaches.



Figure 1. Project Location and Site Layout

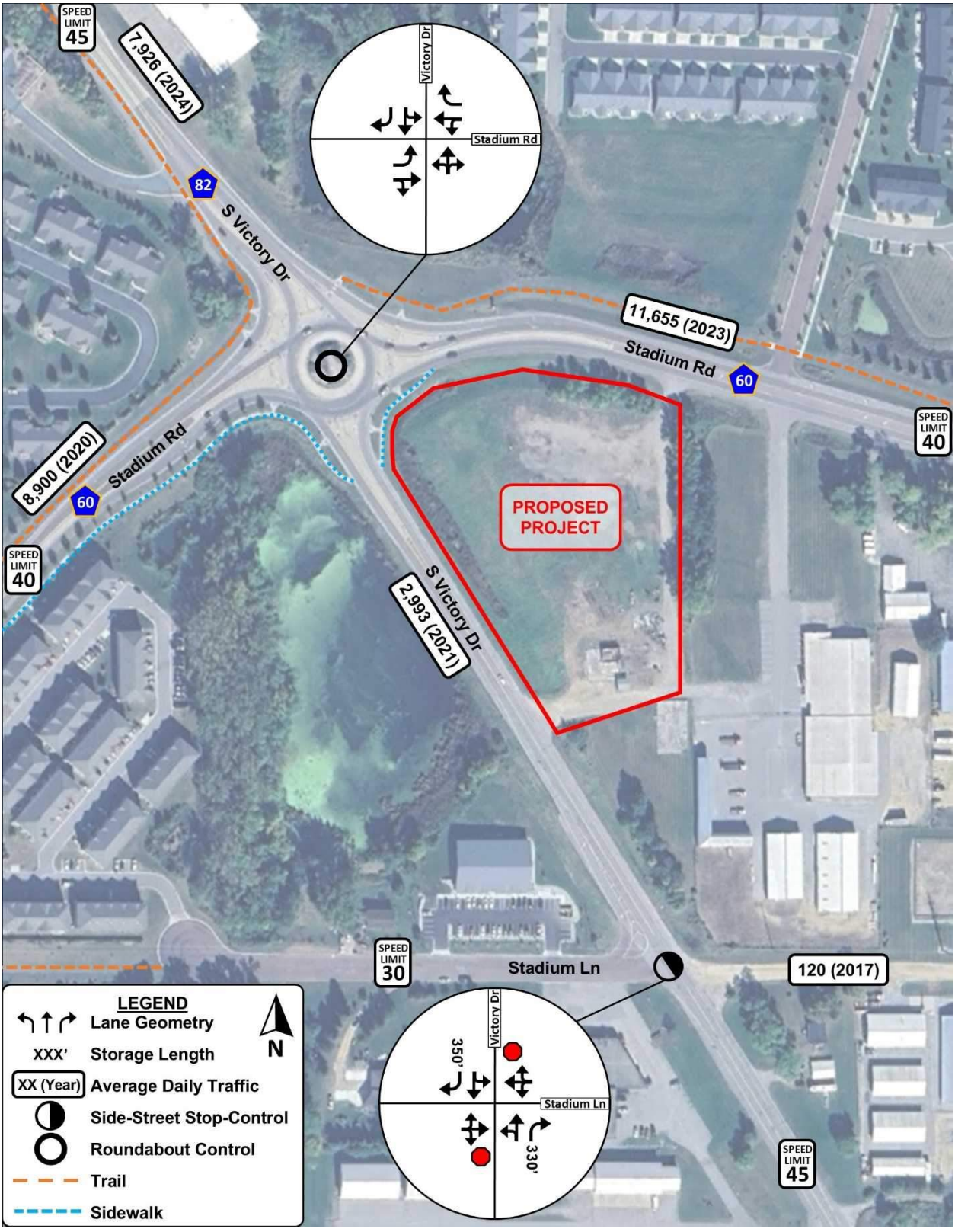


Figure 2. Existing Conditions

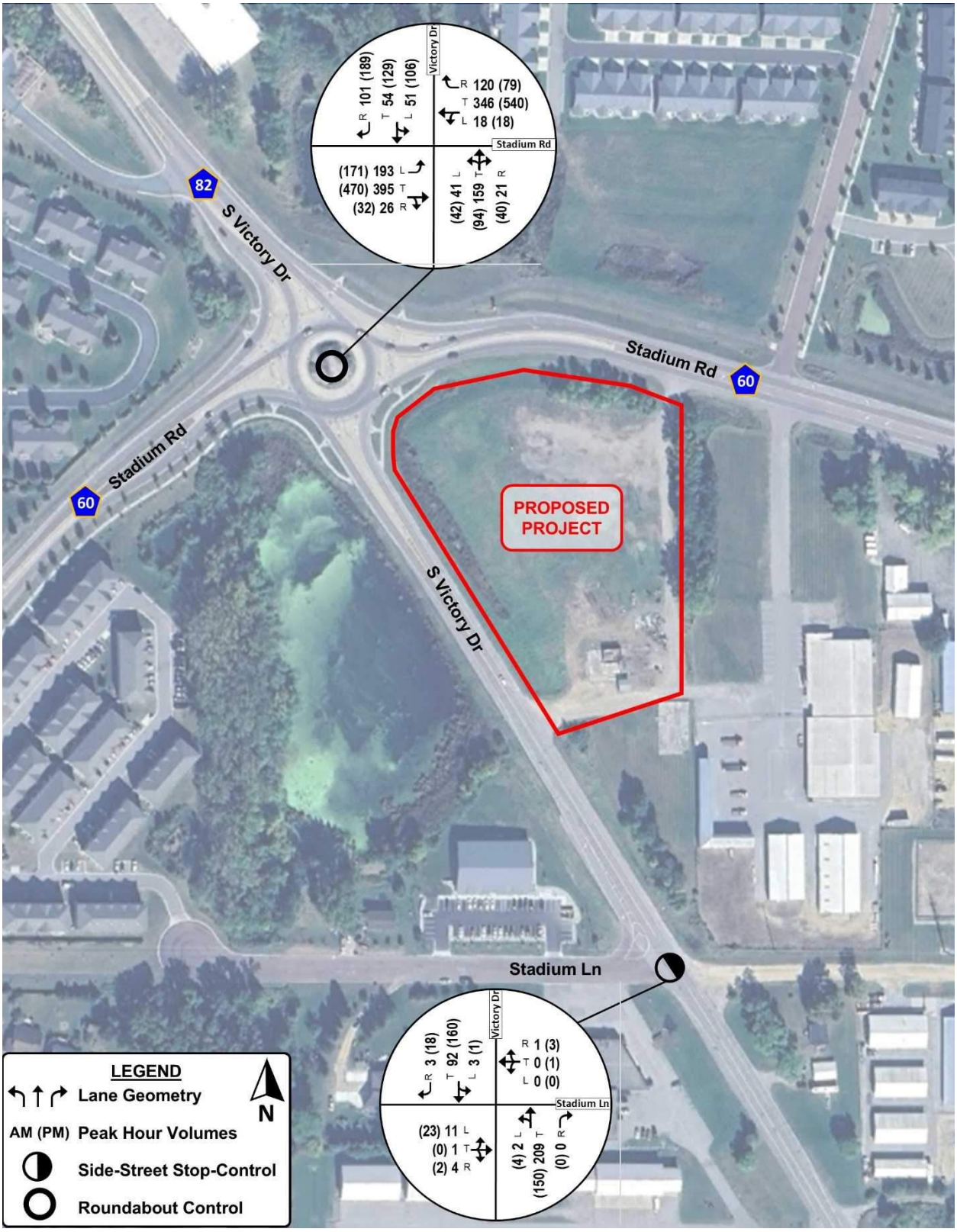


Figure 3. Existing 2025 Traffic Volumes

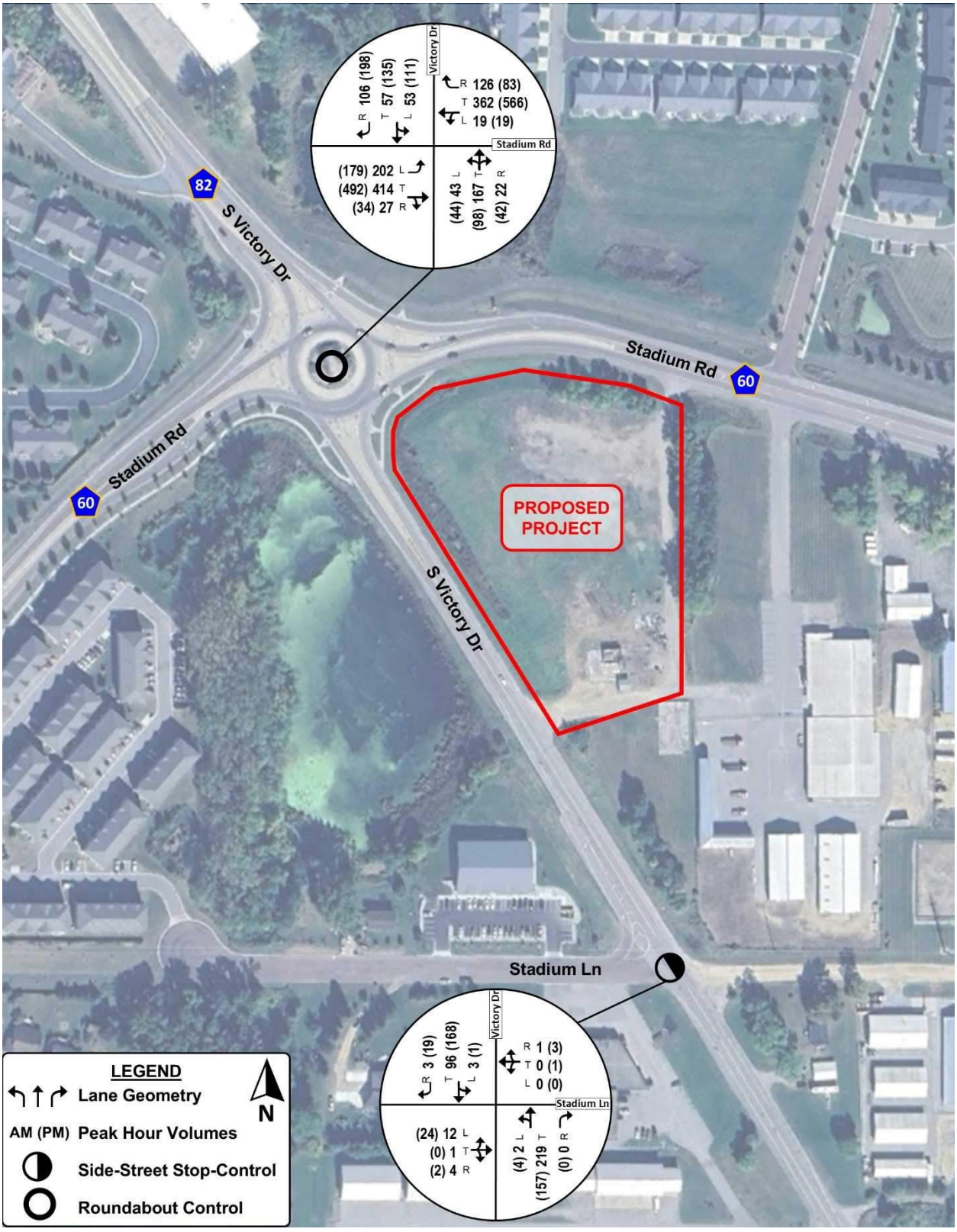


Figure 4. 2027 No-Build Traffic Volumes

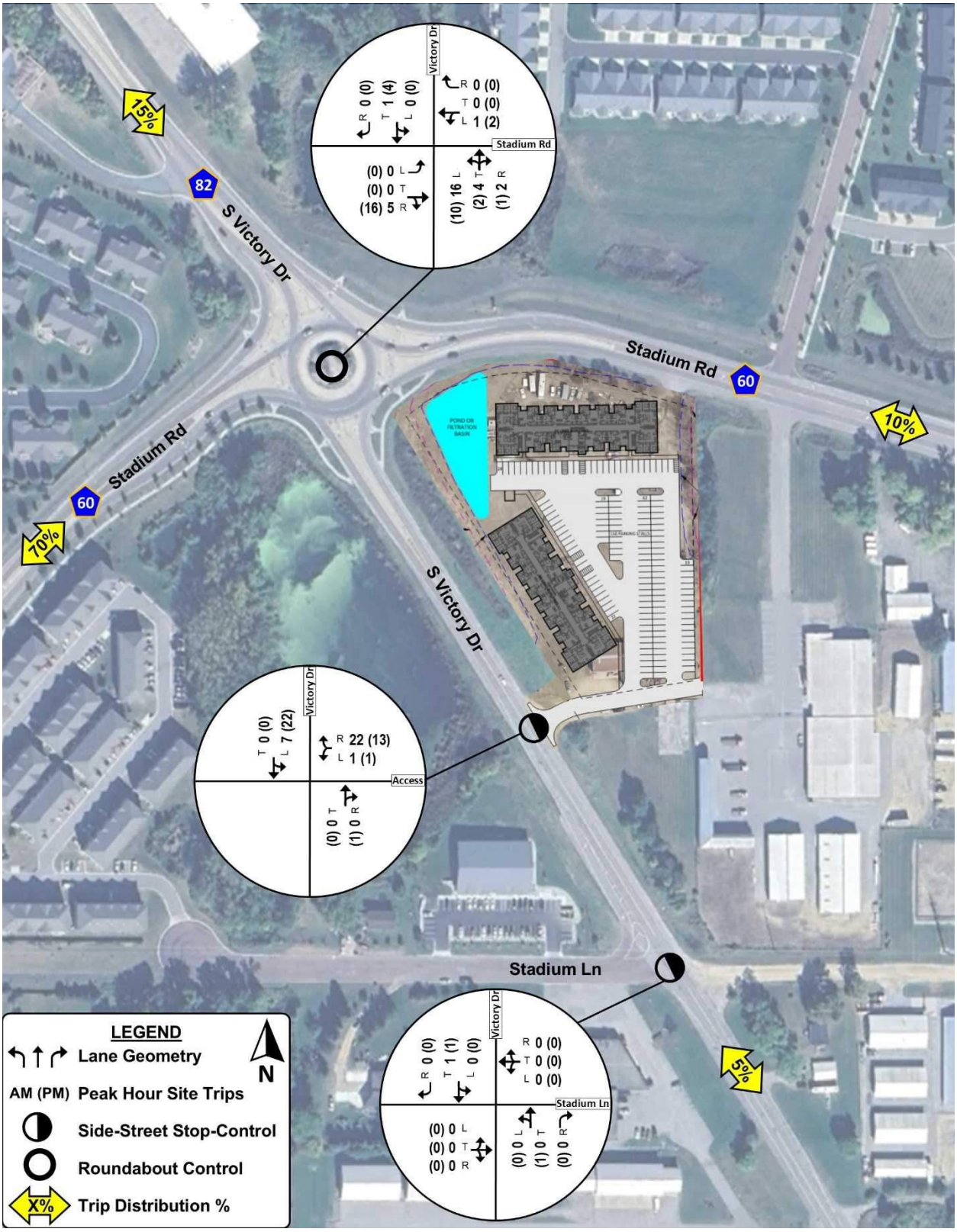


Figure 5. Trip Distribution and Assignment

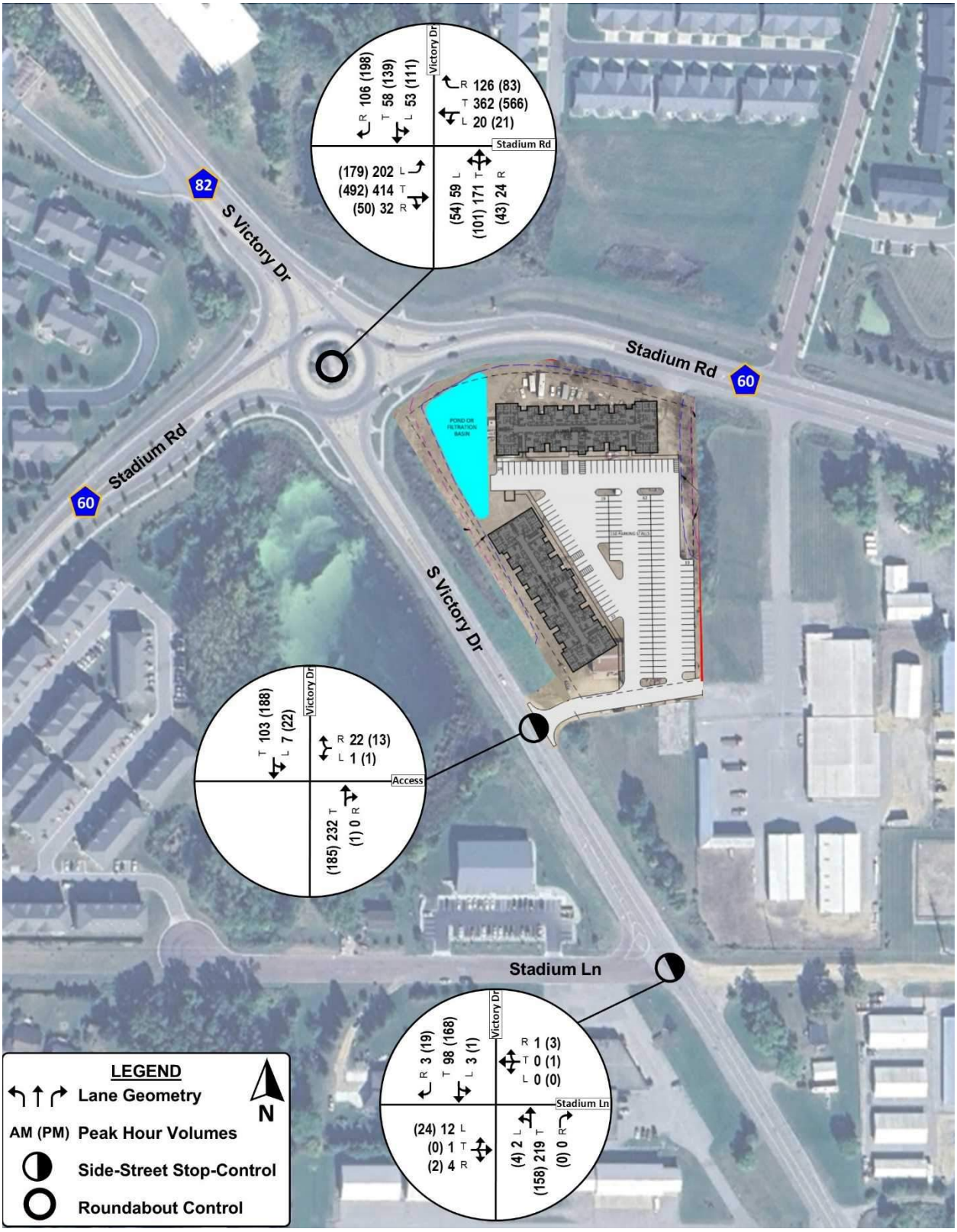


Figure 6. 2027 Build Traffic Volumes

Appendix A – Turning Movement Counts

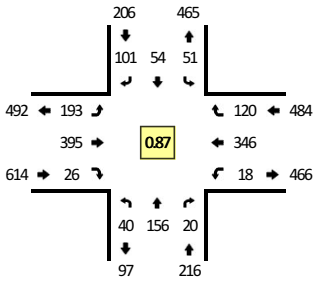
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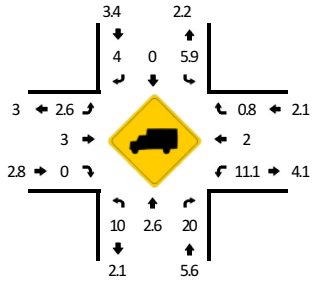
Method for determining peak hour: Total Entering Volume

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CITY/STATE: Mankato, MN

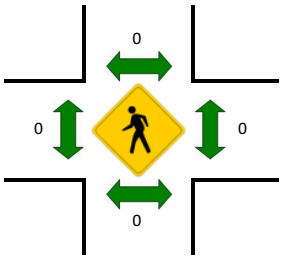
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DATE: Wed, Sep 10 2025

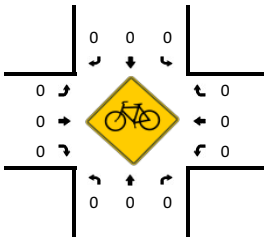
Peak-Hour: 7:15 AM -- 8:15 AM
Peak 15-Min: 7:45 AM -- 8:00 AM

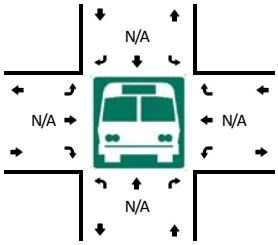


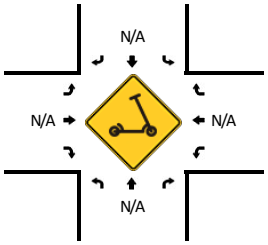


TRUE DATA TO IMPROVE MOBILITY









15-Min Count Period Beginning At	S Victory Dr (Northbound)				S Victory Dr (Southbound)				Stadium Rd (Eastbound)				Stadium Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	4	25	4	0	9	8	11	1	32	76	2	1	3	42	21	0	239	
7:15 AM	11	31	4	0	13	8	24	0	47	84	8	0	5	79	28	1	343	
7:30 AM	15	50	6	0	9	13	28	0	47	89	4	1	1	107	31	0	401	
7:45 AM	10	46	5	0	14	17	30	0	53	117	7	1	6	93	39	0	438	1421
8:00 AM	4	29	5	0	14	16	19	1	41	105	7	3	5	67	22	0	338	1520
8:15 AM	9	24	3	0	9	7	14	0	31	93	7	0	3	88	31	0	319	1496
8:30 AM	4	22	4	0	11	17	24	0	36	57	2	3	2	115	26	0	323	1418
8:45 AM	3	23	2	0	8	9	18	0	34	58	6	0	3	65	18	0	247	1227

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	40	184	20	0	56	68	120	0	212	468	28	4	24	372	156	0	1752
Heavy Trucks	0	0	4		0	0	4		0	8	0		4	16	4		40
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

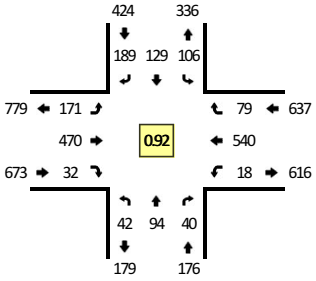
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SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

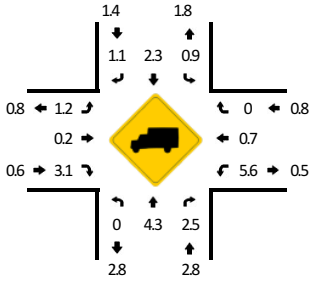
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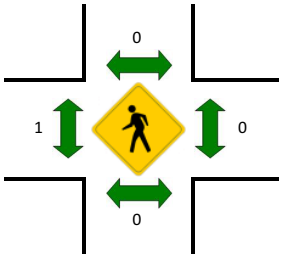
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CITY/STATE: Mankato, MN | **DATE:** Wed, Sep 10 2025

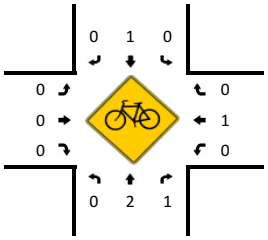
Peak-Hour: 4:30 PM -- 5:30 PM
Peak 15-Min: 5:15 PM -- 5:30 PM

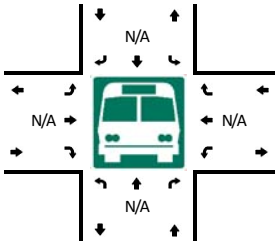


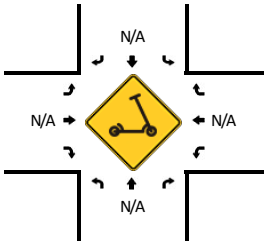
TRUE DATA TO IMPROVE MOBILITY











15-Min Count Period Beginning At	S Victory Dr (Northbound)				S Victory Dr (Southbound)				Stadium Rd (Eastbound)				Stadium Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	8	18	8	0	28	37	49	0	40	134	7	2	6	116	21	0	474	
4:15 PM	7	25	2	0	26	26	40	0	48	129	3	0	4	142	17	0	469	
4:30 PM	16	22	14	0	26	39	35	0	45	114	8	3	4	137	19	0	482	
4:45 PM	7	30	8	0	26	28	42	0	45	109	12	2	7	122	20	0	458	1883
5:00 PM	12	22	7	0	18	28	51	0	32	118	7	2	5	129	21	0	452	1861
5:15 PM	7	20	11	0	36	34	61	0	41	129	5	1	2	152	19	0	518	1910
5:30 PM	6	20	4	0	16	20	34	0	43	96	5	1	2	102	23	0	372	1800
5:45 PM	7	26	7	0	14	17	40	0	46	101	12	1	2	115	23	0	411	1753

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	28	80	44	0	144	136	244	0	164	516	20	4	8	608	76	0	2072
Heavy Trucks	0	0	0		0	8	4		4	0	0		4	4	0		24
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

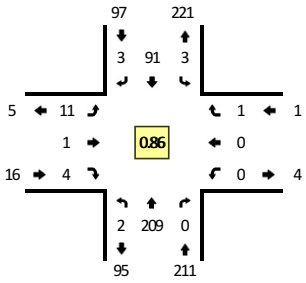
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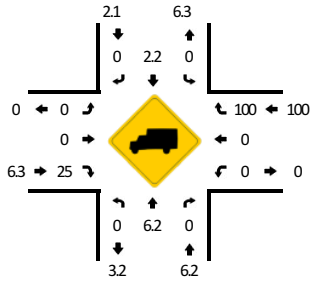
Report generated on 9/17/2025 8:29 AM | SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

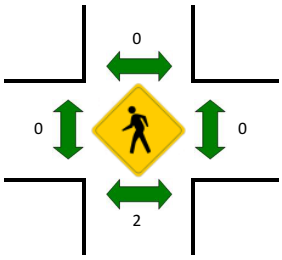
LOCATION: S Victory Dr -- Stadium Ln | **QC JOB #:** 17227203
CITY/STATE: Mankato, MN | **DATE:** Wed, Sep 10 2025

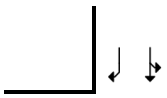
Peak-Hour: 7:15 AM -- 8:15 AM
Peak 15-Min: 7:30 AM -- 7:45 AM

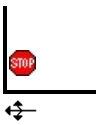


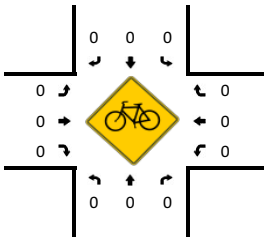


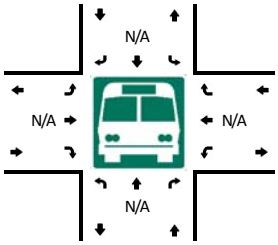
TRUE DATA TO IMPROVE MOBILITY

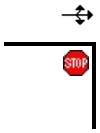


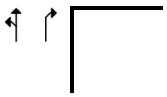


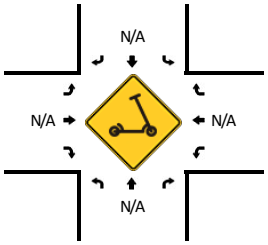












15-Min Count Period Beginning At	S Victory Dr (Northbound)				S Victory Dr (Southbound)				Stadium Ln (Eastbound)				Stadium Ln (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	28	0	0	0	13	0	0	4	0	1	0	0	0	0	0	46	
7:15 AM	1	46	0	0	2	19	0	0	3	0	3	0	0	0	0	0	74	
7:30 AM	0	71	0	0	0	16	2	0	5	0	1	0	0	0	0	0	95	
7:45 AM	1	57	0	0	0	30	0	0	2	1	0	0	0	0	0	0	91	306
8:00 AM	0	35	0	0	1	26	1	0	1	0	0	0	0	0	1	0	65	325
8:15 AM	0	29	0	0	0	14	0	1	2	0	0	0	0	0	2	0	48	299
8:30 AM	0	30	0	0	0	22	0	0	1	1	0	0	0	0	1	0	55	259
8:45 AM	0	27	0	0	2	13	2	0	2	0	0	0	1	0	0	0	47	215

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	284	0	0	0	64	8	0	20	0	4	0	0	0	0	0	380
Heavy Trucks	0	16	0		0	0	0		0	0	0		0	0	0		16
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

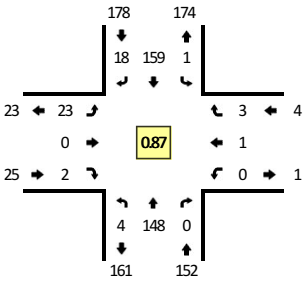
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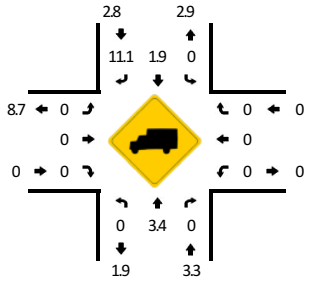
Report generated on 9/17/2025 8:29 AM | SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

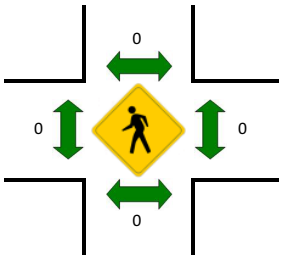
LOCATION: S Victory Dr -- Stadium Ln | **QC JOB #:** 17227204
CITY/STATE: Mankato, MN | **DATE:** Wed, Sep 10 2025

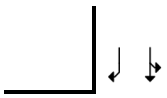
Peak-Hour: 4:30 PM -- 5:30 PM
Peak 15-Min: 4:30 PM -- 4:45 PM

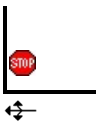


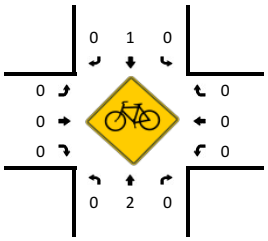


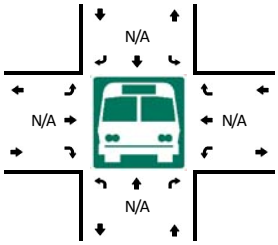
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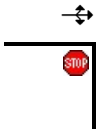


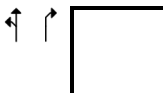


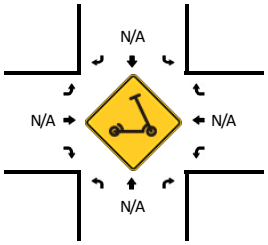












15-Min Count Period Beginning At	S Victory Dr (Northbound)				S Victory Dr (Southbound)				Stadium Ln (Eastbound)				Stadium Ln (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	31	0	0	1	48	3	0	3	0	1	0	0	0	0	0	87	
4:15 PM	0	29	0	0	1	29	3	0	5	0	2	0	0	0	1	0	70	
4:30 PM	1	44	0	0	0	46	6	0	4	0	0	0	0	0	2	0	103	
4:45 PM	0	40	0	0	1	38	6	0	5	0	2	0	0	0	0	0	92	352
5:00 PM	2	33	0	0	0	37	4	0	7	0	0	0	0	1	0	0	84	349
5:15 PM	1	31	0	0	0	38	2	0	7	0	0	0	0	0	1	0	80	359
5:30 PM	0	29	0	0	0	27	3	0	3	0	0	0	1	0	1	0	64	320
5:45 PM	1	35	0	0	0	31	0	0	2	0	1	0	0	0	1	0	71	299

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	4	176	0	0	0	184	24	0	16	0	0	0	0	0	8	0	412
Heavy Trucks	0	12	0		0	4	4		0	0	0		0	0	0		20
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

Report generated on 9/17/2025 8:29 AM | SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

SSTS LLC
8112 W 16th St, St Louis Park, MN
www.s2traffic.com

June 6th, 2025

To: **Brian Johnson, Jones, Haugh & Smith Inc.**

From: **Katie Schmidt, PE (MN PE License #47147)**

Re: **Trip Generation Memorandum – Mankato Apartments Development, Mankato, MN**

Per your request, SSTS LLC has conducted a trip generation estimate for the proposed Mankato Apartment Development in the City of Mankato, Blue Earth County, MN. The Proposed Project is located on the south side of Stadium Rd (CSAH 60) and east of S Victory Dr. The Proposed Project includes 72 apartment units split between two three-level buildings and a 150-stall surface parking lot. Access is proposed on S Victory Dr. The adjacent **Figure 1** depicts the site layout and access location. It is noted that traffic will not be able to cut-through to eastern property.

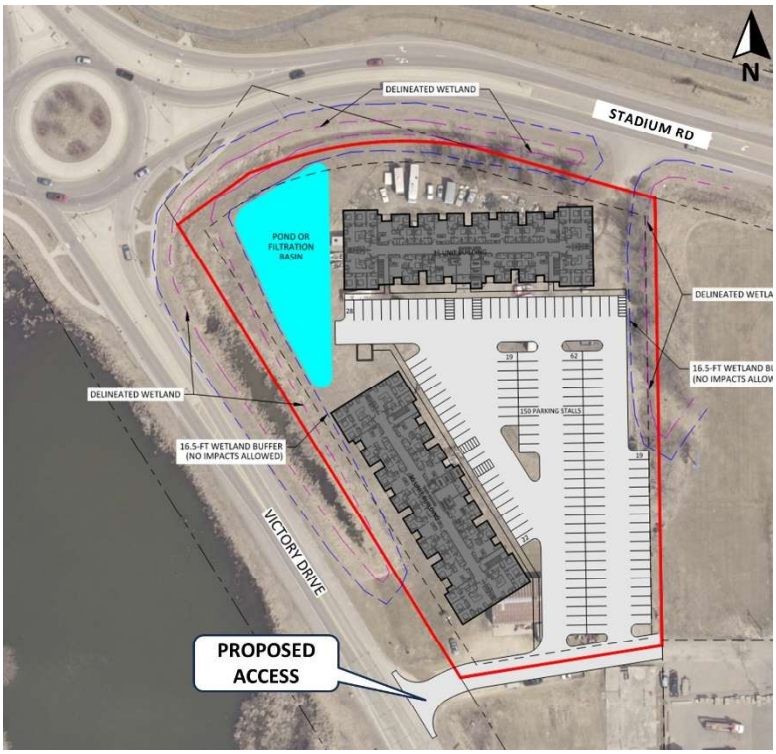


Figure 1. Proposed Project

Trip Generation

The volume of vehicle trips generated by the Proposed Project has been estimated for the weekday AM and PM peak traffic hours and on a daily basis using the data and methodology described in the Institute of Transportation Engineers' (ITE) ***Trip Generation Manual*** [1], which is a standard industry reference used by public agencies to estimate trips generated by specific land uses. **Table 1** summarizes the trip generation estimates. ITE's Low Rise Multifamily land use corresponds to the proposed three-level apartment buildings.

Table 1 - Trip Generation

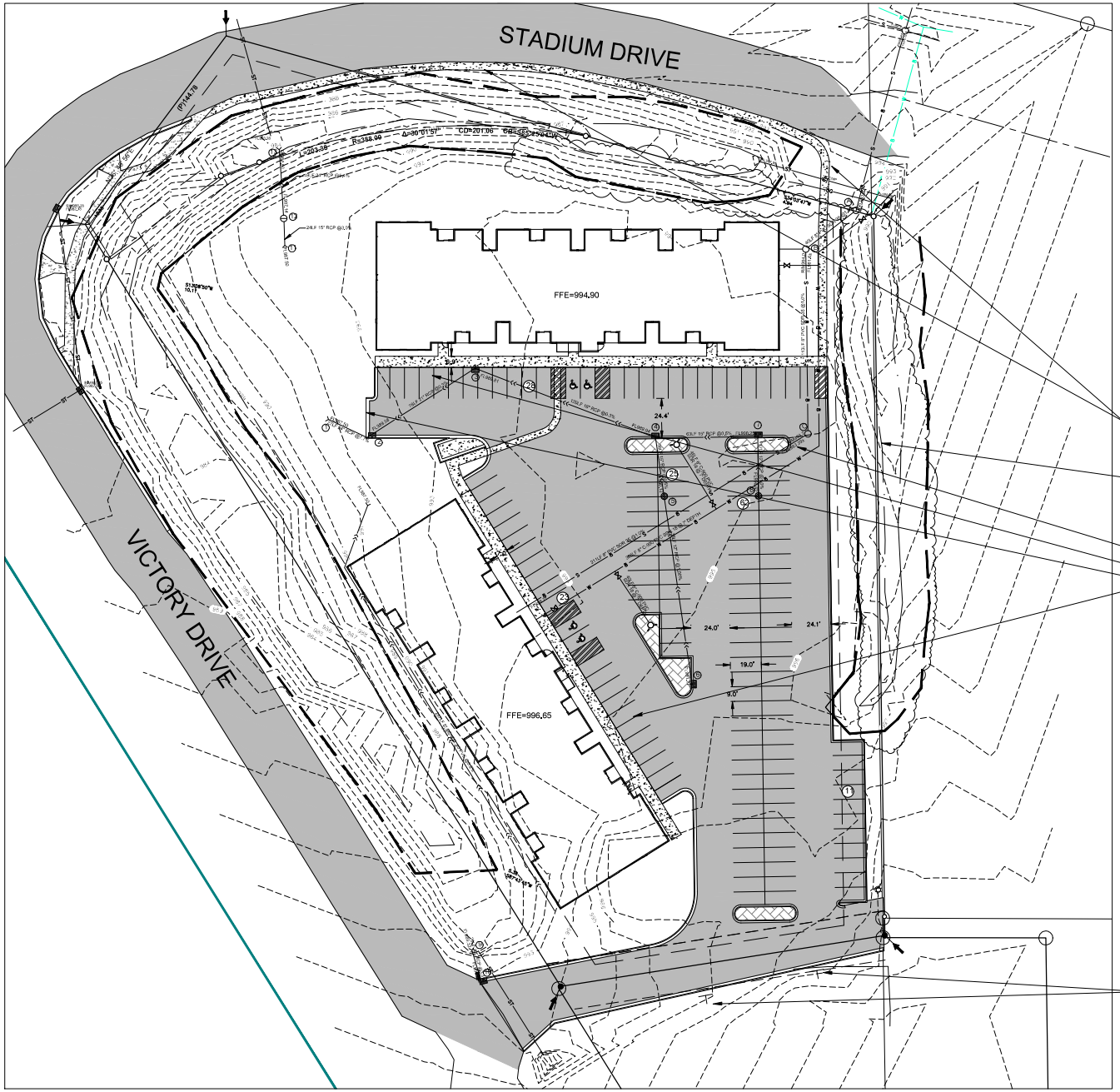
Land Use	ITE Land Use Code	Size	Trips Generated:				
			AM Peak		PM Peak		Weekday
			Enter	Exit	Enter	Exit	ADT
Multifamily Housing (Low-Rise)	220	72 units	7	22	23	14	485
Totals			**7**	**22**	**23**	**14**	**485**
			29		**37**		

The Proposed Project is estimated to generate the following:

- 29 new trips (7 entering and 22 exiting) during the morning traffic peak hour,
- 37 new trips (23 entering and 14 exiting) during the evening traffic peak hour, and
- 485 daily trips.

The anticipated travel patterns for residents of the Proposed Project are approximately 85% to/from the north and 15% to/from the South on S Victory Dr. The number of vehicle trips generated by the Proposed Project is low, approximately one new vehicle trip every two minutes during the peak hours, and impacts to existing traffic operations are anticipated to be minimal. Additionally, turning volumes at the access point do not warrant turn lanes per industry references (AASHTO and NCHRP Reports).

[1] ***Trip Generation Manual***, Institute of Transportation Engineers (ITE), 11th Edition



JONES HAUGH SMITH
ENGINEERING | SURVEYING
515 South Washington Ave. Albert Lea, MN 507-373-4876

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.

Scott J. Johnson
Reg. No. 42744
Date: 9/30/25

Consultant

Project
MANKATO APARTMENTS

Revision

No.	Date 9/30/2025
Drawn bjj	Checked
Project Manager	
Project Status CD	

Sheet Title
HARDSCAPE PLAN

Sheet No.
C3

10/14/2025

REAR ELEVATION
scale 1:50

FRONT ELEVATION
scale 1:50

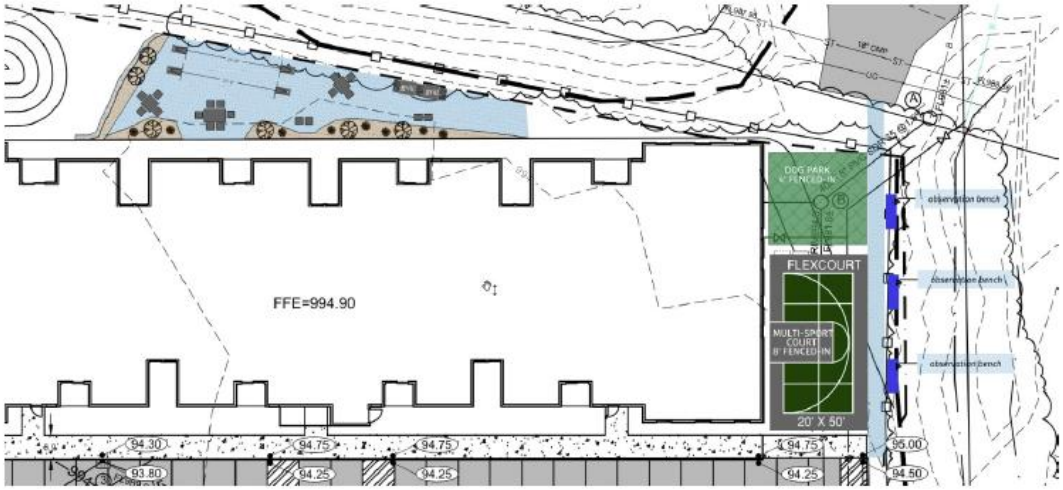
APX CONSTRUCTION GROUP

THIS DOCUMENT IS THE PROPERTY OF APX CONSTRUCTION GROUP AND MAY NOT BE USED, COPIED OR DUPLICATED IN ANY WAY WITHOUT WRITTEN CONSENT. DISCLAIMER: Project is Design-Build due to the lack of on-site consultation & supervision, and control over the actual construction process, and because of the various local building code requirements and weather conditions. The Drafter/Designer/Architect assumes no responsibility in the use of these plans for any damages. This includes structural failures due to any deficiencies omissions, or errors in the design or blueprints. It is recommended :hat you consult with a local building official and/or inspector prior to the start of the construction. General Contractor shall verify all existing dimensions and field conditions prior to ordering or fabricating ary materials. Sizes and dimensions can differ from what is shown on documents. Cross reference plans with all other consultant's sets. All construction shall be installed in accordance with the manufacturer's current specifications and industry standards. All construction components shall meet adopted code requirements.

FRONT & REAR ELEVATIONS	2025.09.23
901 S. VICTORY DRIVE	5

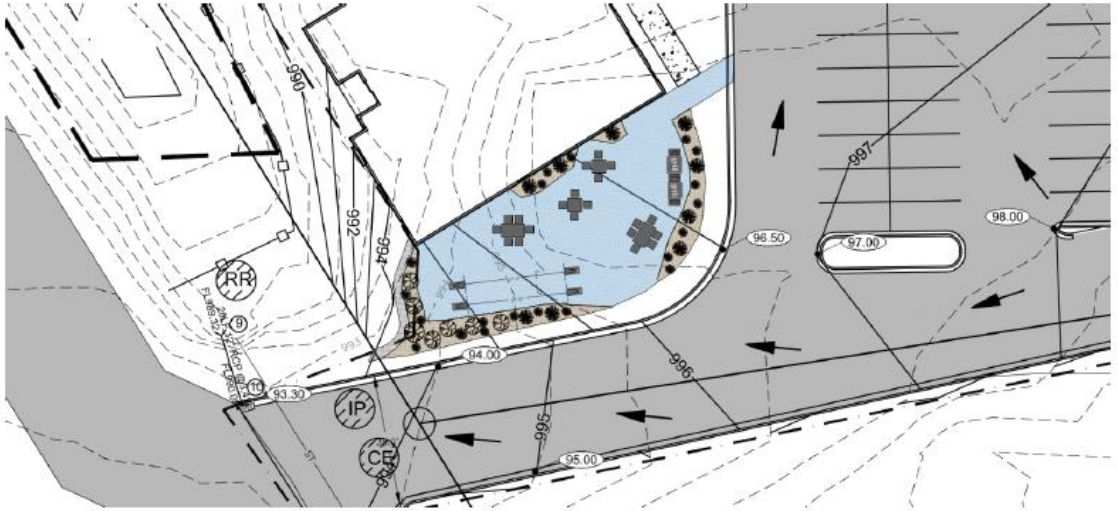
APX CONSTRUCTION GROUP

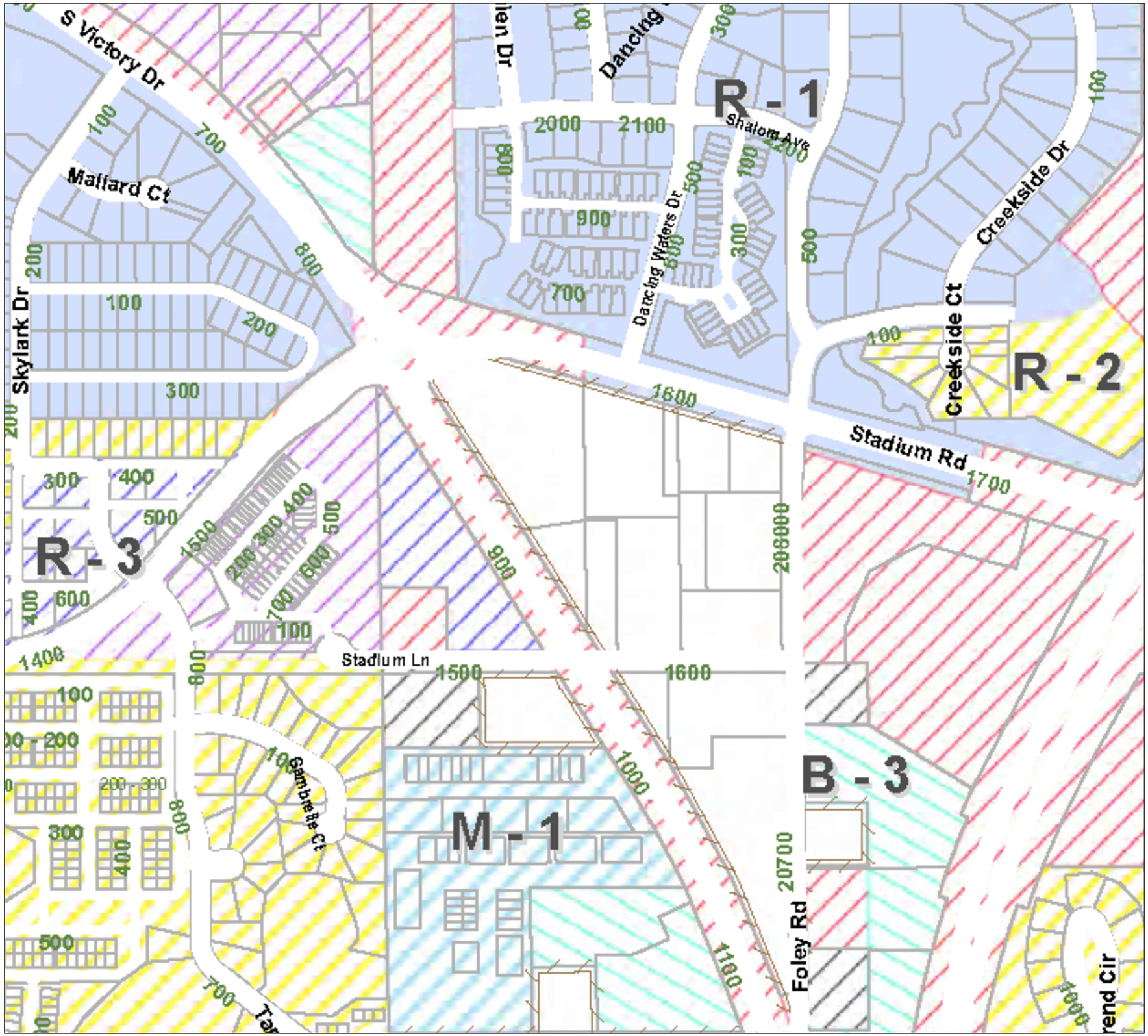
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NORTH SIDE AMENITIES
- OUTDOOR SEATING
- GAME AREA (ie. BAG TOSS)
- EXTERIOR GRILLS
- LANDSCAPING

NORTH EAST AMENITIES
- WALK PATH TO COMMON CORRIDOR (POTENTIAL NEW BUS STOP)
- FENCED-IN DOG PARK
- FENCED-IN MULTI-SPORT FLEX COURT (BBALL, VBAL, PICKLEBALL ETC)
- OBSERVATION BENCHES





ZONING

- T TRANSITION DISTRICT
- R-1 ONE-FAMILY DWELLING
- R-2 ONE & TWO FAMILY DWELLING
- R-3 LIMITED MULTIPLE DWELLING
- R-4 MULTIPLE DWELLING
- R-T RESIDENTIAL TRANSITION
- OR OFFICE RESIDENTIAL / O OFFICE
- CBD-C CENTRAL BUSINESS DISTRICT CORE
- CBD-F CENTRAL BUSINESS DISTRICT FRINGE
- B-1 COMMUNITY BUSINESS DISTRICT
- B-2 GENERAL BUISNESS DISTRICT
- B-3 HIGHWAY BUSINESS DISTRICT
- PI PLANNED INDUSTRIAL
- M-1 LIGHT INDUSTRIAL
- M-2 HEAVY INDUSTRIAL
- IO INSTITUTIONAL OVERLAY

N

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the State of Minnesota.

Brian J. Johnson
Reg. No. 42744
Date: 6/30/25

JONES HAUGH SMITH
Engineers • Surveyors
515 South Washington Ave. Albert Lea, MN 507-373-4876

Consultant

Project:

CURRENT ZONING

Revision:

No.: 25-188	Date: 10/10/2025
Drawn: bjj	Checked:

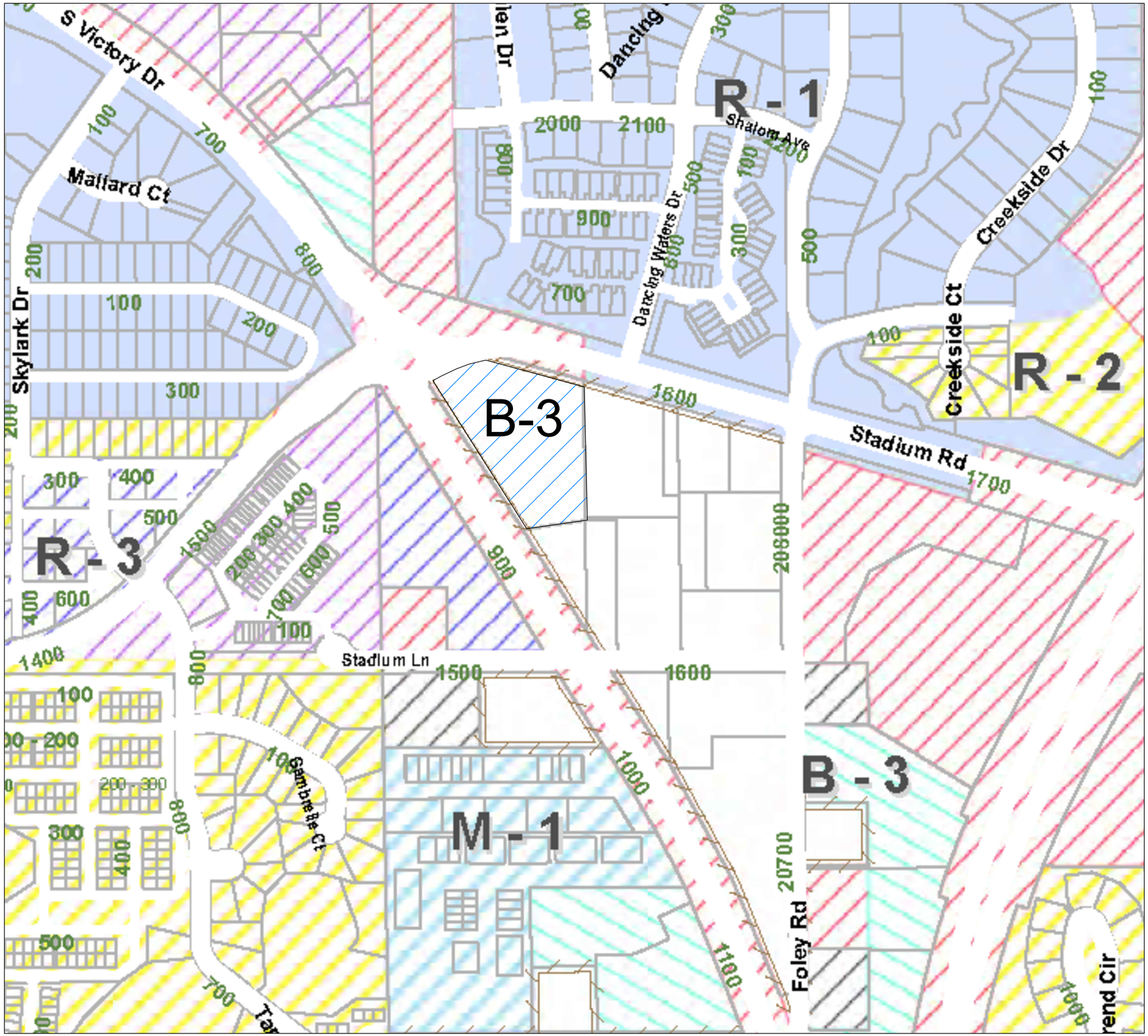
Project Manager:

Project Status: CD

Sheet Title:

Sheet No.:

C1



ZONING

- T TRANSITION DISTRICT
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- R-2 ONE & TWO FAMILY DWELLING
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N

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the State of Minnesota.

Brian J. Johnson
Reg. No. 42744
Date: 6/30/25

JONES HAUGH SMITH
Engineers • Surveyors
515 South Washington Ave. Albert Lea, MN 507-373-4876

Consultant

Project:
PROPOSED ZONING

Revision:

No.: 25-188 | Date: 10/10/2025
Drawn: bjj | Checked:
Project Manager:
Project Status: CD
Sheet Title:

Sheet No.:
C1

CONSTRUCTION GROUP

October 15, 2025

Planning Department
City of Mankato
Intergovernmental Center
10 Civic Center Plaza
Mankato, MN 56001

RE: Plan Review Response Letter for **PRELIMINARY PLAT, ANNEXATION** and **REZONING** request for **901 South Victory Drive in Mankato**

To Whom It May Concern,

I am writing on behalf of the owners of Victory Mankato, LLC, who own the subject property and are requesting Preliminary Plat, Annexation and Rezoning approval.

The subject property address is defined as 901 South Victory Drive and is located in the SE ¼ of the NW ¼ of Section 21, Township T 108 N., Range R 26 W, Mankato, Blue Earth County, Minnesota. This property is in the process of being platted by Jones, Haugh & Smith and this process will be completed by September 30th, 2025.

Below are the developer's responses to the questions and concerns provided by the City of Mankato's plan review members.

A. General note: the items being reviewed during this review cycle are the preliminary plat, annexation and rezoning. Future reviews shall include, but are not limited to, final plat, conditional use permit, and certificate of design compliance.

   A submission was made on Tuesday, October 14th, to the City website for a request for Final Plat, Conditional Use Permit and Certificate of Design Compliance.

B. Applicant shall submit rezoning maps which illustrate the current zoning and the proposed rezoning.

Rezoning maps are included in the attached document package.

C. Applicant shall provide an aerial imagery background on the proposed preliminary plat. Example can be found here.

The subject property map overlain on an aerial image has been included in the attached document package.

D. Applicant shall submit an updated preliminary plat that clearly represents the proposed property lines. In particular on the northern side of the property near the roundabout area. The adjacent platted areas should be represented on the plats, as should the adjacent roadways.

Please see the updated preliminary plat and draft final plat.

E. Are the standard easements included with the plat? Standard easements shall be provided with the plat. Easements at least 20 feet wide centered on exterior lot lines and ten feet wide centered on interior lot lines, shall be provided for utilities, where necessary. Easements shall have continuity of alignment from block to block and at deflection points.

A 10' easement, in addition to the 16.5' wetland easement has been added to the north, south and east sides of the plat. There is not room on the west side due to the building location. Since this is a one-lot plat, lot line easement should be of less significance.

F. The applicant shall submit a legally recorded or other legal document which represents the proposed cross access area along with the proposed improvements to that area, if any. Written approval from the adjacent property owners should be provided showing their consent to the current configuration(s) or legal documentation authorizing said configuration/updates should be provided.

The cross areas access documents are included in this submittal package.

G. The access approach from Stadium Road shall be removed in its entirety, and plans shall be updated to accurately reflect.

The access approach on the north side of the site at Stadium Road has been removed on the civil plan included in the document package.

H. The applicant will be required to make a payment in lieu of parkland dedication fee prior to affixing the signatures to the final plat. The fee will be based on the number of units in the development. How many units are proposed?

There are 72 living units proposed (36 in each building). We are aware of the parkland dedication fee required by the City of Mankato.

I. Specifics of the proposed recreational amenities will be required at the time of submission for a conditional use permit. This will include detailed plans of each of the areas, and exact specifics, sizes, plans, renderings, and details on each of the amenity areas.

Recreational amenity details have been included in the document package.

J. Applicant shall provide a snow removal plan with the request for a conditional use permit.

A temporary snow removal area has been defined on the east side of the parking lot. The developer will be hauling the balance of the snow off-site with a commercial snow removal service.

K. The required items for a preliminary plat shall include all those platted/unplatted areas within 100' and "Location and names of existing or platted streets or other and section and corporate lines within the tract and to a distance of 100 feet beyond the tract." Detail should be provided on the areas to the northwest and the south of this parcel.

Please see the updated preliminary plat and draft final plat.

L. The preliminary plat (per code) should include: Names and addresses of the owner and subdivider control of the lands included in the preliminary plat, the designer of the plat and the surveyor. Who was the surveyor of said plat and where is their certification/signature upon said plat?

The surveyor of record and the names and addresses of the Owners have been added to the preliminary plat.

M. Prior to the submission for a conditional use permit for the grouped housing on the subject site, a request for a wetland No-Loss shall be submitted which verifies that the proposed development will not have an impact on the adjacent, delineated wetlands. The shall be submitted for review and approval and depending on whether the property has been annexed may need to be reviewed by the City's LGU after annexation.

A wetland No-Loss document is attached to this submittal package and has been signed by the Owner.

N. Provide a separate concept plan that includes the development window/development, along with the required setbacks for said proposed zoning district.

See civil site plans which represents the proposed building structures in relation to the property lines and setbacks.

O. Traffic Report
   a. Specify removal of existing driveway connection between the site and Stadium Road in the NE corner of the property, match existing in-slope, backslope, ditch section, and establish turf.

      The attached civil plans denote the removal of said existing driveway.

   b. Provide sidewalk connections from both buildings to existing roundabout sidewalk as depicted.

      A new concrete sidewalk has been designed to be the pedestrian connection to the exiting sidewalk system near the round-a-bout. There is not enough space along Victory drive to install a sidewalk section as the wetland and its 16.5 foot buffer space takes up the entire right of way along this route. We have included

a sidewalk from the south building that will run to the north, through the parking lot, and we will provide signage to direct pedestrians to this route.

c. Include additional R3-2 (left turn prohibited) signage opposite each lot drive isle to discourage cut-through traffic on adjacent property.

This has been added to the civil plans.

P. Drainage Report

a. The rainfall data is inaccurate. Per the Mankato Grading Manual, the modeling should be completed using MSE 3, 24-hr distribution referencing the NOAA Atlas 14, Volume 8, current version.

Rainfall data has been changed to MSE3.

b. A drainage overview map needs to be provided for existing and proposed scenarios for adequate review

Watershed boundaries have been shown on the civil plans. Existing and Proposed are essentially the same.

c. Proposed watershed utilizes soil group A grass cover, which is not reflective of soil information provided by report or USDA (C or D, primarily)

This has been changed to HSG D.

d. Discharge to the wetland east of Victory drive adjacent to the complex entrance needs to be analyzed in pre and post construction conditions
Pre versus Post runoff rates are listed on the plans and in the drainage report.

e. Is all rooftop drainage routed through the storm sewer?

Roof drainage will be directed to the storm sewer or directly to the pond. Underdrain piping will be added where required.

f. Emergency Overflow is not modeled and per the Grading Manual, the 100-yr HWL should be 2' lower than the top of basin elevation, and 1.5' lower than the EOF.

This detail has been added to the civil documents.

Q. Plan

a. Is 1.1 inches over new impervious being provided for treatment or 1 inch? Unclear between plans, calculator, and report

See updated drainage report.

b. Why a wet pond vs filtration?

It is easier to achieve pre versus post runoff rates with a wet pond due to the additional dry storage.

c. There is no clear secondary outlet. Typically, an outlet control structure utilizes a pond skimmer grate as a secondary inlet during high flow events.

A secondary grate outlet and detail have been added to the civil plans.

d. The dead pool storage (NWL and below) must provide 1800 cf per acre that drains to the basin.

Acknowledged and provided.

e. There must be a safety bench or other safety measures provided if the facility is to remain a wet pond. There is significant risk to roadway/parking lot users, as well as pedestrians without the inclusion of a bench and possibly a fence.

Jones, Haug & Smith has included a safety bench around the perimeter of the pond to also act as a maintenance area for the basin.

f. Need to account for maintenance access

A curb cut access has been added on the east side of the pond.

g. Turf Establishment?
Turf Establishment is called out in the SWPPP legend.

R. Other

a. Applicant shall confirm wetland delineation and limits on the proposed plan to confirm avoidance or impacts.

We have confirmed that the wetland delineation with Blue Earth County and have we represented this limits on the attached documents.

b. Confirm existing easements and right of way along S Victory Dr and Stadium Road. The preliminary plat as submitted is hard to read and applicant shall submit a clearer exhibit of the existing right of way and easements located on the property.

Please see updated preliminary and final plat document.

c. Applicant shall be responsible for verifying the existence, location and elevation of the sanitary sewer, water and storm sewer stubbed into the site.

Acknowledged by the Applicant.

Below are responses to the comments offered by the planning staff on Tuesday, October 14th.

A. Applicant shall be aware that the nearest bus stop is at Stadium Road which would be ¼ mile away from the proposed development. A pedestrian connection will be necessary for the multi-family grouped housing project.

We are aware that the nearest bus stop is ¼ mile away from the development. A new concrete sidewalk has been designed to be the pedestrian connection to the exiting sidewalk system near the round-a-bout. There is not enough space along Victory drive to install a sidewalk section as the wetland and its 16.5 foot buffer space takes up the entire right of way along this route. We have included a sidewalk from the south building that will run to the north and we will provide signage to direct pedestrians to this route.

B. Applicant shall provide a hydrant coverage map.

A hydrant coverage map has been included in the Utility Plan which can be found in the document package.

C. Applicant shall be aware that the address of 901 Stadium Road will be retired at the time of annexation. Applicant shall be aware that the northern building will have a 905 Stadium Road address and the southern building will have a 909 Stadium Road address.

We are aware that the addresses of the proposed building will be changed to the numbers noted above.

D. Provide an accurate legal description of the property.

An accurate legal description of the property has been included on the plat map that is part of the document package for this response.

E. Provide an annexation petition from all property owners involved with Growth Holdings, LLC.

An annexation petition has been included and both owner of the property, Ryan Evenson and Kyle Smith, have signed said petition.

Below are responses to the comments offered by the planning staff on Wednesday, October 15th.

A. The applicant shall be aware the property has a deferred assessment levied against it.

We are aware that the subject property has a deferred assessment levied against it.

B. The applicant shall submit a revised traffic report based on previously provided pre-site plan review comments.

We are not aware of any request for changes in this traffic report. Please let us know what you are requesting in this topic.

C. The applicant shall submit a revised drainage report based on previously provided pre-site plan review comments.

We have included a revised drainage report based upon previously provided site plan review comments.

D. The applicant shall submit updated plans based on previously provided pre-site plan review comments.

The document package includes updates based upon previous, pre-site plan review comments.

E. The applicant shall revise the stormwater basin design to provide a maintenance area between the top of basin grading and adjacent buildings.

Jones, Haug & Smith has included a safety bench around the perimeter of the pond to also act as a maintenance area for the basin.

F. The applicant shall review site grading to ensure the FFE(s), and basin grading provides sufficient freeboard above the 100-year storm.

Jones, Haug & Smith has reviewed the site grading plan and confirmed that the basin provides sufficient freeboard above the 100-yr storm event.

We appreciate your diligent review of this project and welcome further questions or comments as we proceed through this process.

Sincerely,



Shawn R. Meschke, P.E.
Senior Project Manager
APX Construction Group

Meeting Date: 10/22/2025

Title

CY54-25

Request of Ryan Evenson, with permission of the property owner, for a conditional use permit to allow an indoor playground and sport center in the B-3, Highway Business, zoning district, and for a certificate of design compliance for the construction of a new structure in the Highway Gateway Overlay District. The subject property is described as Lot 5, Block 2, Venstar Subdivision (1740 Premier Drive).

The anticipated date of Council action is November 10, 2025.

Applicant

The applicant is Ryan Evenson with APX Construction, on behalf of the business owner of Endless Adventures.

Request

The applicant is seeking a conditional use permit to allow the operation of an indoor playground and sports courts facility in the B-3, Highway Commercial, zoning district.

A Certificate of Design Compliance is also being requested since the property is located in the highway overlay district.

Location

The property is located at 1740 Premier Dr, and consists of 4.83 acres and has been platted as Lot 5, Block 2 of Venstar Subdivision, Mankato, Blue Earth County, Minnesota.

Existing Land Use

The current existing land use is commercial, in the B-3 Highway Gateway District.

Zoning

The property is currently zoned B-3.

Environmentally Sensitive Areas

There are no known environmentally sensitive areas.

Public Utilities

The property is currently served by public utilities.

City Code

The City Code pertaining to the B-3, Highway Business District may be viewed at the link below:

https://library.municode.com/mn/mankato/codes/code_of_ordinances?nodeId=PTIICOOR_CH10LAUSDE_ARTVCODI_DIV8HIBUDI

The City Code pertaining to the Highway Gateway Overlay District may be viewed at the link below:

https://library.municode.com/mn/mankato/codes/code_of_ordinances?nodeId=PTIICOOR_CH10LAUSDE_ARTVCODI_DIV9GTGAOVDI_SDIVHGHIGAOVDI

Site Plan Review Comments

The Site Plan and Traffic Review Committee met on October 14th, 2025 and submitted the following comments:

A. Provide pre- and post-construction site storm discharge rates, as well as a drainage area map.
B. Structure No. 4 shall have a permanent sediment control to control grass/sediment discharge directly into the storm sewer.
C. Provide a Traffic Impact Analysis for the site to include the following intersections:
    a. Site Access
    b. Premier Dr/Augusta Dr
    c. Premier Dr/N Victory Dr.
D. Trip generation should be based on the current version of the ITE Trip Generation Manual. The study should include AM and PM peak periods of adjacent roadway as well as any off-peak time when site generation is anticipated to be particularly high. Non-ITE trip generation sources need to be approved by the City.
E. Revise the site plan to provide a single full-access driveway for the site. (note: when possible, the city strives to align proposed driveways opposite existing driveways)
F. Add sidewalk detail for restoration of the sidewalk within city right of way.
G. There appears to be a lot of unused space within the property. Is there a future expansion concept or plan?
H. The applicant shall be responsible for verifying the existence, location and elevation of the sanitary sewer, water and storm sewer stubbed into the site.
I. City standard parking stalls are 9’ x 19’.
J. The applicant shall provide the property owner authorization authorizing the submission of the conditional use permit.
K. The plans as submitted must be updated to accurately reflect the submission. As has been submitted, there is no variance request or land use amendment included with this submission. Update accordingly, including the narrative etc. which states the accurate request (conditional use permit and certificate of design).
L. The applicant shall provide the second-floor plan for the proposed development.
M. The applicant shall provide a parking analysis for the development.
N. The applicant shall provide a bus queue/dropping area or a narrative on how loading and unloading will work on the site.
O. The applicant shall be aware of the proximity to fire station No. 2 where regular siren and truck checks take place.
P. The applicant shall provide a hydrant coverage map.
Q. The applicant shall verify compliance with a construction storm water permit.
R. Applicant shall be aware that currently no bus route runs down Premier Dr. The applicant shall also be aware that this location will be added to the summer Kato Go Play schedule. There are no other extensions of the regular bus routes currently.
S. The applicant shall provide a storm water management plan in accordance with City Standards and MS4 permit required due to the new impervious area measuring one or more acres.
T. The applicant shall submit a revised traffic report based on previously provided pre-site plan review comments.
U. The applicant shall submit updated plans based on previously provided pre-site plan review comments.

Review

The applicant, Ryan Evenson, with APX Construction, is seeking a Conditional Use Permit as well as a Certificate of Design Compliance to allow for the operation of an indoor playground and sports courts facility in the B-3, Highway Commercial and Overlay zoning district.

Conditional Use Permit:
The business, Endless Adventures, intends to operate an indoor playground for children ages 0–15. The proposed hours of operation are 9:00 a.m. to 8:00 p.m, 7 days per week. Memberships can be purchased or customers can pay hourly for the use of the space.

The property is located at 1740 Premier Drive, between Augusta Dr and North Victory Dr. The building is approximately 20,000 square feet and floor plans show proposed indoor playground equipment, a basketball court, a soccer field, separate playroom for infants and toddlers, as well as two rentable party rooms. There is a second floor mezzanine area with a future conference room space.

The site provides a large parking area that also accommodates bus loading and unloading. The site is required to have parking to accommodate 43 stalls; 79 stalls have been provided. A berm is being installed to buffer the property from the adjacent residential neighborhood, as well as a 6-foot fence to the west and north. Landscaping is planned around the property to additionally screen the parking lot and berm.

The applicant is continuing to work with City Staff to determine the appropriate methods for storm water management for the site that conform to the MS4 requirements..

Certificate of Design Compliance:
The proposed exterior elevations show the building to have a brick and metal-paneled facade. The proposed materials are currently selected to be earth tones of white, grey, and brown with an accent of a smokey blue. The storefronts and windows will be black. All metal panels will have hidden fasteners and will give the appearance of horizontal and vertical siding.

Findings

Staff respectfully submits the following findings:

1. The request is in keeping with the comprehensive planning policies of the City as the underlying land use plan identifies this parcel as "commercial."
2. The proposal does not interfere with or diminish the use of property in the immediate vicinity.
3. The proposal is currently served by public facilities and services and will continue to be.
4. The proposal does not cause undue traffic congestion as the submission conforms to Mankato City Code criteria for off-street parking and driving areas. It was determined that no additional turn lanes are warranted at the proposed site driveway location. Additional intersection analysis is being completed at Augusta Drive and N. Victory Drive. The applicant will conintue to work with City Staff.
5. There are no known historical or architectural resources on the site.
6. There are no known natural or environmental features on the site.
7. It will not cause a negative cumulative effect and effect on the City as a whole.
8. The proposal will not jeopardize the public's health, safety, or general welfare.
9. The property is located in the Highway Gateway Overlay District and the proposed value of the project exceeds $500,000, which, by Mankato City Code Chapter 10, requires a review of the Planning Commission and City Council.
10. The building elevations conform to the guidelines of the Highway Gateway Overlay District. The proposed addition has exterior finishes including brick and metal. All sides of the building visible to the public will be treated consistently with quality materials and finishes.

Recommendation

Staff recommends approval of the requested Conditional Use Permit and Certificate of Design Compliance with the following conditions:

1. The exterior finishes as shown and approved by the City Council shall be implemented. No corrugated metal or exposed fasteners shall be allowed.
2. A plan conforming to MS4 requirements per the City of Mankato will need to be submitted at the time of building permit submission. If it is determined that a storm water facility is needed to accommodate onsite stormwater, the applicant will be required to conform to the standards.
3. A final traffic memo should be submitted to reflect the analysis of the adjacent intersections at the time of building permit submittal.
4. At the time of building permit submission for the proposed expansion, the applicant shall provide a photometric plan and light fixture cut sheets in accordance with City Code Chapter 10.
5. There shall be no outside storage of materials.
6. All mechanical equipment shall be screened from the street and the adjacent residential properties.
7. Dumpsters shall be screened according to City Code Chapter 10.
8. A snow storage and removal plan shall be provided at the time of building permit submittal.
9. A bike rack shall be provided.
10. Prior to fabrication or installation of any signage, a sign permit shall be required. All signage shall achieve the sign standards in City Code Chapter 10.

Attachments

General Location Map

Aerial Plan

Site Plan

Floor Plan

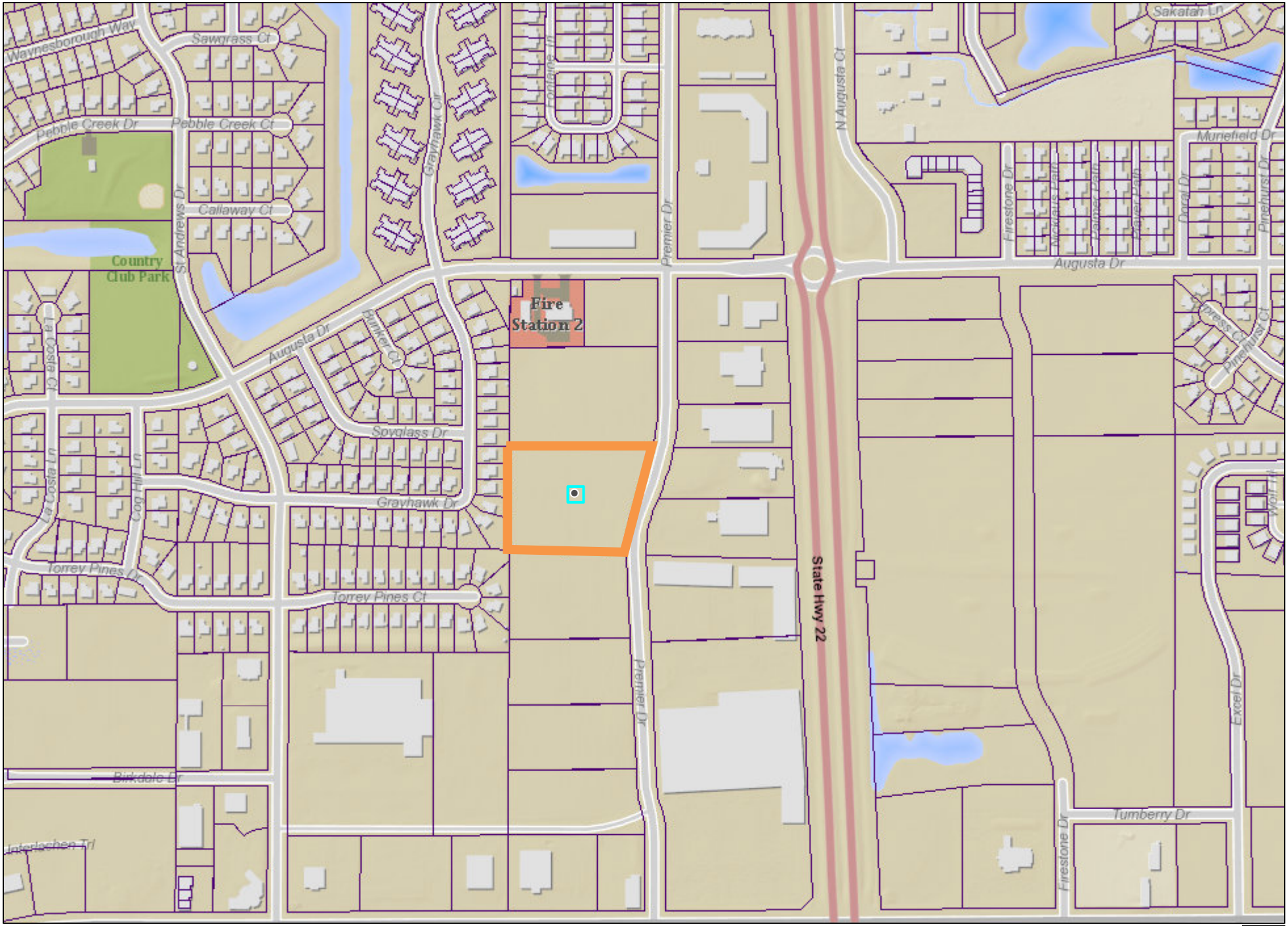
Rendering

Traffic Study

Architectural Plans

Civil Plan

General Location Map



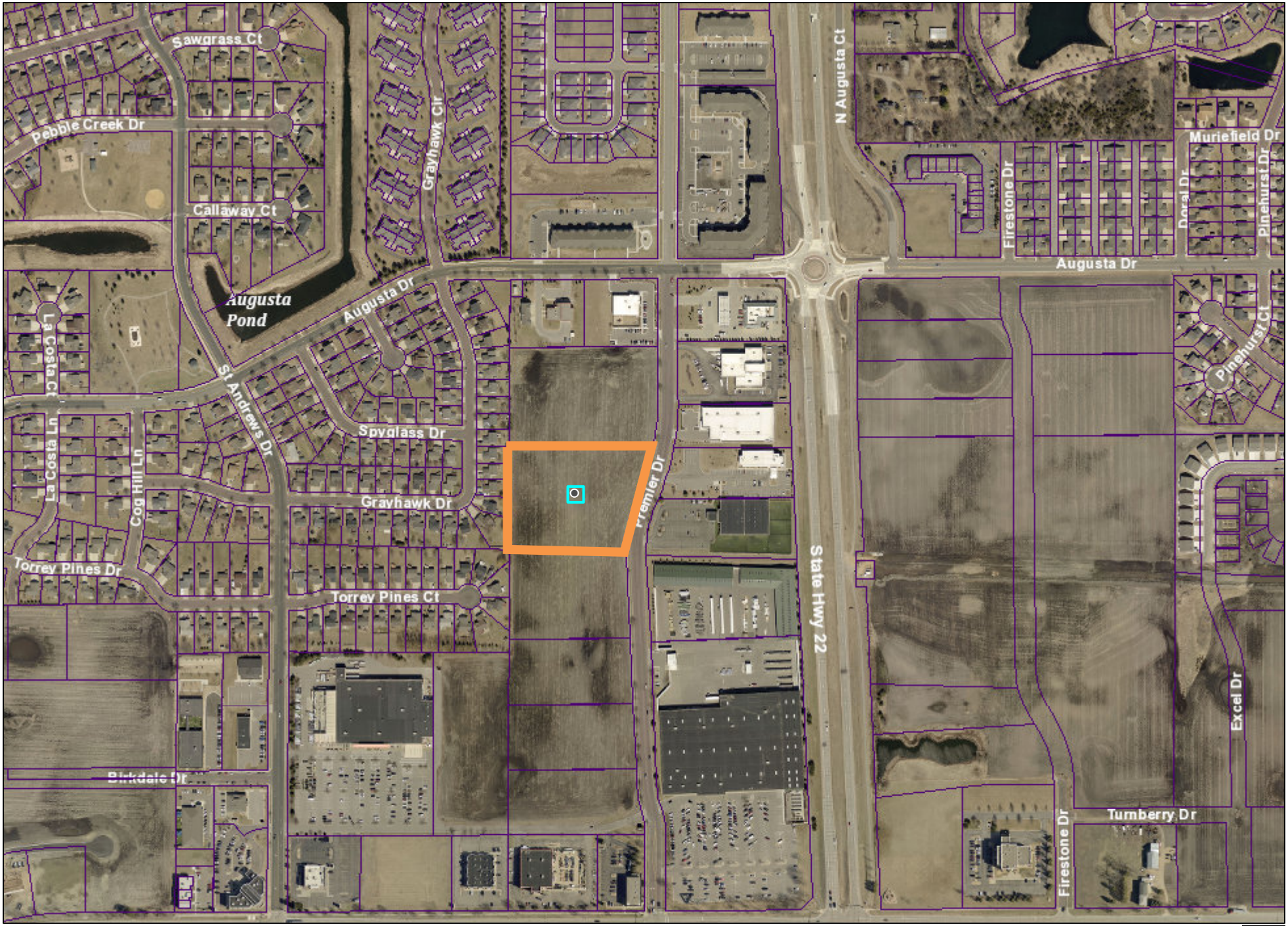
Date: September 2025

Author:

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N

Aerial Map

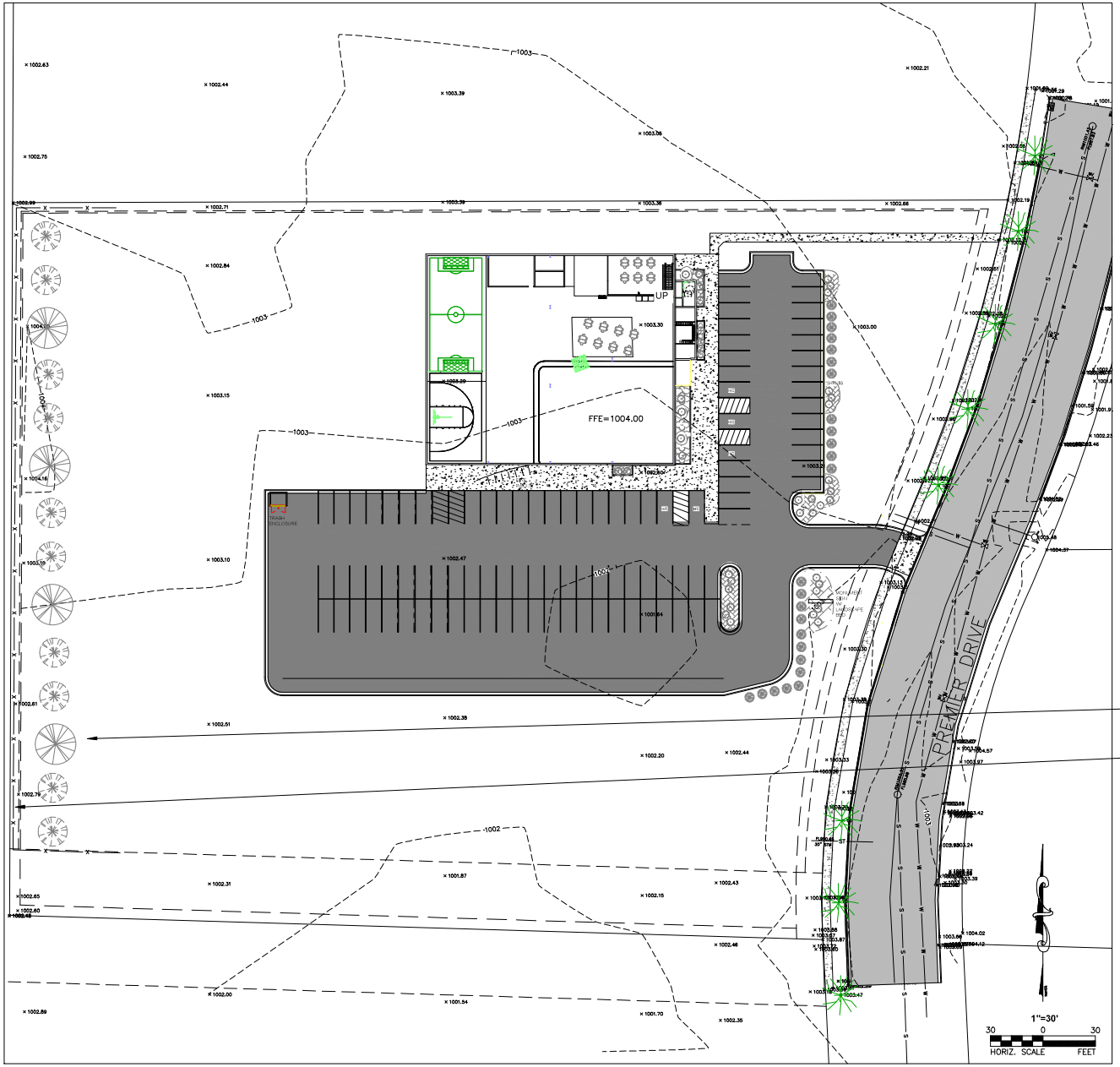


Date: September 2025

Author:

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N



LANDSCAPING NOTES

B-3 COMMERCIAL DISTRICT
SUBD.3. HIGHWAY GATEWAY OVERLAY DISTRICT

Sec. 10-1740 PERIMETER OFF STREET PARKING LOT
(1) SHADE TREE/ 50 LF OF FRONTAGE
(1) EVERGREEN TREE/ 25 LF OF FRONTAGE
80% OPAQUE ALONG ALL PARKING FRONTING STREET

PLANTING BEDS SHALL BE MULCHED WITH BARK CHIPS, ROCK MULCH, FEATHER ROCKS OR SIMILAR MATERIAL.

PERIMETER LANDSCAPING & TRANSITIONAL YARDS SHALL CONSIST OF A COMBINATION OF GROUND COVER, SHADE TREES OR EVERGREEN TREES, SHRUBS AND APPROPRIATE SCREENING DEVICES SUCH AS DECORATIVE WALLS, FENCES OR BERMS.

LANDSCAPING LEGEND

=DENOTES SHADE TREE

=EVERGREEN TREE

=DENOTES SHRUB/FLOWER

=DENOTES ARBOVITAE HEDGE (4' MIN. – 8' MAX)
(80% OPAQUE ALONG ALL PARKING FRONTING PREMIER DR.)

=DENOTES EXISTING BOULEVARD TREE

=DENOTES PLANTING BED W/ MULCH

=DENOTES 6' HIGH VINYL FENCE

WEST 20' OF SITE TO BE TRANSITIONAL YARD LANDSCAPING (ABUTS RESIDENTIAL)

F&I 500LF 6' HIGH VINYL FENCING

PLANT LIST

SYMBOL	QTY	COMMON/SPECIES NAME	ROOT	SPAC.
TREES				
QB	4	JAPANESE TREE LILAC SYRINGA RETICULATA	1.5" B.B.	6' O.C.
	6	EXISTING BOULEVARD TREE	N/A	N/A
	10	BLACK SPRUCE PICEA MARIANA	B.B. 6' TALL	25' O.C.
SHRUBS				
AM	25	EMERALD GREEN ARBORVITAE THUJA OCCIDENTALIS	#2 CONT.	3' O.C.
FLOWERS				
HS	32	STELLA DE ORO DAYLILLY/ HEMEROCALLIS 'STELLA DE ORO'	#2 CONT.	2.0' O.C.

JONES HAUGH SMITH
Engineers • Surveyors
515 South Washington Ave. Albert Lea, MN 507-373-4876

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.

Brian J. Johnson
Reg. No. 42744
Date: 10/4/25

Consultant

Project:
ENDLESS ADVENTURES

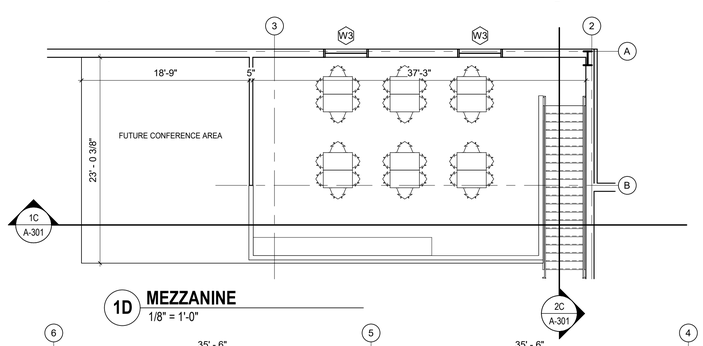
Revision:

No.	Date: 10/4/25
Drawn: bjj	Checked:
Project Manager:	
Project Status: CD	

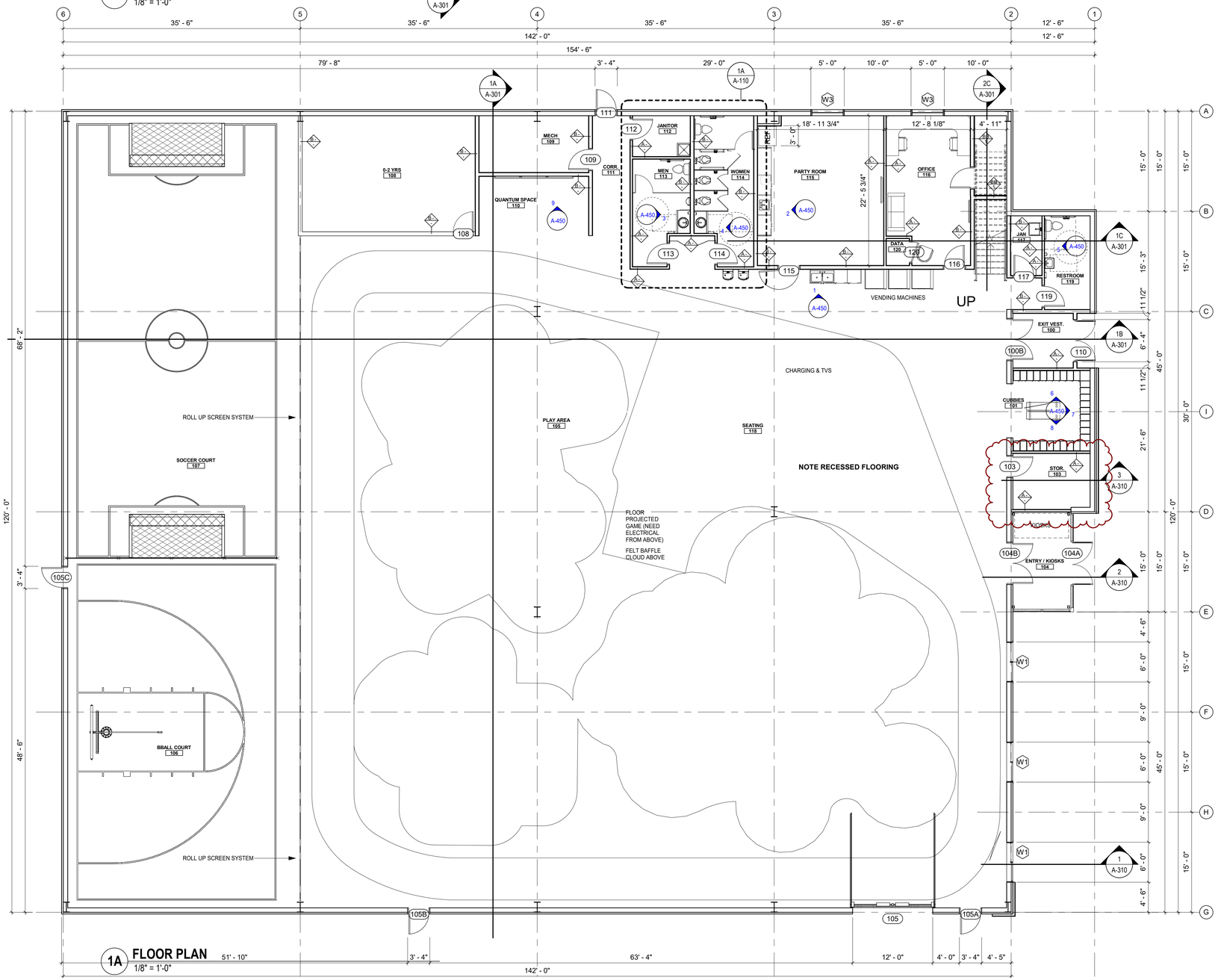
Sheet Title:
LANDSCAPE PLAN

Sheet No.:
C4

Full size = 24x36; Half size = 12x18



1D MEZZANINE
1/8" = 1'-0"



1A FLOOR PLAN
1/8" = 1'-0"

PLAN NOTES

GENERAL FLOOR PLAN NOTES

A. INTERIOR & EXTERIOR DIMENSIONS ARE TO FACE OF STUD, U.N.O.
B. SEE SHEET A-601 FOR WALL TYPE LEGEND
C. SEE SHEET --- FOR DOOR SCHEDULE

PLAN TRUE

CREATE
26560 N Shore Pl
Hartford, SD 57033
Wall Lake Township
phone: 605.695.1899

www.create-designdevelop.com

REVISION SCHEDULE

NO.	DESCRIPTION	DATE
1	Revision 1	Date 1

MANKATO, MN
ENDLESS ADVENTURES

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 Architect under the laws of the State of South Dakota.

PRELIMINARY
NOT FOR CONSTRUCTION

PROJECT NO.:	2555
ISSUE DATE:	9/23/2025
DESIGNED BY:	AT
DRAWN BY:	JO
CHECKED BY:	JO

SHEET
A-101
FLOOR PLAN

50% DD

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10/14/2025 7:51:12 AM



CREATE

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COLOR OF FINISH MAY NOT BE REPRESENTED EXACTLY LIKE PHYSICAL SAMPLE



EXTERIOR WALL (MP-1)

Material Type: METAL PANEL MAIN
Mfr: METALLIC BLDG. SYSTEMS
Texture: FW-120 OR PBR
Color: CHARCOAL



EXTERIOR WALL (MP-2)

Material Type: METAL PANEL FEATURE
Mfr: METALLIC BLDG. SYSTEMS
Texture: PBD
Color: HAWAIIAN BLUE



RETURN ACCENTS (MP-3)

Material Type: METAL PANEL
Mfr: METALLIC BLDG. SYSTEMS
Texture: SMOOTH PDVF
Color: COPPER METALLIC



BRICK/STONE ACCENT

Material Type: THIN BRICK
Mfr: BELDEN
Texture: VELOUR
Color: ALASKA WHITE OR SIM.



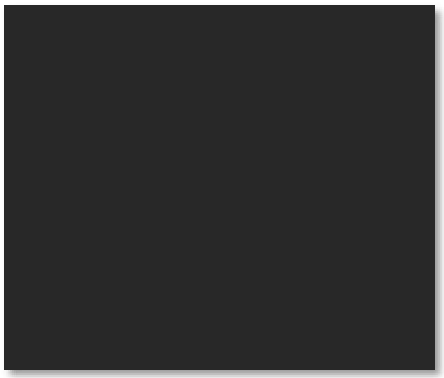
FW-120



PBR

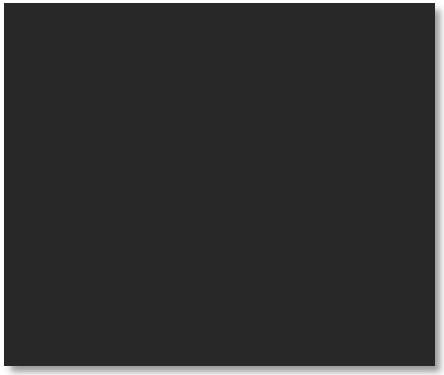


PBD



STOREFRONT / WINDOWS

Material Type: METAL
Mfr: KAWNEER OR SIM
Color: MATTE BLACK



BUILDING CAP / TRIM

Material Type: METAL
Mfr: TBD
Color: MATTE BLACK

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BOLTON & MENK
Real People. Real Solutions.

1960 Premier Drive
Mankato, MN 56001-5900

Ph: (507) 625-4171
Fax: (507) 625-4177
Bolton-Menk.com

September 26, 2025

Molly Westman
City of Mankato
10 Civic Center Plaza
Mankato, MN 56001
(507) 720-2559
mwestman@mankatomn.gov

Reference: Endless Adventures
Mankato, Minnesota

Subject: Traffic Memorandum

Dear Ms. Westman:

The following is a Traffic Memorandum for the proposed Endless Adventures development to be located along Premier Drive, south of Augusta Drive in Mankato, Minnesota. This memorandum has been prepared to provide a turn lane warrant analysis at the proposed driveways and determine if the capacity along the surrounding roadways is sufficient to handle the additional traffic generated by the proposed development.

Turn Lane Warrant Analysis

Site access to the development is proposed via two (2) full movement driveways along Premier Drive. The potential need for a southbound right-turn lane and a northbound left-turn lane into the proposed development was evaluated based on guidance from federal research (NCHRP Report 457) and the MnDOT *Access Management Manual* assuming a 30 mile per hour (mph) speed limit on Premier Drive. Neither a southbound right-turn lane, nor a northbound left-turn lane are recommended due to low-volume driveways and traffic volumes below recommended NCHRP 457 thresholds for turn lane implementation. More detailed information related to the turn lane warrant calculations is provided in **Tables 1-3**.

Roadway Capacity Analysis

The capacity of the surrounding roadway network was analyzed to determine if roadway capacity is sufficient to accommodate the additional traffic generated by the proposed development. **Table 4** provides a comparison of 2024 MnDOT AADTs along Premier Drive, Augusta Drive, and Trunk Highway (TH) 22 to the future AADT with the addition of daily trips generated by the proposed development. Metro Council's *Imagine 2050* transportation policy plan and FHWA's *Highway Functional Classification Concepts, Criteria and Procedures 2023 Edition* were utilized to determine typical AADT ranges based on roadway classification. Based on these guidelines, Augusta Drive and TH 22 are expected to have sufficient capacity to accommodate the additional traffic generated by the proposed development.

It should be noted that based on MnDOT's 2024 AADTs, Premier Drive currently operates with an AADT that exceeds the typical ADT for urban local roads according to the Metro Council's *Imagine 2050* transportation policy plan and FHWA's *Highway Functional Classification Concepts, Criteria and*

Procedures 2023 Edition. The proposed development is anticipated to increase this AADT by only 3.5%, which is expected to account for minimal impact to the roadway. Premier Drive serves multiple commercial developments that may have varying peak hours that spread the projected AADT across multiple hours of the day.

Conclusion

Based on the analysis provided in this memorandum, it was determined that no exclusive turn lanes are warranted at the proposed site driveway locations due to low traffic volumes and a lower speed limit along Premier Drive. Additionally, based on the Metro Council's *Imagine 2050* transportation policy plan and FHWA's *Highway Functional Classification Concepts, Criteria and Procedures 2023 Edition*, it was concluded that the proposed development is expected to have minimal impact on the surrounding roadway network.

If you have any questions or concerns, please do not hesitate to contact me. 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.

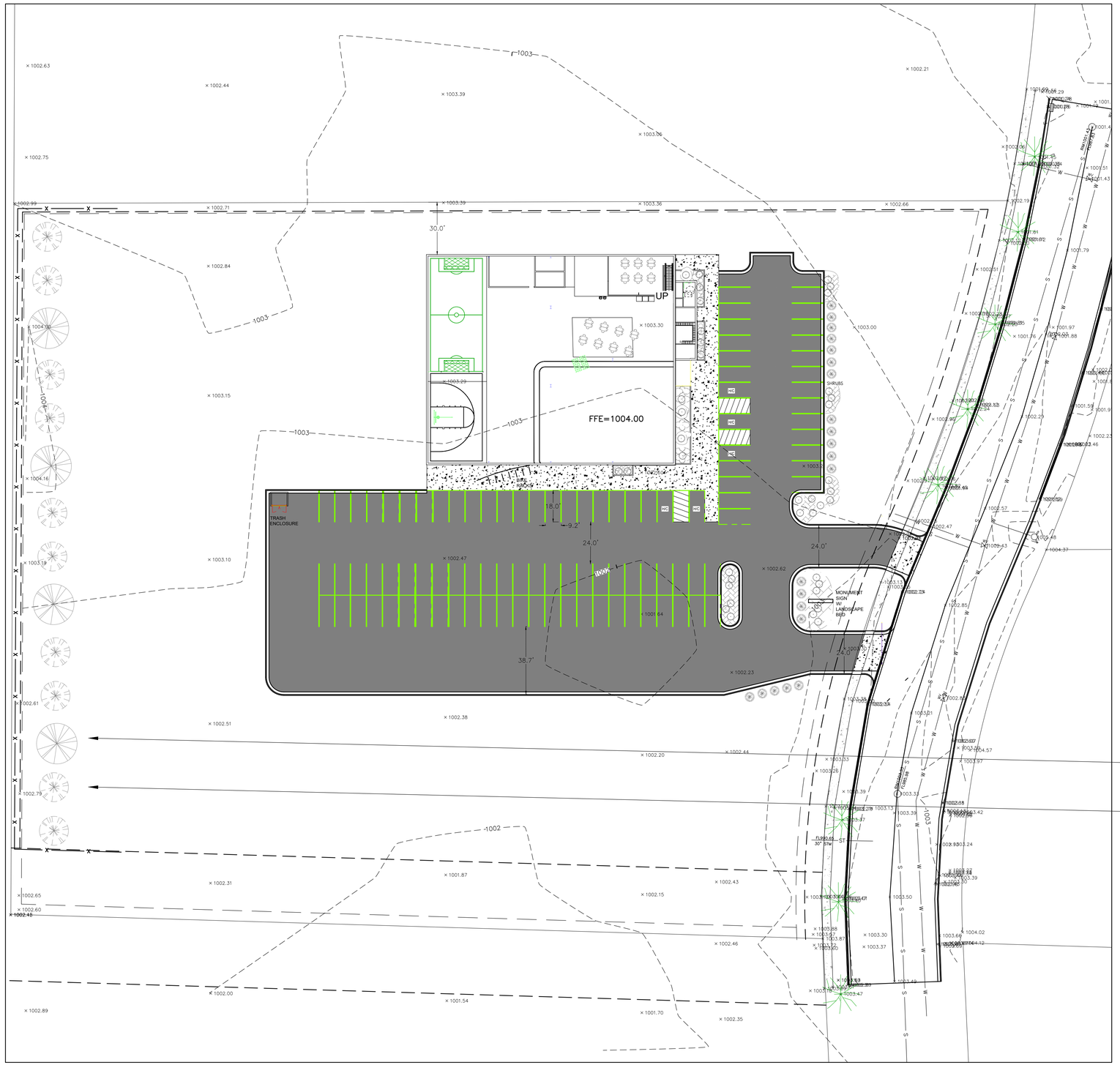
Sincerely,
Bolton & Menk, Inc.



Danielle Troutman, PE
Transportation Project Engineer
License No. 63168

Attachments: Preliminary Site Plan
Calculation Tables

Bolton & Menk is an equal opportunity employer.



LANDSCAPING NOTES

B-3 COMMERCIAL DISTRICT
SUBD.3. HIGHWAY GATEWAY OVERLAY DISTRICT

Sec. 10-1740 PERIMETER OFF STREET PARKING LOT
(1) SHADE TREE/ 50 LF OF FRONTAGE
(1) EVERGREEN TREE/ 25 LF OF FRONTAGE
80% OPAQUE ALONG ALL PARKING FRONTING STREET

PLANTING BEDS SHALL BE MULCHED WITH BARK CHIPS, ROCK MULCH, FEATHER ROCKS OR SIMILAR MATERIAL.

PERIMETER LANDSCAPING & TRANSITIONAL YARDS SHALL CONSIST OF A COMBINATION OF GROUND COVER, SHADE TREES OR EVERGREEN TREES, SHRUBS AND APPROPRIATE SCREENING DEVICES SUCH AS DECORATIVE WALLS, FENCES OR BERMS.

LANDSCAPING LEGEND

=DENOTES SHADE TREE

=EVERGREEN TREE

=DENOTES SHRUB

=DENOTES ARBOVITAE HEDGE (4' MIN. – 8' MAX)
(80% OPAQUE ALONG ALL PARKING FRONTING PREMIER DR.)

=DENOTES EXISTING BOULEVARD TREE

=DENOTES PLANTING BED W/ MULCH

=DENOTES 6' HIGH VINYL FENCE

WEST 20' OF SITE TO BE TRANSITIONAL YARD LANDSCAPING (ABUTS RESIDENTIAL)

F&I 520LF 6' HIGH VINYL FENCING

north

1"=30'

30 0 30
HORIZ. SCALE FEET

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the State of Minnesota.

Brian J. Johnson
Reg. No. 42744
Date: 9/4/25

Consultant:
JONES HAUGH SMITH
Engineers + Surveyors
515 South Washington Ave. Albert Lea, MN 507-373-6876

Project:
ENDLESS ADVENTURES

Revision:

No.:	Date: 9/4/25
Drawn: bjj	Checked:
Project Manager:	
Project Status: CD	

Sheet Title:
LANDSCAPE PLAN

Sheet No.:
C4

Table 1a - Projected Turning Movement Counts

Premier Drive - Turning Movement Counts								
	SBT	WBL	EBR	NBL	NBT	NBR	Hourly Total	MnDOT AADT
Collected 2022 TMCs	52	45	17	10	24	42	190	3042
% of Hourly Total	27%	24%	9%	5%	13%	22%		
Projected 2024 TMCs	39	33	13	7	18	31	141	2261

Table 1b - Anticipated Site Distribution & Assignment

Proposed Daily Traffic (Veh/d)*		80
	% from North	% from South
Anticipated Distribution	30%	70%
Calculated Assignment	24	56

**Daily traffic utilized for turn lane warrant analysis to provide conservative analysis*

Table 1c - NCHRP 457 Input Calculations

NB Left-Turn			SB Right-Turn	
V_A	V_O	LT % of V_A	Major Road Volume (One-Direction)	Right-Turn Volume
112	109	50%	112	24

Table 2 - Guideline for determining the need for a major-road left-turn bay at a two-way stop-controlled intersection.

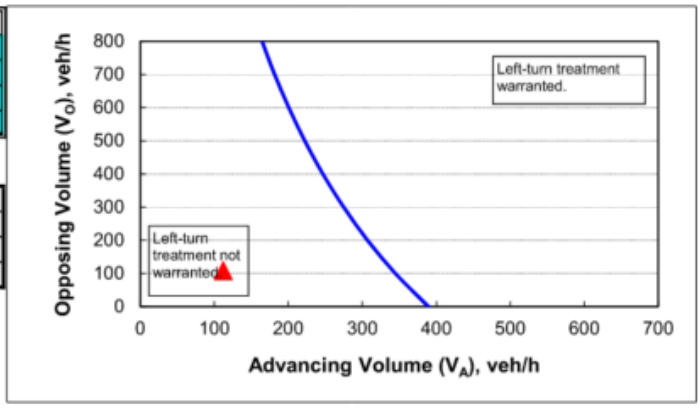
2-lane roadway (English)

INPUT

Variable	Value
85th percentile speed, mph:	30
Percent of left-turns in advancing volume (V_A), %:	50%
Advancing volume (V_A), veh/h:	112
Opposing volume (V_O), veh/h:	109

OUTPUT

Variable	Value
Limiting advancing volume (V_A), veh/h:	341
Guidance for determining the need for a major-road left-turn bay:	
Left-turn treatment NOT warranted.	



CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway, s:	5.0
Average time for left-turn vehicle to clear the advancing lane, s:	1.9

Table 3 - Guideline for determining the need for a major-road right-turn bay at a two-way stop-controlled intersection.

INPUT

Roadway geometry:	2-lane roadway

Variable	Value
Major-road speed, mph:	30
Major-road volume (one direction), veh/h:	112
Right-turn volume, veh/h:	24

OUTPUT

Variable	Value
Limiting right-turn volume, veh/h:	745993
Guidance for determining the need for a major-road right-turn bay for a 2-lane roadway:	
Do NOT add right-turn bay.	

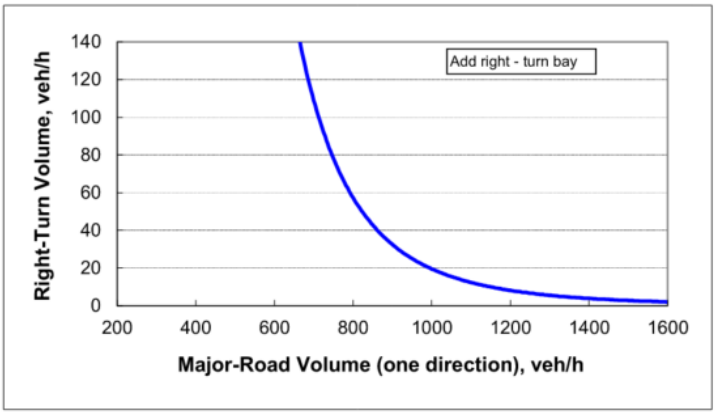


Table 4 - AADT Comparison (vehicles/day)

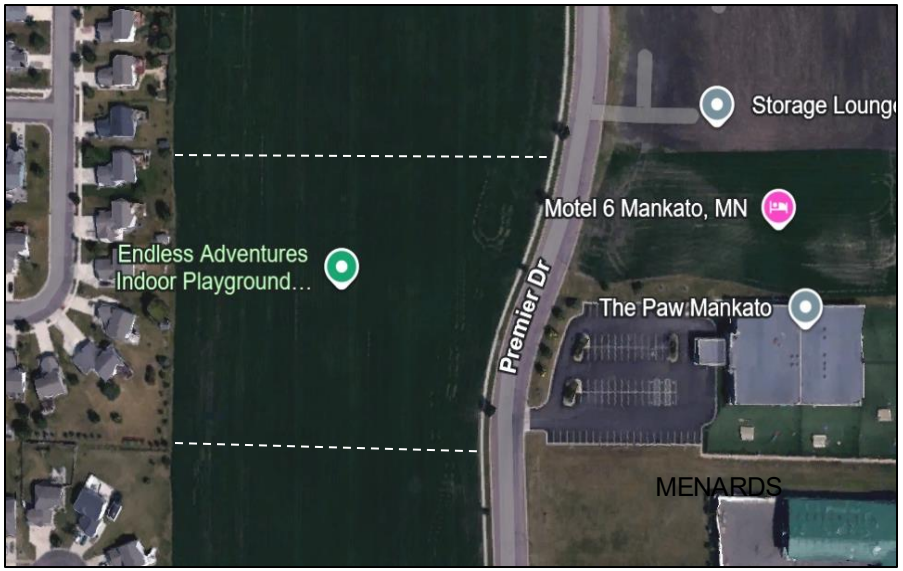
Roadway	Roadway Classification	2024 MnDOT AADT	Anticipated Distribution	Added Daily Traffic	2024 MnDOT AADT + Added Daily Traffic	Imagine 2050 Typical ADT	FHWA Typical ADT	Sufficient Capcity Avaiable?
Premier Drive	Urban Local	2261	100%	80	2341	<1,000	80-700	No
Augusta Drive	Urban Minor Collector	3589	30%	24	3613	50-10,000+	1,000-6,300	Yes
TH 22	Urban Principal Arterial	14105	45%	36	14141	5,000-60,000+	7,000-27,000	Yes



CREATE

ENDLESS ADVENTURES

INDOOR PLAYGROUND | 1740 PREMIER DRIVE, MANKATO, MN 56001



CONDITIONAL USE PERMIT & CERTIFICATE OF DESIGN COMPLIANCE REQUEST

GENERAL CONTRACTOR / OWNER REP:
APX CONSTRUCTION GROUP
SHAWN MESCHKE | (612) 360-3710 | SHAWNM@APXCONSTRUCTIONGROUP.COM

ARCHITECT:
CREATE DESIGN
JUSTIN OLESON | (605) 695-1899 |

CIVIL ENGINEER:
JONES, HAUGH & SMITH
BRIAN JOHNSON | (507) 552-1704 |

STRUCTURAL ENGINEER:
KVS ENGINEERING
MICHAEL KONRAD | (605) 343-9606 |

MECHANICAL ENGINEER:
JPK ENGINEERING
JAMIE KRONBECK | (701) 532-1786 |

ELECTRICAL ENGINEER:
INTEGRAL ENGINEERING
LUKE WEYER | (515) 783-7875 |

PAGE INDEX

1 TITLE PAGE
2 SITE IMAGERY
3 FINISH CALCULATIONS
4 3D RENDERING
5 EXTERIOR FINISHES
6 PHOTOMETRIC PLAN

APX CONSTRUCTION GROUP

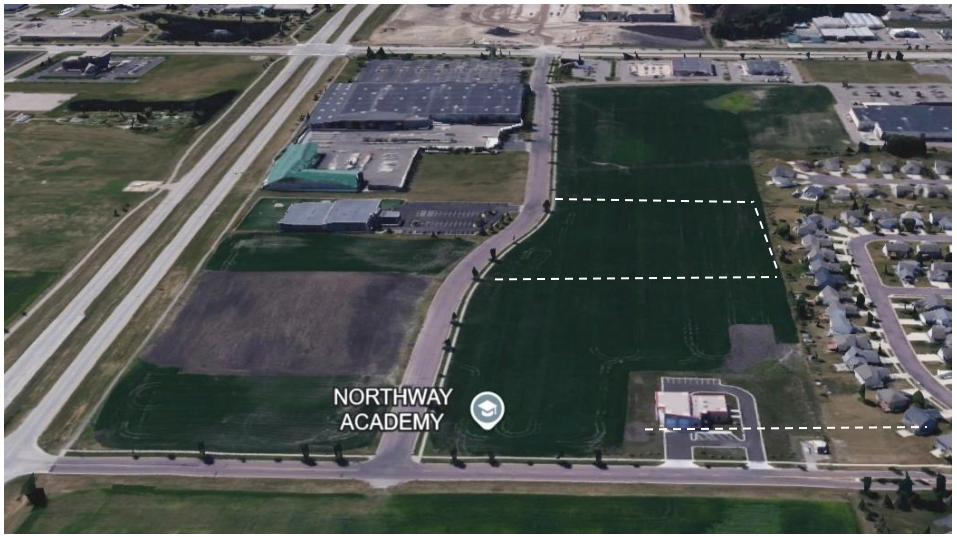
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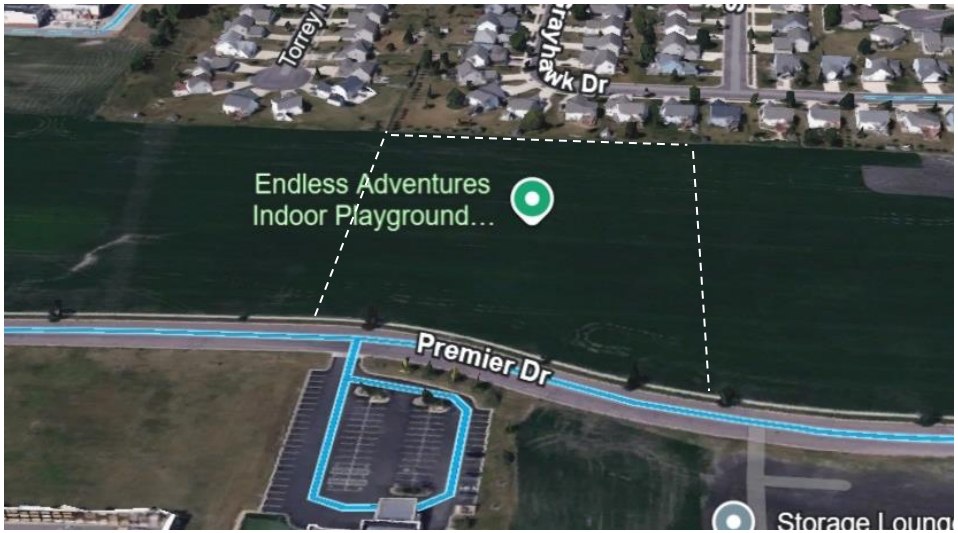
LOOKING NORTH



LOOKING EAST



LOOKING SOUTH



LOOKING WEST

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1 ELEVATION – EAST / PREMIER DR

FINISH KEY | SEE MATERIALS LIST FOR MORE DETAIL			
A	METAL PANEL 1	1,332 sf	42.73%
B	METAL PANEL 2	554 sf	17.77%
C	BRICK	646 sf	20.72
D	METAL TRIM		
E	STORE FRONT	211 sf	6.76%
F	WINDOWS	126 sf	4.04%

2 ELEVATION – SOUTH SIDE

FINISH KEY | SEE MATERIALS LIST FOR MORE DETAIL			
A	METAL PANEL 1	125 sf	3.84%
B	METAL PANEL 2	2,797 sf	86.06%
C	BRICK		
D	METAL TRIM		
E	STORE FRONT	88 sf	2.7%
F	WINDOWS / EXIT DOORS	240 sf	6.83%

3 ELEVATION - WEST SIDE

FINISH KEY | SEE MATERIALS LIST FOR MORE DETAIL			
A	METAL PANEL 1		
B	METAL PANEL 2	2,668 sf	99.22%
C	BRICK		
D	METAL TRIM		
E	STORE FRONT		
F	EXIT DOORS	21 sf	0.78%

4 ELEVATION - NORTH SIDE

FINISH KEY | SEE MATERIALS LIST FOR MORE DETAIL			
A	METAL PANEL 1		
B	METAL PANEL 2	3,531 sf	97.39%
C	BRICK		
D	METAL TRIM		
E	STORE FRONT		
F	WINDOWS / EXIT DOORS	101 sf	2.61%

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CREATE

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COLOR OF FINISH MAY NOT BE REPRESENTED EXACTLY LIKE PHYSICAL SAMPLE



EXTERIOR WALL (MP-1)

Material Type: METAL PANEL MAIN
Mfr: METALLIC BLDG. SYSTEMS
Texture: FW-120 ~~OR PBR~~
Color: CHARCOAL
INSULATED ARCH PANEL



EXTERIOR WALL (MP-2)

Material Type: METAL PANEL FEATURE
Mfr: METALLIC BLDG. SYSTEMS
Texture: PBD
Color: HAWAIIAN BLUE
INSULATED ARCH PANEL - HORIZONTAL RIB



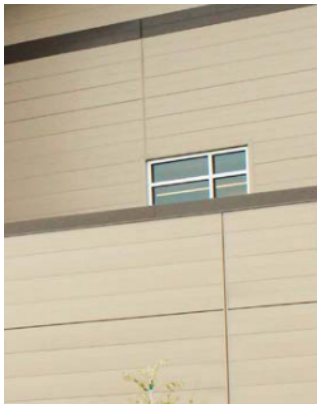
RETURN ACCENTS (MP-3)

Material Type: METAL PANEL
Mfr: METALLIC BLDG. SYSTEMS
Texture: SMOOTH PDVF
Color: COPPER METALLIC



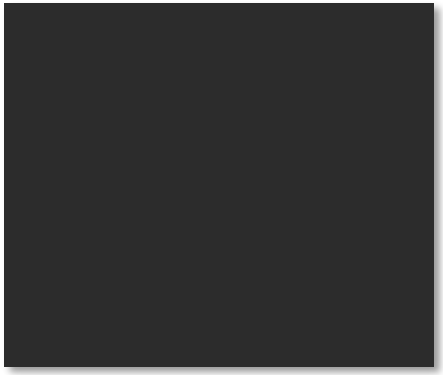
BRICK/STONE ACCENT

Material Type: THIN BRICK
Mfr: BELDEN
Texture: VELOUR
Color: ALASKA WHITE OR SIM.



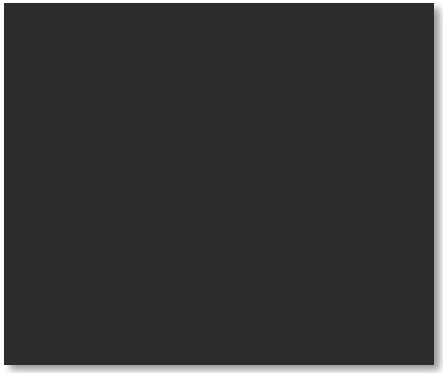


BROCHURES (SEP. ATTACHMENTS) TO SHOW PROFILES MORE CLEARLY



STOREFRONT / WINDOWS

Material Type: METAL
Mfr: KAWNEER OR SIM
Color: MATTE BLACK

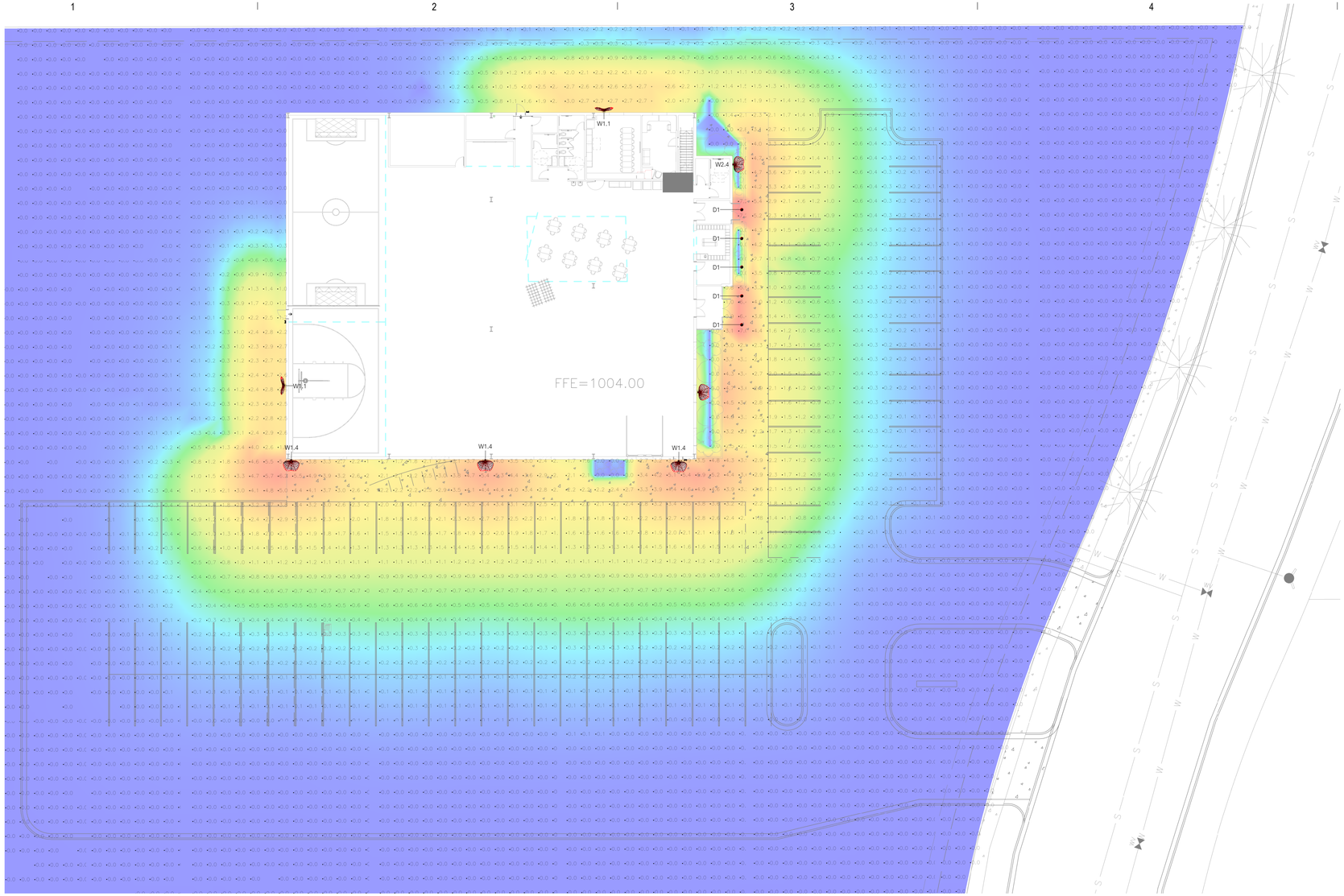


BUILDING CAP / TRIM

Material Type: METAL
Mfr: TBD
Color: MATTE BLACK

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Global Illuminance (fc)

7.24
4.00
2.00
1.00
0.50
0.25
0.13
0.00

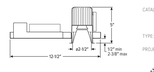
ElumTools Default Analysis

D1

2DR LED 2" Downlight – Round

Williams





CATALOG #: _____

TYPE: _____

PROJECT: _____

NEW CONSTRUCTION AND REMODEL

cULus | Low Lumen | SAB | TITLE 24 | WET LOCATION

ORDERING EXAMPLE: 2DR - L20835 - OPTIONS - CONTROL/DIM - VNV - CW - CR - TRIM OPTIONS - N - P1

HOUSING — MOUNT

HOUSING

SERIES	LUMENS [1]	CRI	CCT	OPTIONS	CONTROL	DRIVER	VOLTAGE
2DR	L5 500lm	8 80	27 2700K	*See page 3 for EMERGENCY BATTERY OPTIONS.*	– None	DIM Dimming driver, 0-10V	UNV 120-277V
	LT 900lm		30 3000K	AEM Airtight construction	AVI-LUTA Avi-on wireless fixture control [4]	DIM1 1% Dimming driver, 0-10V with 1% low end trim (dims down to 1% power, without external dimming wire) [4]	347 347V [5]
	L12 1,200lm		35 3500K	CR Clear	AWNE Lutron Athena wireless node integral fixture control, 48' cavity [4]		
	L15 1,500lm		40 4000K	CP Acicagp plenum (CCEA) [6]			
	L20 2,000lm		50 5000K	SDT Stepdown transformer [6]			
	L25 2,500lm						

TRIM [7]

TRIM TYPE	DISTRIBUTION	FLANGE TYPE	REFLECTOR FINISH	TRIM OPTIONS
See page 2 for BEAM ANGLE.				
O Open reflector	M Medium	OF 1/2" standard flange	Open trim types	MWT Smooth matte white trim flange [16]
F Specular reflector with frosted lay-diffuser [8]	N Narrow [9]	ZF Zero-flange mud-in [10]	SC Satin chrome specular anodize	AD Diffuser drop [17]
R Regressed lens	W Wall wash [11]		SG Satin gloss anodize	AG Gasket for wet locations only, [18]
A Angled lens [12]	S Narrow spec [13]		GD Gold anodize	WETCC Wet location, covered ceiling listed
			CG Champagne gold anodize	AR Anti-reflective [19]
			PW Powder anodize	
			SPC Specular powder coat	
			BG Black gold anodize	
			WW White textured powder coat	
			BL Black textured powder coat	
			Lens trim types	
			CS Clear semi-specular powder coat	
			WW White textured powder coat	
			BL Black textured powder coat	
			MB Black texture splay with white flange [20]	

MOUNTING

MOUNTING TYPE [14]
- N Open pan for new construction [14A]
- E IC-rated enclosure for new construction [14B]
- R Remodel kit [14C]

MOUNTING HARDWARE [21]
- P1 Integral 2-position fixed pan bracket, universal bar hanger included [21A]
- BA1 Adjustable butterfly pan bracket, bar hanger not included [21B]
- CA1 Adjustable caterpillar pan bracket, universal bar hanger included [21C]

NOTES

1 Lumen output based on 0 Trim Type, W Distribution, and CS Reflector Finish. See page 4 for lumen output based on other trim + CS, see page 2 for FIXTURE PERFORMANCE DATA.
2 1 Mounting Type required.
3 Driver and Voltage selection. May be required for 347V, see product builder at litecontrolbuilder.com/builder.
4 DA Driver only. See page 4 for AVI-ON BLUETOOTH WIRELESS CONTROL DETAILS.
5 DA Drivers only.
6 Aer-on and Lutron Athena Controls only. Not available with 8 CRI or Specular.
7 Not available with EM batteries, DA, or DIM drivers.
8 Trim steps separately.
9 WETCC standard unless ordered with EM/RTL.
10 Available with WW Distribution only.
11 When specified with L or R Trim Type: L20 lumen package max for 1 Mounting Type; L15 lumen package max for 2 Mounting Type.
12 L15 lumen package max for N and R Mounting. L12 lumen package max for Wall Wash Mounting. Not available with SDG CRI/CCT, A Trim Type only.
13 For use with mud-in plaster construction only, supplied with temporary plaster ring. Not available with 2" Zero Flange (ZF). DETAIL 5. Not available with D or A Trim Types or ATH Option.
14 R Trim Type only. Not available with ZF Flange Type or WWT.
15 Not available with L Trim Type. ZF Flange Type or WH Reflector finish.
16 W Distribution only. Not available with O or F Trim Types.
17 Round WW Distributions only. Not available with O or F Trim Types.
18 WH and BL Reflector Finishes only.
19 Not available with 8 CRI.
20 Not available with WW Distribution.
21 Mounting hardware required (N and I only), ordered separately. Mounting hardware is included in housing kits. See page 4 for MOUNTING TYPE DETAILS.
22 Additional mounting hardware options available. See page 4 for MOUNTING HARDWARE DETAILS.

W2.4

WDGE3 LED
Architectural Wall Sconce



Catalog Number
Notes
Type

Specifications

Depth (D1): 8"
Depth (D2): 1.5"
Height: 9"
Width: 18"
Weight: (without options) 19.5 lbs



Introduction

The WDGE LED family is designed to meet specifier's every wall-mounted lighting need in a widely accepted shape that blends with any architecture. The clean rectilinear design comes in four sizes with lumen packages ranging from 1,200 to 25,000 lumens, providing a true site-wide solution. Embedded with nLight® AIR wireless controls, the WDGE family provides additional energy savings and code compliance.

WDGE3 has been designed to deliver up to 12,000 lumens through a precision refractive lens with wide distribution, perfect for augmenting the lighting from pole mounted luminaires.

Items marked by a shaded background qualify for the Design Select program and ship in 15 days or less. To learn more about Design Select, visit www.acuitybrands.com/designselect. *See ordering tree for details.

WDGE LED Family Overview

Luminaire	Optics	Standard 4ft, 8°C	Cold 4ft, -20°C	Sensor	Approximate Lumens (4000K, 80CRI)						
					P5	P7	P1	P2	P3	P4	P6
WDGE1 LED	Visual Comfort	4W		–	750	1,200	2,000	–	–	–	–
WDGE2 LED	Visual Comfort	10W	18W	Standalone / nLight	–	1,200	2,000	3,000	4,500	6,000	–
WDGE2 LED	Precision Refractive	10W	18W	Standalone / nLight	700	1,200	2,000	3,200	4,200	–	–
WDGE3 LED	Precision Refractive	15W	18W	Standalone / nLight	6,000	7,500	8,500	10,000	12,000	–	–
WDGE4 LED	Precision Refractive			Standalone / nLight	–	12,000	16,000	18,000	20,000	22,000	25,000

Ordering Information

EXAMPLE: WDGE3 LED P3 40K 70CRI R3 MVOLT SRM DDBXD

Series	Package	Color Temperature	CRI	Distribution	Voltage	Mounting
WDGE3 LED	P6	30K 3000K	70CRI	R2 Type 2	MVOLT	Shipped included
	P5	40K 4000K	80CRI	R3 Type 3	347	SRM Surface mounting bracket
	P3	50K 5000K		R4 Type 4	480	ICW Indirect ceiling mounting Washer bracket (dry/damp locations only)*
	P2			BRT Forward Throw		
	P1					

Shipped separately
AWS 3/8 inch Architectural wall spacer*
PBBW Surface-mounted back box (top, left, right conduit entry). Use when there is no junction box available.*

Options		Finish	
ETSWH	Emergency battery backup, Certified in CA Title 20 MAEDBS (10W, 1°C min)	Standalone Sensors/Controls	DDBXD Dark bronze
E20WC	Emergency battery backup, Certified in CA Title 20 MAEDBS (10W, -20°C min)	PIR Bi-level (100/35%) motion sensor for 8-15' mounting heights. Intended for use on switched circuits with external dual-to-dawn switching.	DBLXD Black
PE	Photocell, Button Type*	PIRH Bi-level (100/35%) motion sensor for 15-30' mounting heights. Intended for use on switched circuits with external dual-to-dawn switching.	DNAXD Natural aluminum
DMG	0-10V dimming wires pulled outside fixture (for use with an external control, ordered separately)*	PIR1FC3V Bi-level (100/35%) motion sensor for 8-15' mounting heights with photocell pre-programmed for dusk to dawn operation.	DWHXD White
BCE	Bottom conduit entry for back box (PBBW). Total of 4 entry points.	PIRH1FC3V Bi-level (100/35%) motion sensor for 15-30'mounting heights with photocell pre-programmed for dusk to dawn operation.	DSSXD Sandstone
SPD10KV	10kV surge pack*	Networked Sensors/Controls	DDBTXD Textured dark bronze
CCE	Coastal Construction*	NLTAIR2 PIR Embedded wireless controls by nLight with Passive Infrared (Pir) sensor and on/off photocell for 8-15' mounting heights.	DBLBXD Textured black
		NLTAIR2 PIRH Embedded wireless controls by nLight with Passive Infrared (Pir) sensor and on/off photocell for 15'-30' mounting heights.	DNATXD Textured natural aluminum
		NLTAIRE2 PIR Embedded wireless controls by nLight with UL924 listed emergency operation, Passive Infrared (Pir) sensor and on/off photocell for 8-15' mounting heights.	DWHGXD Textured white
		NLTAIRE2 PIRH Embedded wireless controls by nLight with UL924 listed emergency operation, Passive Infrared (Pir) sensor and on/off photocell for 15'-30' mounting heights.	DSSTXD Textured sandstone
		See page 4 for rest of nLite functionality.	

Accessories

Ordered and shipped separately.
WSGXWS DDBXD — WSG 1.5Inch Architectural Wall Spacer (specify finish)
WSGLPBBW DDBXD U — WSG2 surface-mounted back box (specify finish)

NOTES
1 347V and 480V not available with ETSWH and E20WC.
2 Not available with PE, DMG. Not available with emergency battery backup or sensors/controls.
3 For PBBW and AWS with CCE option, require an RPA.
4 Not available with 347V, 480V and with sensors/controls.
5 DMG option not available with sensors/controls.
6 Not available with E20WC option.
7 Not available with MVOLT only and only rated to 25C ambient.

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W1.4

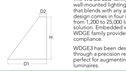
WDGE3 LED
Architectural Wall Sconce



Catalog Number
Notes
Type

Specifications

Depth (D1): 8"
Depth (D2): 1.5"
Height: 9"
Width: 18"
Weight: (without options) 19.5 lbs



Introduction

The WDGE LED family is designed to meet specifier's every wall-mounted lighting need in a widely accepted shape that blends with any architecture. The clean rectilinear design comes in four sizes with lumen packages ranging from 1,200 to 25,000 lumens, providing a true site-wide solution. Embedded with nLight® AIR wireless controls, the WDGE family provides additional energy savings and code compliance.

WDGE3 has been designed to deliver up to 12,000 lumens through a precision refractive lens with wide distribution, perfect for augmenting the lighting from pole mounted luminaires.

Items marked by a shaded background qualify for the Design Select program and ship in 15 days or less. To learn more about Design Select, visit www.acuitybrands.com/designselect. *See ordering tree for details.

WDGE LED Family Overview

Luminaire	Optics	Standard 4ft, 8°C	Cold 4ft, -20°C	Sensor	Approximate Lumens (4000K, 80CRI)						
					P5	P7	P1	P2	P3	P4	P6
WDGE1 LED	Visual Comfort	4W		–	750	1,200	2,000	–	–	–	–
WDGE2 LED	Visual Comfort	10W	18W	Standalone / nLight	–	1,200	2,000	3,000	4,500	6,000	–
WDGE2 LED	Precision Refractive	10W	18W	Standalone / nLight	700	1,200	2,000	3,200	4,200	–	–
WDGE3 LED	Precision Refractive	15W	18W	Standalone / nLight	6,000	7,500	8,500	10,000	12,000	–	–
WDGE4 LED	Precision Refractive			Standalone / nLight	–	12,000	16,000	18,000	20,000	22,000	25,000

Ordering Information

EXAMPLE: WDGE3 LED P3 40K 70CRI R3 MVOLT SRM DDBXD

Series	Package	Color Temperature	CRI	Distribution	Voltage	Mounting
WDGE3 LED	P6	30K 3000K	70CRI	R2 Type 2	MVOLT	Shipped included
	P5	40K 4000K	80CRI	R3 Type 3	347	SRM Surface mounting bracket
	P3	50K 5000K		R4 Type 4	480	ICW Indirect ceiling mounting Washer bracket (dry/damp locations only)*
	P2			BRT Forward Throw		
	P1					

Shipped separately
AWS 3/8 inch Architectural wall spacer*
PBBW Surface-mounted back box (top, left, right conduit entry). Use when there is no junction box available.*

Options		Finish	
ETSWH	Emergency battery backup, Certified in CA Title 20 MAEDBS (10W, 1°C min)	Standalone Sensors/Controls	DDBXD Dark bronze
E20WC	Emergency battery backup, Certified in CA Title 20 MAEDBS (10W, -20°C min)	PIR Bi-level (100/35%) motion sensor for 8-15' mounting heights. Intended for use on switched circuits with external dual-to-dawn switching.	DBLXD Black
PE	Photocell, Button Type*	PIRH Bi-level (100/35%) motion sensor for 15-30'mounting heights. Intended for use on switched circuits with external dual-to-dawn switching.	DNAXD Natural aluminum
DMG	0-10V dimming wires pulled outside fixture (for use with an external control, ordered separately)*	PIR1FC3V Bi-level (100/35%) motion sensor for 8-15' mounting heights with photocell pre-programmed for dusk to dawn operation.	DWHXD White
BCE	Bottom conduit entry for back box (PBBW). Total of 4 entry points.	PIRH1FC3V Bi-level (100/35%) motion sensor for 15-30'mounting heights with photocell pre-programmed for dusk to dawn operation.	DSSXD Sandstone
SPD10KV	10kV surge pack*	Networked Sensors/Controls	DDBTXD Textured dark bronze
CCE	Coastal Construction*	NLTAIR2 PIR Embedded wireless controls by nLight with Passive Infrared (Pir) sensor and on/off photocell for 8-15' mounting heights.	DBLBXD Textured black
		NLTAIR2 PIRH Embedded wireless controls by nLight with Passive Infrared (Pir) sensor and on/off photocell for 15'-30' mounting heights.	DNATXD Textured natural aluminum
		NLTAIRE2 PIR Embedded wireless controls by nLight with UL924 listed emergency operation, Passive Infrared (Pir) sensor and on/off photocell for 8-15' mounting heights.	DWHGXD Textured white
		NLTAIRE2 PIRH Embedded wireless controls by nLight with UL924 listed emergency operation, Passive Infrared (Pir) sensor and on/off photocell for 15'-30' mounting heights.	DSSTXD Textured sandstone
		See page 4 for rest of nLite functionality.	

Accessories

Ordered and shipped separately.
WSGXWS DDBXD — WSG 1.5Inch Architectural Wall Spacer (specify finish)
WSGLPBBW DDBXD U — WSG2 surface-mounted back box (specify finish)

NOTES
1 347V and 480V not available with ETSWH and E20WC.
2 Not available with PE, DMG. Not available with emergency battery backup or sensors/controls.
3 For PBBW and AWS with CCE option, require an RPA.
4 Not available with 347V, 480V and with sensors/controls.
5 DMG option not available with sensors/controls.
6 Not available with E20WC option.
7 Not available with MVOLT only and only rated to 25C ambient.

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W1.2

WDGE2 LED
Architectural Wall Sconce
Precision Refractive Optic



Catalog Number
Notes
Type

Specifications

Depth (D1): 7"
Depth (D2): 1.5"
Height: 9"
Width: 11.5"
Weight: (without options) 13.5 lbs

Introduction

The WDGE LED family is designed to meet specifier's every wall-mounted lighting need in a widely accepted shape that blends with any architecture. The clean rectilinear design comes in four sizes with lumen packages ranging from 1,200 to 25,000 lumens, providing a true site-wide solution. Embedded with nLight® AIR wireless controls, the WDGE family provides additional energy savings and code compliance.

WDGE2 with industry leading precision refractive optics provides great uniform distribution and optical control. When combined with multiple integrated emergency battery backup options, including an 18W cold temperature option, the WDGE2 becomes the ideal wall-mounted lighting solution for pedestrian scale applications in any environment.

Items marked by a shaded background qualify for the Design Select program and ship in 15 days or less. To learn more about Design Select, visit www.acuitybrands.com/designselect. *See ordering tree for details.

WDGE LED Family Overview

Luminaire	Optics	Standard 4ft, 8°C	Cold 4ft, -20°C	Sensor	Approximate Lumens (4000K, 80CRI)						
					P5	P7	P1	P2	P3	P4	P6
WDGE1 LED	Visual Comfort	4W		–	750	1,200	2,000	–	–	–	–
WDGE2 LED	Visual Comfort	10W	18W	Standalone / nLight	–	1,200	2,000	3,000	4,500	6,000	–
WDGE2 LED	Precision Refractive	10W	18W	Standalone / nLight	700	1,200	2,000	3,200	4,200	–	–
WDGE3 LED	Precision Refractive	15W	18W	Standalone / nLight	6,000	7,500	8,500	10,000	12,000	–	–
WDGE4 LED	Precision Refractive			Standalone / nLight	–	12,000	16,000	18,000	20,000	22,000	25,000

Ordering Information

EXAMPLE: WDGE2 LED P3 40K 80CRI T3M MVOLT SRM DDBXD

Series	Package	Color Temperature	CRI	Distribution	Voltage	Mounting
WDGE2 LED	P6	27K 2700K	70CRI	T2L Type 1 Short	MVOLT	Shipped included
	P5	30K 3000K	80CRI	T2M Type 1 Medium	347	SRM Surface mounting bracket
	P3	40K 4000K		T3M Type 2 Medium	480	ICW Indirect ceiling mounting Washer bracket (dry/damp locations only)*
	P2	50K 5000K		T4M Type 3 Medium		
	P1			TFTM Forward Throw Medium		

Shipped separately
AWS 3/8inch Architectural wall spacer*
PBBW Surface-mounted back box (top, left, right conduit entry). Use when there is no junction box available*

Options		Finish	
ETSWH	Emergency battery backup, Certified in CA Title 20 MAEDBS (10W, 1°C min)	Standalone Sensors/Controls	DDBXD Dark bronze
E20WC	Emergency battery backup, Certified in CA Title 20 MAEDBS (10W, -20°C min)	PIR Bi-level (100/35%) motion sensor for 8-15' mounting heights. Intended for use on switched circuits with external dual-to-dawn switching.	DBLXD Black
PE	Photocell, Button Type*	PIRH Bi-level (100/35%) motion sensor for 15-30'mounting heights. Intended for use on switched circuits with external dual-to-dawn switching.	DNAXD Natural aluminum
DMG	0-10V dimming wires pulled outside fixture (for use with an external control, ordered separately)*	PIR1FC3V Bi-level (100/35%) motion sensor for 8-15' mounting heights with photocell pre-programmed for dusk to dawn operation.	DWHXD White
BCE	Bottom conduit entry for back box (PBBW). Total of 4 entry points.	PIRH1FC3V Bi-level (100/35%) motion sensor for 15-30'mounting heights with photocell pre-programmed for dusk to dawn operation.	DSSXD Sandstone
CCE	Coastal Construction*	Networked Sensors/Controls	DDBTXD Textured dark bronze
		NLTAIR2 PIR Embedded wireless controls by nLight with Passive Infrared (Pir) sensor and on/off photocell for 8-15' mounting heights.	DBLBXD Textured black
		NLTAIR2 PIRH Embedded wireless controls by nLight with Passive Infrared (Pir) sensor and on/off photocell for 15'-30' mounting heights.	DNATXD Textured natural aluminum
		NLTAIRE2 PIR Embedded wireless controls by nLight with UL924 listed emergency operation, Passive Infrared (Pir) sensor and on/off photocell for 8-15' mounting heights.	DWHGXD Textured white
		NLTAIRE2 PIRH Embedded wireless controls by nLight with UL924 listed emergency operation, Passive Infrared (Pir) sensor and on/off photocell for 15'-30' mounting heights.	DSSTXD Textured sandstone
		See page 4 for rest of nLite functionality.	

NOTES
1 347V and 480V not available with E20WC option.
2 Not available with MVOLT only and only rated to 25C ambient.

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CREATE
26560 N Shore Pl
Hartford, SD 57033
Wall Lake Township
phone: 605.695.1899

www.create-designdevelop.com

REVISION SCHEDULE

NO.	DESCRIPTION	DATE

Owner
ENDLESS ADVENTURES
MANKATO, MN

INTEGRAL ENGINEERING

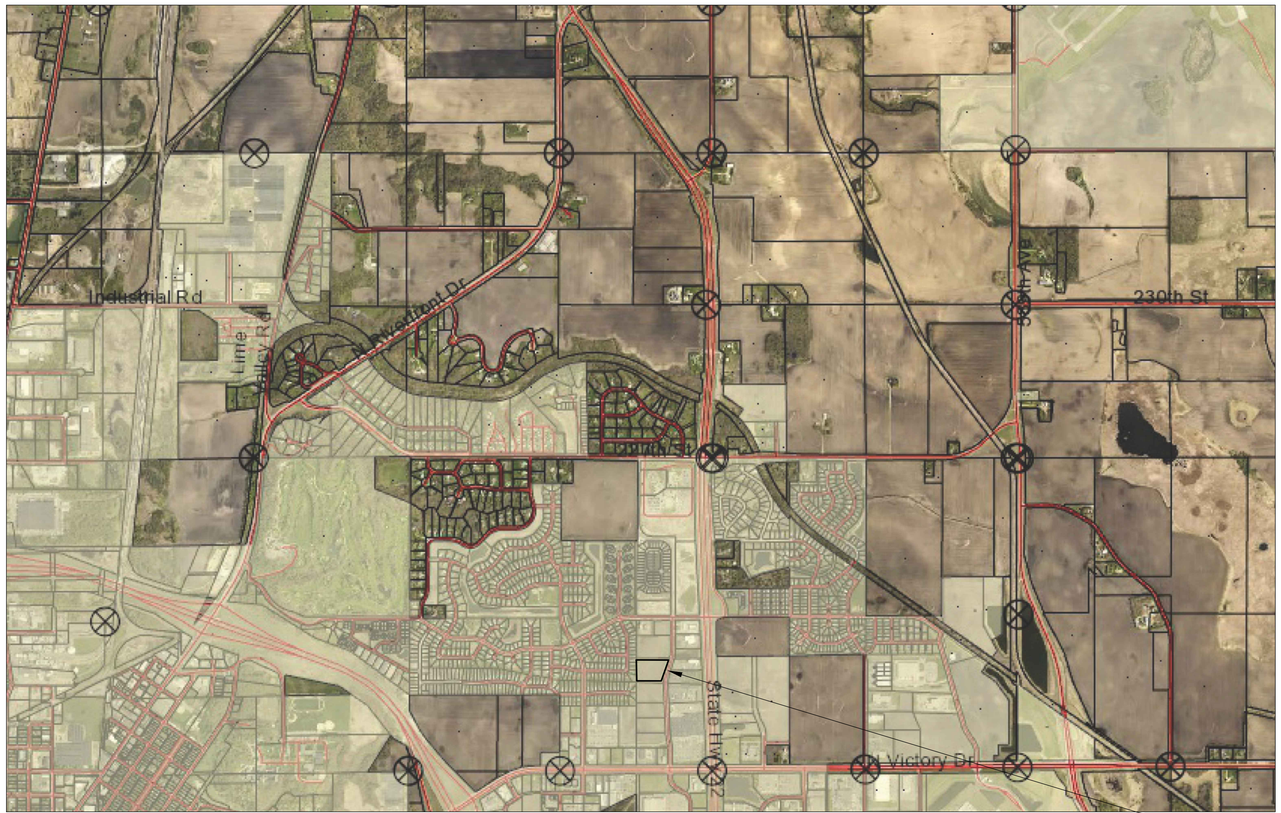
PROJECT NO.: 25055
ISSUE DATE: 2025.09.22
DESIGNED BY: L. Weyer
DRAWN BY: L. Weyer
CHECKED BY: L. Weyer

SHEET
E901
PHOTOMETRIC CALCULATIONS

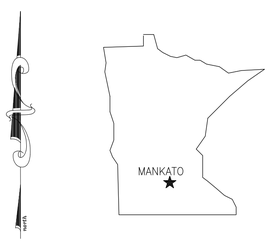
CITY REVIEW

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ENDLESS ADVENTURES
IN LOT 5, BLOCK 2, VENSTAR SUBDIVISION
MANKATO, MN



PROJECT LOCATION



INDEX TO SHEETS

C1: TITLE SHEET
C2: EXISTING CONDITIONS/REMOVAL PLAN
C3: HARDSCAPE PLAN
C4: LANDSCAPE PLAN
C5: UTILITY PLAN
C6: GRADING/SWPP PLAN
C7: DETAILS
C8: SWPPP NARRATIVE & DETAILS
C9: SPECIFICATIONS
C10: SPECIFICATIONS

THIS PLAN CONTAINS 10 SHEETS

LEGEND

- = 5/8"Ø X 16" iron stake monument
- =Iron stake monument-Found
- W = Water Main
- S = Sanitary Sewer
- ST = Storm Sewer
- G = Gas Main
- UT = Underground Telephone
- OT = Overhead Telephone
- FO = Fiber-Optics
- UE = Underground Electric
- OE = Overhead Electric
- X = Chain Link Fence
- = Control Access
- = Gate Post
- = Bollards
- E = Electric Meter
- G = Gas Meter
- F = Fiber-Optics Box
- T = Telephone Pedestal
- = Light Tower
- = Silt Fence
- F&I = Furnish & Install
- 1272 = Existing Elevation Contour Line
- 1272 = Propsoed Elevation Contour Line

- = Sign
- = Sign-Handicap
- = Light Pole
- = Power Pole
- = Guy Anchor
- = Fire hydrant
- = Water Main Valve
- = Fire Sprinkler
- = Cleanout
- = Culvert
- = Gas Main Valve
- = Catch Basin
- = Manholes
- 1271.23 = Spot Elevation
- RM1270.89 = Rim Elevation
- FL1262.34 = Line Elevation
- =Concrete Surface
- =Bituminous Surface
- =Gravel Surface
- 27.00 =Proposed Pavement Elevation
- 28.0 / 24.0 =Proposed Top/Bottom of Retaining Wall Elevation

APPLICABLE CONSTRUCTION PERMITS

ALL CONSTRUCTION WITHIN COUNTY RIGHT-OF-WAY SHALL BE DONE IN ACCORDANCE WITH THE APPLICABLE PERMIT AS ISSUED BY THE COUNTY HIGHWAY DEPT.

GENERAL NOTES

DEVELOPER, CONTRACTOR AND ALL SUBCONTRACTORS SHALL COMPLY WITH ALL APPLICABLE CODES AND ORDINANCES GOVERNED BY STATE AND LOCAL JURISDICTION.

SITE IRRIGATING, LIGHTING, LANDSCAPING, SIGNING ARE NOT A PART OF THIS PLAN.

PROVIDE EROSION CONTROL PER NPDES PERMIT REQUIREMENTS AND AS SHOWN.

PROVIDE HANDICAP CURB RAMPS & SIGNAGE. COMPLY WITH ALL AMERICAN DISABILITY ACT REQUIREMENTS.

ALL CONCRETE OR ASHPALTIC PAVEMENT CONSTRUCTION SHALL COMPLY WITH THE PROVISIONS OF MN/DOT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, LATEST EDITION.

A ROCK CONSTRUCTION ENTRANCE IS REQUIRED AT ALL ENTRANCES FROM BITUMINOUS PAVEMENT.

ACCESS FOR LOCAL RESIDENTS/BUSINESSES SHALL ALWAYS BE MAINTAINED. PROVIDE PAVEMENT STRIPING AS SHOWN

CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS FOR CONSTRUCTION.

SEE BOUNDARY SURVEY BY OTHERS FOR SITE BOUNDARIES.

ANY ALTERATIONS OR REVISIONS TO THE SITE DEVELOPMENT PLAN AS SHOWN SHALL NOT BE THE RESPONSIBILITY OF JONES, HAUGH & SMITH INC. AND SHALL RELEASE JONES, HAUGH & SMITH INC. OF ANY LIABILITY FOR ANY DAMAGES CAUSED THEREFROM UNLESS WRITTEN AUTHORIZATION OR PLAN REVISION HAS BE APPROVED BY JONES, HAUGH & SMITH INC. PRIOR.

BENCHMARK 1

TOP NUT OF FIRE HYDRANT ACROSS PREMIER DR. FROM SITE, ELEV.=1005.48

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the State of Minnesota.

Brian J. Johnson
Reg. No. 42544
Date: 10/4/25

Consultant:
JONES HAUGH SMITH
Engineers • Surveyors
515 South Washington Ave. Albert Lea, MN 507-373-4876

Project: ENDLESS ADVENTURES

Revision:

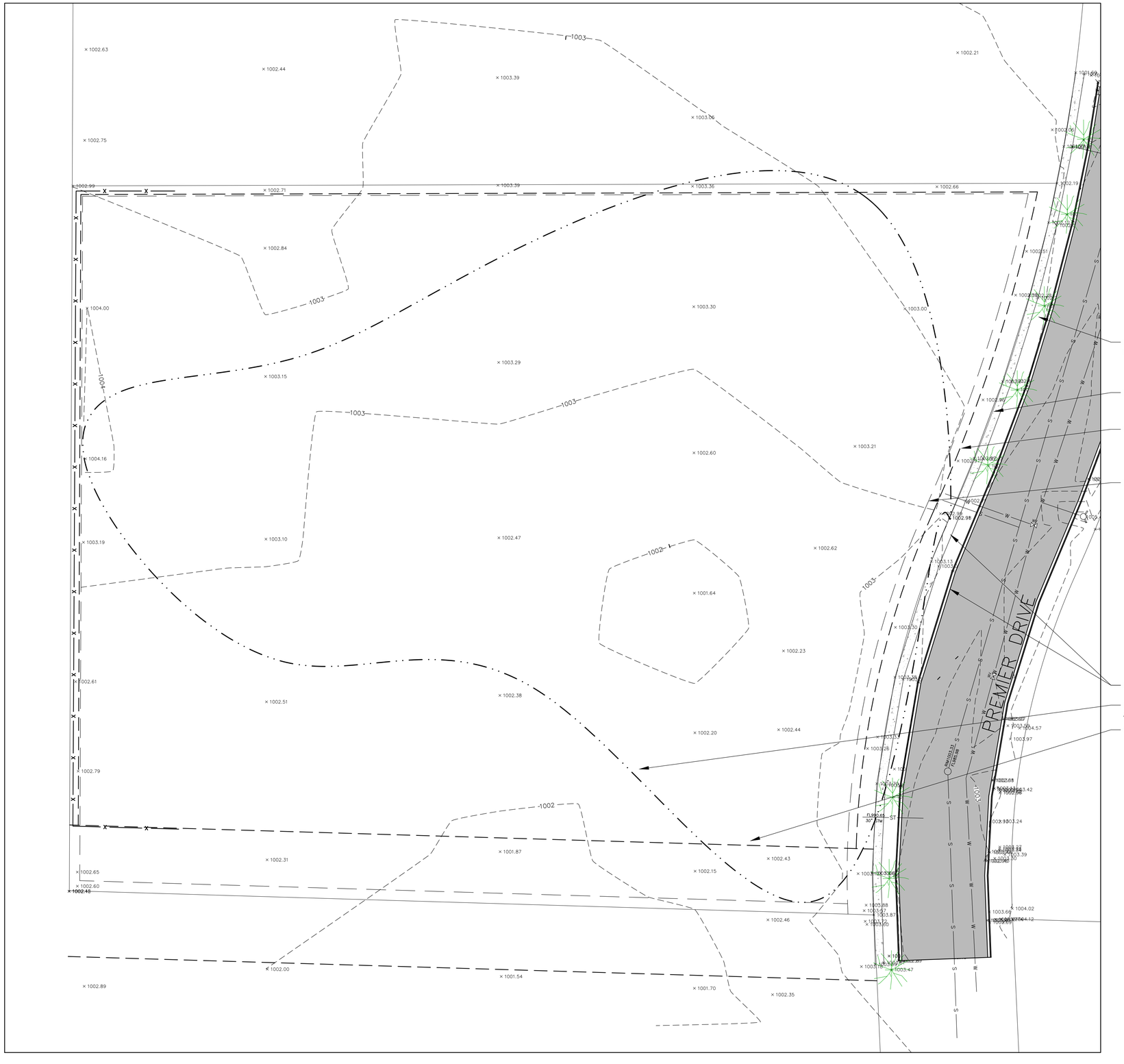
No.:	Date: 10/4/25
Drawn: bjj	Checked:

Project Manager:

Project Status: CD

Sheet Title: TITLE SHEET

Sheet No.: C1



1"=30'

30 0 30

HORIZ. SCALE FEET

North

Consultant:

JONES HAUGH SMITH

Engineers + Surveyors

515 South Washington Ave. Albert Lea, MN 507.373.4876

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.

Brian J. Johnson

Reg. No. 42544

Date: 10/4/25

Project:

ENDLESS ADVENTURES

Revision:

No.:	Date: 10/4/25
Drawn: bjj	Checked:

Project Manager:

Project Status: CD

Sheet Title:

EXISITNG CONDITIONS

Sheet No.:

C2

ZONING NOTES

B-3 COMMERCIAL DISTRICT
SUBD.3. HIGHWAY GATEWAY OVERLAY DISTRICT

BUILDING SETBACKS: FRONT: 15', SIDE: 6', REAR: 6'

CHAPTER 10. SEC. 10.47 - B-3 HIGHWAY COMMERCIAL DISTRICT
SUBD. 2 PERMITTED USES
A. USES LISTED IN THE B-1 COMMUNITY BUSINESS DISTRICT
(CH. 10.SEC. 10.45.SUBD.2.T./WW.)

PART V. SEC. 10.48. SUBD.3.SUBPART 5. YARDS & SETBACKS

PARKING

A.1. ON CORNER LOTS THE BUILD-TO ZONE IS 15' MINIMUM AND 85' MAXIMUM FROM THE PROPERTY LINE @ BOTH FRONTAGES

D. THE SIDE AND REAR YARD SETBACK IS 3' TO IMPERVIOUS SURFACE

PART IX. SEC 10.88. SUBD. 8 REFUSE CONTAINERS
ALL CONTAINERS SHOULD BE FULLY ENCLOSED BY A GATED ENCLOSURE TALL ENOUGH TO COMPLETELY SHIELD FROM VIEW. THE WALL SHOULD HAVE A FINISH SIMILAR TO THE PRIMARY BUILDING

J.1. MONUMENT SIGNAGE
a. 8' OR TALLER SHALL BE CONSTRUCTED WITH THE ENTIRE BOTTOM OF THE SIGN IN CONTACT WITH THE GROUND. BOTTOM 2' OF SIGN SHOULD BE BUILT OF STONE, CONCRETE, BRICK, OR BLOCK. A SOLID BACKGROUND AREA SHOULD BE PROVIDED TO THE TOP OF THE SIGN.
d. THE SQUARE FOOTAGE OF MONUMENT SIGN NOT TO EXCEED THE LINEAL FRONTAGE OF THE LOT (290 FT @ AUGUSTA DRIVE/ 270 FT @
g. DESIGN ELEMENTS OF THE SIGN SHOULD BE CONSISTENT WITH THOSE
e. THE SIGN FACE TO OCCUPY AT LEAST 50% OF THE SIGN.
f. LANDSCAPE THE BASE OF THE SIGN WITH AN AREA AT LEAST 50%

THE AREA OF THE SIGN FACE. CHOOSE HARDY, SEASONALLY OF THE MAIN BUILDING.

h. MINIMUM OF 5' SETBACK FROM PROPERTY LINES (AND NOT WITHIN 25' TRIANGLE @ THE CORNER OF THE LOT)

F&I THICKENED EDGE WALK ALONG BUILDING EXCEPT AT ADA STALLS TAPER BLACKTOP TO MATCH TOP OF WALK AT ADA STALLS PER DETAIL

RAMP BITUMINOUS TO MATCH SIDEWALK AT ADA STALLS–SEE GRADING PLAN & RAMP DETAIL

F&I BITUMINOUS PAVEMENT TYP. – SEE TYPICAL PAVEMENT SECTION

CITY OF MANKATO STANDARD CONCRETE COMMERCIAL ENTRANCE TYP.

F&I PAVEMENT STRIPING & MESSAGES TYP.

350' HYDRANT COVERAGE RADII–SEE UTILITY PLAN FOR MORE INFORMATION

We used a "health club" as a comparable building use.
The requirement for this use is 1 stall per 400 square feet of building floor area.
With a total square footage of 17,225, that would calculate out to be 43 stalls.
We are providing 74 stalls currently with additional overflow/bus parking to the south.

1"=30'
30 0 30
HORIZ. SCALE FEET

Consultant:
JONES HAUGH SMITH
Engineers + Surveyors
515 South Washington Ave. Albert Lea, MN 507.373.4876

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly registered Professional Engineer under the laws of the State of Minnesota.

Brian J. Johnson
Reg. No. 42544
Date: 10/4/25

Project: **ENDLESS ADVENTURES**

Revision:

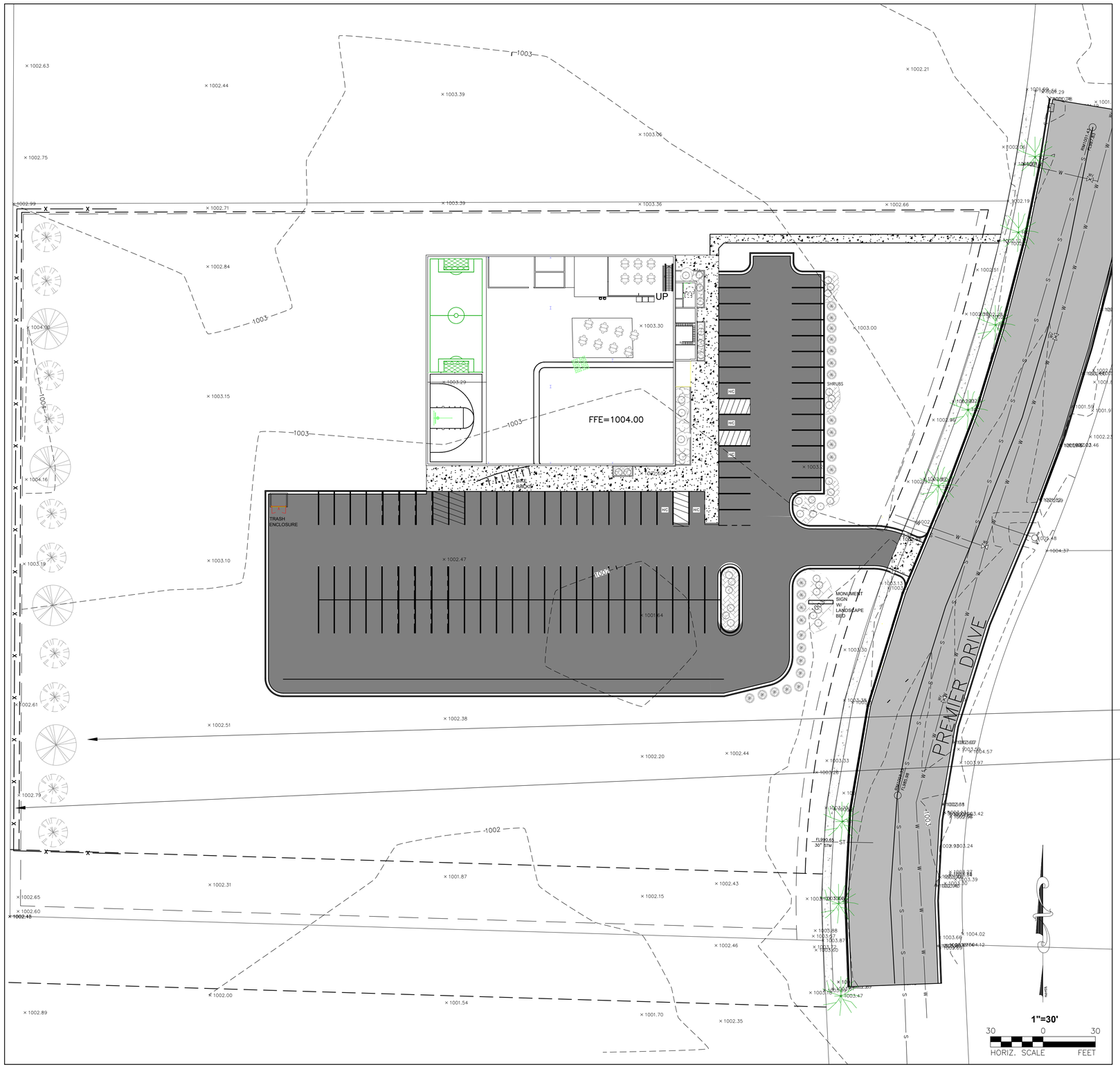
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Drawn: bjj	Checked:

Project Manager:

Project Status: CD

Sheet Title: **HARDSCAPE PLAN**

Sheet No.: **C3**



LANDSCAPING NOTES

B-3 COMMERCIAL DISTRICT
SUBD.3. HIGHWAY GATEWAY OVERLAY DISTRICT

Sec. 10-1740 PERIMETER OFF STREET PARKING LOT
(1) SHADE TREE/ 50 LF OF FRONTAGE
(1) EVERGREEN TREE/ 25 LF OF FRONTAGE
80% OPAQUE ALONG ALL PARKING FRONTING STREET

PLANTING BEDS SHALL BE MULCHED WITH BARK CHIPS, ROCK MULCH, FEATHER ROCKS OR SIMILAR MATERIAL.

PERIMETER LANDSCAPING & TRANSITIONAL YARDS SHALL CONSIST OF A COMBINATION OF GROUND COVER, SHADE TREES OR EVERGREEN TREES, SHRUBS AND APPROPRIATE SCREENING DEVICES SUCH AS DECORATIVE WALLS, FENCES OR BERMS.

LANDSCAPING LEGEND

=DENOTES SHADE TREE

=EVERGREEN TREE

=DENOTES SHRUB/FLOWER

=DENOTES ARBOVITAE HEDGE (4' MIN. – 8' MAX)
(80% OPAQUE ALONG ALL PARKING FRONTING PREMIER DR.)

=DENOTES EXISTING BOULEVARD TREE

=DENOTES PLANTING BED W/ MULCH

=DENOTES 6' HIGH VINYL FENCE

WEST 20' OF SITE TO BE TRANSITIONAL YARD LANDSCAPING (ABUTS RESIDENTIAL)

F&I 500LF 6' HIGH VINYL FENCING

PLANT LIST

SYMBOL	QTY.	COMMON/SPECIES NAME	ROOT	SPAC.
TREES				
QB	4	JAPANESE TREE LILAC SYRINGA RETICULATA	1.5" B.B.	6' O.C.
	6	EXISTING BOULEVARD TREE	N/A	N/A
	10	BLACK SPRUCE PICEA MARIANA	B.B. 6' TALL	25' O.C.
SHRUBS				
AM	25	EMERALD GREEN ABORVITAE THUJA OCCIDENTALIS	#2 CONT.	3' O.C.
FLOWERS				
HS	32	STELLA DE ORO DAYLILLY/ HEMEROCALLIS 'STELLA DE ORO'	#2 CONT.	2.0' O.C.

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.
Brian J. Johnson
Reg. No. 42244
Date: 10/4/25

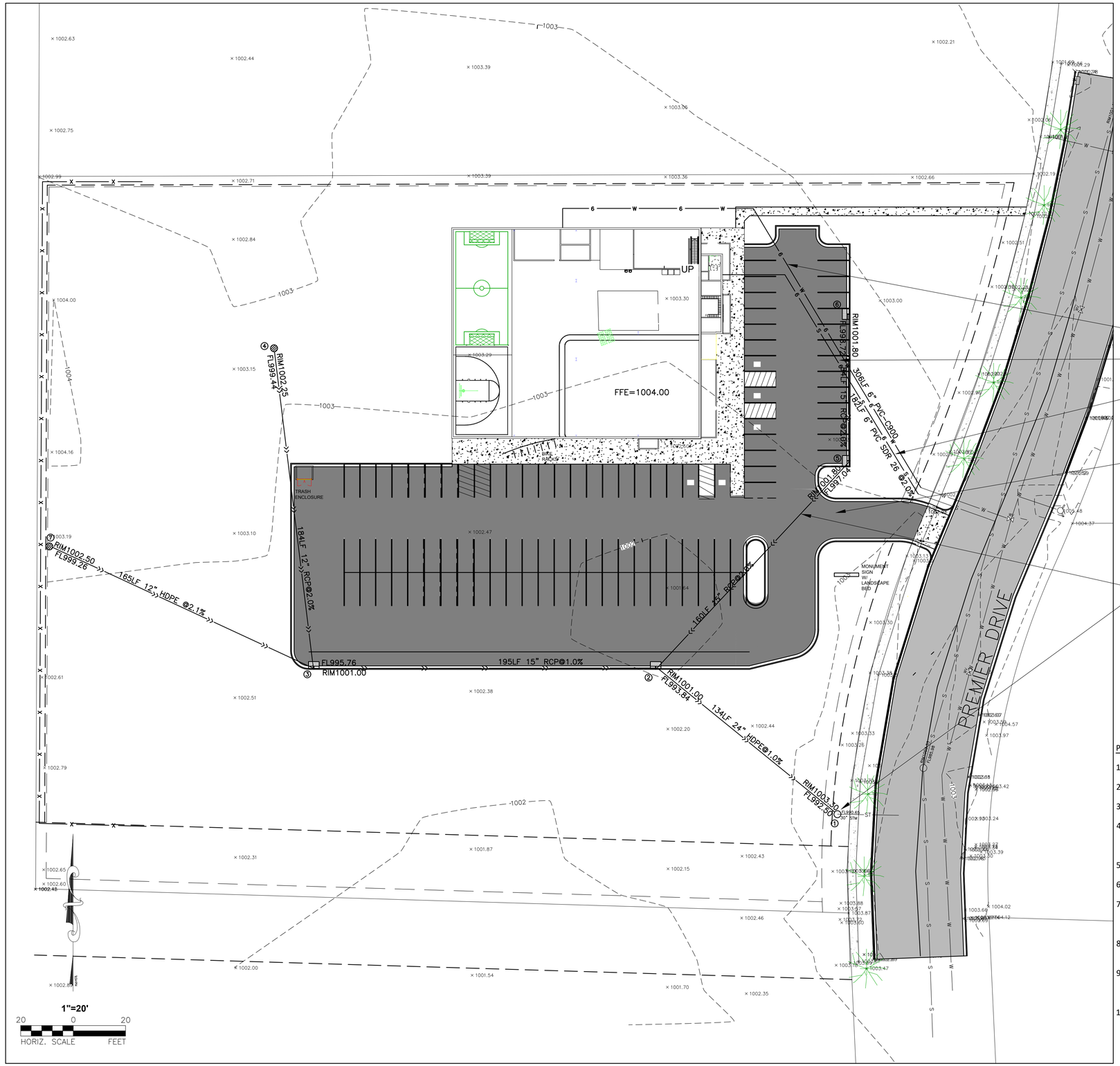
Consultant:
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515 South Washington Ave. Albert Lea, MN 507.373.4876

Project:
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Drawn: bjj | Checked:
Project Manager:
Project Status: CD
Sheet Title:
LANDSCAPE PLAN

Sheet No.:
C4



STORM SEWER STRUCTURE SCHEDULE

NO.	RIM EL.	INVERT EL.	HEIGHT	CASTING	DESIGN	REMARKS
1	1003.30	992.50	10.8	R2573	60-4020	
2	1001.00	993.84	7.16	R3067	48-4022	
3	1001.00	995.76	5.24	R3067	2X3	
4	1002.25	999.44	2.81	R2573	G	F&I 3' SUMP AT ELEV.=996.44
5	1001.80	997.04	4.76	R3067	2X3	
6	1002.00	998.72	3.28	R3067	2X3	
7	1002.50	999.26	3.24	R2573	G	

ALL OUTLET APRONS TO HAVE CL. III RIPAP PER DETAIL INSTALLED WITHIN 24 HOURS OF CONNECTION

F&I NEW 6" SDR 18 PVC WATER SERVICE FROM EXISTING STUB OFF PREMIER DRIVE-SEE MECH. FOR EXACT BLDG. ENTRY

F&I NEW 6" SDR 26 PVC SEWER SERVICE FROM EXISTING STUB OFF PREMIER DRIVE-SEE MECH. FOR EXACT BLDG. ENTRY

F&I SEWER CLEANOUT EVERY 100' ALONG SEWER SERVICE EXTENSION-SEE DETAIL

PROPOSED WATERSHED BOUNDARY TRIBUTARY TO PREMIER DRIVE AREA=3.30 ACRES

F&I STORM SEWER PIPING AND STRUCTURES SHOWN SEE STRUCTURE SCHEDULE FOR MORE INFORMATION CONNECT TO EXISTING 30" STUB FROM PREMIER DR. W/ NEW MANHOLE

PLUMBING SPECIFICATIONS

1. All plumbing shall be installed in accordance with the Minnesota Plumbing Code (see Minnesota Rules, Chapter 4714).
2. The water distribution system shall be disinfected per Minnesota Rules.
3. A sanitary sewer cleanout will be provided near the connection between the building drain and the building sewer.
4. PVC sanitary sewers will meet one of the following ASTM Standards: D3034, F789, D2665, or F891. ASTM D2241 pipe may be used for sewers 6_inch and larger. The installation will comply with ASTM D2321, which requires installation by open trench on a continuous granular bed.
5. PVC solvent weld joints will include a primer of contrasting color to the pipe and cement.
6. RCP storm sewers must comply with ASTMC76.
7. All joints and connections in the storm sewer system shall be gastight or watertight. Approved resilient rubber joints must be used to make watertight connections to manholes, catchbasins, and other structures. Cement mortar joints are permitted only for repairs and connections of existing lines constructed with such joints.
8. Polyethylene (PE) water services must meet ASTM D2239 or D2737 installed perASTM D2774. Joints must use approved insert fittings with metal clamps. No more than two feet may be exposed within the building.
9. The bottom of the water service pipe located within ten feet of the sewer crossing must be at least 12 inches above the top of the sewer. When this is not feasible, the sewer pipe must be constructed of materials listed in the Minnesota Rules. The water service should not contain any joints or connections within 10 feet of the crossing.
10. All portions of the storm sewer system located within 10 feet of the building or water service line must be tested in accordance with Minnesota Rules.

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly registered Professional Engineer under the laws of the State of Minnesota.

Brian J. Johnson
Reg. No. 42544
Date: 10/4/25

Consultant:
JONES HAUGH SMITH
Engineers + Surveyors
515 South Washington Ave. Albert Lea, MN 507.373.4876

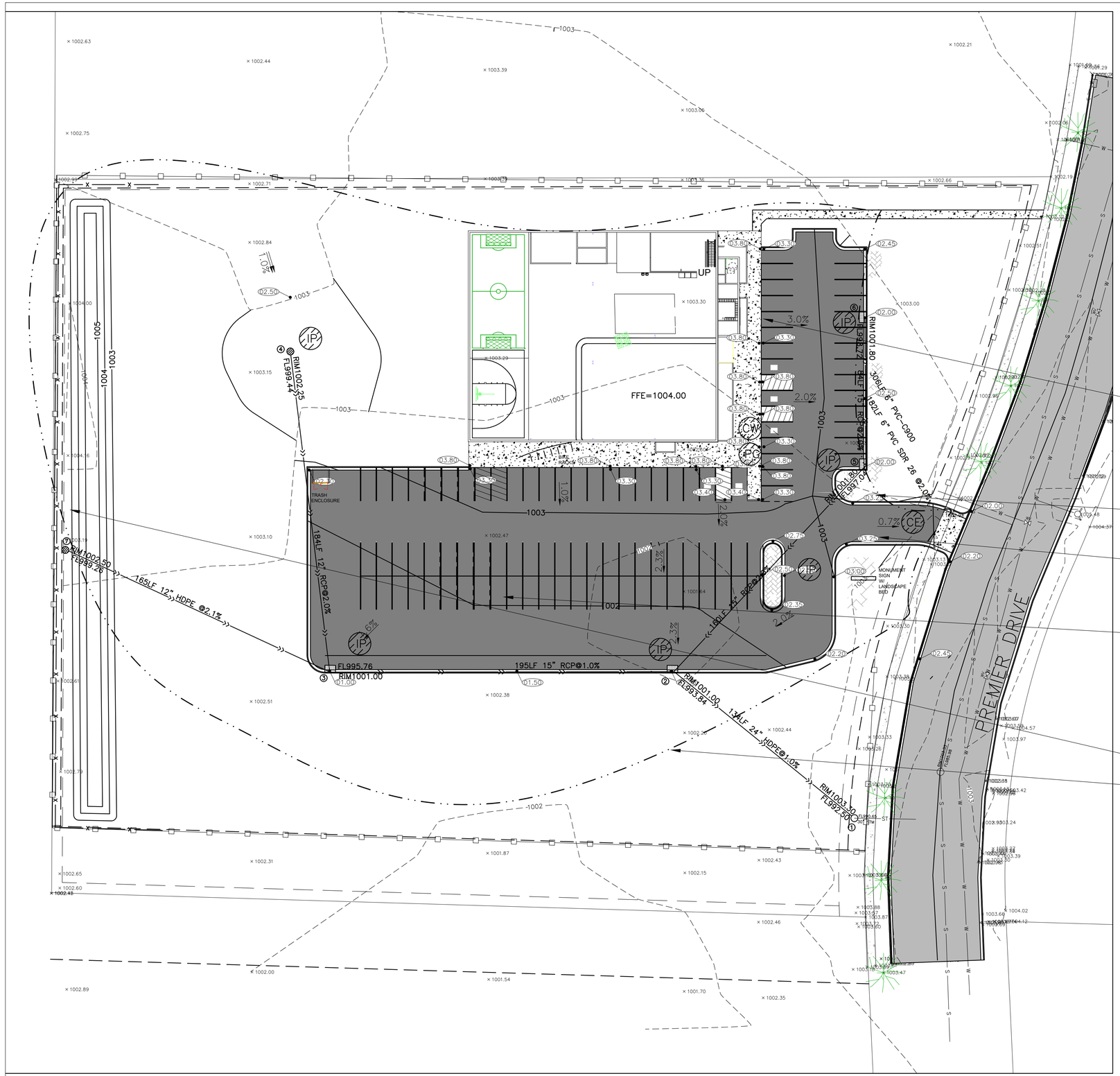
Project:
ENDLESS ADVENTURES

Revision:

No.:	Date: 10/4/25
Drawn: bjj	Checked:
Project Manager:	
Project Status: CD	

Sheet Title:
UTILITY PLAN

Sheet No.:
C5



SWPPP LEGEND

	QUANTITY
(CE) = ROCK CONSTRUCTION ENTRANCE	1 EA
(IP) = INLET PROTECTION–TYP. AT ALL DOWNGRADIENT INLETS	4 EA
= SILT FENCE–FOR PERIMETER CONTROL	1000 LF
= WOOD CHIP BIO–ROLL/SILT SOCK	
= HYDRO–SEED TYPE LAWN OVER 6" MIN. BLACK DIRT TOPSOIL (TYP. TO ALL NON–PAVED DISTURBED AREAS WITHIN SITE)	1 ACRE
(CW) = DESIGNATED CONCRETE WASHOUT AREA	1 EA
(RR) = CL. III RIPRAP ENERGY DISSIPATION–PLACE WITHIN 24 HOURS	0 CY
= RUNOFF FLOW DIRECTION	
(PG) = DESIGNATED POLLUTANT GENERATING AREA	1 EA
(SL) = DESIGNATED STEEP SLOPE AREA (4:1 OR GREATER) F&I CATEGORY 3 BLANKET ON ALL 4:1 OR STEEPER SLOPES	0 SY

ONSITE SOILS=CLAY LOAMS PER NRCS SOIL SURVEY

PROPOSED ELEVATION CONTOUR TYP.

SILT FENCE TYP.

PROPOSED PAVEMENT/GUTTER ELEVATION TYP.

EXISTING ELEVATION CONTOUR TYP.

GRADE ADJACENT AREA TO DRAIN TO INLET

PROPOSED WATERSHED BOUNDARY TYP.

1"=30'

30 0 30

HORIZ. SCALE FEET

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly registered Professional Engineer under the laws of the State of Minnesota.

Brian J. Johnson
Reg. No. 42544
Date: 10/4/25

Consultant:

JONES HAUGH SMITH
Engineers + Surveyors
515 South Washington Ave. Albert Lea, MN 507.373.4876

Project:

ENDLESS ADVENTURES

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Project Manager:

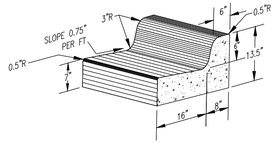
Project Status: CD

Sheet Title:

GRADING & SWPP PLAN

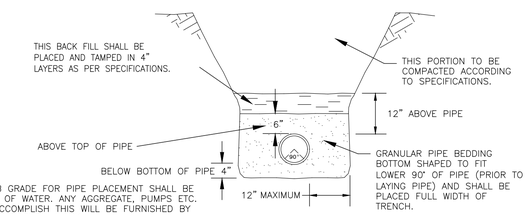
Sheet No.:

C6



CONCRETE CURB & GUTTER DESIGN B618

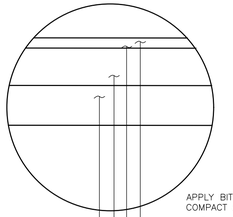
NOTE:
SHEETING, SHORING, BRACING AND SIDE SLOPES REQUIRED BY SAFETY CODES AND REGULATIONS, STATE INDUSTRIAL COMMISSION AND O.S.H.A. ARE NOT SHOWN. CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR THIS.



THE FINISHED SUB GRADE FOR PIPE PLACEMENT SHALL BE MAINTAINED FREE OF WATER. ANY AGGREGATE, PUMPS ETC. NECESSARY TO ACCOMPLISH THIS WILL BE FURNISHED BY CONTRACTOR AS INCIDENTAL WORK.

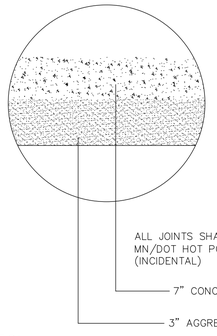
TYPICAL TRENCH
(PVC SEWER, WATER MAIN & PE PIPE)





APPLY BITUMINOUS TACK COAT BETWEEN LIFTS
COMPACT ALL GRANULAR MATERIAL TO 100% OF PROCTOR DENSITY.
2.0" TYPE SPWEA240B WEAR COURSE
2.0" TYPE SPNWB230B BASE COURSE
12" CLASS V AGGREGATE BASE (2211)
SCARIFY THE UPPER 12" OF SUBGRADE IN "CUT" AREAS
ALL GRAVEL BASE SHALL EXTEND A MINIMUMN OF 1' BEHIND ALL CURB

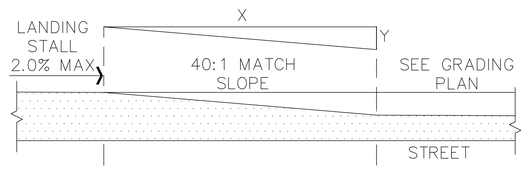
PARKING LOT PAVEMENT SECTION



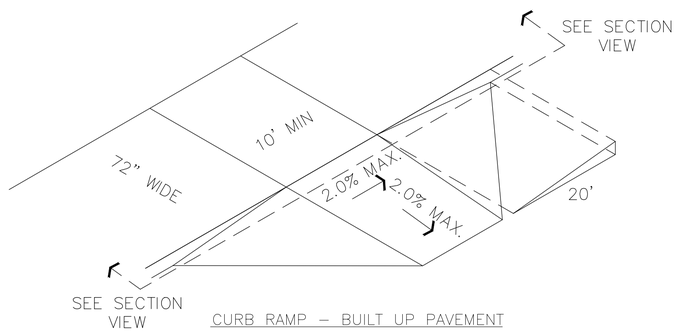
ALL JOINTS SHALL BE SEALED USING AN APPROVED MN/DOT HOT POUR ELASTIC SEALANT (3723) (INCIDENTAL)
7" CONCRETE PAVEMENT (MN/DOT 2301)
3" AGGREGATE BASE CLASS V (MN/DOT 2211)

ALL CONCRETE SHALL BE PORTLAND CEMENT CONCRETE PAVEMENT WITH A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS, A 4" MAXIMUM SLUMP AND 5% – 7% ENTRAINED AIR.

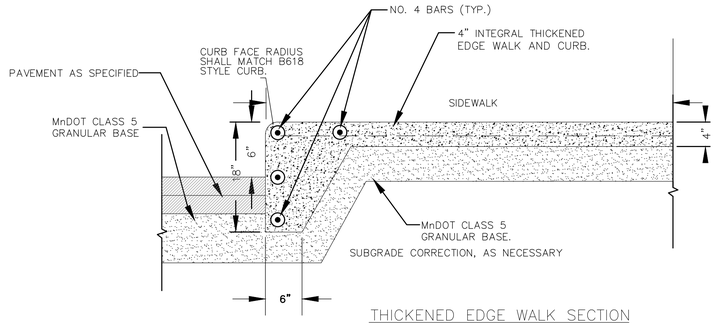
CONCRETE DRIVEWAY SIDEWALK SECTION



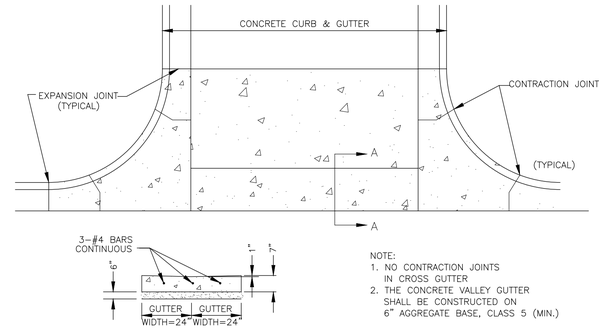
CROSS SECTION



CURB RAMP – BUILT UP PAVEMENT



THICKENED EDGE WALK SECTION

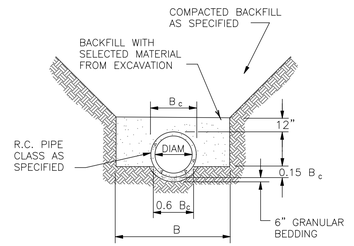


SECTION A

NOTE:
1. NO CONTRACTION JOINTS IN CROSS GUTTER
2. THE CONCRETE VALLEY GUTTER SHALL BE CONSTRUCTED ON 6" AGGREGATE BASE, CLASS 5 (MIN.)

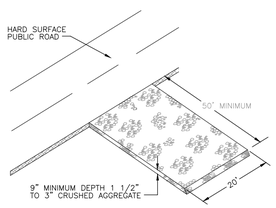
VALLEY GUTTERS TO BE INSTALLED AT LOCATIONS SHOWN ON PLANS

CONCRETE VALLEY GUTTER–MANKATO STANDARD COMMERCIAL DRIVEWAY DETAIL



PIPE DIAM.	B
36" OR LESS	B_c + 24"
42" TO 54"	1.5 x B_c
60" OR OVER	B + 36"

R.C. STORM SEWER TRENCH
CLASS "B" BEDDING CONDITION



EROSION CONTROL PROTECTION AT CONSTRUCTION ACCESS

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the State of Minnesota.

Brian J. Johnson
Reg. No. 42164
Date: 10/4/25

Consultant:
JONES HAUGH SMITH
Engineers + Surveyors
515 South Washington Ave. Albert Lea, MN 507-373-4876

Project:
ENDLESS ADVENTURES

Revision:

No.:	Date: 10/4/25
Drawn: bjj	Checked:

Project Manager:

Project Status: CD

Sheet Title:
SWPPP NARRATIVE & DETAILS

Sheet No.:
C7

SWPPP NARRATIVE

CONSTRUCTION ACTIVITY INFORMATION

PROJECT NAME: ENDLESS ADVENTURES
FACILITY IMPROVEMENT PROJECT

PROJECT LOCATION: MANKATO, MN

PROJECT SIZE: PARCEL SIZE: 2.5 DISTURBED ACRES

PROJECT TYPE: COMMERCIAL BUILDING CONSTRUCTION

MAJOR SOIL TYPE: CLAY

CUMULATIVE IMPERVIOUS SUFACE:
EXISTING – 0 ACRES
POST CONSTRUCTION – 1.50 ACRES

DIRECT DISCHARGE FROM IMPERVIOUS SURFACE: 0 ACRES

RECEIVING WATERS:
CITY STORM SEWER TO REGIONAL POND

DATES OF CONSTRUCTION: 2025

OWNER: ENDLESS ADVENTURES

UNDERGROUND UTILITY/GRADING CONTRACTOR:

TO BE DETERMINED

PARTY RESPONSIBLE FOR LONG TERM O&M:
OWNER: ENDLESS ADVENTURES

GENERAL SITE INFORMATION

IMMEDIATELY FOLLOWING GRADING OF SLOPES OF 3:1 OR GREATER, SLOPES MUST BE STABILIZED WITH WOOD FIBER BLANKET (OR OTHER METHOD APPROVED BY THE ENGINEER) OVER APPROVED SEED MIXTURE AND A MINIMUM OF 4" OF TOPSOIL.

ALL EROSON CONTROL MEASURES SHALL REMAIN IN PLACE AND BE MAINTAINED IN GOOD CONDITION UNTIL THE SITE HAS BEEN RE-VEGETATED, AT WHICH TIME THE CONTRACTOR MAY REMOVE NECESSARY SILT FENCING TO CONSTRUCT ROADWAYS WHILE MAINTAINING ADEQUATE EROSION CONTROL IN ADJACENT AREAS. SUFFICIENT TOPSOIL SHALL BE STOCKPILED OR IMPORTED TO ALLOW FOR THE REPLACEMENT OF A MINIMUM OF 4" OF TOPSOIL FOR DISTURBED AREAS TO BE RE-VEGETATED.

CONTRACTOR SHALL SCHEDULE SITE GRADING, UTILITY INSTALLATION, AND ROADWAY CONSTRUCTION SO THAT THE GENERAL SITE CAN BE MULCHED AND RE-SEEDED SOON AFTER DISTURBANCE. DISTURBED AREAS SHALL BE SEEDED AND MULCHED OR SODDED WITHIN:
7 DAYS

INSPECT SILT FENCES AND BALE CHECKS AFTER EACH RAIN EVENT AND DAILY DURING A PROLONGED RAINFALL. IMMEDIATELY REPAIR FAILED OR FAILING MEASURES.

REMOVE SEDIMENT DEPOSITS FROM SILT FENCE AND BALE CHECKS WHEN SEDIMENT REACHES APPROXIMATELY 1/3 THE HEIGHT OF THE BARRIER.

BARRIERS WILL BE REPLACED WHEN THEY DECOMPOSE OR BECOME INEFFECTIVE BEFORE THE BARRIERS ARE NO LONGER NECESSARY. ANY SEDIMENT REMAINING IN-PLACE AFTER THE BARRIERS ARE NO LONGER NECESSARY WILL BE DRESSED TO CONFORM TO EXISTING GRADE, AND PREPARED AND SEEDED WITH THE APPROPRIATE SEED MIX, AS DIRECTED BY THE ENGINEER.

IN THOSE AREAS WHERE WOOD FIBER BLANKET OR OTHER SLOPE STABILIZATION METHODS HAVE FAILED, THE SLOPE SHALL BE RE-ESTABLISHED, SEED AND TOPSOIL REPLACED, AND ADDITIONAL SLOPE TREATMENT INSTALLED.

BARRIERS WILL BE REMOVED WHEN FINAL STABILIZATION OF THE SLOPES HAS BEEN COMPLETED AS DETERMINED BY THE ENGINEER.

NO STORMWATER MITIGATION MEASURES WERE REQUIRED AS A PART OF ENVIRONMENTAL, ARCHAELOGICAL OR OTHER REQUIRED LOCAL, STATE, OR FEDERAL REVIEW OF THIS PROJECT.

THIS PROJECT IS NOT LOCATED IN A KARST AREA NECESSITATING MEASURES TO PROTECT DRINKING WATER SUPPLY.

THIS PROJECT DOES NOT DISCHARGE WATER TO AN IMPAIRED WATER.

PROVIDE SILT FENCE AROUND ALL SOIL STOCKPILES

SWPPP IMPLEMENTATION CHAIN OF RESPONSIBILITY

EACH CONTRACTOR ON-SITE WILL DESIGNATE AN EMPLOYEE AS ITS PROJECT SWPPP OFFICER. A LIST OF THESE OFFICERS WITH CONTACT INFORMATION WILL BE AVAILABLE ON-SITE. IT WILL BE SOLEY THE SWPPP OFFICERS' RESPONSIBILITY TO ENSURE THAT ALL ON-SITE ACTIVITIES PERFORMED BY ITS COMPANY COMPLY WITH THE SWPPP. THE GENERAL CONTRACTOR'S SWPPP OFFICER WILL HAVE AUTHORITY OVER ALL SUB-CONTRACTOR'S SWPPP OFFICERS FOR WORK PERTAINING TO COMPLIANCE.

SHOULD A SWPPP OFFICER FAIL TO ENSURE COMPLIANCE, THAT OFFICER'S FOREMAN OR DIRECT SUPERVISOR WILL ASSUME ALL RESPONSIBILITY.

SHOULD A SUB-CONTRACTOR FAIL TO COMPLY WITH THE SWPPP, THE GENERAL CONTRACTOR WILL ASSUME ALL RESPONSIBILITY FOR COMPLIANCE.

SHOULD THE GENERAL CONTRACTOR FAIL TO COMPLY WITH THE SWPPP, THE OWNER WILL ASSUME ALL RESPONSIBILITY FOR COMPLIANCE.

EROSION PREVENTION PRACTICES

CONTRACTOR SHALL PHASE CONSTRUCTION, MAINTAIN VEGETATIVE BUFFER STRIPS, AND PROVIDE HORIZONTAL SLOPE STAKING IN ORDER TO MINIMIZE EROSION.

SILT FENCE SHALL BE INSTALLED BEFORE WORK BEGINS. SILT FENCE LIMITS SHALL COINCIDE WITH DOWNGRADE GRADING LIMITS UNLESS OTHERWISE NOTED.

THIS PROJECT DOES NOT HAVE EXPOSED POSITIVE SLOPES WITHIN 200' OF SURFACE WATER.

THE WETTED PERIMETER OF DRAINAGE SWALES WILL BE STABILIZED WITH WOOD FIBER BLANKETS AND/OR DITCH CHECKS WITHIN 200' OF THE SITE BOUNDARY LINE OR WETTED PERIMETER OF DITCHES WITHIN 24 HOURS..

TEMPORARY OR PERMANENT DITCHES THAT ARE BEING USED AS A SEDIMENT CONTAINMENT SYSTEM DURING CONSTRUCTION MUST BE STABILIZED WITHIN 24 HOURS AFTER NON-USE

PIPE OUTLETS MUST HAVE ENERGY DISSIPATION IN PLACE WITHIN 24 HOURS OF INSTALLATION MULCH, HYDROMULCH, TACKIFIER, POLYACRYLAMIDE EROSION PREVENT PRACTICES CANNOT BE BE USED WITHIN THE NORMAL WETTED PERIMETER OF OF DRAINAGE DITCHES OR SWALE SECTIONS WITH A CONTINUOUS SLOPE GREATER THAN 2%

SEDIMENT CONTROL PRACTICES

CONTRACTOR SHALL FURNISH, INSTALL, AND MAINTAIN:
SEDIMENT CONTROLS FOR TEMPORARY AND PERMANENT DRAINAGE BASINS AND DRAINAGE DITCHES THAT ARE A PART OF THIS DESIGN

CHECK DAMS AND/OR WOOD FIBER BLANKETS TO ENSURE SHEET FLOW AND PREVENT RILLS FOR SLOPE LENGTHS GREATER THAN 75' WITH A SLOPE OF 3:1 OR GREATER

SILT FENCE AT ALL DOWN GRADIENT PERIMETERS INSTALLED PRIOR TO ALL LAND DISTURBING ACTIVITIES

INLET PROTECTION AT ALL DRAIN INLETS

SILT FENCING AROUND TEMPORARY SOIL STOCKPILES

ROCK CONSTRUCTION SITE ENTRANCES

STREET SWEEPING OF TRACKED SEDIMENT ONTO PAVED SURFACES

SEDIMENT CONTROL PRACTICES MUST BE IN PLACE AT ALL DOWN GRADIENT PERIMETERS AND UPGRADIENT OF ANY BUFFER ZONES

SEDIMENT CONTROL PRACTICES ARE ESTABLISHED AT THE BASE OF STOCKPILES ON DOWN GRADIENT PERIMETER

STOCKPILES ARE LOCATED OUTSIDE OF NATURAL BUFFERS OR SURFACE WATER, INCLUDING STORM WATER CONVEYANCES UNLESS THERE IS A BYPASS

THIS PROJECT DOES NOT INCLUDE DEWATERING OR BASIN DRAINING PERMANENT SEDIMENT BASINS WILL BE USED AS TEMPORARY BASINS DURING CONSTRUCTION

ADDITIONAL BMP'S FOR SPECIAL WATERS

THIS PROJECT DOES NOT DISCHARGE TO SPECIAL WATERS OR HAVE SIGNIFICANT IMPACTS TO WETLANDS

INSPECTIONS AND MAINTAINANCE

CONTRACTOR SHALL INSPECT AND MAINTAIN MEASURES AT MINIMUM ONCE EVERY (7) DAYS DURING ACTIVE CONSTRUCTION, AND WITHIN 24 HOURS AFTER A RAINFALL EVENT OF 0.5" IN 24 HOURS.

INSPECTIONS WILL INCLUDE STABILIZED AREAS, EROSION PREVENTION AND SEDIMENT CONTROLS, AND INFILTRATION AREAS.

REFER TO MPCA'S COMPLIANCE GUIDE FOR EROSION AND SEDIMENT CONTROL FOR INSPECTION LOG REQUIREMENTS.

MAINTENANCE RECORDS SHOULD INCLUDE: DATES & TIMES IF INSPECTION, NAME OF PERSON CONDUCTING THE INSPECTION, FINDINGS & LOCATIONS OF CORRECTIVE ACTIONS, PARTY COMPLETING MAINTENANCE ACTIVITIES, DATES & AMOUNTS OF RAINFALL EVENTS GREATER THAN 0.5", RAINFALL AMOUNTS ARE TO BE RECORDED WITH RAIN GAUGE ON SITE OR WEATHER STATION WITHIN 1 MILE OF SITE. ANY DISCHARGES OBSERVED SHOULD BE DESCRIBED & PHOTOGRAPHED.

RECORDS RETENTION

CONTRACTOR SHALL MAINTAIN RECORDS OF THE SEDIMENT RETENTION PROCEDURES ON-SITE. RECORDS WILL INCLUDE:
COPY OF THE SWPPP AND ALL REVISIONS
INSPECTION AND MAINTAINANCE RECORDS
PERMANENT OPERATION AND MAINTAINANCE AGREEMENTS
CALCULATIONS FOR THE DESIGN OF TEMPORARY AND PERMANENT STORMWATER MANAGEMENT SYSTEMS
COPIES OF THE SWPPP MUST BE RETAINED ON SITE BY THE PERMITTEE

POLLUTION PREVENTION MEASURES

SOLID WASTE:
COLLECTED SEDIMENT, ASPHALT AND CONCRETE MILLINGS, FLOATING DEBRIS, PAPER, PLASTIC, FABRIC, CONSTRUCTION AND DEMOLITION DEBRIS AND OTHER WASTES MUST BE DISPOSED OF PROPERLY AND MUST COMPLY WITH MPCA DISPOSAL REQUIREMENTS.

CONCRETE AND OTHER WASHOUTS:
PERFORM ALL CONCRETE TRUCK WASHOUTS IN PROPER CONTAINMENT FACILITIES.
SOILID AND LIQUID WASHOUT WASTE FROM OTHER MATERIALS (STUCCO, PAINT, FORM RELEASE OILS CURING COMPOUNDS ETC.) WILL BE DISPOSED OF IN A PROPERLY DESIGNATED LANDFILL.

PERFORM ALL WASHOUTS INCLUDING HANDTOOLS IN A LEAKPROOF CONTAINMENT FACILITY OR IMPERMEABLE LINER THAT PREVENTS RUNOFF ONTO ADJACENT SOILS. DEBRIS/SEDIMENT WILL NOT CONTACT THE GROUND SURFACE.

A SIGNE REQUIRING USE OF PROPER WASHOUT FACILITIES WILL BE INSTALLED ADJACENT TO SAID FACILITIES.

HAZARDOUS MATERIALS:
OIL, GASOLINE, PAINT AND ANY HAZARDOUS SUBSTANCES MUST BE PROPERLY STORED, INCLUDING SECONDARY CONTAINMENT TO PREVENT SPILLS, LEAKS, OR OTHER DISCHARGE. RESTRICTED ACCESS TO STORAGE AREAS MUST BE PROVIDED TO PREVENT VANDALISM. STORAGE AND DISPOSAL OF HAZARDOUS WASTE MUST BE IN COMPLIANCE THE MPCA REGULATIONS.

EXTERNAL WASHING OF TRUCKS AND OTHER CONSTRUCTION VEHICLES MUST BE LIMITED TO A DEFINED AREA OF THE SITE. RUNOFF MUST BE CONTAINED OF AND WASTE PROPERLY DISPOSED OF. NO ENGINE DEGREASING IS ALLOWED ON SITE.

SWPPP IMPLEMENTATION CHAIN OF RESPOSIBILITY

THE GENERAL CONTRACTOR SHALL PROVIDE A TRAINED, CERTIFIED, KNOWLEDGEABLE PERSON WHO SHALL SERVE AS THE SITE'S EROSION CONTROL INSPECTOR. THIS PERSON SHALL BE RESPONSIBLE FOR INSTALLATION AND MAINTENANCE OF EROSION AND SEDIMENT CONTROL BMP'S, AND SHALL MAINTAIN THE INSPECTION LOG AT THE PROJECT SITE.

EACH SUBCONTRACTOR ON-SITE WILL DESIGNATE AN EMPLOYEE AS ITS PROJECT SWPPP OFFICER. A LIST OF THESE OFFICERS WITH CONTACT INFORMATION WILL BE AVAILABLE ON-SITE. IT WILL BE SOLELY THE SWPPP OFFICERS' RESPONSIBILITY TO ENSURE THAT ALL ON-SITE ACTIVITIES PERFORMED BY ITS COMPANY COMPLY WITH THE SWPPP. THE GENERAL CONTRACTOR'S SWPPP INSPECTOR WILL HAVE AUTHORITY OVER ALL SUBCONTRACTOR'S SWPPP OFFICERS FOR WORK PERTAINING TO COMPLIANCE.

SHOULD A SWPPP OFFICER FAIL TO ENSURE COMPLIANCE, THAT OFFICER'S FOREMAN OR DIRECT SUPERVISOR WILL ASSUME ALL RESPONSIBILITY.

SHOULD A SUBCONTRACTOR FAIL TO COMPLY WITH THE SWPPP, THE GENERAL CONTRACTOR WILL ASSUME ALL RESPONSIBILITY FOR COMPLIANCE.

SHOULD THE GENERAL CONTRACTOR FAIL TO COMPLY WITH THE SWPPP, THE OWNER WILL ASSUME ALL RESPONSIBILITY FOR COMPLIANCE.

CHANGES IN PERMIT AND NOTICE OF TERMINATION

THE CONTRACTOR WILL BE A CO-PERMITEE DURING THE CONSTRUCTION OF THE PROJECT. AFTER GRAVEL SURFACING OF THE PROJECT HAS BEEN COMPLETED, AND 70% PERMANENT VEGETATIVE COVER HAS BEEN ESTABLISHED OVER THE PERVIOUS AREAS OF THE SITE, AND THE WARRANTY PERIOD HAS ELAPSED, THE CONTRACTOR MAY SUBMIT A MPCA (NOT)F ORM TO THE OWNER FOR SIGNATURE AND SUBMITTAL TO THE MPCA.

THE OWNER WILL SUBMIT THE NOTICE OF TERMINATION (NOT) AFTER ONE FINAL ESTABLISHMENT OF ALL PERVIOUS SURFACES ACCORDING TO THE MPCA GENERAL PERMIT REQUIREMENTS

NOTIFICATION OF THE MPCA IN CASE OF POLLUTION

IT IS THE DUTY OF THE CONTRACTOR TO NOTIFY THE MPCA IMMEDIATELY OF ANY DISCHARGE, ACCIDENTAL OR OTHERWISE, OF ANY SUBSTANCE OR MATERIAL UNDER HIS CONTROL WHICH, IF NOT RECOVERED, MAY CAUSE POLLUTION OF WATERS OF THE STATE, AND THE CONTRACTOR SHALL RECOVER AS RAPIDLY AND THOROUGHLY AS POSSIBLE SUCH SUBSTANCE OR MATERIAL AND TAKE IMMEDIATELY SUCH OTHER ACTION AS MAY BE REASONABLY POSSIBLE TO MINIMIZE OR ABATE POLLUTION OF WATERS OF THE STATE CAUSED THEREBY.

SEDIMENT LEAVING THE CONSTRUCTION SITE AND ENTERING A PUBLIC WATER IS CAUSE FOR NOTIFICATION.

MPCA DUTY OFFICER: 800-422-0798

QUALIFIED SWPPP PERSONNEL INFORMATION

SWPPP DESIGNER: BRIAN J. JOHNSON, PE
JONES HAUGH & SMITH, INC.
515 SOUTH WASHINGTON AVE
ALBERT LEA, MN 56007
(507) 373-4876

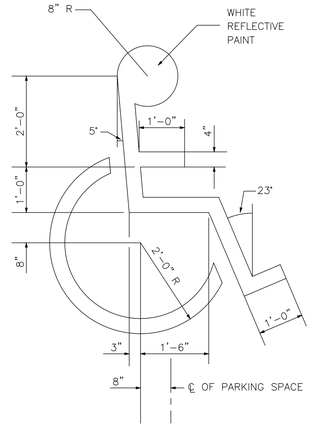
SWPPP INSTALLER:
NAME: _____
FIRM: _____
ADDRESS: _____
_____
PHONE: _____

SWPPP INSPECTOR:
NAME: _____
FIRM: _____
ADDRESS: _____
_____
PHONE: _____

GRADING CONTRACTOR:
NAME: _____
FIRM: BCM CONTRACTING_____
ADDRESS: _____
_____
PHONE: _____

OTHER LAND DISTURBING CONTRACTOR:
NAME: _____
FIRM: _____
ADDRESS: _____
_____
PHONE: _____

OTHER LAND DISTURBING CONTRACTOR:
NAME: _____
FIRM: _____
ADDRESS: _____
_____
PHONE: _____

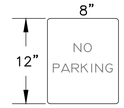


INTERNATIONAL HANDICAP SYMBOL



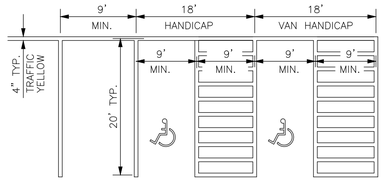
STEEL POST MOUNTED
(PERMANENT)
INSTALL AT ALL HANDICAP STALLS
60"-66" ABOVE FINISH GRADE
CENTERED AT THE HEAD OF THE STALL

SIGN PANEL DETAIL

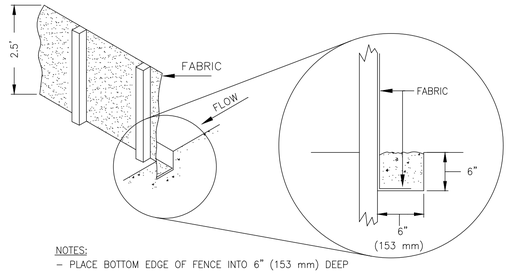


STEEL POST MOUNTED
(PERMANENT)
INSTALL AT ALL HANDICAP ACCESS
AILSES-60"-66" ABOVE FINISH GRADE
CENTERED AT THE HEAD OF THE STALL

SIGN PANEL DETAIL



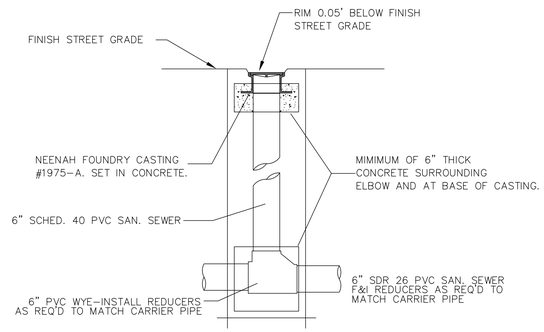
90° STALL



NOTES:
- PLACE BOTTOM EDGE OF FENCE INTO 6" (153 mm) DEEP
- POSTS SHALL BE:
  - 4' (1.22 m) ON CENTER
  - 2" (50.8 mm) X 2" (50.8 mm) HARDWOOD, PINE OR STANDARD STEEL FENCE POSTS
  - DRIVEN 2' (0.61 m) INTO THE GROUND.

EROSION CONTROL FENCE

(MACHINE SLICED)



CLEANOUT DETAIL

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the State of Minnesota.

Brian J. Johnson
Reg. No. 47544
Date: 10/4/25

JONES HAUGH SMITH
Engineers • Surveyors
515 South Washington Ave. Albert Lea, MN 507.373.4876

Consultant:

Project: **ENDLESS ADVENTURES**

Revision:

No.:	Date: 10/4/25
Drawn: bij	Checked:
Project Manager:	
Project Status: CD	

Sheet Title: **SWPPP NARRATIVE & DETAILS**

Sheet No.: **C8**

GOVERNING SPECIFICATIONS
The Minnesota Department of Transportation's "Standard Specifications for Construction" 2018 Edition, including the Mn/DOT Special Provisions modified for this project, Minnesota Plumbing Code and the City Engineers Association of Minnesota Standard Specification, 2018 Edition, will govern except as modified or altered in the Special Provisions. All references to "State of Minnesota" or "Commissioner of Transportation" or "Department" are hereby revised to mean "Owner."

WORK WITHIN PROPERTY
The Contractor will work only in areas secured by the Owner, and will comply with all requirements of access agreements.

MATERIALS TESTING

Materials Testing will be by the Contractor. The Contractor will hire an independent testing consultant, approved by the Engineer, prior to the start of work to be tested.

1. The following materials tests will be provided by the Testing Company:

Work to be Tested	Method	Reference Spec.	Testing Rate
Sewer & Water Service Trenches	Specified Density	MnDOT 2105, 2451, 2501	1 test per 500 lf
Storm Sewer Trench Compaction	Specified Density	MnDOT 2105, 2451, 2501	1 test per 500 lf
Subgrade/Embankment Compaction	Specified Density	MnDOT 2105	1 test per 2500 cy placed (Clay, Sand, etc.)
Test Rolling	Fully Loaded Dump Truck		1 test per road
Select Granular Borrow	Specified Density	MnDOT 3149	1 per 5000 ton
	Gradation	MnDOT 3149	1 per Source
Aggregate Base (CL 3, CL 5)	Modified DCP	MnDOT 2211	2 tests per 1000 ton
	Gradation	MnDOT 2211	1 per 5000 ton
Bituminous Paving	Ordinary Comp.-Control Strip	MnDOT 2360	1 control strip per mobilization and/or per workday
Concrete Curb & Gutter	Air, Slump, Temp, Strength	MnDOT 2461	If non-integrant
Air, Temp. - 1 per day			
Slump, Strength - 1 per day; and each time water is added at the site			
Concrete Driveway or Sidewalk	Air, Slump, Temp, Strength	MnDOT 2461	
Air, Temp. - 1 per day			
Slump, Strength - 1 per day; and each time water is added at the site			
Concrete Paving		MnDOT 2301	
All Concrete Field testing or Concrete Pavement per 2012 MnDOT Schedule of Materials Control (page 32), except Pavement Texture and Smoothness.			

Table Notes:

- Specified Density also requires Moisture-Density and Relative Density
- The Engineer may omit duplicative trench compaction tests at his discretion

MAINTENANCE OF TRAFFIC (1404)
The Contractor will be responsible for traffic control on the Project, and will furnish, erect, and maintain all necessary traffic control devices required to provide safe movement of vehicular traffic through the Project. Any traffic control device installed will meet the requirements of the Minnesota Manual on Uniform Traffic Control Devices, Field Manual, latest edition, and the latest MnDOT specifications approved at the time of bid.

The Contractor will prepare and submit to the City Engineer and County Engineer for Approval a Traffic Control Plan for any work in or utilization of traveled Right-of-Way. The plan will be submitted a minimum of 48 hours prior to the commencement of work. No work in the Right-of-Way will commence without an Approved Traffic Control Plan.

Traffic control will be in accordance with the Traffic Control Layout Plan and the following:
Traffic control devices include, but are not limited to, barricades, warning signs, lane markings, trailers, flashers, cones, and drums, as required, and sufficient barricade weights to maintain barricade stability.
No material will be deposited on a traveled roadway.
Materials will not be placed on road right of way more than one week in advance of their use.
Contractor will notify the affected parties at least one week prior to commencement of disturbance of the private or business drives.
Coordination will be maintained with the Fire and Police Departments to ensure that passage is maintained for emergency vehicles at all times.
The Contractor will make one person responsible for the maintenance of all signs. The Contractor will check each intersection at the end of each day whether it is a working day or not. The name and telephone number of this person will be left with the Police, the City Engineer, and the Fire Departments.

UTILITY PROPERTY AND SERVICE (1507)
Construction operations in the proximity of utility properties will be performed in accordance with the Provisions of 1507, except as modified below:

The first paragraph of 1507 is deleted and the following substituted therefore:

It will be the Contractor's responsibility to contact all local utility companies and ascertain the location of all existing underground utilities, if any, prior to performing any excavation operations. The Contractor will conduct his/her operations in the vicinity of any such facilities, which may exist, in a manner that will prevent damage thereto.

It will be the Contractor's responsibility to utilize the One-Call Excavation Notice System at 'Gopher State One Call' (1-800-252-1166) required under Minnesota Statute Chapter 216D, 48 hours prior to performing any excavation adjacent to any underground facility, which may exist, in a manner that will prevent damage thereto.

CONSTRUCTION STAKES, LINES AND GRADES (1508)

All construction staking will be provided by the Contractor and performed by or under the direct supervision of a Land Surveyor licensed in the State of Minnesota.

Field Fit Adjustments to Grade Stakes
The Engineer may make minor adjustments (< 0.5') to the grade stakes after they have been placed, in order to adjust to actual conditions in the field or to ensure proper or better drainage. Any adjustments to proposed or in-place materials required due to minor adjustments made by the Engineer are incidental to the work.

CONTROL OF HAUL ROADS (1515), LAWS TO BE OBSERVED (1701)

In addition to the requirements of 1515 and 1701, the Contractor will abide by all weight restrictions implemented by the governing road authorities in the performance of the work and in delivering materials and equipment to the project site.

AIR LAND AND WATER POLLUTION (1717)

The provisions of Mn/DOT 1717 are hereby modified and supplemented as follows:

DEWATERING
Any dewatering necessary to construct the work will be done by the Contractor. The Contractor is responsible to determine the type and method of dewatering and to provide and implement all equipment and materials necessary to accomplish the work on this project. Discharged water from dewatering will be routed through a temporary sediment basin. Sediment trapped in the temporary basins will be removed and disposed of on-site.

PROTECTION OF SURFACE STRUCTURES
The Contractor will not trespass on any private property without the express written consent of the Owner thereof. Trees, shrubs, fences, poles and all other private property will be protected unless their removal is authorized. Any property damaged will be satisfactorily restored at the expense of the Contractor. Any land survey or property monuments destroyed, covered, moved, bent or disturbed will be replaced by a Licensed Land Surveyor at the expense of the Contractor.

Wherever construction is planned to cross private property, an easement for the construction has been acquired from the property owner. The Contractor will familiarize himself with the terms of such easements, which the Owner will have on file.

Ground surface, trees, shrubbery, fences and other private property will be restored to the same condition as existed prior to the beginning of construction. This will include consolidating backfill, graveling driveways and any other leveling and landscaping required to restore the premises to original condition. The topsoil will be piled separately from subsoil material and will be replaced in the trench above the subsoil material.

Except where sodding is required, all grassed areas disturbed during the construction will be seeded following landscaping.

The Contractor will restore at his own expense streets, roads, alleys, private or public structures such as water mains, water connections and appurtenances, culverts, drain tiles, sewers, manholes, catch basins, sewer connections, curb, gutter, sidewalk, street signs, or other structures designated to remain in place which are damaged or injured in any way by his acts, and will be responsible for all damages to other utilities he may encounter.

The Contractor will not claim, or be entitled to receive, compensation for any damages sustained by reason of the inaccuracy or omission of any of the information given on the drawings relative to surface, overhead, or underground structures, or by reason of his failure to properly protect such structures.

PROTECTION OF SIDE STREETS AND HAUL ROUTES

The Contractor will be responsible for any damage of the side streets in the area and any other streets that are used as haul routes. The Contractor will discuss all haul route possibilities with the City Engineer and County Engineer prior to their use. The City Engineer, County Engineer, and the Contractor together will inspect the condition of the proposed routes before, during and after their use. The Contractor will correct any damage that is caused by the hauling activities at no cost to the Owner.

DEWATERING

Any dewatering necessary to construct the work will be done by the Contractor. The Contractor is responsible to determine the type and method of dewatering and to provide and implement all equipment and materials necessary to accomplish the work on this project. Discharged water from dewatering will be routed through a temporary sediment basin. Sediment trapped in the temporary basins will be removed and disposed of on-site.

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Wherever construction is planned to cross private property, an easement for the construction has been acquired from the property owner. The Contractor will familiarize himself with the terms of such easements, which the Owner will have on file.

Ground surface, trees, shrubbery, fences and other private property will be restored to the same condition as existed prior to the beginning of construction. This will include consolidating backfill, graveling driveways and any other leveling and landscaping required to restore the premises to original condition. The topsoil will be piled separately from subsoil material and will be replaced in the trench above the subsoil material.

Except where sodding is required, all grassed areas disturbed during the construction will be seeded following landscaping.

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PROTECTION OF SIDE STREETS AND HAUL ROUTES

The Contractor will be responsible for any damage of the side streets in the area and any other streets that are used as haul routes. The Contractor will discuss all haul route possibilities with the City Engineer and County Engineer prior to their use. The City Engineer, County Engineer, and the Contractor together will inspect the condition of the proposed routes before, during and after their use. The Contractor will correct any damage that is caused by the hauling activities at no cost to the Owner.

INTERFERENCE OF UNDERGROUND STRUCTURES

Existing utilities crossed by the new construction will be protected against damage, and/or replaced to original grade. Protection, temporary support and maintenance of existing utilities will be furnished by the Contractor at his own expense. The final installation will provide permanent support to prevent any settlement or movement, which may result in damage to these utilities.

Whenever existing pipe is replaced, the material of replacement will be DIP or PVC pipe of the same diameter as the original, long enough to extend at least one foot into the solid bank on either side of the excavation. The backfill under and around such pipe will be thoroughly compacted by mechanical means to preclude settlement. All connections between different types or sizes of pipe or improperly matched joint types will be encased in concrete with a minimum thickness of 6 inches.

Should it become necessary during the progress of the work to remove or relocate existing utilities or structures, the Owner will cause the same to be done at no expense to the Contractor, except as otherwise provided herein. The Contractor will notify those who maintain utilities sufficiently in advance of construction so they may make the necessary location, disclosure, relocation or other preparation. Where necessary to locate existing underground utilities, the Contractor, upon order of the Engineer, will make any required subsurface explorations and excavation, and will be allowed compensation therefore. Where relocation or reconstruction of existing utilities is impracticable, a change in line and/or grade of the new construction will be ordered, and the change will be made as directed. No deviation from the line or grade set by the Engineer will be made without his approval.

CONNECT TO EXISTING SANITARY SEWER

The Contractor will connect to the existing sanitary sewer at the locations shown on the plan. Exploratory excavation for determining the location of existing utilities and the connection to the existing sanitary sewer are incidental to the work. The Contractor will verify the connection elevation at the main is reasonably close to the elevation shown on the plan prior to beginning work. If the elevation is substantially different, the Contractor will notify the Owner and Engineer.

Where new connections are made to existing sanitary sewer manholes, the contractor will core drill the manhole wall and invert to the existing flow line, construct and shape a new invert for the new pipe, and provide a waterproof boot through the wall of the manhole for the new pipe.

SANITARY SEWER CONSTRUCTION REQUIREMENTS

1. Noise -- The Contractor will insure all equipment is properly fitted with mufflers to reduce noise to the minimum attainable to avoid creating a nuisance in the residential and business area.
2. Trench Compaction -- All trenches will be tamped using the existing material that has been excavated. Tamping will not be paid as a bid item, therefore the cost of this work will be included in the price bid for furnishing and installing the pipe.
3. Piling Excavated Materials -- Excavated material will not be piled on private property without the express permission of the owner thereof, except where easements for the sewer construction or for related work have been obtained; nor will it be piled in any location that will require backfilling machinery to operate on private property. Where excavated material is piled on private property it will be placed to cause the least possible inconvenience to the property owner. Any damage caused thereby, including damage to buildings, walls, sidewalks, driveways, trees, shrubs, lawns, or any other property, will be repaired at the expense of the Contractor. Backcasting in order to minimize disturbance is incidental to the work.
4. It will be the Contractor's responsibility to protect adjacent pipes in and around manholes to be reconstructed, and will replace any pipes damaged, cracked, or broken by the Contractor at their expense.
5. All excavations, trenching and/or jacking and boring pits will be sheeted and/or shored as per OSHA requirements. No unsheeted trench will be left open overnight.
6. Backfilling of all trenches within the limits of street excavation will comply with the provisions of MN/DOT Specification 2112 including achieving 100% compacted density in the upper three feet of subgrade (below aggregate base) and 95% below the upper three feet. Density testing will be performed as directed by the Owner to verify compaction. Trench areas that are determined by the Owner to have yielded due to improper compaction will be deemed as Unacceptable Work and will be corrected by the contractor at no additional cost.
7. Removal of former service lines. -- Service lines no longer being utilized will be removed to the main, as directed by the City. Removal and restoration of street surfacing required for the service removal is incidental.
8. RECORDS OF LATERALS: The Contractor will maintain a complete and accurate record of the location and depth of each lateral. The Contractor will make measurements from the end of each service to prominent permanent features to facilitate its location in the future. The end of each lateral will be located in plan and elevation, and a sketch made to show the plan location. These records will be turned over to the Owner.

MATERIALS FOR SANITARY SEWER CONSTRUCTION:

The project calls for the use of Poly-Vinyl Chloride (PVC). Pipe and fittings should be properly bedded and encased in accordance with the Standard Detail Sheets and Standard Specifications for Sanitary Sewer Installation. All 8" and larger sanitary sewer shall be SDR 35, pipe smaller than 8" shall be SDR 26
Bedding and encasement beneath, along the sides, and above the pipe will be Select Granular material, tamped in place. The only deviation will be in poor soil conditions, as approved by the Engineer, where foundation rock will be substituted. Pipe bedding is incidental to pipe installation. Foundation rock is incidental to pipe installation.
Joints for PVC-SDR 35, and PVC-SDR 26 gravity sewer pipe will be made using Elastomeric gaskets conforming to the requirements of ASTM D3212.
Joints in precast concrete manholes will be made using a joint compound equal to Ram-Nek or rubber gasketed conforming to ASTM C443.
All manhole castings will be equipped with solid lid covers, self-sealing, with concealed pick holes. Manhole casting will be Neenah R1772, or equal and will be labeled 'SANITARY' on casting.

CONNECT TO EXISTING WATERMAIN

The Contractor will connect to existing watermain at the locations shown on the plan. All connections to existing water main are incidental to the work. All exploratory excavation in determining the location of existing water main is incidental to the work. The Contractor will coordinate with the utility owner and be responsible for any fees due for connections.

WATERMAIN CONSTRUCTION REQUIREMENTS

1. Noise -- The Contractor will insure all equipment is properly fitted with mufflers to reduce noise to the minimum attainable to avoid creating a nuisance in the residential and business area.
2. Bedding and encasement beneath, along the sides, and above the pipe will be Select Granular material, tamped in place. The only deviation will be in poor soil conditions, as approved by the Engineer, where foundation rock will be substituted. Pipe bedding is incidental to pipe installation. Foundation rock will be paid at the unit price per ton. No payment will be made for bedding materials which, in the opinion of the Engineer, was unnecessary for proper pipe installation.
3. Trench Compaction -- All trenches will be tamped using the existing material that has been excavated. Tamping will not be paid as a bid item, therefore the cost of this work will be included in the price bid for furnishing and installing the pipe.
4. Piling Excavated Materials -- Excavated material will not be piled on private property without the express permission of the owner thereof, except where easements for the sewer construction or for related work have been obtained; nor will it be piled in any location that will require backfilling machinery to operate on private property. Where excavated material is piled on private property it will be placed to cause the least possible inconvenience to the property owner. Any damage caused thereby, including damage to buildings, walls, sidewalks, driveways, trees, shrubs, lawns, or any other property, will be repaired at the expense of the Contractor.
5. It will be the Contractor's responsibility to protect adjacent pipes in and around manholes to be reconstructed, and will replace any pipes damaged, cracked, or broken by the Contractor at their expense.
6. All excavations, trenching and/or jacking and boring pits will be sheeted and/or shored as per OSHA requirements. No unsheeted trench will be left open overnight.
7. Backfilling of all trenches within the limits of street excavation will comply with the provisions of MN/DOT Specification 2112 including achieving 100% compacted density in the upper three feet of subgrade (below aggregate base) and 95% below the upper three feet. Density testing will be performed as directed by the Engineer to verify compaction. Trench areas that are determined by the Engineer to have yielded due to improper compaction will be deemed as Unacceptable Work and will be corrected by the contractor at no additional cost.
8. The Contractor will coordinate the construction of all private and municipal utilities.
9. The Contractor will be responsible for all tapping or other fees paid to public or private utilities as work incidental to the contract.
10. RECORDS OF LATERALS: The Contractor will maintain a complete and accurate record of the location and depth of each water lateral. The Contractor will make measurements from the end of each service to prominent features to facilitate its location in the future. The end of each lateral will be located in plan and elevation, and a sketch made to show the plan location. These records will be turned over to the Owner.

MATERIALS FOR WATERMAIN CONSTRUCTION- City of Faribault standards shall govern over all material specs listed below if discrepancies exist.

1. Watermain shall be PVC SDR 18 meeting the requirements of AWWA C-900. Pipe and fittings should be properly bedded and encased in accordance with manufacturer's requirements. Foundation rock will be used in poor soil conditions.
2. Bedding and encasement for pipe, beneath, along the sides, and above the pipe will be Select Granular material, tamped in place. The only deviation will be in poor soil conditions, as approved by the Engineer, where foundation rock will be substituted. Pipe bedding is incidental to pipe installation. All joints between pipe, fittings, valves, and hydrants will be equipped to provide electrical conductivity.
3. Gaskets will be mechanical joint rubber gaskets, unless otherwise specified.
4. Hyrdants shall be Waterous Pacer WB-67-250 with 6" mechanical joint inlet and valve boxes as manufactured by American Flow Control Series 2500 or US Metro Pipe Seal with the Top marked WATER.
5. The furnishing and installing of disinfection materials to disinfect the watermains will be the responsibility of the Contractor. The City Utilities Department will assist the Contractor in flushing and testing the watermains.
6. The Contractor will use restrained joint mechanical joint flanges with mega lug retainer glands or equal on all hydrants, watermain offsets, bends, or other mechanical fittings. STAINLESS STEEL BOLTS will be required on all mechanical joints and sleeves.
7. All exposed parts of the bolts and nuts will be completely coated with an approved asphaltic type rust preventive material. Any parts of the fittings that have been scraped will also be coated with an approved asphaltic type rust preventive material. Watermain fittings will conform to ANSI Standard A21.10. All watermain fittings, hydrants and retaining rods will be protected by using sacrificial zinc anode caps such as 175P190 Protecto Caps as manufactured by Ebba Iron or an approved equal. Two caps per mechanical joint will be used.

TESTING OF WATER MAIN

Hydrostatic pressure testing of water main and services will be conducted as follows:
After the pipe has been laid, including fittings and valves and blocking, all newly laid pipe or any valved section thereof, unless directed otherwise by the Engineer, will be subject to hydrostatic pressure of 150 pounds per square inch. The duration of each such test will be at least two hours.

Each section of pipe to be tested will be filled with water and all air expelled at the highest point. The required taps to expel air or to fill the water main will be supplied and installed by the Contractor and will be 3/4 inch and will include an approved service saddle when required.

The test apparatus will be applied at the lowest elevation on the section to be tested. The apparatus will be connected to the main at a service tap or special tap location.
The pressure gauge will be a standard pressure gauge. The dial will register from 0 - 200 psi and have a dial size of 4 1/2 inches with 1-psi increments.

The hydrostatic test, pressure requirement for an acceptable test will be a maximum pressure drop of 2 psi during the last hour of the two-hour pressure test.
If this test requirement cannot be met, the Contractor will investigate the cause, make corrections, and retest until the pressure drop requirement can be met.

Only if several consecutive tests indicate a consistent pressure drop and only after the Contractor has made numerous attempts to resolve the problem, acceptable to the Engineer, may the Contractor request in writing and the Engineer consider the use of the leakage test. The leakage test may be performed by the Contractor to determine the magnitude of the leak, however, meeting the leakage allowance will not automatically be considered acceptance, in lieu of the pressure test, for the section being tested. Final acceptance will be at the discretion of the Engineer.

When allowed, the leakage test will be performed in accordance with AWWA C-600, Section 4.1.5, 4.1.6 and the line will be accepted as per Section 4.1.7.

Operational Testing will be conducted as follows:
At the completion of the project and in the presence of the Engineer and the Contractor, representatives of the Owner will operate all valves, hydrants, and water services to ascertain that the entire facility is in good working order; that all valve boxes are centered and valves are opened; that all hydrants operate and drain properly; that all curb boxes are plumb and centered; and that water is available at all curb stops.

Disinfection Testing:
Before being placed in service, the completed water main will be disinfected. Disinfection materials and procedures, and the collection and testing of water samples, will be in accordance with the provisions of AWWA C-651. After the final flushing the water will be tested for bacteriologic quality and found to meet the standards prescribed by the Minnesota Department of Health.
Samples will be taken and tested after 24 and 48 hours of disinfection. Both tests must be returned with passing results prior to approval for service.

Where an existing water main is cut for the installation of any fitting, the pipe and fittings proposed to be installed will be disinfected prior to installation as follows:

The interior of the pipe and fittings will be cleaned of all dirt and foreign material.

The interior of the pipe and fittings will be thoroughly swabbed or sprayed with a 1 percent minimum hypochlorite solution.

Unless otherwise indicated in the Plans, Specifications, and Special Provisions, the Contractor will furnish all materials and perform the disinfecting, flushing, and testing as necessary for meeting the water quality requirements.

The flushing operations and the form of chlorine and method of application to be used will be subject to approval by the Engineer.

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the State of Minnesota.

Brian J. Johnson
Reg. No. 42144
Date: 10/4/25

Consultant:
JONES HAUGH SMITH
Engineers • Surveyors
515 South Washington Ave. Albert Lea, MN 507-373-4876

Project:
ENDLESS ADVENTURES

Revision:

No.:	Date: 10/4/25
Drawn: bjj	Checked:

Project Manager:

Project Status: CD

Sheet Title:
SPECIFICATIONS

Sheet No.:
C9

MATERIALS FOR STORM SEWER CONSTRUCTION

1. All drainage structures with a depth of greater than 5' from top of casting elevation to bottom of structure elevation will be provided with steps.

2. Reinforced Concrete Pipe will be bedded and encased in accordance with plans and with material meeting the requirements of 2503. All RCP storm sewer pipe 15" in diameter or less will be Class 5, all other RCP storm sewer pipe will be Class 3 unless otherwise noted.

3. All PVC storm sewer will be Schedule 40 PVC, unless otherwise noted.

STORM SEWER CONSTRUCTION REQUIREMENTS

1. Unless otherwise noted, all existing drain tile encountered during the course of the work will be repaired if damaged by the work, or if the existing outlet is known to be removed or made dysfunctional, hooked up to the new storm sewer improvements. This work is incidental to the contract.

2. Where existing tile lines, sump pump lines, or other existing drainage lines are tied into RCP storm sewer lines, a hole will be created in the upper 1/3 of the side of the new storm sewer, the existing line will be inserted into the side of the new RCP to a depth of not greater than 2", geotextile fabric will be blanketed around or stuffed into the opening around the new pipe, and cement grout will be formed around the connection, so as to ensure water tightness.

3. Where existing tile lines, sump pump lines, or other existing drainage lines are tied into HPDE storm sewer, fittings specifically manufactured for the connection of these lines will be used.

4. All existing drainage structures receiving new pipe will be cemented water tight around all pipes entering or exiting the structure. In addition, the inverts of all structures will be cemented so that all water entering the structure has a direct line out of the structure.

5. All new drainage structures will have integrally cast rubber boots to accept pipes and to ensure water-tightness. Worm screw stainless steel bands will be affixed to the boots to secure the pipe to the structure.

6. HDPE pipe will be installed accordance with ASTM F230

CASTING ASSEMBLIES (2506)

Casting assemblies will be of size and design noted on the plans. The work will include the cost of installing to final street surface grade on the manhole or inlet, including pavement removal and replacement if installed after paving.

Contractor will use at least two and not more than six standard adjusting rings immediately below the casting assemble which will be set in a mortar bed. Each adjusting ring will also be set in mortar. All adjusting rings will be plastered with a minimum of ½" of mortar on the interior and exterior, such that the casting is water tight from both the interior and exterior.

When bituminous paving lifts are scheduled for sequential construction seasons, castings will be set to the elevation of the non-wear course for the winter season, and then adjusted to final grade the following year. This work is incidental to construction.

Chimney Seal

Chimney seal will be furnished and installed on all sanitary manhole and ring casting assemblies. Seals will consist of rubberized sleeves or collars specially designed for covering manhole frames, rings and castings. Seals will be exterior seals with mechanical restraint as manufactured by Cretex Products or equal.

Furnish and installation of Chimney Seal is incidental to manhole castings and no additional payment will be made therefore.

Chimney Seal will not be required until final adjustment of castings at the time the final lift of bituminous paving is constructed.

ADJUST WATER VALVE BOX

This work will consist of the adjustment of all water valve boxes to conform to each grade of the bituminous pavement. This work includes multiple adjustments and is incidental to construction. If any structures are damaged by the Contractor's operations, the cost of repairs and replacement will be at the Contractor's expense. Final valve box adjustment at the final lift of paving will be by the paving contractor.

REMOVALS (2104)

Saw-cut Bituminous and/or Saw-cut Concrete

The edges of paving at the locations shown on the plan or directed as directed by the Engineer in the field will be full-depth saw-cut, typically at right angles to the faces to remain, in order to produce a clean edge of which to match the replacement paving or other surface to. Saw-cutting is incidental to the removals.

Remove Bituminous and/or Concrete Surface

After removal of bituminous or concrete surfacing in the traveled way, an aggregate surface will be provided in the removal area to the elevation of the removed materials. A minimum thickness of 6" of aggregate at the surface will be provided. This work is incidental to removals.

Disposal of Removed Materials

The removed materials will become property of the Contractor and be removed from the project site at the Contractor's expense.

Remove Storm Sewer

When existing storm sewer is designated to be removed, the existing pipe will be removed in its entirety, or crushed in its entirety and backfilled over, if directed by the Engineer.

EXCAVATION AND EMBANKMENT (2105)

1. The area designated for excavation will be excavated to sufficient depth to allow construction of the typical section shown on the plans except as otherwise directed by the Owner. The Contractor will verify to the Owner that the subgrade has been constructed to the proper elevation before base construction proceeds. The subgrade must be within 0.10' plus or minus of plan elevation before the construction is allowed to proceed. A subgrade elevation consistently above or below plan elevation will not be considered acceptable work. On average, the subgrade will be at about plan elevation.
2. Excess excavated material will be disposed of by the Contractor. Excess topsoil material will be stockpiled separately or leveled, as directed by the Owner. Stockpiling and leveling will be considered incidental to the excavation, and will not be paid for directly.
3. The contractor will salvage and stockpile suitable topsoil and surface material to the satisfaction of the Owner as necessary to provide for final seed and turf establishment and restoration. Topsoil salvage will be considered incidental to excavation and no direct compensation will be made therefore.
4. Removal of rocks, boulders, masonry or concrete within the excavated area will be considered common excavation. All roots, stumps, rubbish, rocks and other waste materials will be hauled to the nearest landfill. This work will be considered incidental to the construction and will not be paid for directly.
5. Paving sections will be required to allow construction of the typical cross-section. Embankment will be constructed in accordance with the provisions of 2105. Suitable excess excavated materials will be utilized for embankment to the fullest extent practicable. The remaining embankment material will be granular borrow conforming to the provisions of 3149.2A.
6. Site grading will be performed as required to establish plan grade. All excess becomes property of the Contractor to be disposed of off-site.
7. The Contractor will be responsible for ensuring that all areas within the limits of lot grading have a minimum of 6" of salvaged topsoil material on the final grade. It will be the Contractor's responsibility to coordinate and designate topsoil salvaging operations and stockpiling to ensure adequate topsoil is available for a 12" cover. All existing topsoil will be removed in all areas which will be filled with any material other than topsoil except that topsoil depths will not exceed two feet.
8. All borrow or salvaged excavated material to be used as embankment within the limits of paving construction will be approved by the Owner prior to placement. Embankment will comply with the provisions of Minnesota Department of Transportation Spec. 2112 including achieving 100% compacted density in the upper 3 feet of subgrade and 95% below the upper 3 feet of subgrade.
9. All natural topsoils will be removed from below all paving construction areas.
10. Suitable excavated material will be used as backfill. Embankments and boulevards not being seeded or sodded will be dragged or raked smooth prior to completion of each project.
11. Excess excavated material, excluding rocks, boulders, debris and organic material, will be the property of the Owner and will be stockpiled on site as directed by the Owner. All other excess material will be disposed of by the Contractor offsite.
12. When embankment materials are placed on existing ground with an existing slope of greater than 4:1, the embankment will be placed in accordance with 2105.3.B.
13. Where excavation is performed to the subgrade without the placing of embankment materials, the contractor will work the upper 1' of the subgrade to within 2% of optimum moisture prior to the test-rolling stated below. When the existing moisture content is greater or less than 2% of optimum, the contractor will "farm" the material to dry it, or add water and mix the materials until the subgrade reaches the desired moisture content. This work will be incidental to construction.
14. Backfill construction of concrete curb and gutter in accordance with 2531.J is incidental. The contractor will note that when this work is complete, continuous positive drainage is provided to the curb & gutter, which is defined by the MPCA as a stormwater conveyance.

TOPSOIL SALVAGE

All areas to be seeded will be finished with no less than 6 inches of topsoil salvage. This topsoil will be raked to a smooth surface free of roots, rocks and soil clumps. Topsoil salvage will be incidental to the project. All areas to receive fill material are subject to topsoil salvage. Topsoil may be placed over existing topsoil.

SUBGRADE PREPARATION (2112)

1. The provisions of 2112 will be follows and as outlined in 2112.

2. The final shaping and compacting of the subgrade will be done just prior to placing any base or surface course.

3. At the time the subgrade preparation operations have been completed, the prepared surface will be in reasonably close conformity with the cross sections shown in the Plans and the lines and grades shown on the plan.

4. Where excavation is performed to the subgrade with or without the placing of embankment materials, the contractor will work the subgrade to within 2% of optimum moisture. When the existing moisture content is greater or less than 2% of optimum, the contractor will "farm" the material to a minimum depth of 12" to dry it, or add water and mix the materials until the subgrade reaches the desired moisture content. This work will be incidental to construction.

5. The required stability will be such that when any material for base or surface courses is deposited on the subgrade, no rutting or displacement will occur.

6. The subgrade preparation prior to construction of underground utilities will not be subject to elevation tolerances.

7. Subgrade preparation is incidental to the contract

S-7 SUBGRADE COMPACTION

The subgrade when exposed will be compacted with a tamping roller, compactor or other means to not less than 100% Maximum Density and 2% Optimum Moisture. The Contractor will work the upper 1' of the subgrade to within 2% of optimum moisture during compaction. When the existing moisture content is greater or less than 2% of optimum, the contractor will "farm" the material to dry it, or add water and mix the materials until the subgrade reaches the desired moisture content. This work will be incidental to construction. Prior to placement of any stabilized base, a fully loaded dual axel dump truck will be driven over the completed sub-grade in the presence of the Contractor and Engineer present. The subgrade will be found suitable for placement when no rutting or displacment occurs. The test-rolling will be incidental to stabilized base and no specific payment will be made therefore.

S-8 SUBGRADE CORRECTION

If after substantial efforts by the contractor to correct the moisture content of the subgrade and re-compact the materials, the subgrade displays evidence of rutting or yielding prior to, during, or after this compactive effort, additional material will be excavated as directed by the Owner to the depth required to provide a stable foundation for the base material. Suitable material removed during excavation will be utilized for subgrade correction. This work will not be paid as Extra Work if it was or would have been, or could have been performed as part of any other grading activity.

STABILIZED BASE CONSTRUCTION (2211)

This work will consist of the excavation and embankment of existing subgrade and surface materials, and the construction of aggregate base.

1. Aggregate base will be either MnDOT Class 2 or Class 5, at the Contractor's option. Class 7 recycled base is acceptable where alllowed in the MnDOT standard specificitations.
2. Any damage by the Contractor's operations to any existing improvements which have not been designated for removal or disturbance will be repaired at the expense of the Contractor.
3. AGGREGATE: Aggregate for the purposes required by this contract will be furnished by the Contractor from sources selected by him.
4. AGGREGATE BASE: Aggregate base, will be constructed in accordance with the provisions of 2211. Aggregate will conform to the requirements of 3138.
5. Compaction will be obtained by the Modified Penetration Index Method modified as follows: The Owner will hire an independent testing laboratory to perform density and moisture testing. Moisture tests will be performed with each density test. Tests will be performed in accordance with the Materials Testing Section above. Penetration and moisture content testing will be performed along with to the density tests. No payment will be made for work tested that fail to meet the specified density. The Contractor will be responsible for any additional tests due to the failure of work. Water will be applied to the base material during mixing, spreading and compaction operations for proper compaction and will be considered incidental work.
6. Test rolling will be performed on the aggregate base in the presence of the Owner's testing subconsultant. Test rolling will be as specified in Mn/DOT specification 2111 except that the test will be performed with a fully loaded tandem axel dump truck in lieu of the test roller. The Owner may delete the requirement for test-rolling on all or portions of the stabilized base, at his discretion, after consultation with the Contractor.
7. Furnish and install Aggregate Base, Class 5 meeting MN/DOT Specification No. 3138 under all concrete or bituminous pavements and a minimum of 2 inches of Aggregate Base, Class 5 under all curb and curb and gutter.

MAINTENANCE OF COMPLETED BASE

After completion of any part of the base, such base will be maintained in a dust free condition. It will be the Contractor's responsibility to repair at his expense all prepared and shaped surfaces until project is complete. Any water applied to keep the base dampened or reshaped will be at the Contractor's expense. The Contractor will maintain the completed aggregate base after rain events, and replace and recompact any eroded aggregate as work incidental to the contract. Maintenance of completed base is incidental to construction.

APPLICATION OF WATER (2130)

Application of water will be in accordance with the provisions of 2130 except as herein modified. No direct compensation will be made for water used in conjunction with the mixing, placing and compacting operations for base construction. The contractor is responsible for application of water for dust control in accordance with Mn/DOT 1717 and with the NPDES permit. Application of water for dust control is incidental to the work and no additional payment will be made therefore.

CONCRETE PAVEMENT (2301)

Jointed Type 3 Grade A Plain Concrete Pavement will be placed in accordance with the Mn/DOT standard specifications except as modified herein. Loading dock pavement will be reinforced.

The mix designs for concrete paving for this project are:
- Standard Paving - 3A41
- High Early Strength (if directed by Owner) - 3A41HE
- Flexural strength at 28 days will be 750 psi.
- Compressive strength at 28 days will be per the mix designations above.

High Early concrete areas will remain closed to traffic for 3 days or until they have achieved a flexural strength of 450 psi, whichever is shorter.

Concrete will be supplied from a Mn/DOT certified producer. The Contractor will be responsible for supplying the mix designs. The Contractor will provide the Engineer with the mix designs a minimum of 24 hours prior to the first pour.

Concrete will be cured by the use of membrane curing compound meeting the requirements of MnDOT 3754 AMS.

All joint sealant will conform to 3723, Concrete Joint and Crack Sealer (Hot-Poured Elastic Type) sealant.

Transverse metal-tine finishing will not be required.

The location of transverse joints may be adjusted in the field by the Engineer. An increase in the number of transverse joints of up to five percent (5%) compared to the number shown on the plans will be incidental.

All coarse aggregate for concrete pavement will meet the gradation requirements of MnDOT 3137 CA-50.

BITUMINOUS TACK COAT (2357)

Treating existing bituminous or concrete surfaces preparatory to placing a bituminous course thereon will be performed in accordance with the provisions of MN/DOT 2357 and the following:

A bituminous tack coat consisting of emulsified asphalt will be applied between all bituminous surfaces. A tack coat will be placed on the existing pavement prior to placing the next layer of bituminous and the edges of concrete pavement and curb and gutter that will come into contact with the new bituminous will be tacked. All surfaces will be cleaned of all dirt, debris and loose material prior to the application of the bituminous tack coat.

PLANT MIXED ASPHALT PAVEMENT (2350/2360)

Plant mixed asphalt pavement density will be constructed in accordance with Mn/DOT specification 2360, as published by Mn/DOT at the time of bid.After placement of the base course of bituminous paving at the bus parking area and car parking area, the Contractor will flood the work area with water to identify possible "bird bath" locations where the pavement has not been placed at enough grade to ensure proper drainage. Prior to or during placment of the wear course, the Contractor will ensure that these areas are graded to properly drain.

CONCRETE MIX FOR CURB & GUTTER, WALKS, & DRIVEWAYS (2461)

Concrete for this Contract will be as follows and as outlined in 2461:
The concrete mix number to be used for slip form curb and gutter will be 3A22. The concrete mix number for hand formed curb and gutter, sidewalks, and driveways will be 3A32.

	Minnesota Highway Designation	Minnesota Highway Designation
Mix Number	3A32B	3A22B
Type of Concrete	Type 3 (Air Entrained)	Type 3 (Air Entrained)
Grade	Grade A	Grade A
28 Day Strength	27 Mpa (3900 psi)	27 Mpa (3900 psi)
Slump	50 mm to 75 mm (2" to 3")	25 mm to 50 mm (1" to 2")
Coarse Aggregate Composition	100% Class "B"	100% Class "B"
Gradation of Coarse Aggregate	CA25 or CA50 For Structural Concrete	CA25 or CA50 For Structural Concrete

Concrete will be supplied from a Mn/DOT certified producer. The Contractor will supply the mix designs. The Contractor will provide the Engineer with the mix design a minimum of 24 hours prior to the first pour.

WALKS (2521)

Concrete sidewalks will be constructed in accordance with 2521 and Standard Plate 7035M. Preformed joint filler material will be placed in accordance with Standard Plate 7035M. Concrete sidewalks will be mix design 3A32 with a maximum slump of 3". No water will be added to the mix to reduce the slump beyond 3" for temporary workability, as stated in 2461.B3. Colored concrete shall be as manufactured by Scofield with coloring as determined by the Landscape Plan.

CONCRETE CURING AND PROTECTION (2521, 2531)

All sidewalk, driveway, curb and gutter will be cured using a membrane curing compound conforming to the requirement of Minnesota Highway Department #3754. For concrete curb and gutter poured after October 1st, blanket or extreme service membrane methods of curing will be substituted for membrane curing, in accordance with 2531.

EXTREME TEMPERATURE CONCRETE

The following additional measures will be required for extreme temperature concrete construction, as work incidental to the contract:

Hot Weather Concrete Construction
1. Do not place concrete with a placing temperature that will cause difficulty from loss of slump, flash set, or cold joints.
2. Maintain a concrete temperature during placement of less than 90 degrees F.
3. Use all means necessary to avoid drying the concrete prior to the completion of finishing operations.
4. Provide and use windbreaks, sunshades, fog sprays, and other devices to protect the concrete.

Cold Weather Concrete Construction
1. Provide adequate protection when temperatures are 40 degrees F or lower occur durin ghte placing and early curing periods.
2. Comply with all pertinent recommendations of ACI 306 (Recommended Practice for Cold Weather Concreting).
3. Type IIIA cement may be used.
4. The use of Calcium Chloride or other accelerators will not be permitted.
5. Maintain a concrete temperature during placement of more than 60 degrees F.
6. Use all means necessary to avoid exposure of concrete to freezing temperatures during placement, finishing, and curing.
7. Concrete will not be placed on a frozen subgrade.
8. Provide and maintain heated enclosures, insulating blankets, tarpaulins, heaters, fuel, and all other protective equipment required.
9. Maintain favorable curing temperature at all times until the concrete gains sufficient strength to withstand exposure to low temperature and applied loads.

CONCRETE CURBING & GUTTER (2531)

Concrete curb and gutter will be constructed in accordance with the provisions of 2531 and the following: Curing will be by the Membrane Curing Method as specified in 2531.3G (2). The sealing of joints in concrete curb and gutter will not be required.

Construction joints in curb and gutter will be installed at 10-foot intervals. Preformed joint filler material (1/2-inch) will be place at the ends of all street returns, at the ends of concrete driveway approaches, and in accordance with MN/Dot Standard Plate 7035N.

Concrete curb and gutter will be the style shown on the plans.

PEDESTRIAN CURB RAMPS (2531)

Unless otherwise dome sections will be red.

STORM WATER MANAGEMENT (2573)

The Stormwater Pollution Prevention Plan (SWPPP) required by the NPDES permit has been provided by the Owner and is incorporated into the plans and specifications.

The Minnesota Department of Transportation's Specification 2573 - Stormwater Management is hereby modified as follows:

1. The Contractor will apply for and comply with the provisions of the NPDES permit and the SWPPP (Stormwater Pollution Prevention Plan).

2. The Stormwater Pollution Prevention Plan provided by the Owner is meant and provided as a guide in the provision of Erosion and Sediment Control (ESC) Best Management Practices (BMP's) as required by the NPDES permit. The SWPPP is based on finish grade contours. Additional ESC measures, although not shown by the plan, may be required to comply with the provisions of the NPDES permit. Provision and maintenance of the ESC BMP's in accordance with the NPDES permit is the responsibility of the contractor, regardless of what is shown on the SWPPP. Interim ESC BMP's and updating of the SWPPP are the responsibility of the contractor. Maintenance of the ESC BMP's is incidental to the work and will be performed in accordance with 2573.M.

3. When updates to the SWPPP are required, the Contractor will provide the Engineer with sketches of the updated areas, so that the Engineer can update the SWPPP.

4. No additional payment will be made for additional ESC BMP's required by the NPDES permit but not shown on the SWPPP.

5. The contractor will obtain the NPDES permit from the MPCA and pay any applicable fees as work incidental to the contract. The contractor will remain named on the NPDES permit until the warranty period expires, at which time he/she may submit an NPDES Permit Modification/Transfer Form to the Owner for completion and submission to the MPCA.

6. The contractor will maintain the NPDES site inspection log.

7. The contractor will be responsible for all fines imposed by regulating agencies for failure to comply with the provisions of the NPDES permit.

8. If the Engineer determines that ESC BMP's have failed or require maintenance, the Contractor will correct the cause of failure, maintain the BMP's, and alleviate all sediment deposition outside the construction limits, to the fullest extent possible. If the Contractor fails to install or maintain erosion or sediment control measures required by the NPDES permit, fails to conduct required inspections, or fails to take action ordered by the Engineer to correct ESC problems, the Engineer will issue a written order to the Contractor. The Contractor will respond within 24 hours with sufficient personnel, equipment, and/or materials and conduct the required work or be subject to a $500 per calendar day penalty for noncompliance. In addition, the Engineer may recommend that the Owner withhold payment from all work until the ESC BMP's are constructed or maintained.

9. The Engineer may require the Contractor to submit a site plan for certain portions of the work detailing proposed ESC BMP's, and a schedule indicating start and completion dates. The Contractor will not start work within these areas until the Engineer has accepted the site plan and schedule. No additional payment will be made for preparation of site plans required by the Engineer, or reasonable delays or production losses caused by this requirement.

10. Sediment removal required due to the failures to implement or maintain ESC BMP's will not be considered Extra Work. The Contractor will remove all sediment from areas accrued due to actions or inactions by the Contractor, at no cost to the Owner

11. The Contractor will designate a concrete washout area on-site and inform the Engineer of the chosen location at the pre-construction meeting. This area must be constructed so that it drains towards itself. Concrete debris will be removed from the concrete washout and removed from the site prior to final acceptance.

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the State of Minnesota.

Brian J. Johnson
Reg. No. 42164
Date: 10/4/25

Consultant:
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Project:
ENDLESS ADVENTURES

Revision:

No.:	Date: 10/4/25
Drawn: bjj	Checked:

Project Manager:

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Sheet Title:
SPECIFICATIONS

Sheet No.:
C10

Meeting Date: 10/22/2025

Title

CY55-25

Request of the Planning Agency to review Chapter 10 of Mankato City Code related to variances.

The anticipated date of City Council action is December 8, 2025.

Review

The City of Mankato is requesting to amend multiple sections pertaining to variances within Chapter 10 of the Mankato City Code.

In order to act in accordance with the amended 2011 State Statute, the City of Mankato has applied their Variance review through the lens of the three practical difficulties for some time now. Despite this, our current City Code still reflects pre-2011 variance standards. The goal of this amendment pertaining to variances, is to bring the City Code into alignment with current practice and the State Statute as it exists today.

What is a Variance, and How Do They Work?

A variance is the mechanism that enables cities to allow an exception to part of a zoning ordinance. A variance acts as a permitted but limited departure from the strict enforcement of an ordinance as it is applied to a particular piece of physical property within the City of Mankato. A variance is generally defined as a dimensional standard, which may allow a property owner to differ from one or more dimensional zoning rules that would otherwise apply to their specific property. This is often known as an "area variance".

The other form of variances are "use variances", which are generally not allowed within Minnesota, as State law prohibits a city from authorizing any use that is not permitted under the ordinance for the zoning district in which the property is located by granting a variance (Minn. Stat. § 462.357, subd. 6).

Minnesota State Statute allows for a body called "the board of adjustment and appeals" to hear application requests for variances and grant said variances if they meet the legal standards. For the City of Mankato, the City Council acts as the board of adjustment and appeals. With their review of a variance, the City Council may impose conditions as long as they are directly related to and bear a rough proportionality to the impact created by the variance (Minn. Stat. § 462.357, subd. 6). For example, the Council may require that a fence installed through a variance be softened by landscaping to lessen the effect of the nonconforming location, or that an encroaching addition be built of similar materials to the existing structure.

Two commonly introduced factors that cannot be considered when reviewing variances are, economic factors and neighborhood opinion.

State statute explicitly notes that economic considerations alone cannot create practical difficulties, meaning that a property owner's claim that they require a variance because they have incurred substantial costs, or that they would not receive expected revenue without the variance, cannot be considered as a factor for approval.

Neighborhood opinion alone cannot be considered when reviewing practical difficulties, meaning that the City Council's tasks are limited to evaluating how the variance application meets the three-factor test. That does not mean that residents cannot provide important facts to assist the City Council in their assessment of these factors, but it does mean that unsubstantiated opinions or reactions to a request do not serve as a legitimate basis for a determination.

Why is an Amendment Needed?
The amendment is to align variance standards in the City Code with state statute. The amendment provides consistency between city and county land use authorities and allows for clear conditions that may be imposed on the variance, if those conditions are directly related to, and are roughly proportional to, the impact created by the variance. The amended statute also led to the renaming of the "undue hardship" standard to "practical difficulties", whilst retaining the three-factor test of reasonableness, uniqueness, and essential character.

The Practical Difficulties standard must now apply when considering variances; all three factors must be satisfied in order to grant a variance under state statute.

How a Variance Application Review Works:
The City's role in the variance process is rather different from the typical zoning ordinance authority. When considering a variance application, the City exercises its "quasi-judicial" authority to evaluate the facts against the legal standard set forth in the state statute. After evaluation, the City may grant the variance, only if said application meets the legal standard.

The three factors (practical difficulties) that make up the legal standard are as follows:

Reasonableness:
The reasonableness factor requires that the property owner proposes to use the property in a reasonable manner. To meet this factor, the property owner must prove that they intend to use the property in a particular reasonable way, but do not have the ability to do so under the rules of the City Ordinance.
The reasonableness factor refers to the specific reasonable use intended by the property owner, meaning that even if the property owner may be able to use the property in a different reasonable manner without the need for a variance, the reasonableness factor may still be met.
For example, if the variance application is for a garage to be built closer to the side property line than the zoning district setback ordinance allows, the focus of the reasonableness factor is whether the request to construct the garage at the proposed location is reasonable.
In the City's application of the reasonableness factor, they must ask whether the proposal puts the property to use in reasonable manner.

Uniqueness:
The uniqueness factor necessitates that the property owner's circumstances are unique to the property and not caused by action of the property owner. The uniqueness of the property generally relates to the physical characteristics of that particular property, meaning the characteristics of the land and not those of the property owner or their personal preferences. In particular, state statute stated that economic considerations alone cannot create practical difficulties.
For example, when considering whether the proposed use meets the uniqueness factor, the focus of the City's review is whether there is anything physically unique about the property in question. As Environmentally Sensitive Areas have typically been the most common uniqueness factor for properties in the City of Mankato, this may often present itself as properties with ravines, wetlands, or woodland areas.

Essential Character:
The essential character factor stipulates that the variance, if granted, will not alter the essential character of the locality in which it is located. Through this factor, the City contemplates whether the proposed modification to the subject property would differ in scale, place, or manner from the surrounding area and thus be inconsistent with the essential character of the neighborhood.
For example, in Mankato, it is common for low-density residential neighborhoods to have garages. If a property without a garage located in such a neighborhood needed a variance in order to construct said garage, this may very well meet the essential character factor; most properties have garages in the neighborhood and adding another garage would be consistent with the essential character of the neighborhood.

Aside from a review of the "practical difficulties" of a variance application, variances can only be granted when they are in harmony with the general purposes and intent of the ordinance, and when the terms of the variance are

consistent with the comprehensive plan. Because of this, variances in the City of Mankato are reviewed with the understanding that they must meet all five of these components in order to be granted by the City Council.

What are The Proposed Amendments?

Current Mankato City Code defines a greater number of standards than what the statute outlines. By amending the City's variance ordinances, the ordinance would better reflect the process for reviewing variance applications against the legal standards set forth in Minn. Stat. § 462.357, subd. 6. The sections proposed to be amended are as follows:

- Mankato City Code *Chapter 10, Article XI, Division 5- Variances.*
  - *What the code does*: Defines the procedures and standards for Variances granted within the City of Mankato.
  - *Reasoning:* The current code defines a greater number of standards that must be met in order to grant a variance than those allowed for per State Statute. This should be updated to reflect the three practical difficulty factors, harmony with the general purposes and intent of the ordinance, and consistency with the comprehensive plan.
- Mankato City Code *Chapter 10, Article XII, Division 6- Variances.*
  - *What the code does*: Defines the general conditions which the City Council must ensure are met to grant a variance from the basic improvements required for platting properties in the City of Mankato.
  - *Reasoning:* Just like with Division 5, the current code defines a greater number of standards that must be met in order to grant a variance than those allowed for per State Statute. This should be updated to reflect the three practical difficulty factors, harmony with the general purposes and intent of the ordinance, and consistency with the comprehensive plan.
- Mankato City Code *Ch. 10. Article I, Sec. 10-2.- Definitions*.
  - *What the code does*: Defines the term “Variance” for Chapter 10 of the Mankato City Code.
  - *Reasoning:* The current variance definition uses the term “undue hardship.” This should be updated to reflect the use of “practical difficulties” in state statute.
- Mankato City Code *Sec. 10-1700. - Administration and enforcement*.
  - *What the code does*: Defines the standard that the zoning administrator must meet to grant administrative variances from the monument sign requirements.
  - *Reasoning:* The current code uses the term “valid hardship”. This should be updated to reflect the use of “practical difficulties” in state statute.
- Mankato City Code *Sec. 10-440. - Urban design guidelines*.
  - *What the code does*: Details the requirements that must be met in order for the Site Plan Review Committee or Planning Agency to grant or recommend variances from the Urban Design Guidelines for Commercial Districts.
  - *Reasoning:* The current code uses the term “practical hardships”. This should be updated to reflect the use of “practical difficulties” in state statute.
- Mankato City Code *Sec. 10-940. - Urban design guidelines*.
  - *What the code does*: Details the requirements that must be met in order for the Site Plan Review Committee or Planning Agency to grant or recommend variances from the Urban Design Guidelines for Industrial Districts.
  - *Reasoning:* The current code uses the term “practical hardships”. This should be updated to reflect the use of “practical difficulties” in state statute.

These amendments would replace the existing terminology with the terminology used within the State Statute. The improved continuity between the State Statute and the City Code, as well as the improved uniformity of terminology, serve to provide greater clarity of the standards that must be met for Variances from the Mankato City Code.

Attachments

Proposed Variance Amendments

Amended Variance Ordinances

Minn. Stat. 462.357, subd. 6.

DIVISION 5. VARIANCES

Sec. 10-1937. Authority.

In accordance with the procedures and standards set forth in this section, the board of adjustments and appeals shall have the authority to grant variances from the provisions of this article in instances where their strict enforcement would cause practical difficulties ~~undue hardship~~ because of circumstances unique to the individual property.

(Code 2015, § 10.94(1))

Sec. 10-1938. Purpose.

The variance procedure is intended to provide a narrowly circumscribed means by which relief may be granted from unforeseen particular applications of this article that create practical difficulties. ~~or particular hardships.~~

(Code 2015, § 10.94(2))

Sec. 10-1939. Parties entitled to seek variances.

Applications for variances may be filed by the owner of, or any person having contractual interest in, the property.

(Code 2015, § 10.94(3))

Sec. 10-1940. Procedure.

An application for a variance shall be processed in accordance with the following procedures:

(1) *Application.* An application for a variance shall be filed with the zoning administrator and shall include, at least, the following information:

a. The applicant's name, address, and proof of interest in the property.

b. The owner's name and address, if different than the applicant, and the owner's signed consent to the filing of the application.

c. The names and addresses of all professional consultants advising the applicant with respect to the proposed development.

d. The street address and legal description of the property.

e. The present use of the subject property.

f. A site plan showing existing lot lines and dimensions as well as lot area, all easements, all public streets and private rights-of-way bordering and adjacent to the site, the use and location of all adjacent property.

g. The specific feature or features of the proposed use, construction, or development that require a variance.

h. The specific provisions of this article from which a variance is sought and the precise variance therefrom being sought.

i. Statement of the characteristics of the property that prevent compliance with the provisions of this article.

(2) *Action of zoning administrator.* Upon receipt of a properly completed application for an appeal, the zoning administrator shall forthwith transmit to the board of adjustments and appeals the application together with all papers and plans attached thereto.

(3) *Public hearing.* Upon receipt of a properly completed application for a variance, the board of adjustments and appeals shall set a date for a public hearing.

(4) *Notice.* Notice of the public hearing shall be given by the zoning administrator by one publication in one or more newspapers of general circulation. Notice shall be published a minimum of ten days prior to the hearing date and a maximum of 30 days to the hearing. Notice shall also be given by first class mail to all owners of property within 200 feet from the proposed location of the variance. The notice shall describe the particular variance and shall contain a brief description thereof. County assessment records and street addresses shall be deemed sufficient for the location or certification of ownership for notification purposes.

(5) *Board of adjustments and appeals action.* The board of adjustments and appeals shall render its decision in accordance with the board's adopted rules of procedures. The board of appeals may grant the variance, grant the variance subject to conditions, or deny the variance.

(Code 2015, § 10.94(4))

Sec. 10-1941. Standards.

In considering an application for a variance, the board of adjustments and appeals may approve such variance only upon the finding that the application complies with the standards set forth below.

(1) ~~*General standard.* No variance shall be granted unless the applicant shall establish that conforming to the strict letter of the provisions of this article would create a unique and particular hardship.~~ *Zoning*. The proposed variance is in harmony with the general purposes and intent of the zoning ordinance as amended from time to time.

(2) ~~*Unique and particular hardship.* Unique and particular hardship is defined as the property is exceptional as compared to other property subject to the same provisions by reason of a unique physical condition, including the presence of an existing use or structure, whether conforming or nonconforming; irregular or substandard shape or size; exceptional topographical features; or other extraordinary physical conditions peculiar to and inherent in the subject lot. The hardship shall amount to more than a mere inconvenience to the owner and the hardship shall relate to the physical situation of the lot rather than the personal situation of the current owner of the lot.~~ *Comprehensive Plan*. The proposed variance is consistent with the comprehensive plan as amended from time to time.

(3) ~~*Not self-created.* The unique physical condition and hardship shall not be the result of any action or inaction of the property owner or its predecessors in title. The unique physical condition shall have existed at the time of the enactment of the provisions from which a variance is sought or was created by natural forces or was the result of governmental action, other than the adoption of the ordinance from which this chapter is derived.~~ *Practical Difficulties*. The property owner establishes that there are

practical difficulties in complying with the zoning ordinance. Practical difficulties, as used in connection with the granting of a variance require the following findings:

a. The property owner proposes to use the property in a reasonable manner not permitted by the zoning ordinance.

b. The plight of the property is due to circumstances unique to the property not created by the property owner.

c. The variance, if granted, will not alter the essential character of the locality.

(4) ~~*Denied substantial rights.* The carrying out of the strict letter of the provision from which a variance is sought would deprive the owner of the subject lot of substantial rights commonly enjoyed by owners of other property subject to the same provisions.~~ Economic considerations alone do not constitute practical difficulties.

(5) ~~*Not merely special privilege.* The alleged hardship shall not include the inability of the owner or occupant to enjoy some special privilege or additional right not available to owners or occupants of other lots subject to the same provision. The alleged hardship shall not include the inability of the property owner to realize a greater profit than if the variance were not granted.~~ Practical difficulties also include, but are not limited to, inadequate access to direct sunlight for solar energy systems.

(6) ~~*No other remedy.* There are no means other than the requested variance by which the alleged hardship can be avoided or remedied to a degree sufficient to permit a reasonable use of the lot.~~

(7) ~~*Variance less than requested.* A variance less than or different from that requested may be granted when the record supports the applicant's right to some relief but not to the relief requested.~~

(8) ~~*Essential character of the area.* The variance would not result in a development on the lot that:~~

~~a. Would be materially detrimental to the public welfare or materially injurious to the enjoyment, use, development, or value of property or improvements permitted in the vicinity.~~

~~b. Would materially impair an adequate supply of light and air to the properties and improvements in the vicinity.~~

~~c. Would substantially increase congestion in the public streets due to traffic or parking.~~

~~d. Would unduly increase the danger of flood or fire.~~

~~e. Would unduly tax public utilities and facilities in the area.~~

~~f. Would endanger the public health or safety.~~

~~g. Would not be in harmony with the general and specific purposes of this article and the comprehensive planning policies and objectives of the city.~~

(Code 2015, § 10.94(5))

Sec. 10-1942. Conditions on variances.

The board of adjustments and appeals may impose specific conditions and limitations upon the granting of a variance as are necessary to achieve the purpose and objectives of this article. A condition must be directly related to and must bear a rough proportionality to the impact created by the variance. Such conditions and limitations may include, but are not limited to, those concerning the use, construction, character, location, landscaping, screening, parking, and other matters relating to the purpose and objectives of this article and shall be expressly set forth in the resolution granting the variance. Violation of any such condition or limitation shall be a violation of

this article and shall constitute grounds for revocation of the variance pursuant to article X, division 10, of this chapter.

(Code 2015, § 10.94(6))

Sec. 10-1943. Effect of grant of variance.

The approval of a proposed variance by the board of adjustments and appeals shall not authorize the development, construction, reconstruction, alteration, or moving of any building or structure, but shall merely authorize the preparation, filing and processing of applications for such permits or approvals as may be required by the regulation of the city, including, but not limited to, a building permit and a certificate of occupancy.

(Code 2015, § 10.94(7))

Sec. 10-1944. Limitations on variance.

Subject to an extension of time granted by the board of adjustments and appeals, no variance shall be valid for a period longer than 12 months unless a building permit is issued, or unless a certificate of occupancy is issued and a use commenced within that period of time. Except when otherwise provided in the resolution approving a variance, a variance shall be deemed to relate to, and be for the benefit of, the lot in question, rather than the owner of such lot.

(Code 2015, § 10.94(8); Ord. of 2-9-2004)

Sec. 10-1945. Prohibited variances.

Notwithstanding any other provision in this section, no variance shall be granted to establish a use not permitted in the zoning district where the property subject to the application is located. In case of an emergency, the City Council may grant a variance to permit the temporary use of a one-family dwelling as a two-family dwelling. Variances shall be granted for earth sheltered construction as defined in M.S. § 216C.06, subd. 14, when in harmony with this ordinance.

(Code 2015, § 10.94(9))

Sec. 10-1946. Fee.

An applicant for a variance shall pay a nonrefundable filing fee in connection with the submittal of the application in accordance with a fee schedule as established, from time to time, by the city council.

(Code 2015, § 10.94(10))

Secs. 10-1947—10-1975. Reserved.

DIVISION 6. VARIANCES

Sec. 10-2267. General conditions.

(a) The planning commission may recommend to the council a variance from the provisions of division 5 of this article when, in its opinion, practical difficulties ~~undue hardship~~ may result from strict compliance. In granting any variance, the council shall take into account the nature of the proposed use of land, the existing use of land in the vicinity, the number of persons to reside or work in the proposed subdivision and the probable effect of the proposed subdivision upon traffic conditions in the vicinity. No variance shall be granted unless the council finds:

(1) ~~That there are special circumstances or conditions affecting the property such that strict application of the provisions of this article would deprive the applicant of the reasonable use of his land.~~ The variance is in harmony with the purposes and intent of this ordinance.

(2) ~~That the variance is necessary for the preservation and enjoyment of a substantial property right of the petitioner.~~ The variance is consistent with the comprehensive plan, as amended from time to time.

(3) ~~That the granting of the variance will not be detrimental to the public welfare or injurious to other property in the territory in which the property is situated.~~ The proposal puts the property to use in a reasonable manner.

(4) ~~That strict application of the subdivision regulations would create an undue hardship on a property owner as opposed to a mere inconvenience.~~ There are unique physical characteristics of the property not created by the property owner.

(5) The variance will not alter the essential character of the locality.

(b) Recommendations of variances to the council shall list findings of fact and reasons substantiating the finds of fact.

(Code 2015, § 11.08; Ord. of 4-28-1980)

Secs. 10-2268—10-2287. Reserved.

Sec. 10-2. Definitions.

The following words, terms and phrases, when used in this chapter, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

Accessory structure means a structure detached from, but located on the same lot as the principal structure or principal use, the use of which is incidental and accessory to that of the principal structure or principal use.

Accessory use means a use incidental to and on the same lot as a principal use.

Adjacent means adjoining, bordering, touching, or contiguous. If two lots are separated by a public street, they shall not be deemed to be adjacent. If separated by a public alley or public walk, they shall be deemed adjacent.

Agriculture means the use of land for agricultural purposes, including farming, dairying, pasturage agriculture, horticulture, floriculture, viticulture, and animal and poultry husbandry and the necessary accessory uses for storing the products. The term "agriculture" shall include incidental retail sales by the producer of products raised on the farm.

Airport means an area of land designated and set aside for the landing and take-off of aircraft, including all necessary facilities for the maintenance and upkeep of aircraft.

Alley means any public right-of-way or private way whose primary function is to furnish vehicular access to the side or rear of properties having their main frontage on a street. The term "alley" shall not be considered the same as the term "street."

Apartment means a dwelling unit within a house or building containing two or more similar units. Each apartment is intended to be occupied by a single housekeeping unit. (See *Family.*)

Apartment house/building means a building containing three or more apartments. (See *Dwelling, multifamily.*)

Arcade means an area contiguous to a street or plaza that is open and unobstructed to a height of not less than 12 feet, and which is accessible to the public at all times. Any portion of an arcade occupied by building columns, landscaping, statuary, pools, or fountains shall be considered part of the arcade for the purpose of computing a floor-area premium credit. The term "arcade" shall not include off-street loading areas, driveways, off-street parking areas or open pedestrian walkways. The floor of any arcade shall be level with the adjoining street or plaza.

Arcade, internal, means a street arcade that fronts on and adjoins a plaza or other space internal to a building lot rather than the front lot line.

Arcade, street, means an arcade that adjoins a front lot line, is not less than ten feet nor more than 30 feet in depth (measured perpendicular to the front lot line), and extends the full length of, or at least 50 feet along the front lot line, whichever is the greater distance; or on a corner lot, is bounded on two sides by the two intersecting street lines, and has an area of not less than 500 square feet and a minimum linear dimension of ten feet.

Automobile repair garage means any building or premises primarily used for the repair or mechanical maintenance of motor vehicles or trailers.

Automobile service station means any building or premises primarily used for dispensing gasoline or diesel fuel.

Automobile wrecking yard and *junkyard* mean land or buildings where discarded or salvaged materials from wrecked motor vehicles or other vehicles or machinery are bought, sold, stored, exchanged, packed, assembled, disassembled, or handled, including, but not limited to, scrap metal, rags, paper, tires, and rubber products.

Bed and breakfast residence means an owner-occupied, single-family residence situated either in a unique locale or in a historically or architecturally significant structure and provides lodging and meals to registered guests.

Bed and breakfast, accessory use, means an activity which is permitted in the same underlying residential district and which is incidental and secondary to the bed and breakfast residence.

Bedroom means any room used principally for sleeping purposes and does not contain separate kitchen and sanitary facilities.

Board of adjustments and appeals means the city council sitting as a governing board exercising the authority to grant variances from the numeric requirements of this chapter, and to hear and decide appeals from an administrative decision or enforcement order of the zoning administrator.

Buffer area means a landscaped area intended to separate or partially obstruct the view of adjacent land uses or properties from one another.

Building means a structure built upon the surface of the earth and used, or intended to be used, for any use or occupancy. A fence shall not be considered a building for setback purposes. The term "building" is also referred to as a structure.

Building height means the vertical measurement of a structure measured from the average elevation of the finished ground grade within ten feet of the building to the highest point of the roof surface of a flat roof, to the deck line of mansard roofs, and to the mean height level between eaves and ridge of gable, hip, and gambrel roofs.

Building line means a line parallel to or concentric with the street right-of-way line, or any other property line, at the foundation level of a building and representing the distance which the building is set back from the street right-of-way line or other property line.

Bulk materials means uncontained solid matter such as powder, grain, stone, sand, etc.

Campground means an area or tract of land used or occupied by campers using tents or other portable shelters or vehicles designed specifically as their temporary housekeeping accommodations.

Canopy and *awning* mean any projecting structure, moveable or stationary, that is attached to and supported by a building. The terms "canopy" and "awning" do not include canopies covering fuel-dispensing islands at automobile service stations.

Carwash means a building that provides facilities for washing and cleaning motor vehicles, which may use production line methods with a conveyor, blower, or other mechanical devices, and which may employ some hand labor. The term "carwash" is also referred to as an automobile wash.

Cemetery means land used for the burial of the dead, including crematories and mausoleums when operated in conjunction within the boundaries of such cemetery.

Child care (commercial) means a building or portion of a building where care, protection, and supervision are provided for a fee on a regular basis for children of any age.

Child care (home) means a private residence where care, protection, and supervision are provided for a fee for children of any age, and the persons providing care reside at the residence.

Church or *place of religious worship* means an institution that people regularly attend to participate in or hold religious services, meetings, and other related activities.

Clinic means a place used for the diagnosis and treatment of sick, ailing, infirm, injured persons, and those persons who are in need of medical attention. Overnight care facilities are not provided at the clinic.

Club or *lodge* means land, buildings, or premises owned or operated by a corporation, association, or group of individuals for a social, educational, recreational, charitable, political, or patriotic purpose and such land, buildings, or premises are not available for unrestricted public access and use.

Commercial use means an occupation, employment, or enterprise that is carried on for profit by the owner, lessee, or licensee.

Commercial vehicle means any vehicle used in connection with a commercial use.

Community center means a place, structure, area, or other facility used for and providing religious, fraternal, social, or recreational programs generally open to the public and designed to accommodate and serve significant segments of the community. The term "community center" may also be referred to as a convention center or civic center.

Conditional use means a use that, owing to some special circumstances pertaining to its location or operation, may be permitted in a district subject to approval by the city council and is subject to conditions approved by the council.

Congregate housing means a residential facility for four or more elderly persons (aged 60 years or older) within which are provided living and sleeping facilities, meal preparation, laundry services, and room cleaning. Such facilities may also provide other services, such as transportation for routine social and medical appointments, and counseling. The term "congregate housing" may also be referred to as an assisted living facility.

Convenience store means a retail establishment, having a maximum gross floor area of 7,500 square feet, offering for sale prepackaged food products, household items, and other goods commonly associated with this type of store. A convenience store may also be combined with an automobile service station.

Cul-de-sac means a local street, one end of which is closed and consists of a circular turnaround.

Deck, attached, means a structure within six feet of the main building that may or may not have railings or access to the ground but does not contain walls or a roof. The term "attached deck" may also be referred to as a balcony.

Deck, unattached, means a structure six feet or more from the main building that may or may not have railings or access to the ground but does not contain walls or a roof.

Density means the number of dwellings or principal buildings or uses permitted per net acre of land. The term "net acres of land" shall not include land required for public streets.

Development means all structures and other human modifications of the natural landscape.

Dormitory means a building used as group living quarters for a student body, religious order, or other group as an associated use to a college, university, boarding school, orphanage, convent, monastery, farm labor camp, or similar use. Dormitories do not contain separate dwelling units.

Drinking establishments means any premises where alcoholic or nonalcoholic beverages are sold at retail for consumption on the premises. Snack foods may be available, but not as a complete meal. The term "drinking establishments" also refers to bars or saloons, coffee houses, or teen centers.

Drive-in facility means any portion of a building from which business is transacted, or is capable of being transacted, directly with customers located in a motor vehicle, also referred to as a drive-through.

Driveway means a private way used by vehicles to gain access to an individual lot or parcel of land. For one- and two-family dwellings, the driveway shall be defined as the length and width of a driving surface that is used to gain access to a private garage.

Dwelling means a building or portion thereof designed or used exclusively for residential occupancy, including one-family, two-family and multiple-family dwelling units, and apartment buildings, but not including

units used for occupancy in hotels or motels. The term "dwelling" may also refer to a residence or residential building.

Dwelling, multifamily, means a residential building used for occupancy by three or more families living independently of each other and containing three or more dwelling units, but not including group houses, row houses, townhouses, or dormitories.

Dwelling, one-family, attached, (group, row, or townhouse) means one of two or more residential dwellings joined to other dwellings by a common wall without openings and with individual entrances to each dwelling from the exterior. Each dwelling unit shall have principal access onto the ground floor and shall be occupied by not more than one family.

Dwelling, one-family, detached, means a residential building containing not more than one dwelling unit and entirely surrounded by open space and yards located on the same lot.

Dwelling, two-family, means a residential building containing not more than two dwelling units, but not including group, row, or townhouses. The term "two-family dwelling" may also be referred to as a duplex.

Dwelling unit means one or more rooms physically arranged so as to create an independent housekeeping unit for occupancy by one family. A dwelling unit contains separate toilet, cooking, and sleeping accommodations. Dwelling units may be rented or owner-occupied and may also be called a residence or roominghouse dwelling unit.

Easement means the right of a person, government agency, or public utility to use public or private property for a specific purpose.

Emergency shelter means a nonprofit, charitable, or religious organization providing boarding or lodging and ancillary services on the premises to primarily indigent, needy, homeless, or transient persons.

Essential service utility structure and facility includes, but is not limited to, a structure or facility used for the location, maintenance or service of communication lines, natural gas, petroleum pipelines, television cables, or electrical transmission lines.

Family means an individual or two or more persons related by blood, marriage, or adoption, or a group of not more than five unrelated persons, living together as a single housekeeping unit within a dwelling unit, as distinguished from individuals or a group occupying a hotel, motel, club, lodge, sorority, fraternity, or dormitory.

Family, functional, means a collective group of unrelated persons residing in a single dwelling unit, limited to not more than two adult persons, together with their traditional family members of any age.

Family, traditional, means one or more persons related by blood or marriage residing in a single dwelling unit.

Fence means any artificially constructed barrier of any material or combination of materials erected to enclose or screen areas of land.

Floor area means the sum of the gross horizontal area of all floors of a building as measured from the exterior faces of the exterior walls.

Floor area, livable or usable, means the sum of the gross horizontal area of all floors of a building as measured from the interior faces of the interior walls, excluding the areas of unoccupied cellars, accessory garages, porches, attics, basements, stairways, bathrooms, and utility and heating rooms.

Floor area ratio (FAR) means the floor area of the buildings on a lot divided by the area of that lot or, in the case of planned developments, the sum of the floor area of all buildings divided by the gross site area.

Fraternity or sorority house means a building that is occupied solely by a group of university or college students who are associated together in a fraternity or sorority chartered by a national or international fraternity

or sorority, or officially recognized by the university or college, and who receive from the fraternity or sorority their lodging or meals on the premises for compensation.

Frontage means the length of any one property line of a lot that abuts a public street. All sides of a lot adjacent to public streets shall be considered frontage, and yards shall be provided as indicated in this chapter.

Funeral home means a building or part thereof used for human funeral services. Such building may contain space and facilities for:

(1) Embalming and the performance of other services used in the preparation of the dead for burial.

(2) The performance of autopsies and other surgical procedures on the dead.

(3) The storage of caskets, funeral urns, and other related funeral supplies.

(4) The storage of funeral vehicles.

A funeral home shall not include facilities for cremation, unless allowed by a conditional use permit. A funeral chapel shall be considered an accessory use to a funeral home.

Garage, private, means an accessory use situated on the same lot of the principal use, and designed for the private storage of motor vehicles owned by the occupant of a principal use. No facilities for mechanical service or repair of a commercial or public nature are provided in the private garage. Such garage may be attached to the principal building or detached from the principal building. When a private garage is attached to a principal building, it shall be considered part of the principal building for setback and yard purposes.

Garage, public, means a building designed and used for the storage of automobile vehicles and operated as a business enterprise with a service charge or fee being paid to the owner or operator for the parking or storage of privately owned vehicles. Parking ramps shall be included within this definition.

Grade, ground, means the average elevation of the finished ground levels measured at the center of all exterior walls of a building.

Ground coverage. See *Lot coverage.*

Group home means a state-licensed residential facility as defined by state law.

Grouped housing project means two or more dwellings located on a single lot or parcel. See *Planned unit development.*

Home occupation means an accessory use of a dwelling unit, conducted entirely within the dwelling unit, carried on by one or more persons, all of whom reside within the dwelling unit, and no persons are employed at the dwelling unit other than the residents living therein. The home occupation shall be clearly incidental and secondary to the use of the dwelling for residence purposes and does not change the character thereof or adversely affect the uses permitted in the residential zoning district.

Hospital means an institution providing health services for human in-patients and medical or surgical care for the sick or injured. The term "hospital" includes related facilities such as laboratories, outpatient departments, training facilities, central service facilities, staff offices, and overnight accommodations for patients.

Hotel means an establishment where food and lodging are regularly furnished to transients, and which has:

(1) A dining room serving the general public at tables and having facilities for seating at least 30 guests at one time; or

(2) Guest rooms in the following minimum numbers: in first class cities, 50; in second class cities, 15; in all other cities and unincorporated areas, ten.

Illustrations. The illustrations in this chapter are not a part of this chapter, but are included herein for the purposes of explanation and clarification.

Impervious surface means 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, but are not limited to, rooftops, sidewalks, patios, storage areas, roads, streets, driveways, and parking lots constructed of concrete, asphalt, or compacted aggregate.

Industrial park means a planned, coordinated development of a tract of land with two or more separate industrial buildings. Such development is planned, designed, constructed, and managed on an integrated and coordinated basis with special attention given to on-site vehicular circulation, parking, utility needs, building design, orientation, and open space.

Industry, heavy, means a use engaged in the basic processing and manufacturing of materials or products predominately from extracted or raw materials, or a use engaged in storage of or manufacturing process using flammable, or explosive materials, or a storage or manufacturing process that potentially involves hazardous or commonly recognized offensive conditions.

Industry, light, means a use engaged in the manufacture, predominately from previously prepared materials, of finished products or parts, including processing, fabrication, assembly, treatment, packaging, storage, sales, and distribution of such products.

Junkyard means land or buildings at which waste material, refuse material, inoperative motor vehicles, inoperative machinery, and inoperative appliances, are collected, stored, salvaged, or sold.

Kennel means an establishment licensed to operate a facility housing dogs, cats or other household pets and where grooming, breeding, boarding, training, or selling of animals is conducted as a business or commercial use.

Kennel, private, means any accessory use arranged for the care and sheltering of household pets belonging to the owner of the property on which the kennel is located.

Laundry, self-service, means a business that provides home-type washing and drying machines to be used by customers on the premises.

Lot means a piece of land occupied or intended to be occupied by a principal use and its accessory uses together with such open space and yards as is required by this chapter, and having at least the minimum area, frontage, and width as required by this article and as required in article XII of this chapter. The term "lot" is also referred to as a parcel, tract, property, or piece.

Lot area means the total horizontal area within the lot lines of a lot.

Lot coverage means the area of the lot covered by buildings or roofed areas, excluding permitted projecting eaves.

Lot depth means the horizontal distance from the midpoint of the front lot line to the midpoint of the rear lot line, or to the most distant point on any other lot line where there is no rear lot line.

Lot of record means a lot whose existence, location, and dimensions have been legally recorded or registered in a deed or on a plat.

Lot width means the horizontal distance between the side lot lines measured at the required front yard setback line.

Lot, conforming, means a lot that conforms to the minimum width, area, and frontage requirements of this article and article XII of this chapter.

Lot, corner, means a lot abutting, and at the intersection, of two or more streets. A corner lot shall be considered as having primary frontage abutting the required front yard and secondary frontage abutting a corner side yard.

Lot, interior, means an interior lot is a lot other than a corner lot or through lot.

Lot, nonconforming, means a lot or parcel of land that has less than the required minimum area, width, and frontage as required by this article and article XII of this chapter, also referred to as a substandard lot.

Lot, through, means a lot having front and rear lot lines abutting a public street.

Manufactured home means a structure, not affixed to or part of real estate, transportable in one or more sections, which in the traveling mode, is eight body feet or more in width or 40 body feet or more in length, or, when erected onsite, is 320 or more square feet, and which is built on a permanent chassis and designed to be used as a dwelling with or without a permanent foundation when connected to the required utilities, and includes the plumbing, heating, air conditioning, and electrical systems contained in it.

Manufactured housing applies to either:

(1) A factory-built one-family structure built and transported in sections to a permanent site and not intended for additional transportation once it has been placed on a permanent site.

(2) A transportable, factory-built home, designed to be used as a year-round, residential dwelling. Such structure has wheels or axles permanently attached to its frame. Such structures, built prior to June 15, 1976, are referred to as manufactured homes.

Motor vehicle means the same as defined by section 11-35. The term "motor vehicle" may also be referred to as an automobile, vehicle, car, truck, or trailer.

Nonconforming building means any building that does not meet zoning district regulations for building size, building height, lot coverage, or setback.

Nonconforming use means a use of land that does not comply with the use regulations of this chapter.

Nursing home means a place, residence, or home used for the boarding and care of the elderly or infirm who are dependent upon the services of others.

Office means a building or portion of a building wherein services are performed involving predominantly administrative, professional, or clerical operations.

Open space, common, means open space within or related to a development designed and intended for the common use or enjoyment of the occupants of the development. Parking or driveways shall not be considered permitted open space.

Outside storage means the keeping in an unroofed area of any goods, bulk material, other materials, merchandise, or products for more than 24 hours, also referred to as unenclosed storage.

Park means any public or private land available for recreational, educational, cultural, or aesthetic use.

Parking, joint, means the development and use of a parking space or parking lot by two or more separate developments.

Parking lot means an unenclosed or enclosed area used for the temporary parking of four or more motor vehicles.

Parking space or stall means an obstructed space or area of such dimension and construction in conformance with this chapter that is permanently reserved and maintained for the parking of one motor vehicle.

Patio means an attached or unattached structure at ground level that does not contain walls or a roof, and is not used for parking purposes.

Performance guarantee means a financial deposit to ensure that all improvements, facilities, or work required will be completed in conformance with the approved plan.

Performance standards means a set of minimum and maximum design and performance requirements applied to permitted and conditional uses.

Planned unit development (planned development) means an area for which a unitary development plan has been prepared indicating, but not being limited to, the following land uses: open space, on-site circulation for both pedestrians and vehicles, parking, setbacks, housing densities, building spacing, land coverage, landscaping, relationships, streets, building heights, accessory uses, and architectural treatment. A planned unit development also includes cluster developments. The term "cluster developments" means a development design technique that concentrates buildings in a specific area on a site to allow the remaining land to be used for recreation, common open space, or preservation of environmentally sensitive areas.

Planning agency means the planning commission and the planning department as they function together.

Plaza means an open area at ground level, which is accessible to the public at all times and is unobstructed from its lowest level to the sky. Any portion of a plaza occupied by landscaping, statuary, pools, and open recreation facilities shall be considered to be part of the plaza for the purpose of computing a floor area premium credit. The term "plaza" shall not include off-street loading areas, driveways, off-street parking areas or pedestrian ways accessory thereto. Plazas shall be continuous areas of not less than 750 square feet and not more than 8,000 square feet. A plaza shall not at any point be more than five feet above, nor more than 12 feet below, the curb level of the nearest adjoining street, and shall be unobstructed from its lowest level to the sky, except for arbors or trellises, awnings or canopies, railings not less than 50 percent open and not exceeding three feet eight inches in height, flagpoles, open terraces or porches, steps, ornamental fountains or statuary, or unenclosed balconies.

Pool means any structure, chamber, or tank containing an artificial body of water for swimming, diving, relaxation, or recreational use, including special purpose pools and wading pools.

Private residential pool means a pool connected with a single-family residence or owner-occupied duplex, located on private property under the control of the homeowner, the use of which is limited to family members or the family's invited guests. The term "private residential pool" does not include a pool used as part of a business.

Public pool has the meaning given in M.S.A. § 144.1222, subd. 4, para. (d).

Recycling center means a building in which used material is separated and processed prior to shipment to others who will use those materials to manufacture new products.

Recycling collection point means an incidental use that serves as a neighborhood drop-off point for temporary storage of recoverable resources. No processing of items is permissible.

Restaurant, bar, and *drinking establishment.*

Bar means any premises where alcoholic and nonalcoholic beverages are sold at retail for consumption on the premises. The liquor license for a bar shall be classified as Class RB or Class B as defined by chapter 3, also referred to as a saloon, club, pub, or other use similar to this definition.

Nonalcoholic drinking establishment means any premises where nonalcoholic beverages are sold at retail for consumption on the premises. Snack foods may be available, but not as a complete meal, also referred to as a coffee house, dance club, teen center, or similar use.

Restaurant means a business that sells unpackaged food to the customer in a ready-to-consume state, in individual servings, where the customer consumes these foods in the building, picks up food from the building to consume elsewhere, or the food is delivered to the customer by employees of the restaurant and establishments. If liquor is served in the establishment, the liquor license shall be classified as a Class R license as defined by chapter 3. Kitchen facilities shall be capable of service the permitted occupancy. The term "restaurant" includes, but is not limited to, fast food restaurants, sit down restaurants, pick-up or carry-out restaurants, delivery restaurants, drive-in restaurants, drive-through restaurants, cafes, tea rooms, delis, and any combination thereof. The term "restaurant" may also refer to an eating establishment.

School means a public or private facility that provides a curriculum of elementary and secondary academic instruction, including kindergartens, elementary, junior high schools, and high schools.

Screen means the utilization of a fence, wall, vegetation, or other device or means, in order to conceal from view.

Self-service storage facility means a commercial building or group of buildings that contain varying sizes of individual compartmentalized and controlled access stalls or lockers for the storage of customers' goods or wares.

Setback means the required minimum horizontal distance between a building line and the related front, side, or rear property lines.

Shopping mall means two or more commercial or business uses joined to each other by a common wall without openings and each with individual entrances. Each use shall have principal access to the outside (strip mall) or to a common enclosed area (enclosed mall).

Sign means any name, identification, description, display, illustration, structure, emblem, or device which is affixed to, painted, or represented upon a building, bench, or other outdoor structure, vehicle, or piece of land, which is intended to direct attention to an object, product, place, activity, person, organization, or business. The structure supporting or intended to support a sign shall be considered part of the sign.

Site plan means a document or group of documents containing sketches, text, drawings, maps, photographs, and other material intended to present and explain certain elements of a proposed development, including physical design, siting of buildings and structures, interior vehicular and pedestrian access, parking lots, the provision of improvements, and the interrelationship of these elements.

State-licensed residential facility means a dwelling operated under state license to provide supervision, food, lodging, or other services to a dependent population living and cooking together in a single cooperative housekeeping unit. The term "state-licensed residential facility" includes state-licensed day care facilities and group day care facilities.

Street means a public or private thoroughfare used, or intended to be used, for travel by motor vehicles. Streets are further classified by the function they perform as follows: local, collectors, and arterials. Public alleys shall not be considered streets.

Townhouse means one of a group of one-family attached dwellings all fronting on a public right-of-way or private driveway, and occupying either individual lots or a common lot when developed in grouped housing projects or planned unit developments.

Trash enclosure means an accessory use of a property where trash or recyclable material containers, or any other type of waste or refuse container is stored.

Unrelated individuals means two or more individuals who are not related by blood, marriage, or adoption. The term "related by blood" shall mean whole or half relation between a common ancestor or descendant, husband, wife, son, daughter, father, mother, brother, sister, uncle, aunt, niece, nephew, stepchildren, legally adopted children, grandmother, grandfather, state assigned foster children, first cousin, or any combination of the above persons.

Used for includes the phrases "arranged for," "designed for," "intended for," and "occupied for."

Variance means the adjustment by the board of adjustments and appeals of the literal provisions of this chapter in cases where the literal provisions would cause practical difficulties ~~undue hardship~~ because of physical circumstances unique to an individual property. ~~Variances shall be limited to height, bulk, density, and yard requirements.~~

Water retention device or area means any constructed control device, ponding area or stormwater pond, or a natural depression or wetland installed or planned for under a state approved surface water management plan which provides for the temporary storage of stormwater runoff, with the purpose of replicating pre-development hydrologic conditions and retaining sediment or nutrients.

Yard means an open space on the same zoning lot with a building that is occupied by that building or any other structure, and excluding loading and parking areas, except as otherwise permitted in this chapter.

Yard, corner side, means a yard extending across the full depth of a corner lot and having a width equal the shortest distance between the right-of-way line along the lot's secondary frontage and the building line of the main building.

Yard, front, means a yard extending across the full width of a lot and having a depth equal to the shortest distance between the front lot line and the building line of the main building, including any enclosed or covered porches, as measured from the existing or future right-of-way on which the lot has primary frontage. The front yard depth shall be measured at right angles to the front property line.

Yard, rear, means a yard extending across the full width of a lot and having a depth equal to the shortest distance between the rear lot line and the building line of the main building, or a depth equal to the shortest distance between the most distant point on any other lot line and the building line of the main building in instances where there is no rear lot line. The rear yard depth shall be measured at right angles to the main building.

Yard, side, means a yard between the side lot line and the building line of the main building, which extends from the front yard to the rear yard and has a width equal to the shortest distance between the side lot line and the building line of the main building. The required side yard width shall be calculated at the front building line and the side yard width shall be measured at right angles to the side lot lines.

Zoning administrator means the staff or persons to whom the city manager has assigned the administrative responsibilities under this chapter.

Zoning lot means one or more lots which are used for a single principal use or planned unit development.

Zoning map, official, means the map incorporated into this chapter.

(Code 2015, § 10.02; Ord. of 3-27-2006; Ord. of 11-26-2007; Ord. No. O-2022-0509-2, § 10.02(114)—(116), 5-9-2022)

Sec. 10-1700. Administration and enforcement.

(a) This section shall be enforced pursuant to article XI, division 7, of this chapter.

(b) The zoning administrator may grant administrative variances from the monument sign requirements for uses in existence on the effective date of the ordinance from which this chapter is derived if practical difficulties are ~~a valid hardship is~~ constituted by article XI, division 5, of this chapter. The zoning administrator's decision may be appealed to the city council.

(Code 2015, § 10.87(7); Ord. of 10-22-1990; Ord. of 11-26-1990; Ord. of 10-12-1992; Ord. of 2-23-1998; Ord. of 4-25-1999; Ord. of 1-14-2013)

Sec. 10-440. Urban design guidelines.

The following shall apply to development proposals and plans submitted after the adoption of the ordinance from which this chapter is derived:

(1) *New development.* Development plans for new development on vacant parcels shall be required to demonstrate conformance to the general design principles and recommendations or general site development guidelines of the Urban Design Framework Manual.

(2) *Existing development.* Development and structures that exist before the adoption of the ordinance from which this chapter is derived shall not be considered nonconforming under this subsection and shall be permitted to continue and expand in a manner consistent with existing conditions, designs, and approvals granted under this article.

(3) *Redevelopment.*

a. When the principal use of property changes and is accompanied by a change in the ground coverage of existing buildings or structures, development plans shall demonstrate conformance to the General Design Principles and Recommendations and General Site Development Guidelines of the Urban Design Framework Manual. The site plan review committee or planning agency may grant or recommend variances from this subsection, as appropriate; when it is determined that practical difficulties ~~hardships~~ exist because of site conditions or the character of other structures in the vicinity.

b. Redevelopment plans that include demolition of the existing principal structure to an extent of 50 percent or more of the floor area shall be considered new development and shall be subject to subsection (1) of this section.

(Code 2015, § 10.41(10); Ord. of 7-10-2000)

Sec. 10-940. Urban design guidelines.

The following shall apply to development proposals and plans submitted after the adoption of the ordinance from which this chapter is derived:

(1) *New development.* Development plans for new development on vacant parcels shall be required to demonstrate conformance to the general design principles and recommendations or general site development guidelines of the Urban Design Framework Manual.

(2) *Existing development.* Development and structures that exist before the adoption of the ordinance from which this chapter is derived shall not be considered nonconforming under this section and shall be permitted to continue and expand in a manner consistent with existing conditions, designs, and approvals granted under this article.

(3) *Redevelopment.*

a. When the principal use of property changes and is accompanied by a change in the ground coverage of existing buildings or structures, development plans shall demonstrate conformance to the general design principles and recommendations and general site development guidelines of the Urban Design Framework Manual. The site plan review committee or planning agency may grant or recommend variances from this article, as appropriate, when it is determined that practical difficulties ~~hardships~~ exist because of site conditions or the character of other structures in the vicinity.

b. Redevelopment plans that include demolition of the existing principal structure to an extent of 50 percent or more of the floor area shall be considered new development and shall be subject to subsection (1) of this section.

(Code 2015, § 10.61(10); Ord. of 7-10-2000)

DIVISION 5. VARIANCES

Sec. 10-1937. Authority.

In accordance with the procedures and standards set forth in this section, the board of adjustments and appeals shall have the authority to grant variances from the provisions of this article in instances where their strict enforcement would cause practical difficulties because of circumstances unique to the individual property.

(Code 2015, § 10.94(1))

Sec. 10-1938. Purpose.

The variance procedure is intended to provide a narrowly circumscribed means by which relief may be granted from unforeseen particular applications of this article that create practical difficulties.

(Code 2015, § 10.94(2))

Sec. 10-1939. Parties entitled to seek variances.

Applications for variances may be filed by the owner of, or any person having contractual interest in, the property.

(Code 2015, § 10.94(3))

Sec. 10-1940. Procedure.

An application for a variance shall be processed in accordance with the following procedures:

(1) *Application.* An application for a variance shall be filed with the zoning administrator and shall include, at least, the following information:

   a. The applicant's name, address, and proof of interest in the property.

   b. The owner's name and address, if different than the applicant, and the owner's signed consent to the filing of the application.

   c. The names and addresses of all professional consultants advising the applicant with respect to the proposed development.

   d. The street address and legal description of the property.

   e. The present use of the subject property.

   f. A site plan showing existing lot lines and dimensions as well as lot area, all easements, all public streets and private rights-of-way bordering and adjacent to the site, the use and location of all adjacent property.

   g. The specific feature or features of the proposed use, construction, or development that require a variance.

h. The specific provisions of this article from which a variance is sought and the precise variance therefrom being sought.

i. Statement of the characteristics of the property that prevent compliance with the provisions of this article.

(2) *Action of zoning administrator.* Upon receipt of a properly completed application for an appeal, the zoning administrator shall forthwith transmit to the board of adjustments and appeals the application together with all papers and plans attached thereto.

(3) *Public hearing.* Upon receipt of a properly completed application for a variance, the board of adjustments and appeals shall set a date for a public hearing.

(4) *Notice.* Notice of the public hearing shall be given by the zoning administrator by one publication in one or more newspapers of general circulation. Notice shall be published a minimum of ten days prior to the hearing date and a maximum of 30 days to the hearing. Notice shall also be given by first class mail to all owners of property within 200 feet from the proposed location of the variance. The notice shall describe the particular variance and shall contain a brief description thereof. County assessment records and street addresses shall be deemed sufficient for the location or certification of ownership for notification purposes.

(5) *Board of adjustments and appeals action.* The board of adjustments and appeals shall render its decision in accordance with the board's adopted rules of procedures. The board of appeals may grant the variance, grant the variance subject to conditions, or deny the variance.

(Code 2015, § 10.94(4))

Sec. 10-1941. Standards.

In considering an application for a variance, the board of adjustments and appeals may approve such variance only upon the finding that the application complies with the standards set forth below.

(1) *Zoning*. The proposed variance is in harmony with the general purposes and intent of the zoning ordinance as amended from time to time.

(2) *Comprehensive Plan*. The proposed variance is consistent with the comprehensive plan as amended from time to time.

(3) *Practical Difficulties*. The property owner establishes that there are practical difficulties in complying with the zoning ordinance. Practical difficulties, as used in connection with the granting of a variance require the following findings:

a. The property owner proposes to use the property in a reasonable manner not permitted by the zoning ordinance.

b. The plight of the property is due to circumstances unique to the property not created by the property owner.

c. The variance, if granted, will not alter the essential character of the locality.

(4) Economic considerations alone do not constitute practical difficulties.

(5) Practical difficulties also include, but are not limited to, inadequate access to direct sunlight for solar energy systems.

(Code 2015, § 10.94(5))

Sec. 10-1942. Conditions on variances.

The board of adjustments and appeals may impose specific conditions and limitations upon the granting of a variance as are necessary to achieve the purpose and objectives of this article. A condition must be directly related to and must bear a rough proportionality to the impact created by the variance. Such conditions and limitations may include, but are not limited to, those concerning the use, construction, character, location, landscaping, screening, parking, and other matters relating to the purpose and objectives of this article and shall be expressly set forth in the resolution granting the variance. Violation of any such condition or limitation shall be a violation of this article and shall constitute grounds for revocation of the variance pursuant to article X, division 10, of this chapter.

(Code 2015, § 10.94(6))

Sec. 10-1943. Effect of grant of variance.

The approval of a proposed variance by the board of adjustments and appeals shall not authorize the development, construction, reconstruction, alteration, or moving of any building or structure, but shall merely authorize the preparation, filing and processing of applications for such permits or approvals as may be required by the regulation of the city, including, but not limited to, a building permit and a certificate of occupancy.

(Code 2015, § 10.94(7))

Sec. 10-1944. Limitations on variance.

Subject to an extension of time granted by the board of adjustments and appeals, no variance shall be valid for a period longer than 12 months unless a building permit is issued, or unless a certificate of occupancy is issued and a use commenced within that period of time. Except when otherwise provided in the resolution approving a variance, a variance shall be deemed to relate to, and be for the benefit of, the lot in question, rather than the owner of such lot.

(Code 2015, § 10.94(8); Ord. of 2-9-2004)

Sec. 10-1945. Prohibited variances.

Notwithstanding any other provision in this section, no variance shall be granted to establish a use not permitted in the zoning district where the property subject to the application is located. In case of an emergency, the City Council may grant a variance to permit the temporary use of a one-family dwelling as a two-family dwelling. Variances shall be granted for earth sheltered construction as defined in M.S. § 216C.06, subd. 14, when in harmony with this ordinance.

(Code 2015, § 10.94(9))

Sec. 10-1946. Fee.

An applicant for a variance shall pay a nonrefundable filing fee in connection with the submittal of the application in accordance with a fee schedule as established, from time to time, by the city council.

(Code 2015, § 10.94(10))

Secs. 10-1947—10-1975. Reserved.

DIVISION 6. VARIANCES

Sec. 10-2267. General conditions.

(a) The planning commission may recommend to the council a variance from the provisions of division 5 of this article when, in its opinion, practical difficulties may result from strict compliance. In granting any variance, the council shall take into account the nature of the proposed use of land, the existing use of land in the vicinity, the number of persons to reside or work in the proposed subdivision and the probable effect of the proposed subdivision upon traffic conditions in the vicinity. No variance shall be granted unless the council finds:

(1) The variance is in harmony with the purposes and intent of this ordinance.

(2) The variance is consistent with the comprehensive plan, as amended from time to time.

(3) The proposal puts the property to use in a reasonable manner.

(4) There are unique physical characteristics of the property not created by the property owner.

(5) The variance will not alter the essential character of the locality.

(b) Recommendations of variances to the council shall list findings of fact and reasons substantiating the finds of fact.

(Code 2015, § 11.08; Ord. of 4-28-1980)

Secs. 10-2268—10-2287. Reserved.

Sec. 10-2. Definitions.

The following words, terms and phrases, when used in this chapter, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

Accessory structure means a structure detached from, but located on the same lot as the principal structure or principal use, the use of which is incidental and accessory to that of the principal structure or principal use.

Accessory use means a use incidental to and on the same lot as a principal use.

Adjacent means adjoining, bordering, touching, or contiguous. If two lots are separated by a public street, they shall not be deemed to be adjacent. If separated by a public alley or public walk, they shall be deemed adjacent.

Agriculture means the use of land for agricultural purposes, including farming, dairying, pasturage agriculture, horticulture, floriculture, viticulture, and animal and poultry husbandry and the necessary accessory uses for storing the products. The term "agriculture" shall include incidental retail sales by the producer of products raised on the farm.

Airport means an area of land designated and set aside for the landing and take-off of aircraft, including all necessary facilities for the maintenance and upkeep of aircraft.

Alley means any public right-of-way or private way whose primary function is to furnish vehicular access to the side or rear of properties having their main frontage on a street. The term "alley" shall not be considered the same as the term "street."

Apartment means a dwelling unit within a house or building containing two or more similar units. Each apartment is intended to be occupied by a single housekeeping unit. (See *Family.*)

Apartment house/building means a building containing three or more apartments. (See *Dwelling, multifamily.*)

Arcade means an area contiguous to a street or plaza that is open and unobstructed to a height of not less than 12 feet, and which is accessible to the public at all times. Any portion of an arcade occupied by building columns, landscaping, statuary, pools, or fountains shall be considered part of the arcade for the purpose of computing a floor-area premium credit. The term "arcade" shall not include off-street loading areas, driveways, off-street parking areas or open pedestrian walkways. The floor of any arcade shall be level with the adjoining street or plaza.

Arcade, internal, means a street arcade that fronts on and adjoins a plaza or other space internal to a building lot rather than the front lot line.

Arcade, street, means an arcade that adjoins a front lot line, is not less than ten feet nor more than 30 feet in depth (measured perpendicular to the front lot line), and extends the full length of, or at least 50 feet along the front lot line, whichever is the greater distance; or on a corner lot, is bounded on two sides by the two intersecting street lines, and has an area of not less than 500 square feet and a minimum linear dimension of ten feet.

Automobile repair garage means any building or premises primarily used for the repair or mechanical maintenance of motor vehicles or trailers.

Automobile service station means any building or premises primarily used for dispensing gasoline or diesel fuel.

Automobile wrecking yard and *junkyard* mean land or buildings where discarded or salvaged materials from wrecked motor vehicles or other vehicles or machinery are bought, sold, stored, exchanged, packed, assembled, disassembled, or handled, including, but not limited to, scrap metal, rags, paper, tires, and rubber products.

Bed and breakfast residence means an owner-occupied, single-family residence situated either in a unique locale or in a historically or architecturally significant structure and provides lodging and meals to registered guests.

Bed and breakfast, accessory use, means an activity which is permitted in the same underlying residential district and which is incidental and secondary to the bed and breakfast residence.

Bedroom means any room used principally for sleeping purposes and does not contain separate kitchen and sanitary facilities.

Board of adjustments and appeals means the city council sitting as a governing board exercising the authority to grant variances from the numeric requirements of this chapter, and to hear and decide appeals from an administrative decision or enforcement order of the zoning administrator.

Buffer area means a landscaped area intended to separate or partially obstruct the view of adjacent land uses or properties from one another.

Building means a structure built upon the surface of the earth and used, or intended to be used, for any use or occupancy. A fence shall not be considered a building for setback purposes. The term "building" is also referred to as a structure.

Building height means the vertical measurement of a structure measured from the average elevation of the finished ground grade within ten feet of the building to the highest point of the roof surface of a flat roof, to the deck line of mansard roofs, and to the mean height level between eaves and ridge of gable, hip, and gambrel roofs.

Building line means a line parallel to or concentric with the street right-of-way line, or any other property line, at the foundation level of a building and representing the distance which the building is set back from the street right-of-way line or other property line.

Bulk materials means uncontained solid matter such as powder, grain, stone, sand, etc.

Campground means an area or tract of land used or occupied by campers using tents or other portable shelters or vehicles designed specifically as their temporary housekeeping accommodations.

Canopy and *awning* mean any projecting structure, moveable or stationary, that is attached to and supported by a building. The terms "canopy" and "awning" do not include canopies covering fuel-dispensing islands at automobile service stations.

Carwash means a building that provides facilities for washing and cleaning motor vehicles, which may use production line methods with a conveyor, blower, or other mechanical devices, and which may employ some hand labor. The term "carwash" is also referred to as an automobile wash.

Cemetery means land used for the burial of the dead, including crematories and mausoleums when operated in conjunction within the boundaries of such cemetery.

Child care (commercial) means a building or portion of a building where care, protection, and supervision are provided for a fee on a regular basis for children of any age.

Child care (home) means a private residence where care, protection, and supervision are provided for a fee for children of any age, and the persons providing care reside at the residence.

Church or *place of religious worship* means an institution that people regularly attend to participate in or hold religious services, meetings, and other related activities.

Clinic means a place used for the diagnosis and treatment of sick, ailing, infirm, injured persons, and those persons who are in need of medical attention. Overnight care facilities are not provided at the clinic.

Club or *lodge* means land, buildings, or premises owned or operated by a corporation, association, or group of individuals for a social, educational, recreational, charitable, political, or patriotic purpose and such land, buildings, or premises are not available for unrestricted public access and use.

Commercial use means an occupation, employment, or enterprise that is carried on for profit by the owner, lessee, or licensee.

Commercial vehicle means any vehicle used in connection with a commercial use.

Community center means a place, structure, area, or other facility used for and providing religious, fraternal, social, or recreational programs generally open to the public and designed to accommodate and serve significant segments of the community. The term "community center" may also be referred to as a convention center or civic center.

Conditional use means a use that, owing to some special circumstances pertaining to its location or operation, may be permitted in a district subject to approval by the city council and is subject to conditions approved by the council.

Congregate housing means a residential facility for four or more elderly persons (aged 60 years or older) within which are provided living and sleeping facilities, meal preparation, laundry services, and room cleaning. Such facilities may also provide other services, such as transportation for routine social and medical appointments, and counseling. The term "congregate housing" may also be referred to as an assisted living facility.

Convenience store means a retail establishment, having a maximum gross floor area of 7,500 square feet, offering for sale prepackaged food products, household items, and other goods commonly associated with this type of store. A convenience store may also be combined with an automobile service station.

Cul-de-sac means a local street, one end of which is closed and consists of a circular turnaround.

Deck, attached, means a structure within six feet of the main building that may or may not have railings or access to the ground but does not contain walls or a roof. The term "attached deck" may also be referred to as a balcony.

Deck, unattached, means a structure six feet or more from the main building that may or may not have railings or access to the ground but does not contain walls or a roof.

Density means the number of dwellings or principal buildings or uses permitted per net acre of land. The term "net acres of land" shall not include land required for public streets.

Development means all structures and other human modifications of the natural landscape.

Dormitory means a building used as group living quarters for a student body, religious order, or other group as an associated use to a college, university, boarding school, orphanage, convent, monastery, farm labor camp, or similar use. Dormitories do not contain separate dwelling units.

Drinking establishments means any premises where alcoholic or nonalcoholic beverages are sold at retail for consumption on the premises. Snack foods may be available, but not as a complete meal. The term "drinking establishments" also refers to bars or saloons, coffee houses, or teen centers.

Drive-in facility means any portion of a building from which business is transacted, or is capable of being transacted, directly with customers located in a motor vehicle, also referred to as a drive-through.

Driveway means a private way used by vehicles to gain access to an individual lot or parcel of land. For one- and two-family dwellings, the driveway shall be defined as the length and width of a driving surface that is used to gain access to a private garage.

Dwelling means a building or portion thereof designed or used exclusively for residential occupancy, including one-family, two-family and multiple-family dwelling units, and apartment buildings, but not including

units used for occupancy in hotels or motels. The term "dwelling" may also refer to a residence or residential building.

Dwelling, multifamily, means a residential building used for occupancy by three or more families living independently of each other and containing three or more dwelling units, but not including group houses, row houses, townhouses, or dormitories.

Dwelling, one-family, attached, (group, row, or townhouse) means one of two or more residential dwellings joined to other dwellings by a common wall without openings and with individual entrances to each dwelling from the exterior. Each dwelling unit shall have principal access onto the ground floor and shall be occupied by not more than one family.

Dwelling, one-family, detached, means a residential building containing not more than one dwelling unit and entirely surrounded by open space and yards located on the same lot.

Dwelling, two-family, means a residential building containing not more than two dwelling units, but not including group, row, or townhouses. The term "two-family dwelling" may also be referred to as a duplex.

Dwelling unit means one or more rooms physically arranged so as to create an independent housekeeping unit for occupancy by one family. A dwelling unit contains separate toilet, cooking, and sleeping accommodations. Dwelling units may be rented or owner-occupied and may also be called a residence or roominghouse dwelling unit.

Easement means the right of a person, government agency, or public utility to use public or private property for a specific purpose.

Emergency shelter means a nonprofit, charitable, or religious organization providing boarding or lodging and ancillary services on the premises to primarily indigent, needy, homeless, or transient persons.

Essential service utility structure and facility includes, but is not limited to, a structure or facility used for the location, maintenance or service of communication lines, natural gas, petroleum pipelines, television cables, or electrical transmission lines.

Family means an individual or two or more persons related by blood, marriage, or adoption, or a group of not more than five unrelated persons, living together as a single housekeeping unit within a dwelling unit, as distinguished from individuals or a group occupying a hotel, motel, club, lodge, sorority, fraternity, or dormitory.

Family, functional, means a collective group of unrelated persons residing in a single dwelling unit, limited to not more than two adult persons, together with their traditional family members of any age.

Family, traditional, means one or more persons related by blood or marriage residing in a single dwelling unit.

Fence means any artificially constructed barrier of any material or combination of materials erected to enclose or screen areas of land.

Floor area means the sum of the gross horizontal area of all floors of a building as measured from the exterior faces of the exterior walls.

Floor area, livable or usable, means the sum of the gross horizontal area of all floors of a building as measured from the interior faces of the interior walls, excluding the areas of unoccupied cellars, accessory garages, porches, attics, basements, stairways, bathrooms, and utility and heating rooms.

Floor area ratio (FAR) means the floor area of the buildings on a lot divided by the area of that lot or, in the case of planned developments, the sum of the floor area of all buildings divided by the gross site area.

Fraternity or sorority house means a building that is occupied solely by a group of university or college students who are associated together in a fraternity or sorority chartered by a national or international fraternity

or sorority, or officially recognized by the university or college, and who receive from the fraternity or sorority their lodging or meals on the premises for compensation.

Frontage means the length of any one property line of a lot that abuts a public street. All sides of a lot adjacent to public streets shall be considered frontage, and yards shall be provided as indicated in this chapter.

Funeral home means a building or part thereof used for human funeral services. Such building may contain space and facilities for:

(1) Embalming and the performance of other services used in the preparation of the dead for burial.

(2) The performance of autopsies and other surgical procedures on the dead.

(3) The storage of caskets, funeral urns, and other related funeral supplies.

(4) The storage of funeral vehicles.

A funeral home shall not include facilities for cremation, unless allowed by a conditional use permit. A funeral chapel shall be considered an accessory use to a funeral home.

Garage, private, means an accessory use situated on the same lot of the principal use, and designed for the private storage of motor vehicles owned by the occupant of a principal use. No facilities for mechanical service or repair of a commercial or public nature are provided in the private garage. Such garage may be attached to the principal building or detached from the principal building. When a private garage is attached to a principal building, it shall be considered part of the principal building for setback and yard purposes.

Garage, public, means a building designed and used for the storage of automobile vehicles and operated as a business enterprise with a service charge or fee being paid to the owner or operator for the parking or storage of privately owned vehicles. Parking ramps shall be included within this definition.

Grade, ground, means the average elevation of the finished ground levels measured at the center of all exterior walls of a building.

Ground coverage. See *Lot coverage.*

Group home means a state-licensed residential facility as defined by state law.

Grouped housing project means two or more dwellings located on a single lot or parcel. See *Planned unit development.*

Home occupation means an accessory use of a dwelling unit, conducted entirely within the dwelling unit, carried on by one or more persons, all of whom reside within the dwelling unit, and no persons are employed at the dwelling unit other than the residents living therein. The home occupation shall be clearly incidental and secondary to the use of the dwelling for residence purposes and does not change the character thereof or adversely affect the uses permitted in the residential zoning district.

Hospital means an institution providing health services for human in-patients and medical or surgical care for the sick or injured. The term "hospital" includes related facilities such as laboratories, outpatient departments, training facilities, central service facilities, staff offices, and overnight accommodations for patients.

Hotel means an establishment where food and lodging are regularly furnished to transients, and which has:

(1) A dining room serving the general public at tables and having facilities for seating at least 30 guests at one time; or

(2) Guest rooms in the following minimum numbers: in first class cities, 50; in second class cities, 15; in all other cities and unincorporated areas, ten.

Illustrations. The illustrations in this chapter are not a part of this chapter, but are included herein for the purposes of explanation and clarification.

Impervious surface means 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, but are not limited to, rooftops, sidewalks, patios, storage areas, roads, streets, driveways, and parking lots constructed of concrete, asphalt, or compacted aggregate.

Industrial park means a planned, coordinated development of a tract of land with two or more separate industrial buildings. Such development is planned, designed, constructed, and managed on an integrated and coordinated basis with special attention given to on-site vehicular circulation, parking, utility needs, building design, orientation, and open space.

Industry, heavy, means a use engaged in the basic processing and manufacturing of materials or products predominately from extracted or raw materials, or a use engaged in storage of or manufacturing process using flammable, or explosive materials, or a storage or manufacturing process that potentially involves hazardous or commonly recognized offensive conditions.

Industry, light, means a use engaged in the manufacture, predominately from previously prepared materials, of finished products or parts, including processing, fabrication, assembly, treatment, packaging, storage, sales, and distribution of such products.

Junkyard means land or buildings at which waste material, refuse material, inoperative motor vehicles, inoperative machinery, and inoperative appliances, are collected, stored, salvaged, or sold.

Kennel means an establishment licensed to operate a facility housing dogs, cats or other household pets and where grooming, breeding, boarding, training, or selling of animals is conducted as a business or commercial use.

Kennel, private, means any accessory use arranged for the care and sheltering of household pets belonging to the owner of the property on which the kennel is located.

Laundry, self-service, means a business that provides home-type washing and drying machines to be used by customers on the premises.

Lot means a piece of land occupied or intended to be occupied by a principal use and its accessory uses together with such open space and yards as is required by this chapter, and having at least the minimum area, frontage, and width as required by this article and as required in article XII of this chapter. The term "lot" is also referred to as a parcel, tract, property, or piece.

Lot area means the total horizontal area within the lot lines of a lot.

Lot coverage means the area of the lot covered by buildings or roofed areas, excluding permitted projecting eaves.

Lot depth means the horizontal distance from the midpoint of the front lot line to the midpoint of the rear lot line, or to the most distant point on any other lot line where there is no rear lot line.

Lot of record means a lot whose existence, location, and dimensions have been legally recorded or registered in a deed or on a plat.

Lot width means the horizontal distance between the side lot lines measured at the required front yard setback line.

Lot, conforming, means a lot that conforms to the minimum width, area, and frontage requirements of this article and article XII of this chapter.

Lot, corner, means a lot abutting, and at the intersection, of two or more streets. A corner lot shall be considered as having primary frontage abutting the required front yard and secondary frontage abutting a corner side yard.

Lot, interior, means an interior lot is a lot other than a corner lot or through lot.

Lot, nonconforming, means a lot or parcel of land that has less than the required minimum area, width, and frontage as required by this article and article XII of this chapter, also referred to as a substandard lot.

Lot, through, means a lot having front and rear lot lines abutting a public street.

Manufactured home means a structure, not affixed to or part of real estate, transportable in one or more sections, which in the traveling mode, is eight body feet or more in width or 40 body feet or more in length, or, when erected onsite, is 320 or more square feet, and which is built on a permanent chassis and designed to be used as a dwelling with or without a permanent foundation when connected to the required utilities, and includes the plumbing, heating, air conditioning, and electrical systems contained in it.

Manufactured housing applies to either:

(1) A factory-built one-family structure built and transported in sections to a permanent site and not intended for additional transportation once it has been placed on a permanent site.

(2) A transportable, factory-built home, designed to be used as a year-round, residential dwelling. Such structure has wheels or axles permanently attached to its frame. Such structures, built prior to June 15, 1976, are referred to as manufactured homes.

Motor vehicle means the same as defined by section 11-35. The term "motor vehicle" may also be referred to as an automobile, vehicle, car, truck, or trailer.

Nonconforming building means any building that does not meet zoning district regulations for building size, building height, lot coverage, or setback.

Nonconforming use means a use of land that does not comply with the use regulations of this chapter.

Nursing home means a place, residence, or home used for the boarding and care of the elderly or infirm who are dependent upon the services of others.

Office means a building or portion of a building wherein services are performed involving predominantly administrative, professional, or clerical operations.

Open space, common, means open space within or related to a development designed and intended for the common use or enjoyment of the occupants of the development. Parking or driveways shall not be considered permitted open space.

Outside storage means the keeping in an unroofed area of any goods, bulk material, other materials, merchandise, or products for more than 24 hours, also referred to as unenclosed storage.

Park means any public or private land available for recreational, educational, cultural, or aesthetic use.

Parking, joint, means the development and use of a parking space or parking lot by two or more separate developments.

Parking lot means an unenclosed or enclosed area used for the temporary parking of four or more motor vehicles.

Parking space or stall means an obstructed space or area of such dimension and construction in conformance with this chapter that is permanently reserved and maintained for the parking of one motor vehicle.

Patio means an attached or unattached structure at ground level that does not contain walls or a roof, and is not used for parking purposes.

Performance guarantee means a financial deposit to ensure that all improvements, facilities, or work required will be completed in conformance with the approved plan.

Performance standards means a set of minimum and maximum design and performance requirements applied to permitted and conditional uses.

Planned unit development (planned development) means an area for which a unitary development plan has been prepared indicating, but not being limited to, the following land uses: open space, on-site circulation for both pedestrians and vehicles, parking, setbacks, housing densities, building spacing, land coverage, landscaping, relationships, streets, building heights, accessory uses, and architectural treatment. A planned unit development also includes cluster developments. The term "cluster developments" means a development design technique that concentrates buildings in a specific area on a site to allow the remaining land to be used for recreation, common open space, or preservation of environmentally sensitive areas.

Planning agency means the planning commission and the planning department as they function together.

Plaza means an open area at ground level, which is accessible to the public at all times and is unobstructed from its lowest level to the sky. Any portion of a plaza occupied by landscaping, statuary, pools, and open recreation facilities shall be considered to be part of the plaza for the purpose of computing a floor area premium credit. The term "plaza" shall not include off-street loading areas, driveways, off-street parking areas or pedestrian ways accessory thereto. Plazas shall be continuous areas of not less than 750 square feet and not more than 8,000 square feet. A plaza shall not at any point be more than five feet above, nor more than 12 feet below, the curb level of the nearest adjoining street, and shall be unobstructed from its lowest level to the sky, except for arbors or trellises, awnings or canopies, railings not less than 50 percent open and not exceeding three feet eight inches in height, flagpoles, open terraces or porches, steps, ornamental fountains or statuary, or unenclosed balconies.

Pool means any structure, chamber, or tank containing an artificial body of water for swimming, diving, relaxation, or recreational use, including special purpose pools and wading pools.

Private residential pool means a pool connected with a single-family residence or owner-occupied duplex, located on private property under the control of the homeowner, the use of which is limited to family members or the family's invited guests. The term "private residential pool" does not include a pool used as part of a business.

Public pool has the meaning given in M.S.A. § 144.1222, subd. 4, para. (d).

Recycling center means a building in which used material is separated and processed prior to shipment to others who will use those materials to manufacture new products.

Recycling collection point means an incidental use that serves as a neighborhood drop-off point for temporary storage of recoverable resources. No processing of items is permissible.

Restaurant, bar, and *drinking establishment.*

Bar means any premises where alcoholic and nonalcoholic beverages are sold at retail for consumption on the premises. The liquor license for a bar shall be classified as Class RB or Class B as defined by chapter 3, also referred to as a saloon, club, pub, or other use similar to this definition.

Nonalcoholic drinking establishment means any premises where nonalcoholic beverages are sold at retail for consumption on the premises. Snack foods may be available, but not as a complete meal, also referred to as a coffee house, dance club, teen center, or similar use.

Restaurant means a business that sells unpackaged food to the customer in a ready-to-consume state, in individual servings, where the customer consumes these foods in the building, picks up food from the building to consume elsewhere, or the food is delivered to the customer by employees of the restaurant and establishments. If liquor is served in the establishment, the liquor license shall be classified as a Class R license as defined by chapter 3. Kitchen facilities shall be capable of service the permitted occupancy. The term "restaurant" includes, but is not limited to, fast food restaurants, sit down restaurants, pick-up or carry-out restaurants, delivery restaurants, drive-in restaurants, drive-through restaurants, cafes, tea rooms, delis, and any combination thereof. The term "restaurant" may also refer to an eating establishment.

School means a public or private facility that provides a curriculum of elementary and secondary academic instruction, including kindergartens, elementary, junior high schools, and high schools.

Screen means the utilization of a fence, wall, vegetation, or other device or means, in order to conceal from view.

Self-service storage facility means a commercial building or group of buildings that contain varying sizes of individual compartmentalized and controlled access stalls or lockers for the storage of customers' goods or wares.

Setback means the required minimum horizontal distance between a building line and the related front, side, or rear property lines.

Shopping mall means two or more commercial or business uses joined to each other by a common wall without openings and each with individual entrances. Each use shall have principal access to the outside (strip mall) or to a common enclosed area (enclosed mall).

Sign means any name, identification, description, display, illustration, structure, emblem, or device which is affixed to, painted, or represented upon a building, bench, or other outdoor structure, vehicle, or piece of land, which is intended to direct attention to an object, product, place, activity, person, organization, or business. The structure supporting or intended to support a sign shall be considered part of the sign.

Site plan means a document or group of documents containing sketches, text, drawings, maps, photographs, and other material intended to present and explain certain elements of a proposed development, including physical design, siting of buildings and structures, interior vehicular and pedestrian access, parking lots, the provision of improvements, and the interrelationship of these elements.

State-licensed residential facility means a dwelling operated under state license to provide supervision, food, lodging, or other services to a dependent population living and cooking together in a single cooperative housekeeping unit. The term "state-licensed residential facility" includes state-licensed day care facilities and group day care facilities.

Street means a public or private thoroughfare used, or intended to be used, for travel by motor vehicles. Streets are further classified by the function they perform as follows: local, collectors, and arterials. Public alleys shall not be considered streets.

Townhouse means one of a group of one-family attached dwellings all fronting on a public right-of-way or private driveway, and occupying either individual lots or a common lot when developed in grouped housing projects or planned unit developments.

Trash enclosure means an accessory use of a property where trash or recyclable material containers, or any other type of waste or refuse container is stored.

Unrelated individuals means two or more individuals who are not related by blood, marriage, or adoption. The term "related by blood" shall mean whole or half relation between a common ancestor or descendant, husband, wife, son, daughter, father, mother, brother, sister, uncle, aunt, niece, nephew, stepchildren, legally adopted children, grandmother, grandfather, state assigned foster children, first cousin, or any combination of the above persons.

Used for includes the phrases "arranged for," "designed for," "intended for," and "occupied for."

Variance means the adjustment by the board of adjustments and appeals of the literal provisions of this chapter in cases where the literal provisions would cause practical difficulties because of physical circumstances unique to an individual property.

Water retention device or area means any constructed control device, ponding area or stormwater pond, or a natural depression or wetland installed or planned for under a state approved surface water management plan which provides for the temporary storage of stormwater runoff, with the purpose of replicating pre-development hydrologic conditions and retaining sediment or nutrients.

Yard means an open space on the same zoning lot with a building that is occupied by that building or any other structure, and excluding loading and parking areas, except as otherwise permitted in this chapter.

Yard, corner side, means a yard extending across the full depth of a corner lot and having a width equal the shortest distance between the right-of-way line along the lot's secondary frontage and the building line of the main building.

Yard, front, means a yard extending across the full width of a lot and having a depth equal to the shortest distance between the front lot line and the building line of the main building, including any enclosed or covered porches, as measured from the existing or future right-of-way on which the lot has primary frontage. The front yard depth shall be measured at right angles to the front property line.

Yard, rear, means a yard extending across the full width of a lot and having a depth equal to the shortest distance between the rear lot line and the building line of the main building, or a depth equal to the shortest distance between the most distant point on any other lot line and the building line of the main building in instances where there is no rear lot line. The rear yard depth shall be measured at right angles to the main building.

Yard, side, means a yard between the side lot line and the building line of the main building, which extends from the front yard to the rear yard and has a width equal to the shortest distance between the side lot line and the building line of the main building. The required side yard width shall be calculated at the front building line and the side yard width shall be measured at right angles to the side lot lines.

Zoning administrator means the staff or persons to whom the city manager has assigned the administrative responsibilities under this chapter.

Zoning lot means one or more lots which are used for a single principal use or planned unit development.

Zoning map, official, means the map incorporated into this chapter.

(Code 2015, § 10.02; Ord. of 3-27-2006; Ord. of 11-26-2007; Ord. No. O-2022-0509-2, § 10.02(114)—(116), 5-9-2022)

Sec. 10-1700. Administration and enforcement.

(a) This section shall be enforced pursuant to article XI, division 7, of this chapter.

(b) The zoning administrator may grant administrative variances from the monument sign requirements for uses in existence on the effective date of the ordinance from which this chapter is derived if practical difficulties are constituted by article XI, division 5, of this chapter. The zoning administrator's decision may be appealed to the city council.

(Code 2015, § 10.87(7); Ord. of 10-22-1990; Ord. of 11-26-1990; Ord. of 10-12-1992; Ord. of 2-23-1998; Ord. of 4-25-1999; Ord. of 1-14-2013)

Sec. 10-440. Urban design guidelines.

The following shall apply to development proposals and plans submitted after the adoption of the ordinance from which this chapter is derived:

(1) *New development.* Development plans for new development on vacant parcels shall be required to demonstrate conformance to the general design principles and recommendations or general site development guidelines of the Urban Design Framework Manual.

(2) *Existing development.* Development and structures that exist before the adoption of the ordinance from which this chapter is derived shall not be considered nonconforming under this subsection and shall be permitted to continue and expand in a manner consistent with existing conditions, designs, and approvals granted under this article.

(3) *Redevelopment.*

a. When the principal use of property changes and is accompanied by a change in the ground coverage of existing buildings or structures, development plans shall demonstrate conformance to the General Design Principles and Recommendations and General Site Development Guidelines of the Urban Design Framework Manual. The site plan review committee or planning agency may grant or recommend variances from this subsection, as appropriate; when it is determined that practical difficulties exist because of site conditions or the character of other structures in the vicinity.

b. Redevelopment plans that include demolition of the existing principal structure to an extent of 50 percent or more of the floor area shall be considered new development and shall be subject to subsection (1) of this section.

(Code 2015, § 10.41(10); Ord. of 7-10-2000)

Sec. 10-940. Urban design guidelines.

The following shall apply to development proposals and plans submitted after the adoption of the ordinance from which this chapter is derived:

(1) *New development.* Development plans for new development on vacant parcels shall be required to demonstrate conformance to the general design principles and recommendations or general site development guidelines of the Urban Design Framework Manual.

(2) *Existing development.* Development and structures that exist before the adoption of the ordinance from which this chapter is derived shall not be considered nonconforming under this section and shall be permitted to continue and expand in a manner consistent with existing conditions, designs, and approvals granted under this article.

(3) *Redevelopment.*

a. When the principal use of property changes and is accompanied by a change in the ground coverage of existing buildings or structures, development plans shall demonstrate conformance to the general design principles and recommendations and general site development guidelines of the Urban Design Framework Manual. The site plan review committee or planning agency may grant or recommend variances from this article, as appropriate, when it is determined that practical difficulties exist because of site conditions or the character of other structures in the vicinity.

b. Redevelopment plans that include demolition of the existing principal structure to an extent of 50 percent or more of the floor area shall be considered new development and shall be subject to subsection (1) of this section.

(Code 2015, § 10.61(10); Ord. of 7-10-2000)

462.357 OFFICIAL CONTROLS: ZONING ORDINANCE.

Subdivision 1. **Authority for zoning.** For the purpose of promoting the public health, safety, morals, and general welfare, a municipality may by ordinance regulate on the earth's surface, in the air space above the surface, and in subsurface areas, the location, height, width, bulk, type of foundation, number of stories, size of buildings and other structures, the percentage of lot which may be occupied, the size of yards and other open spaces, the density and distribution of population, the uses of buildings and structures for trade, industry, residence, recreation, public activities, or other purposes, and the uses of land for trade, industry, residence, recreation, agriculture, forestry, soil conservation, water supply conservation, conservation of shorelands, as defined in sections 103F.201 to 103F.221, access to direct sunlight for solar energy systems as defined in section 216C.06, flood control or other purposes, and may establish standards and procedures regulating such uses. To accomplish these purposes, official controls may include provision for purchase of development rights by the governing body in the form of conservation easements under chapter 84C in areas where the governing body considers preservation desirable and the transfer of development rights from those areas to areas the governing body considers more appropriate for development. No regulation may prohibit earth sheltered construction as defined in section 216C.06, subdivision 14, relocated residential buildings, manufactured homes built in conformance with sections 327.31 to 327.35, or industrialized or modular buildings for residential use built in conformance with Minnesota Rules, chapter 1361, that comply with all other zoning ordinances promulgated pursuant to this section. The regulations may divide the surface, above surface, and subsurface areas of the municipality into districts or zones of suitable numbers, shape, and area. The regulations shall be uniform for each class or kind of buildings, structures, or land and for each class or kind of use throughout such district, but the regulations in one district may differ from those in other districts. The ordinance embodying these regulations shall be known as the zoning ordinance and shall consist of text and maps. A city may by ordinance extend the application of its zoning regulations to unincorporated territory located within two miles of its limits in any direction, but not in a county or town which has adopted zoning regulations; provided that where two or more noncontiguous municipalities have boundaries less than four miles apart, each is authorized to control the zoning of land on its side of a line equidistant between the two noncontiguous municipalities unless a town or county in the affected area has adopted zoning regulations. Any city may thereafter enforce such regulations in the area to the same extent as if such property were situated within its corporate limits, until the county or town board adopts a comprehensive zoning regulation which includes the area.

Subd. 1a. **Certain zoning ordinances.** A municipality must not enact, amend, or enforce a zoning ordinance that has the effect of altering the existing density, lot-size requirements, or manufactured home setback requirements in any manufactured home park constructed before January 1, 1995, if the manufactured home park, when constructed, complied with the then existing density, lot-size and setback requirements.

Subd. 1b. **Conditional uses.** A manufactured home park, as defined in section 327.14, subdivision 3, is a conditional use in a zoning district that allows the construction or placement of a building used or intended to be used by two or more families.

Subd. 1c. **Amortization prohibited.** Except as otherwise provided in this subdivision, a municipality must not enact, amend, or enforce an ordinance providing for the elimination or termination of a use by amortization which use was lawful at the time of its inception. This subdivision does not apply to adults-only bookstores, adults-only theaters, or similar adults-only businesses, as defined by ordinance.

Subd. 1d. **Nuisance.** Subdivision 1c does not prohibit a municipality from enforcing an ordinance providing for the prevention or abatement of nuisances, as defined in section 561.01, or eliminating a use determined to be a public nuisance, as defined in section 617.81, subdivision 2, paragraph (a), clauses (i) to (ix), without payment of compensation.

Subd. 1e. **Nonconformities.** (a) Except as otherwise provided by law, any nonconformity, including the lawful use or occupation of land or premises existing at the time of the adoption of an additional control under this chapter, may be continued, including through repair, replacement, restoration, maintenance, or improvement, but not including expansion, unless:

(1) the nonconformity or occupancy is discontinued for a period of more than one year; or

(2) any nonconforming use is destroyed by fire or other peril to the extent of greater than 50 percent of its estimated market value, as indicated in the records of the county assessor at the time of damage, and no building permit has been applied for within 180 days of when the property is damaged. In this case, a municipality may impose reasonable conditions upon a zoning or building permit in order to mitigate any newly created impact on adjacent property or water body. When a nonconforming structure in the shoreland district with less than 50 percent of the required setback from the water is destroyed by fire or other peril to greater than 50 percent of its estimated market value, as indicated in the records of the county assessor at the time of damage, the structure setback may be increased if practicable and reasonable conditions are placed upon a zoning or building permit to mitigate created impacts on the adjacent property or water body.

(b) Any subsequent use or occupancy of the land or premises shall be a conforming use or occupancy. A municipality may, by ordinance, permit an expansion or impose upon nonconformities reasonable regulations to prevent and abate nuisances and to protect the public health, welfare, or safety. This subdivision does not prohibit a municipality from enforcing an ordinance that applies to adults-only bookstores, adults-only theaters, or similar adults-only businesses, as defined by ordinance.

(c) Notwithstanding paragraph (a), a municipality shall regulate the repair, replacement, maintenance, improvement, or expansion of nonconforming uses and structures in floodplain areas to the extent necessary to maintain eligibility in the National Flood Insurance Program and not increase flood damage potential or increase the degree of obstruction to flood flows in the floodway.

(d) Paragraphs (d) to (j) apply to shoreland lots of record in the office of the county recorder on the date of adoption of local shoreland controls that do not meet the requirements for lot size or lot width. A municipality shall regulate the use of nonconforming lots of record and the repair, replacement, maintenance, improvement, or expansion of nonconforming uses and structures in shoreland areas according to paragraphs (d) to (j).

(e) A nonconforming single lot of record located within a shoreland area may be allowed as a building site without variances from lot size requirements, provided that:

(1) all structure and septic system setback distance requirements can be met;

(2) a Type 1 sewage treatment system consistent with Minnesota Rules, chapter 7080, can be installed or the lot is connected to a public sewer; and

(3) the impervious surface coverage does not exceed 25 percent of the lot.

(f) In a group of two or more contiguous lots of record under a common ownership, an individual lot must be considered as a separate parcel of land for the purpose of sale or development, if it meets the following requirements:

(1) the lot must be at least 66 percent of the dimensional standard for lot width and lot size for the shoreland classification consistent with Minnesota Rules, chapter 6120;

(2) the lot must be connected to a public sewer, if available, or must be suitable for the installation of a Type 1 sewage treatment system consistent with Minnesota Rules, chapter 7080, and local government controls;

(3) impervious surface coverage must not exceed 25 percent of each lot; and

(4) development of the lot must be consistent with an adopted comprehensive plan.

(g) A lot subject to paragraph (f) not meeting the requirements of paragraph (f) must be combined with the one or more contiguous lots so they equal one or more conforming lots as much as possible.

(h) Notwithstanding paragraph (f), contiguous nonconforming lots of record in shoreland areas under a common ownership must be able to be sold or purchased individually if each lot contained a habitable residential dwelling at the time the lots came under common ownership and the lots are suitable for, or served by, a sewage treatment system consistent with the requirements of section 115.55 and Minnesota Rules, chapter 7080, or connected to a public sewer.

(i) In evaluating all variances, zoning and building permit applications, or conditional use requests, the zoning authority shall require the property owner to address, when appropriate, stormwater runoff management, reducing impervious surfaces, increasing setback, restoration of wetlands, vegetative buffers, sewage treatment and water supply capabilities, and other conservation-designed actions.

(j) A portion of a conforming lot may be separated from an existing parcel as long as the remainder of the existing parcel meets the lot size and sewage treatment requirements of the zoning district for a new lot and the newly created parcel is combined with an adjacent parcel.

Subd. 1f. **Substandard structures.** Notwithstanding subdivision 1e, Minnesota Rules, parts 6105.0351 to 6105.0550, may allow for the continuation and improvement of substandard structures, as defined in Minnesota Rules, part 6105.0354, subpart 30, in the Lower Saint Croix National Scenic Riverway.

Subd. 1g. **Feedlot zoning controls.** (a) A municipality proposing to adopt a new feedlot zoning control or to amend an existing feedlot zoning control must notify the Pollution Control Agency and commissioner of agriculture at the beginning of the process, no later than the date notice is given of the first hearing proposing to adopt or amend a zoning control purporting to address feedlots.

(b) Prior to final approval of a feedlot zoning control, the governing body of a municipality may submit a copy of the proposed zoning control to the Pollution Control Agency and to the commissioner of agriculture and request review, comment, and recommendations on the environmental and agricultural effects from specific provisions in the ordinance.

(c) The agencies' response to the municipality may include:

(1) any recommendations for improvements in the ordinance; and

(2) the legal, social, economic, or scientific justification for each recommendation under clause (1).

(d) At the request of the municipality's governing body, the municipality must prepare a report on the economic effects from specific provisions in the ordinance. Economic analysis must state whether the ordinance will affect the local economy and describe the kinds of businesses affected and the projected impact the proposal will have on those businesses. To assist the municipality, the commissioner of agriculture, in cooperation with the Department of Employment and Economic Development, must develop a template for measuring local economic effects and make it available to the municipality. The report must be submitted

to the commissioners of employment and economic development and agriculture along with the proposed ordinance.

(e) A local ordinance that contains a setback for new feedlots from existing residences must also provide for a new residence setback from existing feedlots located in areas zoned agricultural at the same distances and conditions specified in the setback for new feedlots, unless the new residence is built to replace an existing residence. A municipality may grant a variance from this requirement under section 462.358, subdivision 6.

Subd. 1h. **Comprehensive plans in greater Minnesota; open spaces.** When adopting or updating a comprehensive plan in a municipality located within a county that is not a greater than 80 percent area, as defined in section 103G.005, subdivision 10b, and that is located outside the metropolitan area, as defined by section 473.121, subdivision 2, the municipality shall consider adopting goals and objectives for the preservation of agricultural, forest, wildlife, and open space land and the minimization of development in sensitive shoreland areas. Within three years of updating the comprehensive plan, the municipality shall consider adopting ordinances as part of the municipality's official controls that encourage the implementation of the goals and objectives.

Subd. 1i. **Airport safety zones on zoning maps.** Airport safety zones must be included on maps that illustrate boundaries of zoning districts and that are adopted as official controls.

Subd. 2. **General requirements.** (a) At any time after the adoption of a land use plan for the municipality, the planning agency, for the purpose of carrying out the policies and goals of the land use plan, may prepare a proposed zoning ordinance and submit it to the governing body with its recommendations for adoption.

(b) Subject to the requirements of subdivisions 3, 4, and 5, the governing body may adopt and amend a zoning ordinance by a majority vote of all its members. The adoption or amendment of any portion of a zoning ordinance which changes all or part of the existing classification of a zoning district from residential to either commercial or industrial requires a two-thirds majority vote of all members of the governing body.

(c) The land use plan must provide guidelines for the timing and sequence of the adoption of official controls to ensure planned, orderly, and staged development and redevelopment consistent with the land use plan.

Subd. 3. **Public hearings.** No zoning ordinance or amendment thereto shall be adopted until a public hearing has been held thereon by the planning agency or by the governing body. A notice of the time, place and purpose of the hearing shall be published in the official newspaper of the municipality at least ten days prior to the day of the hearing. When an amendment involves changes in district boundaries affecting an area of five acres or less, a similar notice shall be mailed at least ten days before the day of the hearing to each owner of affected property and property situated wholly or partly within 350 feet of the property to which the amendment relates. For the purpose of giving mailed notice, the person responsible for mailing the notice may use any appropriate records to determine the names and addresses of owners. A copy of the notice and a list of the owners and addresses to which the notice was sent shall be attested to by the responsible person and shall be made a part of the records of the proceedings. The failure to give mailed notice to individual property owners, or defects in the notice shall not invalidate the proceedings, provided a bona fide attempt to comply with this subdivision has been made.

Subd. 4. **Amendments.** An amendment to a zoning ordinance may be initiated by the governing body, the planning agency, or by petition of affected property owners as defined in the zoning ordinance. An amendment not initiated by the planning agency shall be referred to the planning agency, if there is one, for study and report and may not be acted upon by the governing body until it has received the recommendation

of the planning agency on the proposed amendment or until 60 days have elapsed from the date of reference of the amendment without a report by the planning agency.

Subd. 5. **Amendment; certain cities of the first class.** The provisions of this subdivision apply to the adoption or amendment of any portion of a zoning ordinance which changes all or part of the existing classification of a zoning district from residential to either commercial or industrial of a property located in a city of the first class, except a city of the first class in which a different process is provided through the operation of the city's home rule charter. In a city to which this subdivision applies, amendments to a zoning ordinance shall be made in conformance with this section but only after there shall have been filed in the office of the city clerk a written consent of the owners of two-thirds of the several descriptions of real estate situate within 100 feet of the total contiguous descriptions of real estate held by the same owner or any party purchasing any such contiguous property within one year preceding the request, and after the affirmative vote in favor thereof by a majority of the members of the governing body of any such city. The governing body of such city may, by a two-thirds vote of its members, after hearing, adopt a new zoning ordinance without such written consent whenever the planning commission or planning board of such city shall have made a survey of the whole area of the city or of an area of not less than 40 acres, within which the new ordinance or the amendments or alterations of the existing ordinance would take effect when adopted, and shall have considered whether the number of descriptions of real estate affected by such changes and alterations renders the obtaining of such written consent impractical, and such planning commission or planning board shall report in writing as to whether in its opinion the proposals of the governing body in any case are reasonably related to the overall needs of the community, to existing land use, or to a plan for future land use, and shall have conducted a public hearing on such proposed ordinance, changes or alterations, of which hearing published notice shall have been given in a daily newspaper of general circulation at least once each week for three successive weeks prior to such hearing, which notice shall state the time, place and purpose of such hearing, and shall have reported to the governing body of the city its findings and recommendations in writing.

Subd. 6. **Appeals and adjustments.** Appeals to the board of appeals and adjustments may be taken by any affected person upon compliance with any reasonable conditions imposed by the zoning ordinance. The board of appeals and adjustments has the following powers with respect to the zoning ordinance:

(1) To hear and decide appeals where it is alleged that there is an error in any order, requirement, decision, or determination made by an administrative officer in the enforcement of the zoning ordinance.

(2) To hear requests for variances from the requirements of the zoning ordinance including restrictions placed on nonconformities. Variances shall only be permitted when they are in harmony with the general purposes and intent of the ordinance and when the variances are consistent with the comprehensive plan. Variances may be granted when the applicant for the variance establishes that there are practical difficulties in complying with the zoning ordinance. "Practical difficulties," as used in connection with the granting of a variance, means that the property owner proposes to use the property in a reasonable manner not permitted by the zoning ordinance; the plight of the landowner is due to circumstances unique to the property not created by the landowner; and the variance, if granted, will not alter the essential character of the locality. Economic considerations alone do not constitute practical difficulties. Practical difficulties include, but are not limited to, inadequate access to direct sunlight for solar energy systems. Variances shall be granted for earth sheltered construction as defined in section 216C.06, subdivision 14, when in harmony with the ordinance. The board of appeals and adjustments or the governing body as the case may be, may not permit as a variance any use that is not allowed under the zoning ordinance for property in the zone where the affected person's land is located. The board or governing body as the case may be, may permit as a variance the temporary use of a one family dwelling as a two family dwelling. The board or governing body as the

case may be may impose conditions in the granting of variances. A condition must be directly related to and must bear a rough proportionality to the impact created by the variance.

Subd. 6a. **Normal residential surroundings for persons with disabilities.** It is the policy of this state that persons with disabilities should not be excluded by municipal zoning ordinances or other land use regulations from the benefits of normal residential surroundings. For purposes of subdivisions 6a through 9, "person" has the meaning given in section 245A.02, subdivision 11.

Subd. 7. **Permitted single family use.** A state licensed residential facility, including an assisted living facility under chapter 144G, serving six or fewer persons, a licensed day care facility serving 12 or fewer persons, and a group family day care facility licensed under Minnesota Rules, parts 9502.0315 to 9502.0445 to serve 14 or fewer children shall be considered a permitted single family residential use of property for the purposes of zoning, except that a residential facility whose primary purpose is to treat juveniles who have violated criminal statutes relating to sex offenses or have been adjudicated delinquent on the basis of conduct in violation of criminal statutes relating to sex offenses shall not be considered a permitted use.

Subd. 8. **Permitted multifamily use.** Except as otherwise provided in subdivision 7 or in any town, municipal or county zoning regulation as authorized by this subdivision, a state licensed residential facility serving from 7 through 16 persons or a licensed day care facility serving from 13 through 16 persons shall be considered a permitted multifamily residential use of property for purposes of zoning. A township, municipal or county zoning authority may require a conditional use or special use permit in order to assure proper maintenance and operation of a facility, provided that no conditions shall be imposed on the facility which are more restrictive than those imposed on other conditional uses or special uses of residential property in the same zones, unless the additional conditions are necessary to protect the health and safety of the residents of the residential facility. Nothing herein shall be construed to exclude or prohibit residential or day care facilities from single family zones if otherwise permitted by a local zoning regulation.

Subd. 9. **Development goals and objectives.** In adopting official controls after July 1, 2008, in a municipality outside the metropolitan area, as defined by section 473.121, subdivision 2, the municipality shall consider restricting new residential, commercial, and industrial development so that the new development takes place in areas subject to the following goals and objectives:

(1) minimizing the fragmentation and development of agricultural, forest, wildlife, and open space lands, including consideration of appropriate minimum lot sizes;

(2) minimizing further development in sensitive shoreland areas;

(3) minimizing development near wildlife management areas, scientific and natural areas, and nature centers;

(4) encouraging land uses in airport safety zones that are compatible with the safe operation of the airport and the safety of people in the vicinity of the airport;

(5) identification of areas of preference for higher density, including consideration of existing and necessary water and wastewater services, infrastructure, other services, and to the extent feasible, encouraging full development of areas previously zoned for nonagricultural uses;

(6) encouraging development close to places of employment, shopping centers, schools, mass transit, and other public and private service centers;

(7) identification of areas where other developments are appropriate; and

(8) other goals and objectives a municipality may identify.

History: *1965 c 670 s 7; 1969 c 259 s 1; 1973 c 123 art 5 s 7; 1973 c 379 s 4; 1973 c 539 s 1; 1973 c 559 s 1,2; 1975 c 60 s 2; 1978 c 786 s 14,15; Ex1979 c 2 s 42,43; 1981 c 356 s 248; 1982 c 490 s 2; 1982 c 507 s 22; 1984 c 617 s 6-8; 1985 c 62 s 3; 1985 c 194 s 23; 1986 c 444; 1987 c 333 s 22; 1989 c 82 s 2; 1990 c 391 art 8 s 47; 1990 c 568 art 2 s 66,67; 1994 c 473 s 3; 1995 c 224 s 95; 1997 c 113 s 20; 1997 c 200 art 4 s 5; 1997 c 202 art 4 s 11; 1997 c 216 s 138; 1999 c 96 s 3,4; 1999 c 211 s 1; 2001 c 174 s 1; 2001 c 207 s 13,14; 2002 c 366 s 6; 2004 c 258 s 2; 2005 c 56 s 1; 1Sp2005 c 1 art 1 s 92; art 2 s 146; 2007 c 140 art 12 s 14; 2008 c 297 art 1 s 60,61; 2009 c 149 s 3; 2011 c 19 s 2; 1Sp2019 c 3 art 3 s 110,111; 2023 c 37 art 6 s 7; 2024 c 85 s 104*