City of Ramsey
Agenda
Public Works Committee
Tuesday, March 16, 2021
5:30 pm
Lake Itasca Room, 7550 Sunwood Drive NW

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

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

1. Call to Order

2. Citizen Input

3. Approve Agenda

4. Approve Minutes

1. Approve the following meeting minutes.
1. Public Works Committee meeting dated February 16, 2021.

5. Committee Business

1. Tennis Court Maintenance and Consider Adding Pickleball Courts

2. Consider Recommending City Council Approval of Plans and Specifications and Authorization to Advertise for Bids for Business Park 95 Street Reconstructions, Improvement Project #21-03

6. Committee/Staff Input

1. Receive Staff Updates on Improvement Projects, Studies and Items of Interest

2. Review Future Topics Calendar

7. Adjournment

Public Works Committee **4. 1.**

Meeting Date: 03/16/2021
Submitted For: Grant Riemer, Engineering/Public Works
By: MaryJo Warner, Engineering/Public Works

Title:

Approve the following meeting minutes.
1. Public Works Committee meeting dated February 16, 2021.

Purpose/Background:

Purpose: To review and approve meeting minutes.
Background: Attached are the meeting minutes for review.

Timeframe:

5 minutes.

Observations/Alternatives:

n/a

Funding Source:

n/a

Recommendation:

To review and approve meeting minutes dated February 16, 2021.

Action:

Motion to approve meeting minutes dated February 16, 2021.

Attachments

Minutes

Form Review

Inbox	Reviewed By	Date
Grant Riemer	Grant Riemer	03/11/2021 02:20 PM
Kurt Ulrich	Kurt Ulrich	03/11/2021 03:10 PM
Form Started By: MaryJo Warner		Started On: 03/11/2021 01:34 PM
Final Approval Date: 03/11/2021		

PUBLIC WORKS COMMITTEE
CITY OF RAMSEY
ANOKA COUNTY
STATE OF MINNESOTA

The Public Works Committee conducted a regular meeting on Tuesday, February 16, 2021, at the Ramsey Municipal Center, 7550 Sunwood Drive NW, Ramsey, Minnesota.

Members Present: Chairperson Chris Riley
Councilmember Debra Musgrove
Councilmember Matt Woestehoff

Also Present: Public Works Superintendent Grant Riemer
City Engineer Bruce Westby
Deputy City Administrator Tim Gladhill
Fire Chief Matt Kohner
Police Chief Jeff Katers

1. CALL TO ORDER

Chairperson Riley called the regular meeting of the Public Works Committee to order at 5:36 p.m.

2. CITIZEN INPUT

There was none.

3. APPROVE AGENDA

Deputy City Administrator noted that they are still waiting for the applicant to arrive related to Item 5.01. He suggested the group delay that item and move up Item 6.01 to give the applicant additional time to arrive for the discussion.

Motion by Councilmember Woestehoff, seconded by Councilmember Musgrove, to approve the agenda, as amended.

Motion carried. Voting Yes: Chairperson Riley, Councilmembers Woestehoff and Musgrove. Voting No: None.

4. APPROVE MINUTES

4.01: Approve January 19, 2021, Meeting Minutes

City Engineer Westby noted that staff made a few corrections to the minutes from the version that was first published with the agenda and republished the corrected version prior to the meeting.

Motion by Councilmember Musgrove, seconded by Councilmember Woestehoff, to approve the following minutes:

Regular Meeting Minutes dated January 19, 2021

Motion carried. Voting Yes: Chairperson Riley, Councilmembers Musgrove and Woestehoff. Voting No: None.

6. COMMITTEE / STAFF INPUT

6.01: Staff Updates on Improvement Projects and Items of Interest

City Engineer Westby provided an update on current and proposed City projects.

Councilmember Musgrove asked the timeframe on the well casing grant.

City Engineer Westby replied that the City was just awarded that grant agreement and has through the summer to get the work done. He stated that the well driller is working on the plans now and intends to begin work in March and anticipates being done in May, weather dependent.

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

Chairperson Riley asked when 167th is going to be repaired.

City Engineer Westby believed that is scheduled for 2023.

Chairperson Riley stated that is the road he receives the most complaints about.

City Engineer Westby confirmed that staff also receives complaints on that roadway.

Councilmember Musgrove asked if roads move up in order because of changing conditions.

City Engineer Westby confirmed that staff reviews the CIP each year to determine if projects should be moved based on updated road ratings and funding sources.

Chairperson Riley asked if 167th is an MSA road.

City Engineer Westby confirmed that to be true.

5. COMMITTEE BUSINESS

5.01: Consider Street Names for Riverstone South Addition

Deputy City Administrator Gladhill reviewed the staff report.

Police Chief Katers stated that within City Code both major and minor plats recognize the naming of streets following County grids. He stated that the naming grid goes throughout the County, using the example of different cities that use birds or trees. He stated that there have been approved changes in the past but in this case, these roads match roads in existence today. He explained that it is very important for public safety response to be able to use the grid, noting that he knows how to get to a home without looking at a map based on the address. He stated that he does not mind adaptations if there is a public benefit, but he does not see that to be the case in this request.

Fire Chief Kohner echoed the comment that consistency is very important in public safety. He stated that when deviations are made, it creates a larger learning curve and does not benefit the City. He noted that there are a number of residents on these streets already and therefore it is important to keep those roads running north and south following the Anoka County grid.

Tom Bakritges, Capstone Homes, stated that they view this as common sense and are aware of the grid naming system. He stated that they are requesting to replace unicorn with umbrellabird. He noted that unicorn is not an animal and is horrible for marketing. He stated that umbrellabird is a unique name that is also an actual animal and therefore follows the grid naming system. He stated that the second request is made in order to honor the Pearson family on the property. He stated that from the beginning they have said they would like to use Pearson as a street name, whether that is parkway, drive, or street. He stated that most cities are flexible as long as the north/south and east/west pattern is followed.

Chairperson Riley confirmed agreement on the other three street names of Quintana, Rabbit and Tiger.

Councilmember Musgrove asked the thought process behind changing names in Riverstone North.

Chairperson Riley explained that the County planned the street name as sloth, but the applicant and City agreed to replace that with snowy owl.

Councilmember Musgrove stated that change would then replace the mammal with a bird. She asked if the applicant is open to other U names. She stated that she is not a fan of unicorn but would like to stay in the mammal theme.

Councilmember Woestehoff stated that he does not have a problem with unicorn and also did not have a problem with sloth. He stated that he understands the goal of Pearson Parkway but could not support that as it does not match the alphabet pattern. He stated that he lives in the mineral section of roads on Uranimite and noted that uranimite is not actually a word outside of the street name. He stated that he supports the City recommendations because of the public safety reasoning.

Chairperson Riley stated that there is already a snowy owl and would prefer to keep that. He stated that perhaps Pearson Parkway could be moved to the U road placement as a compromise.

Councilmember Woestehoff noted that Unicorn Street already exists in Ramsey with addresses on it.

Councilmember Musgrove commented that she believes that staff will be able to adapt and find the address based on street name. She stated that she does like the idea to change unicorn to Pearson and keep snowy owl.

Councilmember Specht asked and received confirmation that there are addresses in existence on unicorn. He recognized that could be difficult for marketing and stated that he would like to honor the Pearson name and believes this to be a good compromise.

Mr. Bakritges confirmed that they would also support changing unicorn to Pearson and keeping snowy owl.

Motion by Councilmember Musgrove, seconded by Councilmember Woestehoff, to recommend that the City Council adopt the following street names for Riverstone South: Quintana, Rabbit, Snowy Owl, Tiger, and Pearson.

Motion carried. Voting Yes: Chairperson Riley, Councilmembers Musgrove and Woestehoff. Voting No: None.

6. COMMITTEE / STAFF INPUT (Continued)

6.02: Review Future Topics Calendar

Chairperson Riley welcomed input on the calendar.

City Engineer Westby stated that staff is trying in earnest to knock some items off the list and will continue to do so as quickly as they can.

7. ADJOURNMENT

Motion by Councilmember Musgrove, seconded by Councilmember Woestehoff, to adjourn the Public Works Committee meeting.

Motion carried.

The regular meeting of the Public Works Committee adjourned at 6:09 p.m.

Respectfully submitted,

_____

Grant Riemer
Public Works Superintendent

Drafted by Amanda Staple
TimeSaver Off Site Secretarial, Inc.

Public Works Committee **5. 1.**

Meeting Date: 03/16/2021

By: Mark Riverblood, Engineering/Public Works

Title:

Tennis Court Maintenance and Consider Adding Pickleball Courts

Purpose/Background:

The city has tennis courts at Rivers' Bend Park (4), and one each at Fox and Riverdale Park. Loral I Armstrong Delaney Central Park also has a four court system that was constructed in the mid-1990's and last resurfaced in 2013. The following year pickleball stripping was added 'over' two of the four courts at Central, such that they could be used for either tennis or pickleball.

It may be noted that tennis courts typically need resurfacing at about a 5 to 8 year maintenance interval. For Central Park, this coming year would be the eighth year since this maintenance activity has occurred, and it is needed and should not deferred due to concern for safety and quality of play. (At the point the color coating begins to spall off, or loosen from the bituminous surface below, players can slip and slide when making abrupt moves or stops, creating a fall hazard. The color coating is at this stage as of 2020.)

Notification:

Observations/Alternatives:

As indicated, pickleball court striping (for 4 pickleball courts), was added to half of the tennis courts at Central in 2014, and has been very popular—more so than for tennis play. There is demonstrable need for more pickleball courts at the park, and therefore Staff is recommended increasing the number of courts to 6, by converting two of the four tennis courts to dedicated pickleball. The attached exhibit shows what that configuration would look like.

As an aside, the tennis courts at Fox and Riverdale Park are in need of maintenance at this time too, however this will be addressed separately from the courts at Central.

At the regular February Park & Recreation Commission, the Commission recommended proceeding with both the maintenance and the conversion of the tennis courts to pickleball, by the same motion below, offered for the Public Works Committee's consideration.

Funding Source:

As for the tennis court maintenance resurfacing ($28,028), the recommended funding source is the Capital Maintenance Fund, (formally known as ‘Park Maintenance Fund #810’) which has a present balance of approximately $889,000.

The new capital costs of adding pickleball posts, nets and separation fencing at $16,939 would be proposed to be funded by the Park Trust Fund, which has a present balance of approximately $5.018 million.

Recommendation:

Staff recommends proceeding with the reconditioning of the courts at Central Park as soon as practicable, and adding 6 pickleball courts in lieu of two of the four tennis courts at the park at the same time as this maintenance activity occurs.

Action:

Motion to recommend to City Council, the reconditioning of the courts at Central Park in the amount of $28,028 to be funded by the Capital Maintenance Fund, and adding 6 pickleball courts at the park for $16,939 with proceeds from the Park Trust Fund.

Attachments

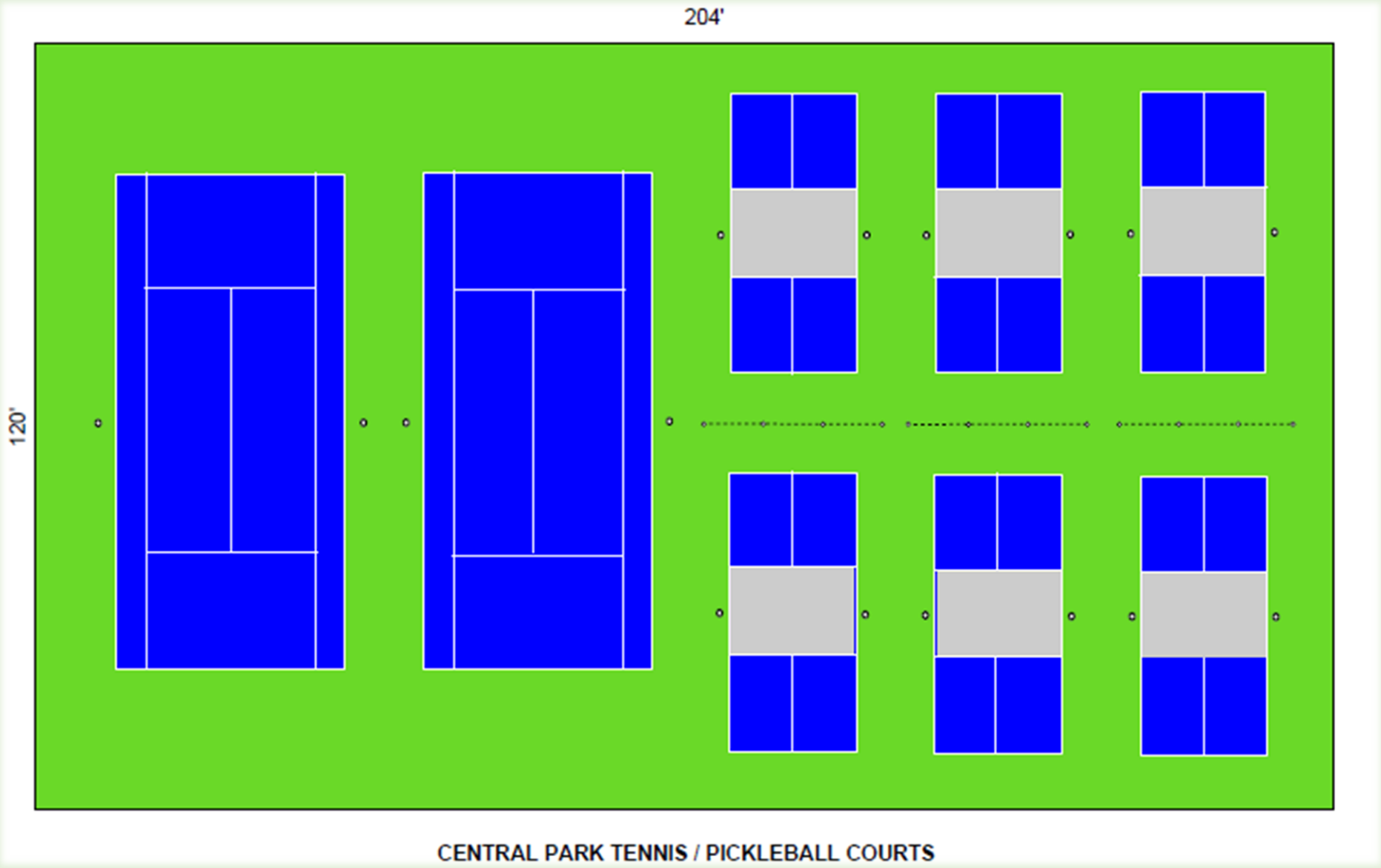
Court overhead view

Contract costs

Form Review

Inbox	Reviewed By	Date
Grant Riemer	Grant Riemer	03/10/2021 07:36 AM
Grant Riemer	Kathy Schmitz	03/11/2021 02:24 PM
Mark Riverblood (Originator)	Kathy Schmitz	03/11/2021 02:26 PM
Kurt Ulrich	Kurt Ulrich	03/11/2021 03:01 PM
Grant Riemer	MaryJo Warner	03/11/2021 03:39 PM
Form Started By: Mark Riverblood		Started On: 03/09/2021 06:48 PM
Final Approval Date: 03/11/2021		

Existing Courts at **Loral I Armstrong Delaney Central Park**



Proposed Configuration

Serving Minnesota, Wisconsin, Iowa, Nebraska, North Dakota, and South Dakota

3017 161st Ave NW, Andover, MN 55304
763-753-1127 – Phone
763-753-3619 – Fax
eric@umathleticconstruction.com

MN Contractors No. IR722325
IA Contractors No. C090307

February 2, 2021

City of Ramsey
7550 Sunwood Dr NW
Ramsey, MN 55303

Re: Central Park Tennis Court Resurfacing
7925 161st Ave NW

We propose the following:

Pickleball Standards

1. Remove two pair of existing tennis net posts and tie down anchors on two tennis courts, dispose of off site
2. Fill footings with granular fill and compact to 4" from top of bituminous
3. Place 4" of concrete level with bituminous surface
4. Furnish and install 6 pair of new pickleball net posts and nets
    a. Footings to be 18" X 60"
    b. 4,000PSI exterior design concrete

48" Divider Fence

1. Furnish and install 3 sections of 48" tall x 28' long chain link fence centered between north and south pickleball courts
    a. 3" SS40 galvanized terminal and line posts
    b. End posts concrete set 48" deep
    c. Line posts air driven 54" deep
    d. 1-5/8" SS40 top and bottom rail
    e. 2" 9GA KK galvanized chain link fabric
        i. 1.25" maximum spacing between fence and bituminous surface
    f. All chain link material, posts and hardware to be galvanized

Tennis/Pickleball Court Color Coat System

1. Hydro blast and power wash surface to remove loose paint, dirt, and debris, dispose of off site
2. Machine rout all existing cracks and clean with compressed air
3. Fill cracks with crack patch binder to level of existing surface with multiple applications and grind smooth with bituminous surface
4. Fill birdbaths with crack patch binder and grind smooth with existing bituminous surface
5. Apply two coats of sand filled acrylic emulsion resurfacer
    a. 8-10 lbs. silica sand added per gallon of concentrate material
    b. Coverage: .05-.07 gallons per square yard per coat
6. Apply two coats of latex acrylic paint
    a. Color to be selected by owner
    b. 6 lbs. silica sand added per gallon of concentrate material
    c. Coverage: .05 gallons per square yard per coat
7. Reline per USTA standards **Total $44,967**

Alternate 1 – Armor Crack Repair

1. Furnish and install Armor Crack Repair System per lineal foot **ADD $18.50/LF**

Notes:
Standard 1-year material and workmanship warranty
Crack patch binder repairs do not carry a warranty due to ground movement which will cause hairline cracks will reappear
All above is furnished and installed complete
Sourcewell contract 060518-AST

Thank you,

Eric Hicks
Upper Midwest Athletic Construction, Inc.

Public Works Committee **5. 2.**

Meeting Date: 03/16/2021

By: Bruce Westby, Engineering/Public Works

Title:

Consider Recommending City Council Approval of Plans and Specifications and Authorization to Advertise for Bids for Business Park 95 Street Reconstructions, Improvement Project #21-03

Purpose/Background:

Purpose:

The purpose of this case is to consider recommending City Council approval of plans and specifications and authorization to advertise for bids for Improvement Project #21-03, Business Park 95 Street Reconstructions.

Background:

City Improvement Project 21-03 proposes to reconstruct the streets within the Business Park 95 subdivision in 2021 including; 140th Avenue, McKinley Street, Radium Street and Unity Street. The streets total approximately 6,314 lineal feet (1.20 miles) in length. The title sheet on the attached plans shows the overall project scope graphically.

On December 8, 2020, the Ramsey City Council approved the 2021 – 2030 Capital Improvement Program, which identifies the streets in Business Park 95 for reconstructions in 2021.

On February 24, 2020, the Ramsey City Council indefinitely suspended the annual sealcoat program and reallocated $250,000 of the budgeted 2020 sealcoat funds for pavement overlay improvements in the Business Park 95 subdivision since the streets within Business Park 95 are prematurely deteriorating due to pavement stripping, which is the driving force for suspending the annual sealcoat program.

In February 2020, Staff hired WSB to perform a pavement forensics analysis, which included the extraction of pavement cores from each street segment proposed to receive overlay improvements in Business Park 95. Based on WSB and Associates pavement forensics analysis, it was found that the deterioration of the streets in Business Park 95 were beyond the scope of overlay improvements. WSB's report solidified Staff's recommendation not to overlay the streets within Business Park 95 in 2020. The WSB report is attached to this case.

On March 16, 2020, the Public Works Committee supported Staff's conclusions and recommendations that the proposed Amended 2020 Pavement Overlay Improvements, including Business Park 95, were not feasible or cost-effective from an engineering standpoint, and that the overlay improvements as proposed should not be completed in 2020.

On November 10, 2020, the Ramsey City Council authorized Staff to execute proposals from Bolton & Menk for topographic survey work, and from Chosen Valley Testing (CVT) for geotechnical evaluation work, both of which are required to complete the project design and prepare plans and specifications. The CVT Geotechnical Report is attached to this case. The geotechnical report generally found clean sand below the existing bituminous and gravel pavement sections.

On December 8, 2020, the Ramsey City Council authorized Staff to execute proposals from Nelson Sanitation & Rental, Inc. for televising the sanitary sewer and storm sewer within the project area, and from Water Conservation Services, Inc. for leak testing watermain within the project area.

The watermain leak test results indicated that all of the watermain is in good condition and does not need repairs.

The sanitary sewer televising showed that the sanitary sewer system is generally in good condition and does not need any major repairs. However, one small crack was observed in the obvert (top) of a pipe segment near the of Unity and 140th Street. Staff considered the options for repairing the crack and recommend lining the pipe in the future instead of replacing the pipe as part of this project, which would require closing the street for several days to dig the pipe up and replace it. It is also significantly cheaper to line a pipe than to excavate the street and replace the pipe and a portion of the street in the process. Lining a pipe can also be completed without closing the street to traffic.

The storm sewer televising showed that more than half of the storm sewer was plastic pipe, and that much of the smaller diameter plastic pipe needed to be replaced. In addition, several hundred feet of concrete storm sewer needed to be replaced. This cost was not accounted for in the CIP storm sewer cost estimates, which significantly increased project costs.

In 2020, Business Park 95 was included in the Ground Penetrating Radar Pavement Evaluation performed by Braun Intertec. This data provides bituminous and aggregate base thickness information. The Ground Penetrating Radar (GPR) data is included in the street segment summary attached to this case.

The Business Park 95 subdivision is a commercial subdivision with heavy truck traffic. During the fall of 2020, Staff took traffic counts with annual daily traffic (ADT) volumes of; 846 on Unity Street south of Bunker Lake Boulevard, and 2,245 on McKinley Street east of Sunfish Lake Boulevard. The City does not have a standard commercial pavement section, however, since these roads must be open during all seasons to heavy truck traffic, the streets are proposed to be reconstructed to a 9-ton design using MnDOT's design guidelines. Based upon pavement coring's, the existing pavement section meets a 9-ton design. The existing concrete curb and gutter is generally in good condition.

The streets are proposed to be reconstructed using the full-depth reclamation process. This includes reclaiming the existing pavement and aggregate base section, removing the top 4-inches of reclaim material, then compacting the remaining 6-inches of material in place to serve as aggregate base. Then 4-inches of new bituminous pavement is proposed to be placed on top to effectively provide a 10-inch minimum pavement section, meeting a 9-ton design strength.

The pavement on the east end of McKinley Street ends approximately 450-feet east of Radium Street, after which it becomes a gravel surface for approximately 75-feet before turning into a private driveway. This leaves no space within public right of way for snow plows or emergency vehicles to turn around. The plans include and alternate bid for extending the pavement on McKinley Street approximately 250-feet east, and constructing a paved cul-de-sac on the east end within existing right-of-way. The cul-de-sac extension is supported by the Public Works Department and Fire Department. This cul-de-sac extension would have the added benefit of providing better access to an existing trunk sanitary sewer line which exists in green space east of McKinley Street. Bidding the cul-de-sac extension as an alternate bid will allow the City Council to know the bid price before deciding whether to construct the cul-de-sac extension.

Approximately 450-feet of the west end of McKinley Street is proposed to be left as is as this segment will be reconstructed with the Sunfish Lake Boulevard & BNSF Railway grade separation improvements, part of the Ramsey Gateway Highway 10 Improvements project. The construction limits on the west end of McKinley Street were designed to match the tie down location for the segment of McKinley Street to be reconstructed with the Ramsey Gateway Improvements to avoid throw away costs.

Timeframe:

Staff anticipates up to 15 minutes will be needed to present and discuss this case.

Observations/Alternatives:

Alternative #1 – Motion to recommend City Council approval of plans and specifications and authorization to advertise for bids for Improvement Project #21-03, Business Park 95 Street Reconstructions.

Alternative #2 – Motion of other.

Funding Source:

Estimated total construction costs for the proposed improvements based on the attached plans is $1,164,915.80.

Estimated total project cost is $1,432,846.43, which includes 23-percent indirect costs for administrative, engineering, finance, and legal costs. Below is a breakout of estimated project costs for the base bid street and storm sewer improvements, as well as the alternate bid cul-de-sac street and storm sewer improvements.

Base Street Project Costs = $ 1,106,461.01
Base Storm Sewer Project Costs = $ 124,049.19

Alt CDS Street Project Costs = $ 139,354.08
Alt CDS Storm Sewer Project Costs = $ 62,982.15

The improvements are proposed to be funded using a combination of Pavement Management Funds, Stormwater Utility Funds, and the $250,000 that was previously dedicated for overlays on these streets.

Recommendation:

Staff recommends alternative #1.

Action:

Motion to recommend City Council approval of plans and specifications and authorization to advertise for bids for Improvement Project #21-03, Business Park 95 Street Reconstructions.

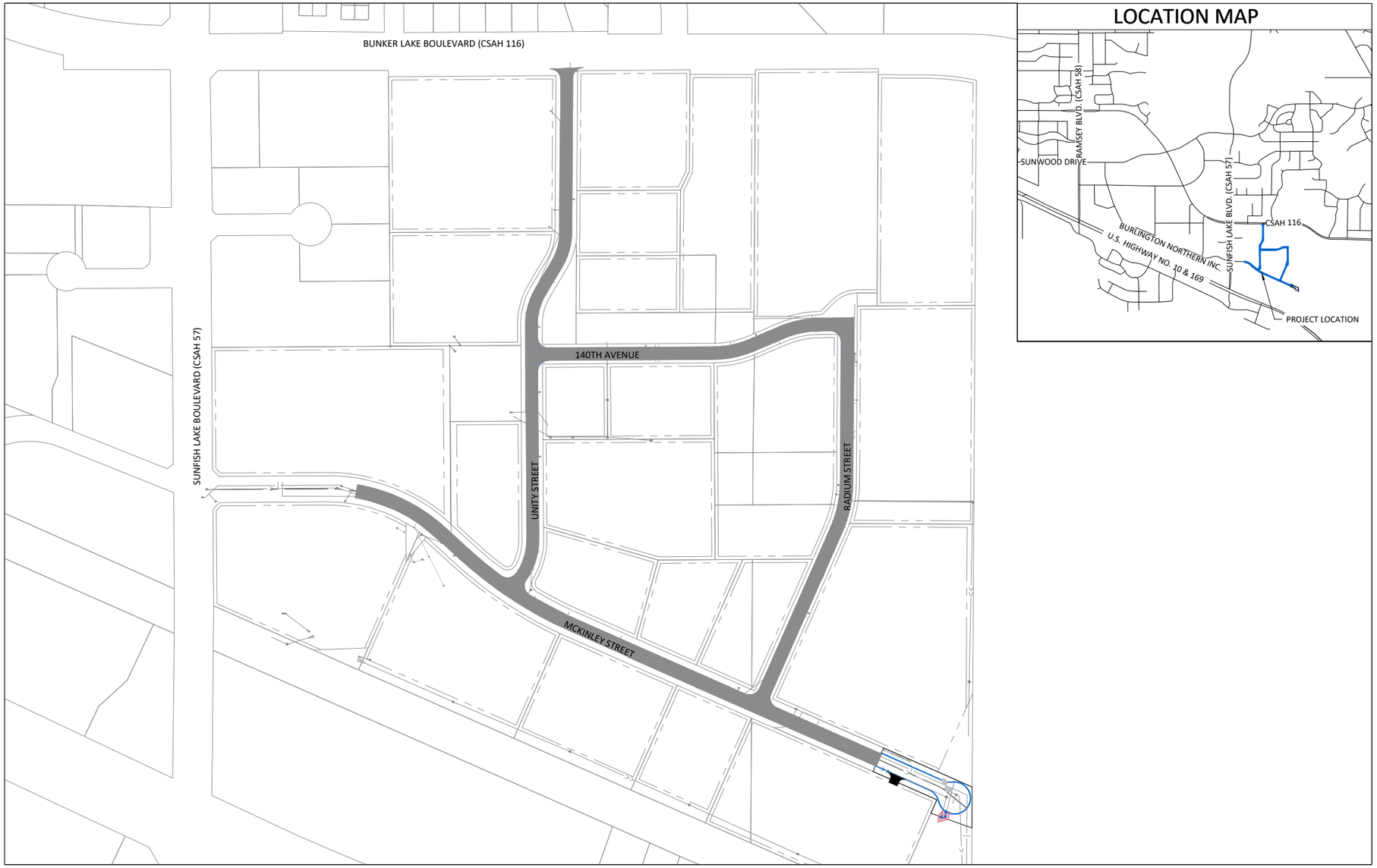
Attachments

Plans IP2103
Street segments summary
WSB Pavement Forensic Report
CVT Geotechnical Report

Form Review

Inbox	Reviewed By	Date
Grant Riemer	Grant Riemer	03/11/2021 02:57 PM
Kurt Ulrich	Kurt Ulrich	03/11/2021 03:06 PM
Form Started By: Bruce Westby		Started On: 03/10/2021 10:44 AM
Final Approval Date: 03/11/2021		

CITY OF RAMSEY
BUSINESS PARK 95 STREET RECONSTRUCTIONS
CITY IMPROVEMENT PROJECT NO. 21-03



LOCATION MAP

GOVERNING SPECIFICATIONS

THE 2018 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" SHALL GOVERN.

ALL FEDERAL, STATE AND LOCAL LAWS, REGULATIONS AND ORDINANCES SHALL BE COMPLIED WITH IN THE CONSTRUCTION OF THIS PROJECT.

ALL TRAFFIC CONTROL DEVICES AND SIGNING SHALL CONFORM TO THE MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, INCLUDING THE FIELD MANUAL FOR TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS.

SHEET INDEX

THIS PLAN CONTAINS 26 SHEETS

LEGEND

	LIGHT POLE		EASEMENT
	TREE		RIGHT OF WAY
	TREE	E	ELECTRIC
	SHRUB	U	OVERHEAD UTILITY
	SIGN	G	GAS
	VALVE	C	TELECOMMUNICATIONS
PED	UTILITY PEDESTAL		STORM SEWER
HH	HAND HOLE		SANITARY SEWER
			WATERMAIN
	REMOVE TREE		SAWCUT PAVEMENT
	3'X2' CATCH BASIN		TREE LINE
	MANHOLE		FENCE
	INLET PROTECTION		LANDSCAPING
			RETAINING WALL
	HYDRANT		5' CONTOUR LINE
	VALVE		1' CONTOUR LINE
			SILT FENCE
	GRAVEL SURFACE		SODDING TYPE LAWN
	CONCRETE PAVEMENT		NEW BITUMINOUS PAVEMENT
	BITUMINOUS PAVEMENT		RECLAIM BITUMINOUS PAVEMENT
	RIP RAP		MILL BITUMINOUS PAVEMENT

0 50 100 150
SCALE (FEET)

N

City of RAMSEY

CITY OF RAMSEY
7550 SUNWOOD DRIVE
RAMSEY, MN 55303
(763) 427-1410 FAX (763) 433-9898

THE SUBSURFACE UTILITY INFORMATION IN THIS PLAN IS UTILITY QUALITY LEVEL D. THIS QUALITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF CI/ASCE 38-02, ENTITLED "STANDARD GUIDELINES FOR THE COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA."

NOTE: EXISTING UTILITY INFORMATION SHOWN ON THIS PLAN HAS BEEN PROVIDED BY THE UTILITY OWNER. THE CONTRACTOR SHALL FIELD VERIFY EXACT LOCATIONS PRIOR TO COMMENCING CONSTRUCTION AS REQUIRED BY STATE LAW. NOTIFY GOPHER STATE ONE CALL 1-800-252-1166 OR 651-454-0002

GSOC

Call before you dig
811
651 454-0002 Metro
800 252-1166 Outstate
www.gopherstateonecall.org

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

JOE FERIANCEK, P.E.
CIVIL ENGINEER II

57095 LIC. NO.

DATE 3/9/21

DATE	REVISION

SHEET 01 OF 26 SHEETS

Mar 09, 2021 - 10:18am
G:\Engineering\AutoCad Dwgs\Projects A-M\Business Park 95 Recon 21-03\Plan Drawings\21-03 Title & Notes.dwg

IP 21-03 Business Park 95 Street Reconstructions

Statement of Estimated Quantities

Base Street Construction

Item No.	MnDOT No.	Note	Item Description	Unit	Quantity
1	2021.501		Mobilization	LS	1
2	2104.502		Remove Pipe Apron	EA	1
3	2104.502	6	Salvage & Install Mal Box Support	EA	10
4	2104.503	1	Remove Concrete Curb and Gutter	LF	4090
5	2104.503	1	Remove Sewer Pipe (Storm)	LF	681
6	2104.503	1	Sawing Bituminous Pavement (Full Depth)	LF	1195
7	2104.503	1	Sawing Concrete Pavement (Full Depth)	LF	726
8	2104.504	1	Remove Bituminous Pavement	SY	1011
9	2104.504	1	Remove Concrete Pavement	SY	148
10	2104.504	1	Remove Concrete Valley Gutter	SY	29
11	2104.504	1	Remove Gravel Surface	SY	47
12	2105.504		Geotextile Fabric Type 4	SY	42
13	2105.507	2, 12	Common Excavation (EV)	CY	76
14	2105.607	2	Haul & Stockpile Reclaim Material (LV)	CY	3344
15	2112.519	9	Subgrade Preparation	RDST	56
16	2211.507	2, 11	Aggregate Base Class 5 Modified (CV)	CY	363
17	2215.504	9, 11	Full Depth Reclamation (10.0")	SY	24076
18	2232.504	1	Mill Bituminous Surface (2.0")	SY	213
19	2357.506	4	Bituminous Material for Tack Coat	GAL	1703
20	2360.509	5	Type SP 12.5 Non Wearing Course Mixture (3,C) 2.0"	TON	2675
21	2360.509	5	Type SP 12.5 Non Wearing Course Mixture (3,C) Driveways 2.0"	TON	88
22	2360.509	5	Type SP 9.5 Wearing Course Mixture (3,C) 2.0"	TON	2675
23	2360.509	5	Type SP 9.5 Wearing Course Mixture (3,C) Driveways 2.0"	TON	88
24	2501.502		30" RC Pipe Apron	EA	1
25	2501.602		Safety Grate for 30" RC Pipe Apron	EA	1
26	2503.503	10	12" RC Pipe Sewer Design 3006 Class III	LF	170
27	2503.503	10	15" RC Pipe Sewer Design 3006 Class III	LF	105
28	2503.503	10	18" HDPE Pipe Sewer	LF	23
29	2503.503	10	18" RC Pipe Sewer Design 3006 Class III	LF	179
30	2503.503	10	30" HDPE Pipe Sewer	LF	30
31	2503.503	10	30" RC Pipe Sewer Design 3006 Class III	LF	204
32	2503.602	10	Connect to Existing Storm Sewer	EA	19
33	2503.602		Grout Catch Basin	EA	3
34	2503.602		Reset Catch Basin	EA	21
35	2504.602		Adjust Valve Box	EA	27
36	2506.502		Adjust Frame and Ring Casting	EA	21
37	2511.507		Randon Rip Rap Class III	CY	12
38	2531.503	8	Concrete Curb & Gutter Design B618	LF	4090
39	2531.504	8	Concrete Pavement 6.0" Driveways	SY	148
40	2531.604	8	7" Concrete Valley Gutter	SY	62
41	2531.604	8	8" Concrete Valley Gutter Driveways	SY	736
42	2540.601		Landscape Restoration	LS	1
43	2540.602		Temporary Mail Box Cluster	EA	1
44	2563.601	7	Traffic Control	LS	1
45	2573.502		Storm Drain Inlet Protection	EA	26
46	2573.503		Silt Fence	LF	32
47	2574.507	3	Topsoil (LV)	CY	100
48	2575.504		Sodding Type Lawn	SY	688

IP 21-03 Business Park 95 Street Reconstructions

Statement of Estimated Quantities

Alternative A: Cul-de-Sac Extension

Item No.	MnDOT No.	Note	Item Description	Unit	Quantity
1	2101.501		Clearing and Grubbing	LS	1
2	2104.502		Remove Pipe Apron	EA	3
3	2104.503	1	Remove Sewer Pipe (Storm)	LF	158
4	2104.503	1	Sawing Bituminous Pavement (Full Depth)	LF	29
5	2104.504	1	Remove Bituminous Pavement	SY	78
6	2104.504	1	Remove Gravel Surface	SY	475
7	2104.507	1	Remove Rip Rap	CY	40
8	2105.504		Geotextile Fabric Type 4	SY	120
9	2105.507	2, 12	Common Excavation (EV)	CY	700
10	2106.507	2	Granular Embankment (CV)	CY	185
11	2106.507	2	Select Granular Embankment (CV)	CY	852
12	2112.519	9	Subgrade Preparation	RDST	3
13	2211.507	2, 11	Aggregate Base Class 5 Modified (Use Reclaim)	CY	437
14	2357.506	4	Bituminous Material for Tack Coat	GAL	131
15	2360.509	5	Type SP 12.5 Non Wearing Course Mixture (3,C) 2.0"	TON	196
16	2360.509	5	Type SP 12.5 Non Wearing Course Mixture (3,C) Driveways 2.0"	TON	9
17	2360.509	5	Type SP 9.5 Wearing Course Mixture (3,C) 2.0"	TON	196
18	2360.509	5	Type SP 9.5 Wearing Course Mixture (3,C) Driveways 2.0"	TON	9
19	2501.502		30" RC Pipe Apron	EA	1
20	2501.502		42" RC Pipe Apron	EA	2
21	2501.602		Safety Grate for 42" RC Pipe Apron	EA	2
22	2501.602		Safety Grate for 30" RC Pipe Apron	EA	1
23	2503.503	10	30" RC Pipe Sewer Design 3006 Class III	LF	57
24	2503.503	10	42" RC Pipe Sewer Design 3006 Class III	LF	119
25	2503.602	10	Connect to Existing Storm Sewer	EA	1
26	2504.604		4" Polystyrene Insulation	SY	4
27	2506.502		Adjust Frame and Ring Casting	EA	2
28	2506.502		Casting Assembly (Storm)	EA	1
29	2506.502	10	Construct Drainage Sructure Design 60-4020	EA	1
30	2511.507		Randon Rip Rap Class III	CY	33
31	2531.503	8	Concrete Curb & Gutter Design B618	LF	633
32	2531.604	8	8" Concrete Valley Gutter Driveways	SY	17
33	2573.502		Storm Drain Inlet Protection	EA	1
34	2573.503		Silt Fence	LF	600
35	2574.507	3	Topsoil (LV)	CY	105
36	2575.504		Sodding Type Lawn	SY	714

PAY ITEM NOTES:

1. REMOVAL LIMITS SHALL BE MARKED IN THE FIELD BY CITY STAFF.
2. LV TO CV CONVERSION FACTOR = 1.25.
3. LV TO CV CONVERSION FACTOR = 1.30.
4. ESTIMATED QUANTITY BASED ON APPLICATION RATE OF 0.07 GAL/SY.
5. ESTIMATED QUANTITY BASED ON APPLICATION RATE OF 110 LB/SY-IN.
6. PAY ITEM INCLUDES ALL EXISTING MAILBOX SUPPORTS, REGARDLESS OF MATERIAL(S), SIZE, FOOTING TYPE, LOCATION, OR EXISTING ELECTRICAL SERVICE. MAILBOX ARE TO BE SALVAGED ON AN AS NEEDED BASIS, TO BE DETERMINED BY CITY STAFF IN THE FIELD.
7. LUMP SUM QUANTITY SHALL INCLUDE ALL COST REQUIRED FOR MAINTAINING ALL FLAGGING OPERATIONS AS NECESSARY, MAINTAINING PEDESTRIAN ACCESS ROUTES, ANY SIGNAGE AND BARRICADES AS NECESSARY.
8. FINISH WITH CLEAR CURING COMPOUND.
9. EXCESS RECLAMATION MATERIAL SHALL BE HAULED FROM THE ONSITE STOCKPILE LOCATION TO THE CITY OF RAMSEY PUBLIC WORKS CAMPUS, 14100 JASPER STREET. THE EXPECTED RECLAMATION DEPTH IS 10 INCHES. THE TOP 4 INCHES ARE PROPOSED TO BE REMOVED. SHAPING AND COMPACTION OF RECLAMATION MATERIAL INCIDENTAL TO THE SUBGRADE PREPARATION PAY ITEM.
10. THE EXCAVATION REQUIRED FOR UTILITY INSTALLATION IS INCIDENTAL TO THE UTILITY PAY ITEM.
11. EXCESS RECLAMATION MATERIAL MAY BE USED AS AGGREGATE BASE FOR ALT A CUL-DE-SAC EXTENSION, MUST PASS RAMSEY MODIFIED GRADATION. EXCESS RECLAMATION MATERIAL MAY BE USED AS FILL BELOW THE PAVEMENT SECTION FOR THE ALT A: CUL-DE-SAC EXTENSION. HAULING OF RECLAMATION MATERIAL USED AS AGGREGATE BASE IS INCIDENTAL.
12. STRIPING OF TOPSOIL INCLUDED IN COMMON EXCAVATION BID ITEM.

GENERAL NOTES:

1. THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY. IT IS NOT GUARANTEED ANY OR ALL EXISTING UTILITIES ARE SHOWN. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. HE AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.
2. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING IRRIGATION SYSTEMS WITHIN THE PROJECT CONSTRUCTION LIMITS BEFORE COMMENCING WORK. THE CONTRACTOR IS RESPONSIBLE FOR AVOIDING DAMAGE TO IRRIGATION SYSTEMS WHERE POSSIBLE.
3. SALVAGE AND INSTALL MAILBOX SUPPORTS IN THE SAME LOCATION, UNLESS OTHERWISE DIRECTED. THE INSTALLATION WILL BE THE SAME TYPE AS ORIGINAL INSTALLATION. CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING MAILBOX SUPPORTS WHICH ARE DAMAGED DURING SALVAGE AND/OR INSTALLATION UNLESS CONTRACTOR NOTIFIES CITY OF DAMAGED MAILBOX SUPPORTS BEFORE SALVAGE OPERATIONS BEGIN. SALVAGED MAILBOX SUPPORTS SHALL BE STORED BY CONTRACTOR DURING PROJECT.
4. PERMANENT SIGN REMOVAL AND INSTALLATION IS TO BE PERFORMED BY CITY OF RAMSEY PUBLIC WORKS DEPARTMENT.
5. ACCESS TO ALL PROPERTIES MUST BE MAINTAINED AT ALL TIMES. DRIVEWAY REMOVAL AND REPLACEMENTS MUST BE PERFORMED IN SUCH A WAY TO MAINTAIN TRAFFIC TO PROPERTIES.

DATE	REVISION

Mar 10, 2021 - 9:28pm
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I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota

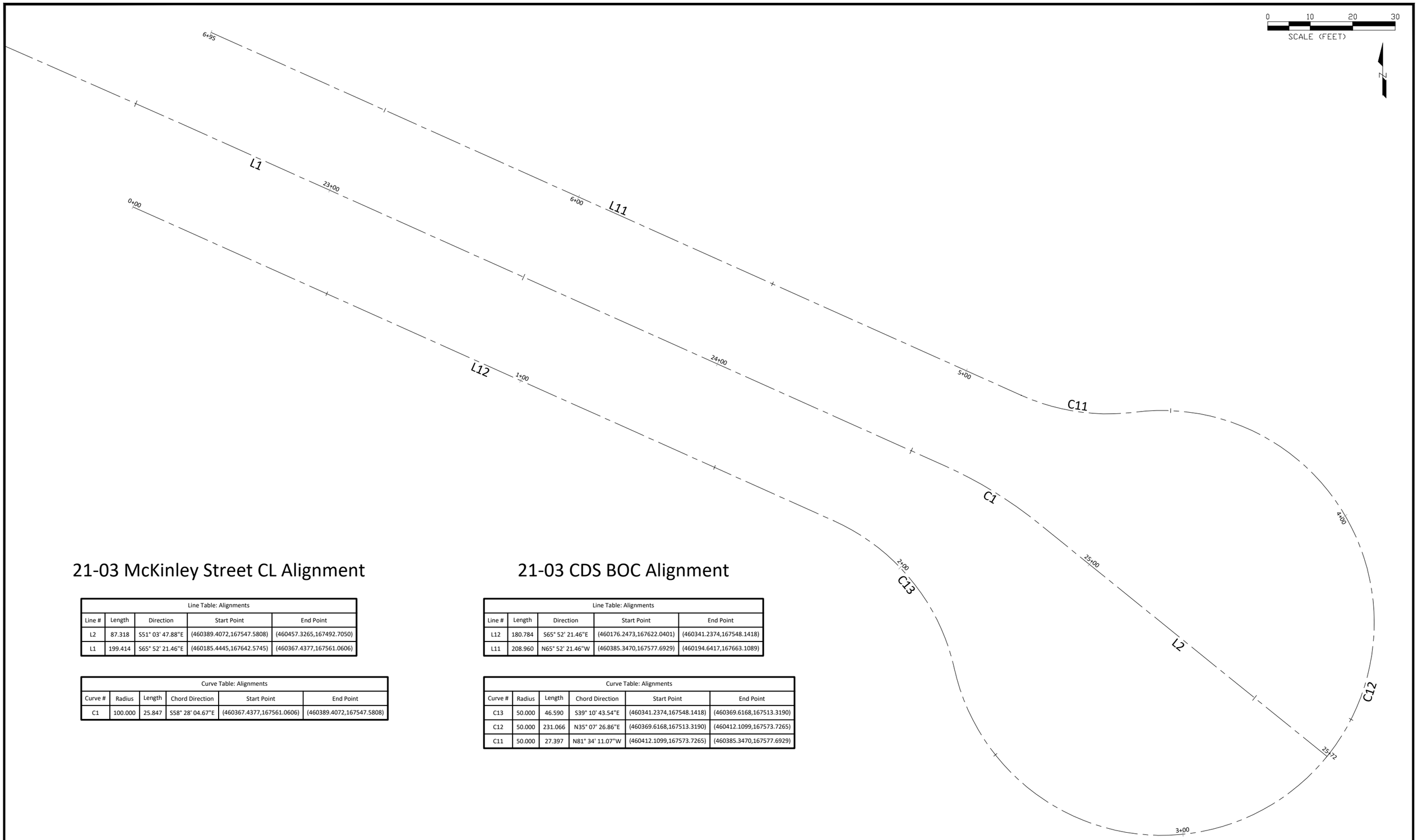
JOE FERIANCEK, P.E.
Date 3/9/21 Lic. No. 57095

DESIGNED BY:	JJF	
DRAWN BY:	JJF	DATE: 3/9/21
CHECKED BY:	BRW	FILE: 21-03

CITY OF RAMSEY
7550 SUNWOOD DRIVE
RAMSEY, MN 55303
(763) 427-1410 FAX (763) 433-9898

SEQ & NOTES

BUSINESS PARK 95 STREET RECONSTRUCTIONS
CITY PROJECT NO. 21-03
CITY OF RAMSEY, MINNESOTA



21-03 McKinley Street CL Alignment

Line Table: Alignments				
Line #	Length	Direction	Start Point	End Point
L2	87.318	S51° 03' 47.88"E	(460389.4072,167547.5808)	(460457.3265,167492.7050)
L1	199.414	S65° 52' 21.46"E	(460185.4445,167642.5745)	(460367.4377,167561.0606)

Curve Table: Alignments					
Curve #	Radius	Length	Chord Direction	Start Point	End Point
C1	100.000	25.847	S58° 28' 04.67"E	(460367.4377,167561.0606)	(460389.4072,167547.5808)

21-03 CDS BOC Alignment

Line Table: Alignments				
Line #	Length	Direction	Start Point	End Point
L12	180.784	S65° 52' 21.46"E	(460176.2473,167622.0401)	(460341.2374,167548.1418)
L11	208.960	N65° 52' 21.46"W	(460385.3470,167577.6929)	(460194.6417,167663.1089)

Curve Table: Alignments					
Curve #	Radius	Length	Chord Direction	Start Point	End Point
C13	50.000	46.590	S39° 10' 43.54"E	(460341.2374,167548.1418)	(460369.6168,167513.3190)
C12	50.000	231.066	N35° 07' 26.86"E	(460369.6168,167513.3190)	(460412.1099,167573.7265)
C11	50.000	27.397	N81° 34' 11.07"W	(460412.1099,167573.7265)	(460385.3470,167577.6929)

DATE	REVISION

Mar 09, 2021 - 10:29am
G:\Engineering\AutoCad Dwgs\Projects A-M\Business Park 95 Recon 21-03\Plan Drawings\21-03 Alt A CDS Alignment Layout.dwg

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota

Joe Feriancek

JOE FERIANCEK, P.E.
Date 3/9/21 Lic. No. 57095

DESIGNED BY:	JJF	
DRAWN BY:	JJF	DATE: 3/9/21
CHECKED BY:	BRW	FILE: 21-03

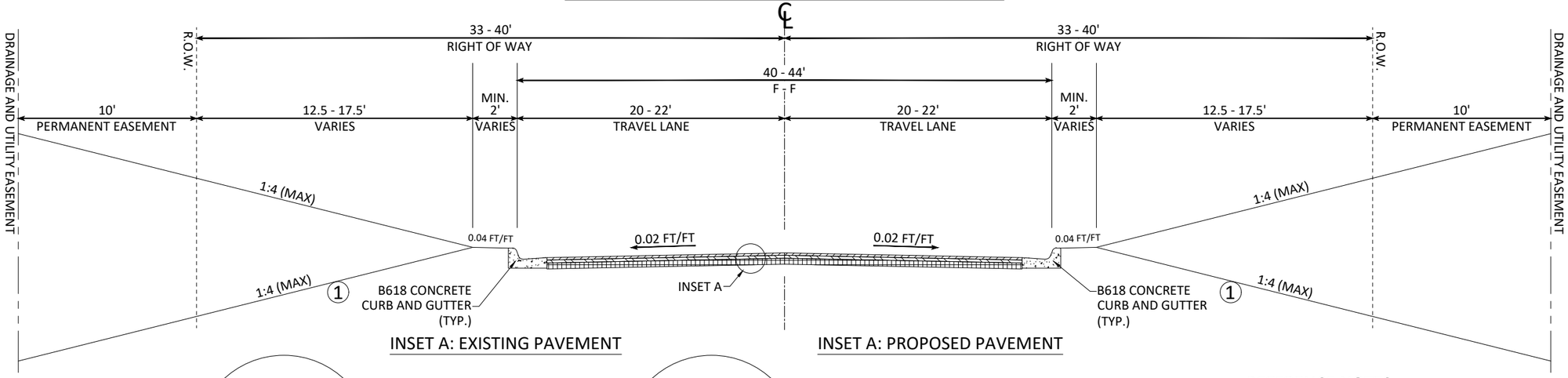
CITY OF RAMSEY
7550 SUNWOOD DRIVE
RAMSEY, MN 55303
(763) 427-1410 FAX (763) 433-9898

ALT A - CDS ALIGNMENT LAYOUT

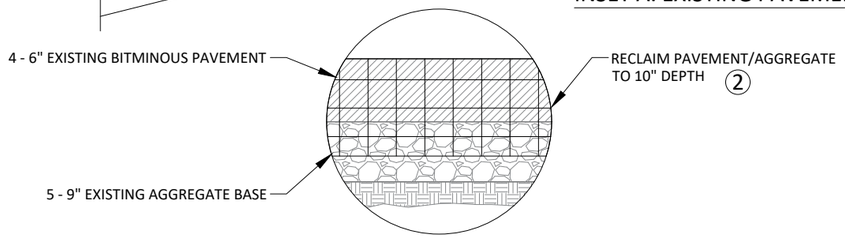
BUSINESS PARK 95 STREET RECONSTRUCTIONS
CITY PROJECT NO. 21-03
CITY OF RAMSEY, MINNESOTA

SHEET 03 OF 26 SHEETS

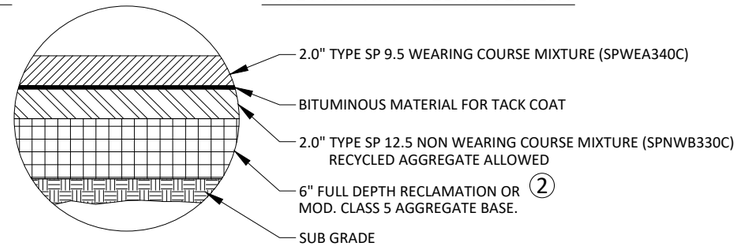
TYPICAL SECTION: FULL-DEPTH RECLAMATION



INSET A: EXISTING PAVEMENT



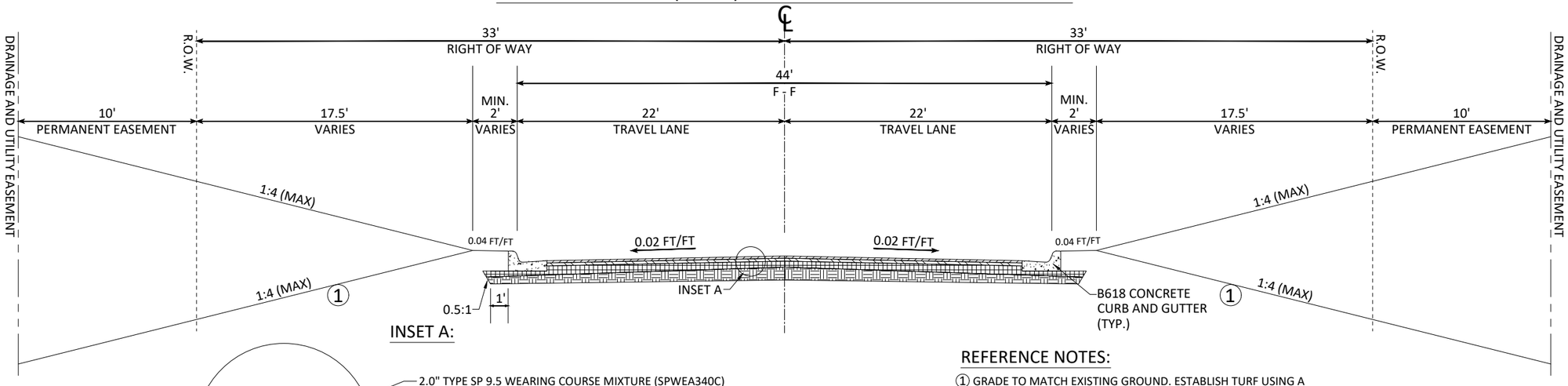
INSET A: PROPOSED PAVEMENT



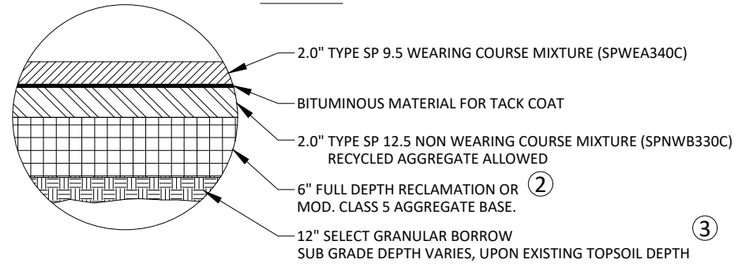
REFERENCE NOTES:

1. GRADE TO MATCH EXISTING GROUND. ESTABLISH TURF USING A MINIMUM OF 4" TOPSOIL AND SODDING TYPE LAWN SEE CITY PLATE NO. ERO-6 FOR TOPSOIL REQUIREMENTS.
2. FULL DEPTH RECLAMATION MUST PASS CITY OF RAMSEY MODIFIED CLASS 5 AGGREGATE BASE GRADATION. SEE CITY PLATE NO. STR-26.

TYPICAL SECTION: (ALT A) McKINLEY STREET CDS EXTENSION



INSET A:



REFERENCE NOTES:

1. GRADE TO MATCH EXISTING GROUND. ESTABLISH TURF USING A MINIMUM OF 4" TOPSOIL AND SODDING TYPE LAWN. SEE CITY PLATE NO. ERO-6 FOR TOPSOIL REQUIREMENTS.
2. FULL DEPTH RECLAMATION MUST PASS CITY OF RAMSEY MODIFIED CLASS 5 AGGREGATE BASE GRADATION. SEE CITY PLATE NO. STR-26.
3. SEE GEOTECHNICAL REPORT IN PROJECT SPECIFICATIONS, TWO (2) SOIL BORINGS TAKEN IN CDS EXTENSION AREA 0.5' TO 1.2' OF TOPSOIL ANTICIPATED BASED ON SOIL BORINGS.

CUL-DE-SAC MEASURES 100' DIAMETER FROM BACK-OF-CURB TO BACK-OF-CURB.

DATE	REVISION

Mar 09, 2021 – 10:34am
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I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota

JOE FERIANCEK, P.E.
Date 3/9/21 Lic. No. 57095

DESIGNED BY:	JJF		
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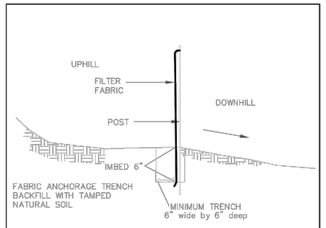
CHECKED BY:	BRW	FILE:	21-03

CITY OF RAMSEY
7550 SUNWOOD DRIVE
RAMSEY, MN 55303
(763) 427-1410 FAX (763) 433-9898

TYPICAL SECTIONS

BUSINESS PARK 95 STREET RECONSTRUCTIONS
CITY PROJECT NO. 21-03
CITY OF RAMSEY, MINNESOTA

SHEET 04 OF 26 SHEETS

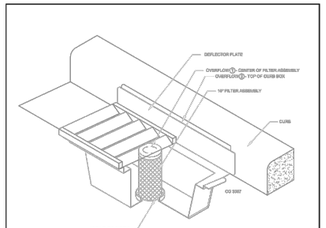


INSTALL AS PER FILTER FABRIC MANUFACTURER'S RECOMMENDATIONS

SILT FENCE DETAIL

NO SCALE

APPROVED: 1 – 2016 | City of RAMSEY | STANDARD DETAILS: SILT FENCE | CITY PLATE No. ERO–1

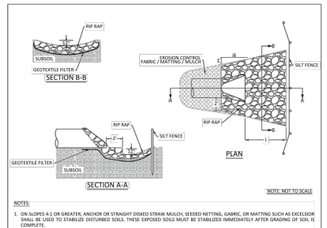


INLET PROTECTION – WIMCO OR EQUAL

N.T.S.

NOTE:
THIS INLET PROTECTION SHALL BE USED IMMEDIATELY FOLLOWING CURB & GUTTER CONSTRUCTION. INLET PROTECTION SHALL REMAIN INSTALLED AND MAINTAINED UNTIL ALL HOME CONSTRUCTION IS COMPLETE.

APPROVED: 1 – 2016 | City of RAMSEY | STANDARD DETAILS: INLET PROTECTION | CITY PLATE No. ERO–2



NOTE: NOT TO SCALE

NOTES:
1. ON SLOPES 4:1 OR GREATER, ANCHOR OR STRAIGHT DISKED STRAW MULCH, SEEDED NETTING, FABRIC, OR MATTING SUCH AS EXCELSIOR SHALL BE USED TO STABILIZE DISTURBED SOILS. THESE EXPOSED SOILS MUST BE STABILIZED IMMEDIATELY AFTER GRADING OF SOIL IS COMPLETE.
2. A SKIRTING OF EROSION CONTROL FABRIC OR MULCH MUST BE USED TO PROTECT OUTLETS AS ILLUSTRATED REGARDLESS OF SLOPE.
3. RIP RAP IS CLASS III PLACED 18" THICK.
4. FOR PIPE GREATER THAN 48" DIAMETER OR 58' SPAN, QUANTITY OF GEOTEXTILE FABRIC AND RIP RAP WILL BE HANDLED IN A CASE BY CASE MANNER.
5. GEOTEXTILE FABRIC SHALL COVER THE BOTTOM AND SIDES OF THE AREA EXCAVATED FOR THE RIP RAP MATERIAL.

RIP RAP AT RCP OUTLETS			
DIA. OF PIPE (IN.)	(FT.)	RIP RAP FABRIC (SY)	MIN. RIP RAP DEPTH (CU. YD)
12	8	19.6	6.5
15	9	20.8	6.9
18	10	22.1	7.4
21	10	23.5	7.8
24	11	24.7	8.2
30	13	27.4	9.1
36	14	29.8	9.9
42	15	32.5	10.8
48	16	35.2	11.7

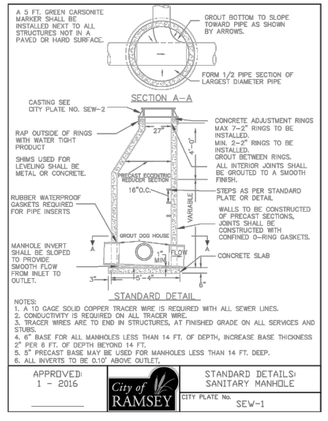
RIP RAP AT RCP-A OUTLETS			
SPAN OF PIPE (IN.)	(FT.)	RIP RAP FABRIC (SY)	MIN. RIP RAP DEPTH (CU. YD)
18	10	20.8	6.9
24	12	23.2	7.7
30	13	25.5	8.5
36	14	27.9	9.3
42	15	30.3	10.1
48	16	32.7	10.9
54	18	37.5	12.5
60	20	42.2	14.1

APPROVED: 9 – 2016 | City of RAMSEY | STANDARD DETAILS: RIP–RAP | CITY PLATE No. ERO–3

Notes:
1. INSTALLATION OF 4" OF TOPSOIL REQUIRED ACROSS ALL DISTURBED AREAS.
2. TOPSOIL IS DEFINED AS BLACK DIRT COMPOSED OF UNCONSOLIDATED MATERIAL, LARGELY UNDECOMPOSED ORGANIC MATTER WHICH IS SUITABLE FOUNDATION FOR VEGETATIVE GROWTH.
3. THE COMPOSITION OF TOPSOIL SHOULD CONTAIN NO MORE THAN THIRTY-FIVE PERCENT (35%) SAND CONTENT.

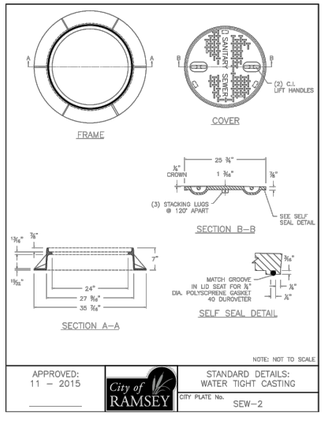
APPROVED: 7 – 2019 | City of RAMSEY | STANDARD DETAILS: TOPSOIL REQUIREMENTS | CITY PLATE No. ERO–6

A 5 FT. GREEN CARSONITE MARKER SHALL BE INSTALLED NEXT TO ALL STRUCTURES NOT IN A PAVED OR HARD SURFACE.



NOTES:
1. A 10 GAGE SOLID COPPER TRACER WIRE IS REQUIRED WITH ALL SEWER LINES.
2. CONDUCTIVITY IS REQUIRED ON ALL TRACER WIRE.
3. TRACER WIRES ARE TO END IN STRUCTURES, AT FINISHED GRADE ON ALL SERVICES AND STUBS.
4. 6" BASE FOR ALL MANHOLES LESS THAN 14 FT. OF DEPTH, INCREASE BASE THICKNESS 2" PER 8 FT. OF DEPTH BEYOND 14 FT.
5. 5" PRECAST BASE MAY BE USED FOR MANHOLES LESS THAN 14 FT. DEEP.
6. ALL INVERTS TO BE 0.10' ABOVE OUTLET.

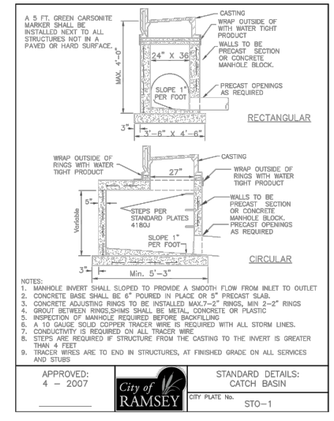
APPROVED: 1 – 2016 | City of RAMSEY | STANDARD DETAILS: SANITARY MANHOLE | CITY PLATE No. SEW–1



NOTE: NOT TO SCALE

APPROVED: 11 – 2015 | City of RAMSEY | STANDARD DETAILS: WATER TIGHT CASTING | CITY PLATE No. SEW–2

A 5 FT. GREEN CARSONITE MARKER SHALL BE INSTALLED NEXT TO ALL STRUCTURES NOT IN A PAVED OR HARD SURFACE.

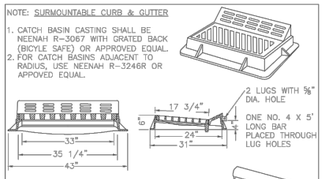


NOTES:
1. MANHOLE INVERT SHALL SLOPED TO PROVIDE A SMOOTH FLOW FROM INLET TO OUTLET
2. CONCRETE BASE SHALL BE 6" POURED IN PLACE OR 5" PRECAST SLAB.
3. CONCRETE ADJUSTING RINGS TO BE INSTALLED MAX.7–2" RINGS, MIN 2–2" RINGS
4. GROUT BETWEEN RINGS,&SHIMS SHALL BE METAL, CONCRETE OR PLASTIC
5. INSPECTION OF MANHOLE REQUIRED BEFORE BACKFILLING
6. A 10 GAUGE SOLID COPPER TRACER WIRE IS REQUIRED WITH ALL STORM LINES.
7. CONDUCTIVITY IS REQUIRED ON ALL TRACER WIRE.
8. STEPS ARE REQUIRED IF STRUCTURE FROM THE CASTING TO THE INVERT IS GREATER THAN 4 FEET
9. TRACER WIRES ARE TO END IN STRUCTURES, AT FINISHED GRADE ON ALL SERVICES AND STUBS

APPROVED: 4 – 2007 | City of RAMSEY | STANDARD DETAILS: CATCH BASIN | CITY PLATE No. STO–1

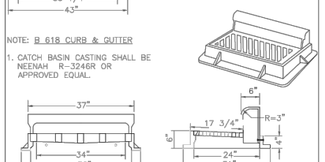
NOTE: SURMOUNTABLE CURB & GUTTER

1. CATCH BASIN CASTING SHALL BE NEENAH R–3067 WITH GRATED BACK (BICYLE SAFE) OR APPROVED EQUAL.
2. FOR CATCH BASINS ADJACENT TO RADIUS, USE NEENAH R–3246R OR APPOVED EQUAL.



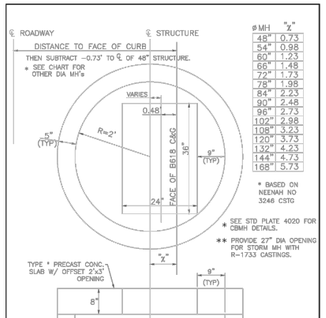
NOTE: B 618 CURB & GUTTER

1. CATCH BASIN CASTING SHALL BE NEENAH R–3246R OR APPROVED EQUAL.



STANDARD CATCHBASIN CASTING

APPROVED: 7 – 2016 | City of RAMSEY | STANDARD DETAILS: STORMWATER CASTING | CITY PLATE No. STO–4



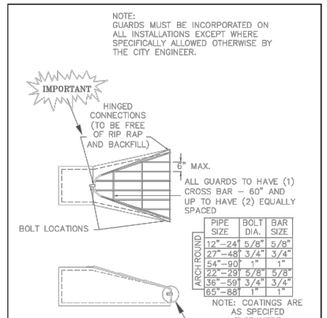
Ø MH	"X"
48"	0.73
54"	0.98
60"	1.23
66"	1.48
72"	1.73
78"	1.98
84"	2.23
90"	2.48
96"	2.73
102"	2.98
108"	3.23
120"	3.73
132"	4.23
144"	4.73
168"	5.73

* BASED ON NEENAH NO 3246 CSTG

* SEE STD PLATE 4020 FOR CBMH DETAILS.

** PROVIDE 27" DIA OPENING FOR STORM MH WITH R–1733 CASTINGS.

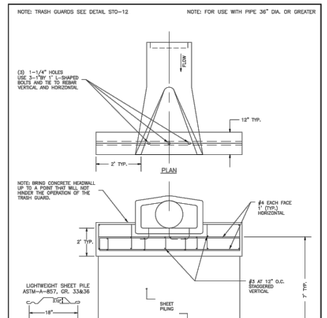
APPROVED: 4 – 2005 | City of RAMSEY | STANDARD DETAILS: SLAB TOP MANHOLE COVER | CITY PLATE No. STO–5



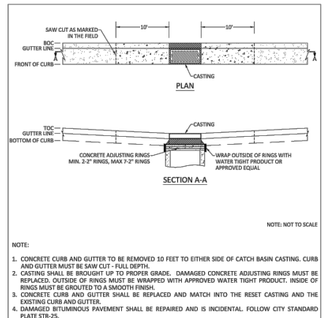
PIPE SIZE	BOLT DIA.	BAR SIZE
12"–24"	5/8"	5/8"
27"–48"	3/4"	3/4"
54"–90"	1"	1"
22"–29"	5/8"	5/8"
36"–59"	3/4"	3/4"
65"–88"	1"	1"

(ARCH/ROUND)

APPROVED: 2 – 2006 | City of RAMSEY | STANDARD DETAILS: TRASH GUARD | CITY PLATE No. STO–8



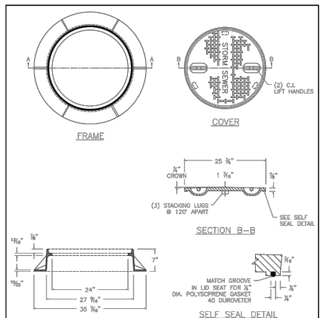
APPROVED: 9 – 2016 | City of RAMSEY | STANDARD DETAILS: STORM SEWER PILING & CONCRETE END SECTION | CITY PLATE No. STO–10



NOTE: NOT TO SCALE

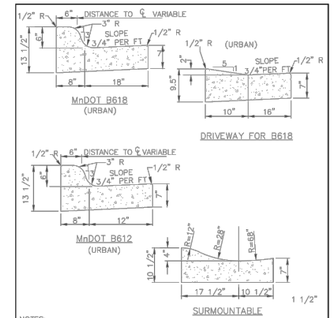
NOTE:
1. CONCRETE CURB AND GUTTER TO BE REMOVED 10 FEET TO EITHER SIDE OF CATCH BASIN CASTING. CURB AND GUTTER MUST BE SAW CUT - FULL DEPTH.
2. CASTING SHALL BE BROUGHT UP TO PROPER GRADE. DAMAGED CONCRETE ADJUSTING RINGS MUST BE REPLACED. OUTSIDE OF RINGS MUST BE WRAPPED WITH APPROVED WATER TIGHT PRODUCT. INSIDE OF RINGS MUST BE GROUTED TO A SMOOTH FINISH.
3. CONCRETE CURB AND GUTTER SHALL BE REPLACED AND MATCH INTO THE RESET CASTING AND THE EXISTING CURB AND GUTTER.
4. DAMAGED BITUMINOUS PAVEMENT SHALL BE REPAIRED AND IS INCIDENTAL. FOLLOW CITY STANDARD PLATE STR–25.
5. PROPER TRAFFIC CONTROL DEVICES SHALL BE REQUIRED TO MAINTAIN A SAFE WORK ENVIRONMENT, AND IS INCLUDED IN THE TRAFFIC CONTROL LUMP SUM BIT ITEM.
6. ALL EQUIPMENT, MATERIALS, DISPOSAL, AND LABOR REQUIRED TO RESET CATCH BASIN CASTING AS DESCRIBED BY THIS DETAIL IS INCIDENTAL.
7. BOULEVARD RESTORATION BEHIND CURB IS NOT INCLUDED WITH THE RESET CATCH BASIN CASTING PAY ITEM.

APPROVED: 3 – 2017 | City of RAMSEY | STANDARD DETAILS: RESET CATCH BASIN | CITY PLATE No. STO–13



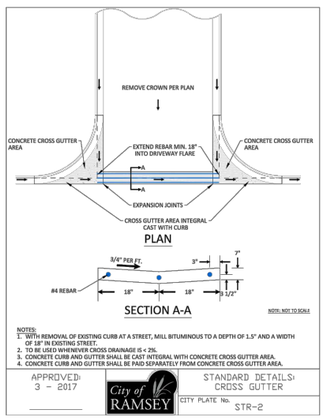
NOTE: NOT TO SCALE

APPROVED: 2 – 2019 | City of RAMSEY | STANDARD DETAILS: WATER TIGHT CASTING | CITY PLATE No. STO–14



NOTES:
1. ON WEAR COURSE MILL THE EXISTING BITUMINOUS 1.5" BY 24" IN FRONT OF THE REPLACEMENT CURB.
2. ON BASE COURSE SAW CUT AND REMOVE EXISTING BITUMINOUS 18" IN FRONT OF THE REPLACEMENT CURB.

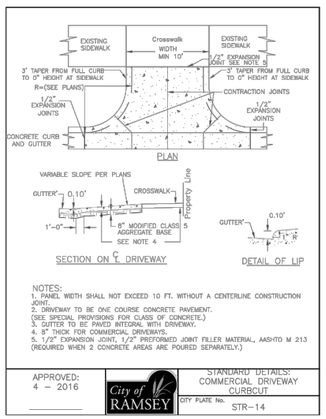
APPROVED: 1 – 2016 | City of RAMSEY | STANDARD DETAILS: CURB AND GUTTER | CITY PLATE No. STR–1



NOTE: NOT TO SCALE

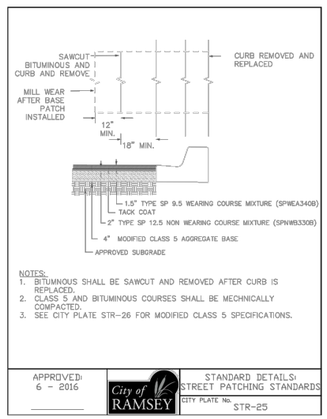
NOTES:
1. WITH REMOVAL OF EXISTING CURB AT A STREET, MILL BITUMINOUS TO A DEPTH OF 1.5" AND A WIDTH OF 18" IN EXISTING STREET.
2. TO BE USED WHENEVER CROSS DRAINAGE IS < 2%.
3. CONCRETE CURB AND GUTTER SHALL BE CAST INTEGRAL WITH CONCRETE CROSS GUTTER AREA.
4. CONCRETE CURB AND GUTTER SHALL BE PAID SEPARATELY FROM CONCRETE CROSS GUTTER AREA.

APPROVED: 3 – 2017 | City of RAMSEY | STANDARD DETAILS: CROSS GUTTER | CITY PLATE No. STR–2



NOTES:
1. PANEL WIDTH SHALL NOT EXCEED 10 FT. WITHOUT A CENTERLINE CONSTRUCTION JOINT.
2. DRIVEWAY TO BE ONE COURSE CONCRETE PAVEMENT. (SEE SPECIAL PROVISIONS FOR CLASS OF CONCRETE.)
3. GUTTER TO BE PAVED INTEGRAL WITH DRIVEWAY.
4. 8" THICK FOR COMMERCIAL DRIVEWAYS.
5. 1/2" EXPANSION JOINT, 1/2" PREFORMED JOINT FILLER MATERIAL, AASHTO M 213 (REQUIRED WHEN 2 CONCRETE AREAS ARE POURED SEPARATELY.)

APPROVED: 4 – 2016 | City of RAMSEY | STANDARD DETAILS: COMMERCIAL DRIVEWAY CURBCUT | CITY PLATE No. STR–14



NOTES:
1. BITUMINOUS SHALL BE SAWCUT AND REMOVED AFTER CURB IS REPLACED.
2. CLASS 5 AND BITUMINOUS COURSES SHALL BE MECHNICALLY COMPACTED.
3. SEE CITY PLATE STR–26 FOR MODIFIED CLASS 5 SPECIFICATIONS.

APPROVED: 6 – 2016 | City of RAMSEY | STANDARD DETAILS: STREET PATCHING STANDARDS | CITY PLATE No. STR–25

TABLE A

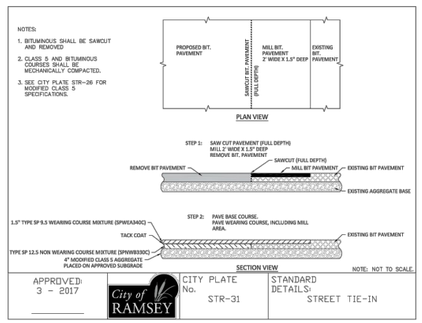
MODIFIED CLASS 5 SPECIFICATIONS

% PASSING

1"	100
3/4"	90 – 100
3/8"	50 – 80
No.4	35 – 70
No.10	20 – 60
No.40	10 – 35
No.200	5 – 10

NOTES:
1. THE AGGREGATE BASE CONSTRUCTION WILL BE ACCEPTED FOR PAYMENT IN ACCORDANCE WITH THE PROVISIONS IN TABLE A.
2. IF THE AGGREGATE BASE FAILS TO MEET THE REQUIREMENTS OF TABLE A THE MATERIAL CAN BE CORRECTED IN PLACE OR REMOVED AND REPLACED WITH MATERIAL THAT MEET THE REQUIREMENTS OF TABLE A.
3. IN THE EVENT THAT RECYCLED MATERIAL IS USE IT MUST MEET MNDOT REQUIREMENTS FOR RECYCLED BASE.

APPROVED: 2 – 2003 | City of RAMSEY | STANDARD DETAILS: MODIFIED CLASS 5 SPECIFICATIONS | CITY PLATE No. STR–26



NOTE: NOT TO SCALE

APPROVED: 3 – 2017 | City of RAMSEY | CITY PLATE No. STR–31 | STANDARD DETAILS: STREET TIE–IN

DATE	REVISION

Mar 09, 2021 – 10:35am
G:\Engineering\AutoCad Dwgs\Projects A–M\Business Park 95 Recon 21-03\Plan Drawing\21-03 Title & Notes.dwg

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota

JOE FERIANCEK, P.E.
Date 3/9/21 Lic. No. 57095

DESIGNED BY:	JJF		
DRAWN BY:	JJF	DATE:	3/9/21
CHECKED BY:	BRW	FILE:	21-03

City of RAMSEY

CITY OF RAMSEY
7550 SUNWOOD DRIVE
RAMSEY, MN 55303
(763) 427-1410 FAX (763) 433-9898

DETAILS

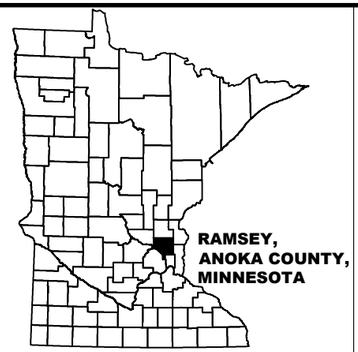
BUSINESS PARK 95 STREET RECONSTRUCTIONS
CITY PROJECT NO. 21-03
CITY OF RAMSEY, MINNESOTA

SHEET 05 OF 26 SHEETS

STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

BUSINESS PARK 95 STREET RECONSTRUCTIONS

CITY OF RAMSEY
ANOKA COUNTY, MINNESOTA



DESCRIPTION OF CONSTRUCTION ACTIVITIES AND STORMWATER MANAGEMENT:
Construction activities include; Site Grading, Storm Sewer Construction, Temporary Erosion and Sediment Control, Roadway Construction, and Permanent Stabilization.

Project Description:

This project consists of reconstruction of 1.20 miles of existing bituminous streets, using full-depth reclamation, replacing bituminous street to the existing grade, spot concrete curb and gutter replacement, and extending McKinley Street 250 lineal feet with concrete curb and gutter and bituminous pavement. The drainage for the existing streets uses concrete curb and gutter to direct flow into storm water catch basins located at low points. Storm water pipes collect the runoff to 3 regional ponds. Minor improvements will be made to existing storm water catch basins, including re-setting structures which have settled. There is no change to the outfall location of the storm water runoff.

RESPONSIBLE PARTIES:

The Contractor and Owner must apply for coverage under the MPCA's General Storm Water Permit for Construction Activity as required by the National Pollution Discharge Elimination System (NPDES) Phase II program. Coverage under the permit will begin automatically 7 calendar days after the electronic submittal date or after the postmarked date of a complete application. (Longer time frames will apply to areas disturbing 50 acres or discharge within 1 mile of a special water).

	COMPANY	CONTACT PERSON	PHONE
OWNER:	CITY OF RAMSEY	BRUCE WESTBY, PE	763-433-9825
SWPPP DESIGNER:	CITY OF RAMSEY	JOE FERIANCEK, PE	763-433-9893
CONTRACTOR:			
STIE MANAGER:			
PARTY RESPONSIBLE FOR LONG TERM O&M:	CITY OF RAMSEY	BRUCE WESTBY, PE	763-433-9825

Individuals listed above, including the SWPPP preparer, individual overseeing implementation of, revising and amending the SWPPP, Individuals performing or supervising the installation, maintenance and repair of BMP's must be trained. At least one individual present on the permitted project, or available within 72 hours shall be trained in the applicable job duties. Documentation showing training commensurate with the job duties and responsibilities is required to be included in the SWPPP prior to any work beginning on the site. Copies of the SWPPP preparer information is included in the Project Manual. The Contractor shall provide information for the individual(s) overseeing implementation, supervising installation, maintenance, and repair of BMP's to be included in the Project Manual prior to the start of construction. This information shall be kept up to date until the project NOT is filed.

Documentation shall include:

a. Names of trained personnel associated with this project.
b. Dates of training, names of instructor(s) and entity providing training.
c. Content of training course or workshop including the number of hours trained.
d. As an alternative to a, b, and c listed above, a photocopy of the current Erosion and Stormwater Management card issued by the University of Minnesota can be attached to the SWPPP as suitable documentation of training.

DOCUMENTATION RETENTION:
The following documentation will be retained for a period of not less than 3-years form the date of submittal of the NOT.

1. The final SWPPP.
2. Copies of all stormwater related permits required for the project.
3. Records of all inspection and maintenance conducted during construction.
4. Copies of all permanent operation and maintenance agreements; including all right-of-way, contracts, covenants and other binding requirements regarding perpetual maintenance.
5. All required calculations for design of temporary and permanent BMP's.

IMPLEMENTATION SCHEDULE AND PHASING:

1. Furnish & Install perimeter sediment control and inlet protection.
2. Reclamation of existing bituminous pavement.
3. Rough grade site.
4. Furnish & install bituminous pavement.
5. Add additional temporary BMP's as necessary during construction based on inspection reports.
6. Submit Notice of Termination (NOT) to MPCA within 30 days of final stabilization.

FINAL STABILIZATION:
The permittee(s) must ensure final stabilization of the site. The permittee(s) must submit a NOT within 30 days after final stabilization is complete, or another owner/operator (permittee) has assumed control over all areas of the site which have not undergone final stabilization. Final stabilization can be achieved in one of the following ways:

1. All soil disturbing activities at the site have been completed and all soils must be stabilized by a uniform perennial vegetative cover with a density of 70 percent over the entire pervious surface area, or other equivalent means necessary to prevent soil failure under erosive conditions and;

a. All drainage ditches, constructed to drain water from the site after construction is complete, must be stabilized to preclude erosion;
b. All temporary synthetic, and structural erosion prevention and sediment control BMP's (such as silt fence) must be removed as part of the site final stabilization; and
c. The permittee(s) must clean out all sediment from conveyances and from temporary sedimentation basins to be used as permanent water quality management basins. Sediment must be stabilized to prevent it from being washed back into the basin, conveyances or drainage ways discharging off-site or to surface waters. The cleanout of permanent basins must be sufficient to return the basin to design capacity.

2. Final vegetation cover shall be in the Project Specifications.
3. For residential construction only, final stabilization has been achieved when temporary erosion protection and down gradient perimeter control for individual lots has been completed and the residence has been transferred to the homeowner. Additionally, the permittee must distribute the MPCA "Homeowner fact sheet" to the homeowner to inform the homeowner of the need for, and benefits of, final stabilization.

SPECIAL ENVIRONMENTAL CONSIDERATIONS:

Was an environmental review required for this project or any part of a common plan of development or sale that includes all or any portion of this project?	NO
Does any portion of the site have the potential to affect threatened or endangered species?	NO
Does any portion of this site discharge to a Calcareous Fen and the letter of approval from the DNR is located in the Project Manual?	NO
Will any portion of this site potentially affect properties listed on the National Register of Historic Places or a Known or Discovered Archeological site?	NO
Have any Karst features been identified in the project vicinity?	NO
Is compliance with temporary or permanent stormwater management design requirements infeasible for this project?	NO

POLLUTION PREVENTION MANAGEMENT MEASURES:
The permittee(s) shall implement the following pollution prevention management measures on the site:

1. 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 regulations.
2. 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 with MPCA regulations.
3. External washing of trucks and other construction vehicles must be limited to a defined area of the site. Runoff must be contained and waste properly disposed of. No engine degreasing is allowed on site.

GENERAL STORMWATER DISCHARGE REQUIREMENTS:
All requirements listed in Part 15 of the permit for the design of permanent stormwater treatment system and discharge have been included in the preparation of this SWPPP. These include but are not limited to:

1. The expected amount, frequency, intensity and duration of precipitation.
2. The nature of stormwater runoff and run-on at the site.
3. Peak flow rates and stormwater volumes to minimize erosion at outlets and downstream channel and stream bank erosion.
4. The range of soil particle sizes expected to be present on the site.

RECEIVING WATERS:
Recieving waters, including surface water, wetlands, Public Waters, and stormwater ponds are identified on the USGS 7.5min quad map within 1 mile of the project boundary. Receiving waters that are impaired, the impairment and WLA are listed as follows. All specific BMP's relative to construction activities listed in this permit for special and impaired waters have been incorporated into this plan. All specific BMP's listed in approved TMDLs and those BMP's listed for construction related waste load allocations have also been incorporated.

NAME OF WATER BODY	TYPE (DITCH, POND, WETLAND, LAKE, ETC.)	APPENDIX A SPECIAL WATER?	FLOWS TO IMPAIRED WATER WITHIN 1 MILE?	USEPA APPROVED TMDL?
MISSISSIPPI RIVER	RIVER	YES	YES	YES
IMPAIRMENTS: DO; FISHESBIO; INVERTBIO				

PROJECT AREAS:

Total project size (disturbed area) =	6.38	acres
Existing area of impervious surface =	5.72	acres
Post construction area of impervious surface =	6.12	acres
New impervious surface area created =	0.40	acres

Planned construction start date: June 2021
Planned construction completion date: September 2021

PROJECT LOCATION:

County: ANOKA Township: 32 Range: 25 Section: 35 Latitude: 45.223416 Longitude: -93.424515

PERMANENT STORMWATER MANAGEMENT SYSTEM:
Type of storm water management used if more than 1 acre of new impervious surface is created:

a. Wet Sedimentation Pond
b. Infiltration / Filtration
c. Regional Pond
d. Permanent Stormwater Management Not Required

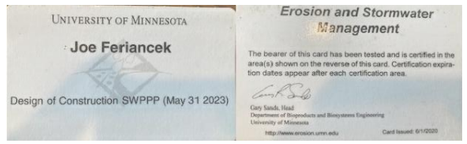
LOCATION OF SWPPP REQUIREMENTS IN PROJECT PLAN:

DESCRIPTION	LOCATION
TEMPORARY EROSION CONTROL MEASURES	SHEETS No. 08 - 09
FINAL STABILIZATION	SHEETS No. 18 - 25
STORM SEWER TABULATION	SHEETS No. 18 - 25
EROSION AND SEDIMENT CONTROL DETAILS	SHEETS No. 05

EROSION AND SEDIMENT CONTROL QUANTITIES:

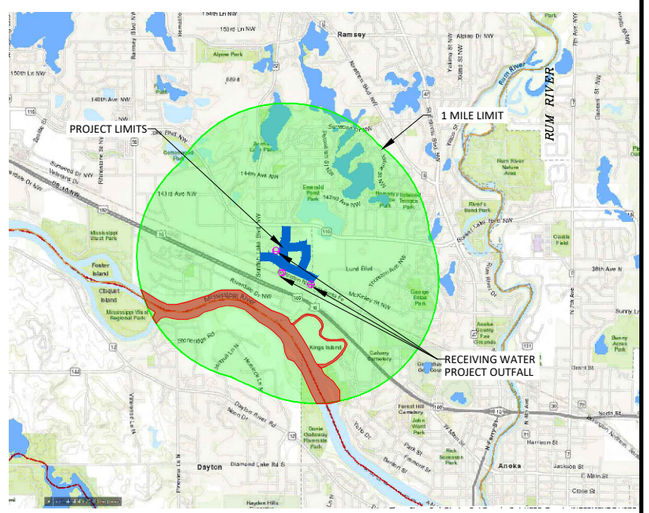
DESCRIPTION	QUANTITY
SILT FENCE TYPE MS	600 LF
STORM DRAIN INLET PROTECTION	27 EA.
RIP RAP	33 CY
SODDING TYPE LAWN	1256 SY

CERTIFICATION:



LEGEND

PROJECT LIMITS
1 MILE LIMIT
RECEIVING WATER
IMPAIRED WATER



DATE	REVISION

Mar 26, 2021 - 10:44am
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I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota

JOE FERIANCEK, P.E.
Date 3/9/21 Lic. No. 57095

DESIGNED BY:	JJF	
DRAWN BY:	JJF	DATE: 3/9/21
CHECKED BY:	BRW	FILE: 21-03

City of RAMSEY

CITY OF RAMSEY
7550 SUNWOOD DRIVE
RAMSEY, MN 55303
(763) 427-1410 FAX (763) 433-9898

SWPPP

BUSINESS PARK 95 STREET RECONSTRUCTIONS
CITY PROJECT NO. 21-03
CITY OF RAMSEY, MINNESOTA

SHEET 06 OF 26 SHEETS

SEQUENCE OF CONSTRUCTION:

Construction shall proceed in the following sequence:

1. Contractor shall schedule and conduct a pre-construction meeting with the City.
2. Contractor shall secure all necessary permits and licenses.
3. Furnish & install erosion control measures.
4. Maintain erosion control measures, i.e. silt fence, inlet protection.
5. Reclaim existing bituminous pavement and base.
6. Scarify, grade and compact 1' below reclaim section.
7. Re-install reclamation material as necessary, grade and compact reclamation material.
8. Furnish & install base course of bituminous pavement
9. Complete concrete curb and gutter repairs, install restoration per plan.
10. Furnish & install wear course of bituminous pavement.
11. Remove erosion control after vegetation is established.

ADDITIONAL STORMWATER POLLUTION PREVENTION, GRADING PLAN, AND SCHEDULE NOTES:

1. All slopes to be 1:4 unless approved by the city engineer.
2. Below grade structures shall be protected and meet drainage requirements per the city engineer.
3. Construction operation hours are from 7:00 a.m. - 10:00 p.m. Monday through Saturday.
4. Call Gopher State One Call for utility locations prior to any work at 1-800-252-1166.
5. Permittee may need to modify SWPPP if the general objectives of controlling pollutants is not being met.
6. Operator shall implement these and any other BMP's that may be required to meet the general permit requirements.
7. Site is not in karst area or pollution or remediation site.
8. Silt fence to be installed downhill from any grading activity.
9. If tracking onto adjacent streets occurs a street sweeper shall be used to clean streets within 8 hours or as directed by the engineer.
10. Dust control may be necessary during rough grading. No grading can take place if wind speed exceeds 25 mph.
11. Solid waste shall be collected and disposed of properly and must comply with MPCA disposal requirements.
12. Hazardous materials shall be stored properly to prevent spills and vandalism.
13. No engine degreasing is allowed on site. External washing of vehicles shall be limited to a defined area (bone yard) on site.
14. Permittee(s) shall adhere to all SWPPP specifications on the plan and other MPCA permit requirements.

EROSION PREVENTION PRACTICES:

1. The permittee(s) must plan for and implement appropriate construction phasing, vegetative buffer strips, horizontal slope grading, and other construction practices that minimize erosion, so that the inspection and maintenance requirements are complied with. The location of areas not to be disturbed must be delineated (e.g. with flags, stakes, signs, silt fence, etc.) on the development site before work begins.
2. All exposed soil areas must be stabilized as soon as practical, but in no case later than 7 days after the construction area has temporarily or permanently ceased.
   These areas include constructed stormwater management pond side slopes, and any exposed soil areas with a positive slope to a stormwater conveyance system, such as a curb and gutter system, storm sewer inlet, temporary or permanent drainage ditch or other natural or man made systems that discharge to a surface water.
3. The normal wetted perimeter of any temporary or permanent drainage ditch that drains water from a construction site, or diverts water around a site, must be stabilized within 200 lineal feet from the property edge, or from the point of discharge to any surface water. Stabilization must be completed within 24 hours of connecting to a surface water.
4. Pipe outlets must be provided with temporary or permanent energy dissipation within 24 hours of connection to a surface water.
5. All disturbed areas, except roadways, building areas, parking areas, islands and sidewalk, shall be restored with minimum 2 inches topsoil, seeded and mulched within 7 days of completion of site grading. Seeding shall be in accordance with MnDOT Specification 2575. Where side slopes exceed or equal 1:3 and running slope is greater than 1:50, a polypropylene netting or wood fiber blanket shall be provided and staked over the mulched area. Seed and mulch types and applications rates are per plan and specification.
6. Refer to restoration plan for areas to be seeded or sodded for erosion control.

DEWATERING AND BASIN DRAINING:

1. Dewatering or basin draining (e.g. pumped discharges, trench/ditch cuts for drainage) related to the construction activity that may have turbid or sediment laden discharge water must be discharged to a temporary or permanent sedimentation basin on the project site whenever possible. If the water cannot be discharged to a sedimentation basin prior to entering the surface water, it must be treated with the appropriate BMP's, such that the discharge does not adversely affect the receiving water or downstream landowners. The permittee(s) must ensure that discharge points are adequately protected from erosion and scour. The discharge must be dispersed over natural rock rip rap, sand bags, plastic sheeting or other accepted energy dissipation measures. Adequate sedimentation control measures are required for discharge water that contains suspended solids.
2. All water from dewatering or basin draining activities must be discharged in a manner that does not cause nuisance conditions, erosion in receiving channels or on downslope properties, or inundation in wetlands causing significant adverse impact to the wetland.

SEDIMENT CONTROL PRACTICES:

1. Sediment control practices must minimize sediment from entering surface waters, including curb and gutter systems and storm sewer inlets.
   a. Temporary or permanent drainage ditches and sediment basins that are designed as part of a treatment system (e.g. ditches with rock check dams) require sediment control practices only as appropriate for site conditions.
   b. If the down gradient treatment system is overloaded, additional upgradient sediment control practices must be installed to eliminate the overloading, and the SWPPP must be amended to identify these additional practices.
   c. In order to maintain sheet flow and minimize rills and/or gullies, there shall be no unbroken slope length of greater than 75 feet for slopes with a grade of 1:3 or steeper.
2. Sediment control practices must be established on all down gradient perimeters before any upgradient land disturbing activities begin. These practices shall remain in place until final stabilization has been established.
3. The timing of the installation of sediment control practices may be adjusted to accommodate short-term activities such as clearing or grubbing, or passage of vehicles. Any short-term activity must be completed as quickly as possible and the sediment control practices must be installed immediately after the activity is completed. However, sediment control practices must be installed before the next precipitation event even if the activity is not complete.
4. All storm drain inlets must be protected by appropriate BMP's during construction until all sources with potential for discharging to the inlet have been stabilized.
5. Temporary soil stockpiles must have silt fence or other effective sediment controls, and cannot be placed in surface waters, including stormwater conveyances such as curb and gutter systems, or conduits and ditches.
6. Stockpile areas which remain on the site for more than seven days shall be seeded, mulched, and surrounded by silt fence.
7. Vehicle tracking of sediment from the construction site must be minimized by BMP's such as stone pads, concrete or steel wash racks, or equivalent systems. Street sweeping must be used if such BMPs are not adequate to prevent sediment from being tracked onto the street.
8. The permittee must install temporary sedimentation basins as required.

INSPECTIONS AND MAINTENANCE:

1. The permittee(s) (either the owner or operator, whoever is identified in the SWPPP) must routinely inspect the construction site once every seven (7) days during active construction and within 24 hours after a rainfall event greater than 0.5-inches in 24 hours. Following an inspection that occurs within 24 hours after a rainfall event, the next inspection must be conducted within 7 days.
2. All inspections and maintenance conducted during construction must be recorded in writing and these records must be retained with the SWPPP. Records of each inspection and maintenance activity shall include:

a. Date and time of inspections;
b. Name of persons conducting inspections;
c. Accurate findings of inspections, including the specific location where corrective actions are needed;
d. Corrective actions taken (including dates, times, and party completing maintenance activities);
e. Date of all rainfall events greater than ½ inches in 24 hours, and the amount of rainfall for each event. Permittee(s) must obtain rainfall amounts by either a properly maintained rain gauge installed onsite, a weather station that is within one (1) mile of your location, or a weather reporting system that provides site specific rainfall data from radar summaries;
f. If permittee(s) observe a discharge (i.e., color, odor, settled or suspended solids, oil sheen, and other obvious indicators of pollutant(s);
g. Any amendments to the SWPPP proposed as a result of the inspection must be documented as required in Section 6 of the general permit within seven (7) calendar days.

3. Where parts of the construction site have undergone final stabilization, but work remains on other parts of the site, inspections of the stabilized areas may be reduced to once per month. Where work has been suspended due to frozen ground conditions, the required inspections and maintenance must take place within 24 hours after runoff occurs at the site or 24 hours prior to resuming construction, whichever occurs first.
4. All erosion prevention and sediment control BMP's must be inspected to ensure integrity and effectiveness. All nonfunctional BMP's must be repaired, replaced, or supplemented with functional BMP's. The permittee(s) must investigate and comply with the following inspection and maintenance requirements:

a. All silt fence must be repaired, replaced, or supplemented when they become nonfunctional or the sediment reaches ⅓ of the height of the fence. These repairs must be made within 24 hours of discovery, or as soon as field conditions allow access.
b. Temporary and permanent sedimentation basins must be drained and the sediment removed when the depth of sediment collected in the basin reaches ½ the storage volume. Drainage and removal must be completed within 72 hours of discovery, or as soon as field conditions allow access.
c. Surface waters, including drainage ditches and conveyance systems, must be inspected for evidence of sediment being deposited by erosion. The permittee(s) must remove all deltas and sediment deposited in surface waters, including drainage ways, catch basins, and other drainage systems, and restabilize the areas where sediment removal results in exposed soil. The removal and stabilization must take place within seven (7) days of discovery unless precluded by legal, regulatory, or physical access constraints. The permittee shall use all reasonable efforts to obtain access. If precluded, removal and stabilization must take place within seven (7) calendar days of obtaining access. The permittee is responsible for contacting all local, regional, state and federal authorities and receiving any applicable permits, prior to conducting any work.
d. Construction site vehicle exit locations must be inspected for evidence of off-site sediment tracking onto paved surfaces. Tracked sediment must be removed from all paved surfaces within 3 hours after notification by the City that sweeping is required.
   e.The permittee(s) are responsible for the operation and maintenance of temporary and permanent water quality management BMP's as well as all erosion prevention and sediment control BMP's, for the duration of the construction work at the site. The permittee(s) are responsible until another permittee has assumed control over all areas of the site that have not been finally stabilized or the site has undergone final stabilization, and a NOT has been submitted to the MPCA.
e. If sediment escapes the construction site, off-site accumulations of sediment must be removed in a manner and at a frequency sufficient to minimize off-site impacts (e.g. fugitive sediment in streets could be washed into storm sewers by the next rain and/or pose a safety hazard to users of public streets).

5. All infiltration areas must be inspected to ensure that no sediment from ongoing construction activities is reaching the infiltration area and these areas are protected from compaction due to construction equipment driving across the infiltration area.
6. Storm sewer pipes and structures to be inspected and cleaned out.

DATE	REVISION

Mar 09, 2021 - 10:46am
G:\Engineering\AutoCad Dwgs\Projects A-M\Business Park 95 Recon 21-03\Plan Drawings\21-03 SWPPP.dwg

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota

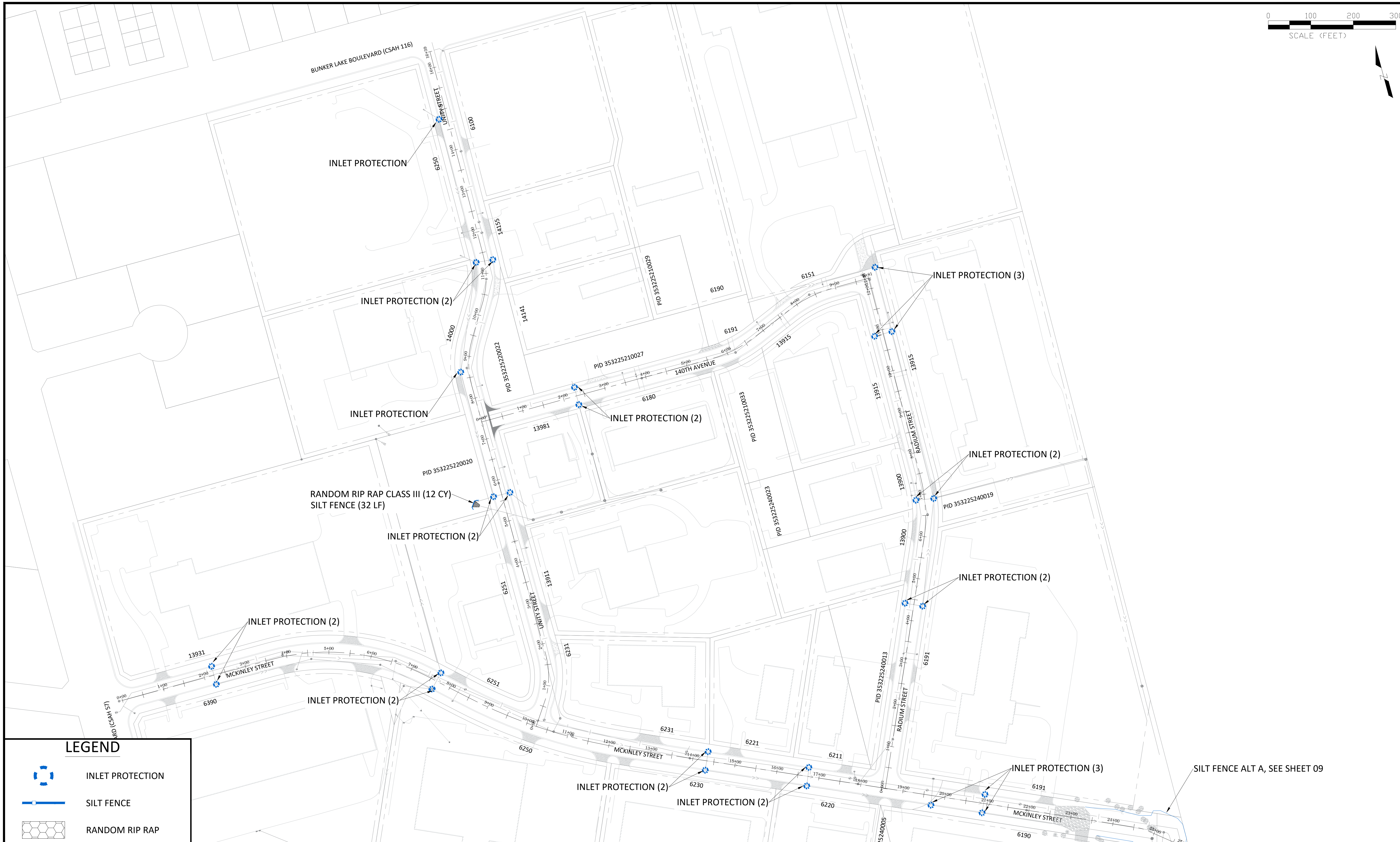
JOE FERIANCEK, P.E.
Date 3/9/21 Lic. No. 57095

DESIGNED BY:	JJF	
DRAWN BY:	JJF	DATE: 3/9/21
CHECKED BY:	BRW	FILE: 21-03

CITY OF RAMSEY
7550 SUNWOOD DRIVE
RAMSEY, MN 55303
(763) 427-1410 FAX (763) 433-9898

SWPPP

BUSINESS PARK 95 STREET RECONSTRUCTIONS
CITY PROJECT NO. 21-03
CITY OF RAMSEY, MINNESOTA



SCALE (FEET)
0 100 200 300
N
BUNKER LAKE BOULEVARD (CSAH 116)
UNITY STREET
INLET PROTECTION
INLET PROTECTION (2)
INLET PROTECTION
RANDOM RIP RAP CLASS III (12 CY)
SILT FENCE (32 LF)
INLET PROTECTION (2)
INLET PROTECTION (2)
INLET PROTECTION (3)
INLET PROTECTION (2)
INLET PROTECTION (2)
INLET PROTECTION (2)
INLET PROTECTION (2)
INLET PROTECTION (2)
INLET PROTECTION (2)
INLET PROTECTION (3)
SILT FENCE ALT A, SEE SHEET 09
140TH AVENUE
RADIUM STREET
MCKINLEY STREET
PID 353225210027
PID 353225210029
PID 353225220022
PID 353225220020
PID 353225210033
PID 353225240023
PID 353225240019
PID 353225240013
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6231
13931
6390
6250
6230
6221
6211
6220
6191
6190

LEGEND

- INLET PROTECTION
- SILT FENCE
- RANDOM RIP RAP

DATE	REVISION

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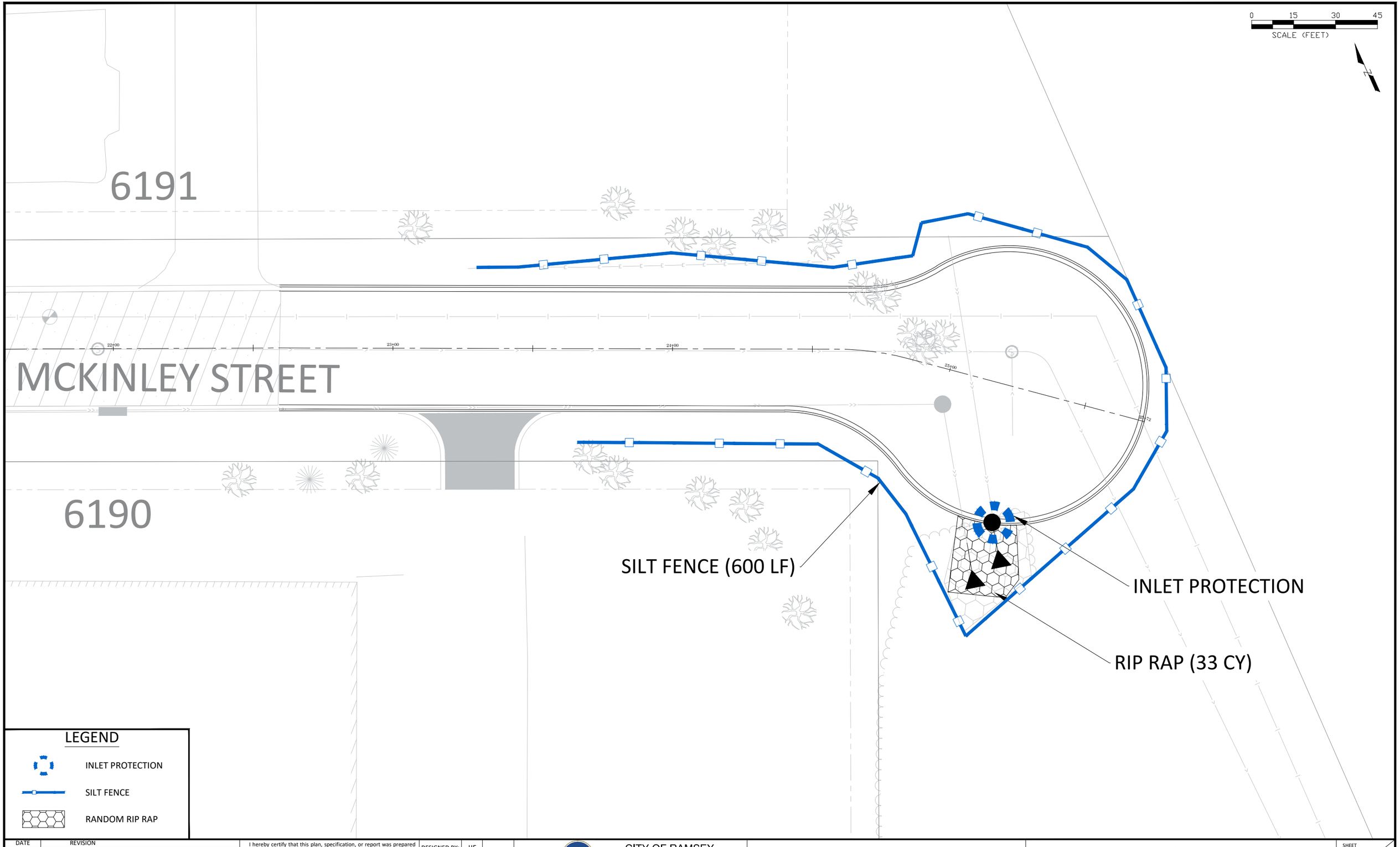
CITY OF RAMSEY
7550 SUNWOOD DRIVE
RAMSEY, MN 55303
(763) 427-1410 FAX (763) 433-9898

EROSION CONTROL

BUSINESS PARK 95 STREET RECONSTRUCTIONS
CITY PROJECT NO. 21-03
CITY OF RAMSEY, MINNESOTA

SHEET 08 OF 26 SHEETS



DATE	REVISION

Mar 09, 2021 - 10:56am
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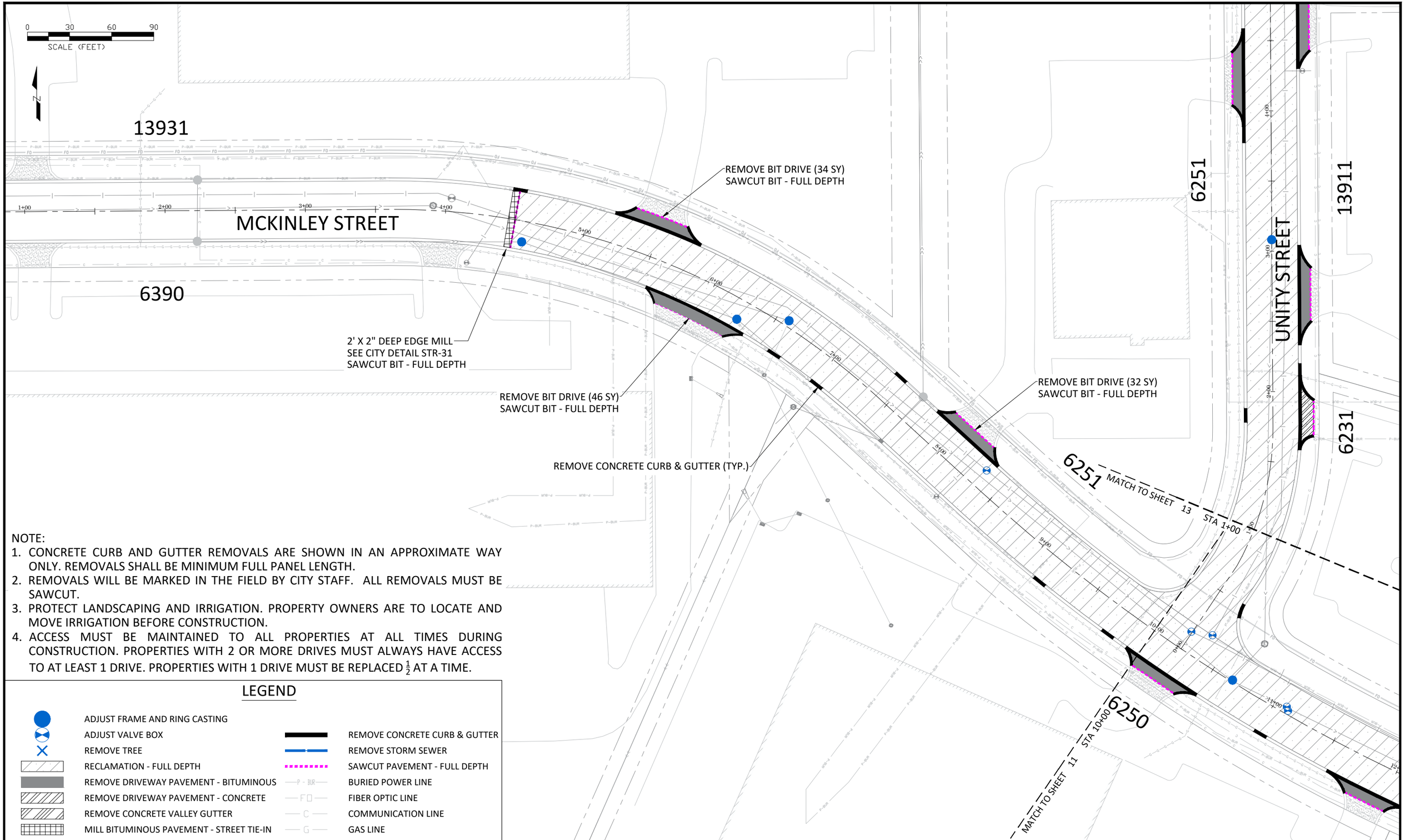
DESIGNED BY:	JJF	
DRAWN BY:	JJF	DATE: 3/9/21
CHECKED BY:	BRW	FILE: 21-03

CITY OF RAMSEY
7550 SUNWOOD DRIVE
RAMSEY, MN 55303
(763) 427-1410 FAX (763) 433-9898

EROSION CONTROL - ALT A MCKINLEY STREET CDS EXTENSION

BUSINESS PARK 95 STREET RECONSTRUCTIONS
CITY PROJECT NO. 21-03
CITY OF RAMSEY, MINNESOTA



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LEGEND

- ADJUST FRAME AND RING CASTING
- ADJUST VALVE BOX
- REMOVE TREE
- RECLAMATION - FULL DEPTH
- REMOVE DRIVEWAY PAVEMENT - BITUMINOUS
- REMOVE DRIVEWAY PAVEMENT - CONCRETE
- REMOVE CONCRETE VALLEY GUTTER
- MILL BITUMINOUS PAVEMENT - STREET TIE-IN
- REMOVE CONCRETE CURB & GUTTER
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- SAWCUT PAVEMENT - FULL DEPTH
- BURIED POWER LINE
- FIBER OPTIC LINE
- COMMUNICATION LINE
- GAS LINE

DATE	REVISION

Mar 09, 2021 - 11:21am
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Date 3/9/21 Lic. No. 57095

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CHECKED BY:	BRW	FILE:	21-03

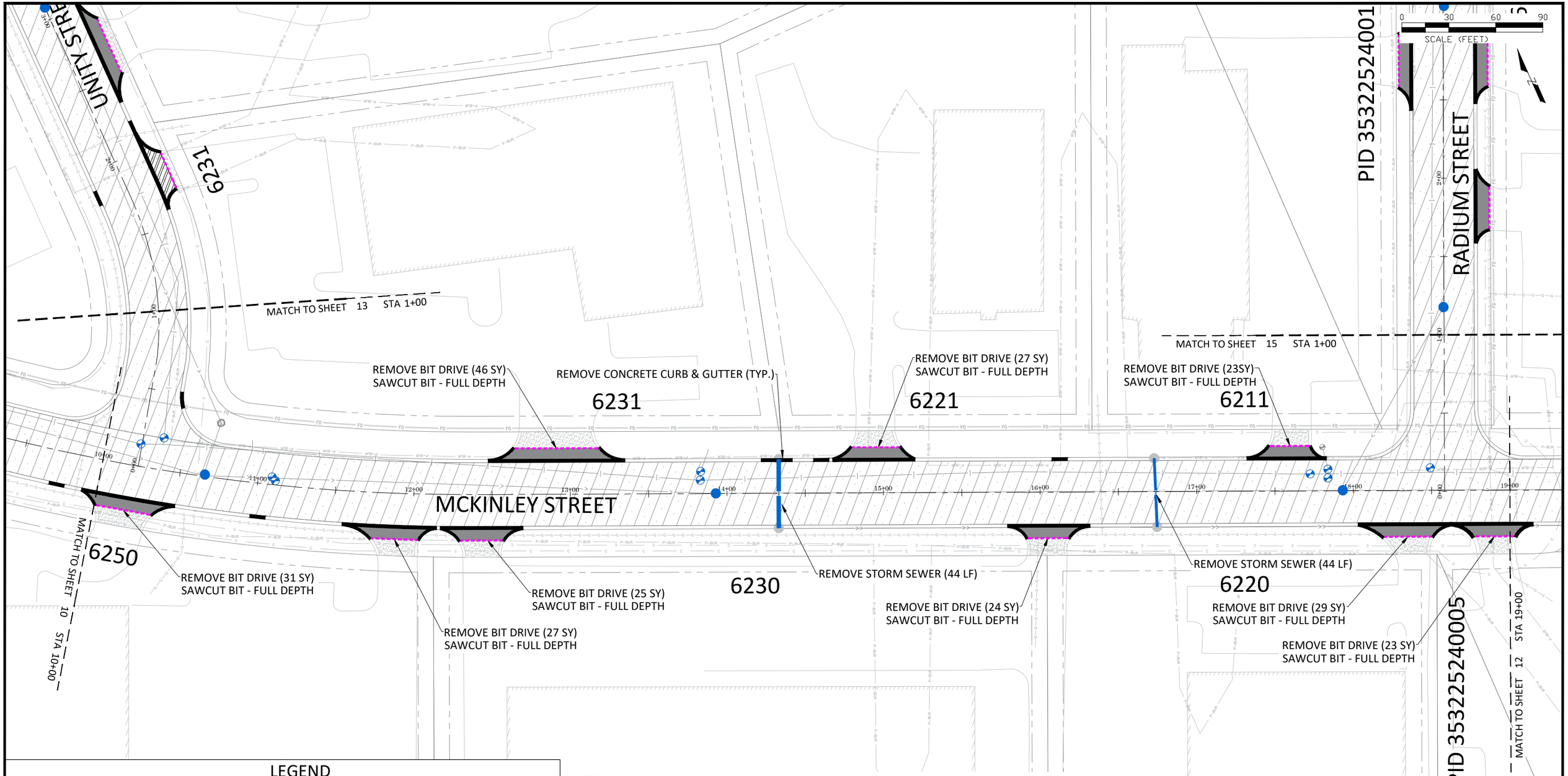
City of RAMSEY

CITY OF RAMSEY
7550 SUNWOOD DRIVE
RAMSEY, MN 55303
(763) 427-1410 FAX (763) 433-9898

EXISTING CONDITIONS & REMOVALS
MCKINLEY STA. 0+00 TO 10+00

BUSINESS PARK 95 STREET RECONSTRUCTIONS
CITY PROJECT NO. 21-03
CITY OF RAMSEY, MINNESOTA

SHEET 10 OF 26 SHEETS



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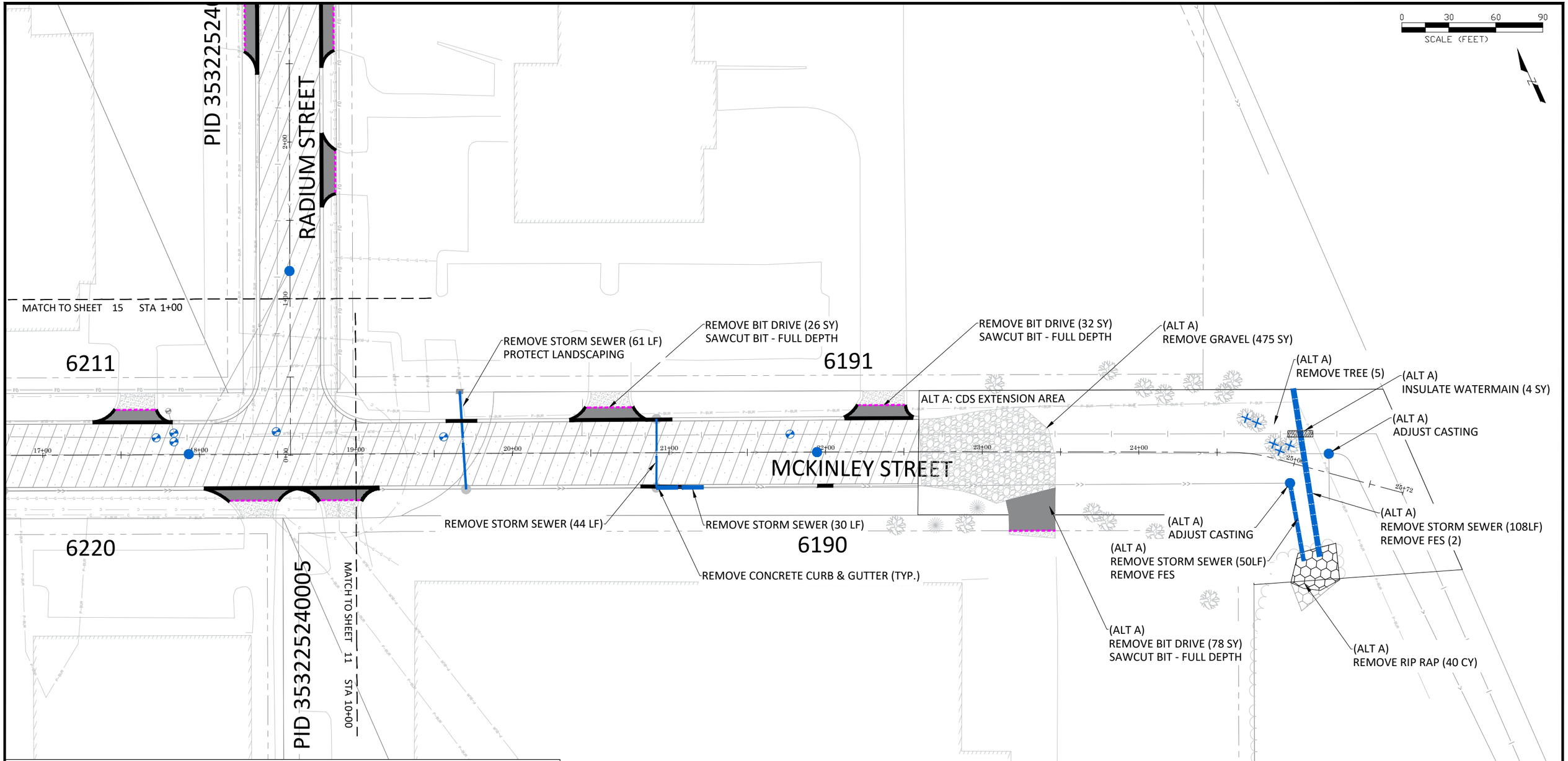
CHECKED BY:	BRW	FILE: 21-03

CITY OF RAMSEY
7550 SUNWOOD DRIVE
RAMSEY, MN 55303
(763) 427-1410 FAX (763) 433-9898

EXISTING CONDITIONS & REMOVALS
MCKINLEY STA. 10+00 TO 19+00

BUSINESS PARK 95 STREET RECONSTRUCTIONS
CITY PROJECT NO. 21-03
CITY OF RAMSEY, MINNESOTA

SHEET 11 OF 26 SHEETS



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DATE	REVISION

Mar 09, 2021 - 11:25am
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JOE FERIANCEK, P.E.
Date 3/9/21 Lic. No. 57095

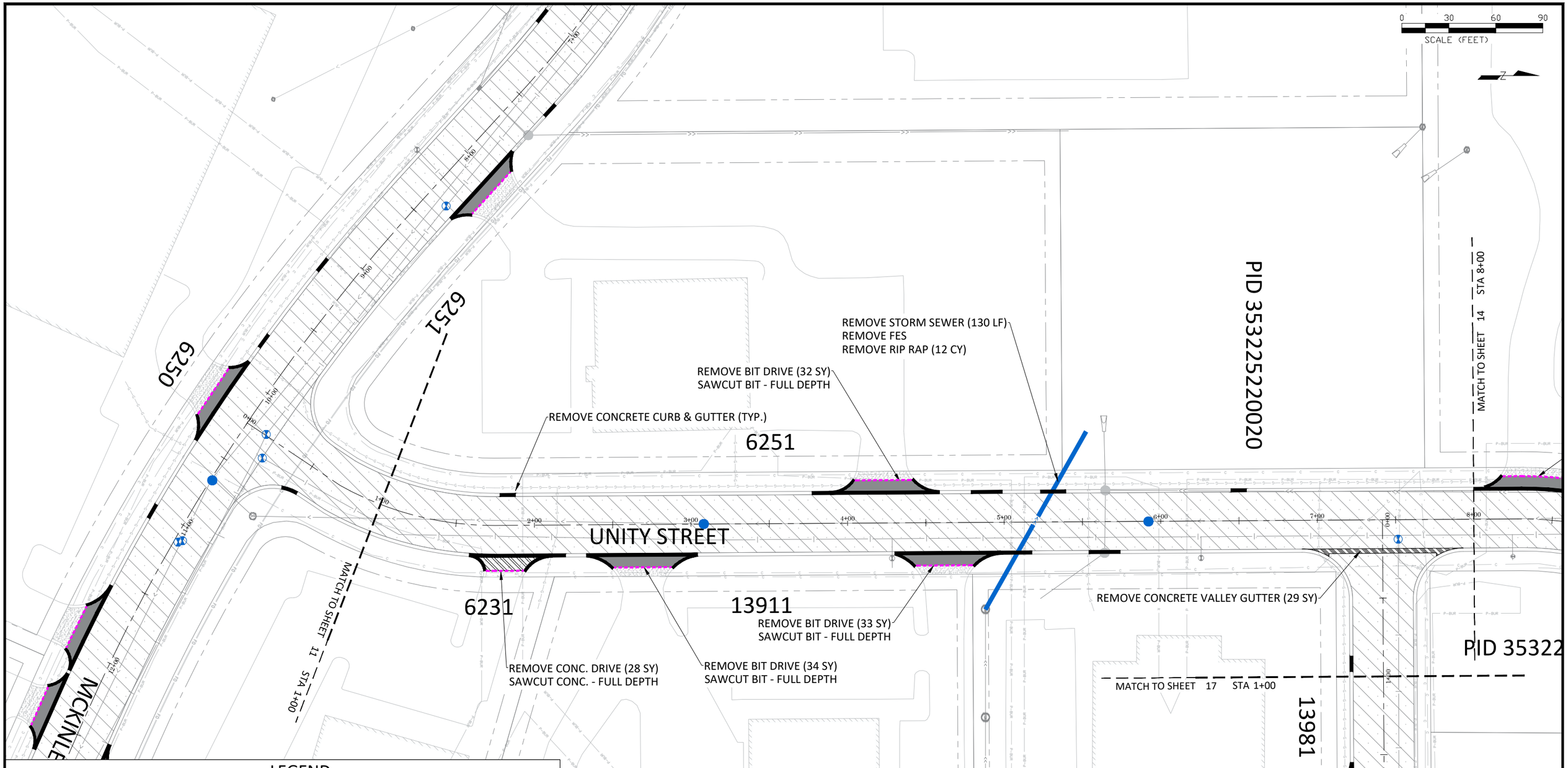
DESIGNED BY:	JJF		
DRAWN BY:	JJF	DATE:	3/9/21
CHECKED BY:	BRW	FILE:	21-03

CITY OF RAMSEY
7550 SUNWOOD DRIVE
RAMSEY, MN 55303
(763) 427-1410 FAX (763) 433-9898

EXISTING CONDITIONS & REMOVALS
MCKINLEY STA. 19+00 TO CDS

BUSINESS PARK 95 STREET RECONSTRUCTIONS
CITY PROJECT NO. 21-03
CITY OF RAMSEY, MINNESOTA

SHEET 12 OF 26 SHEETS



LEGEND

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DATE	REVISION

Mar 09, 2021 - 11:27am
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Joe Feriancek

JOE FERIANCEK, P.E.

Date 3/9/21 Lic. No. 57095

DESIGNED BY:	JJF		
DRAWN BY:	JJF	DATE:	3/9/21
CHECKED BY:	BRW	FILE:	21-03

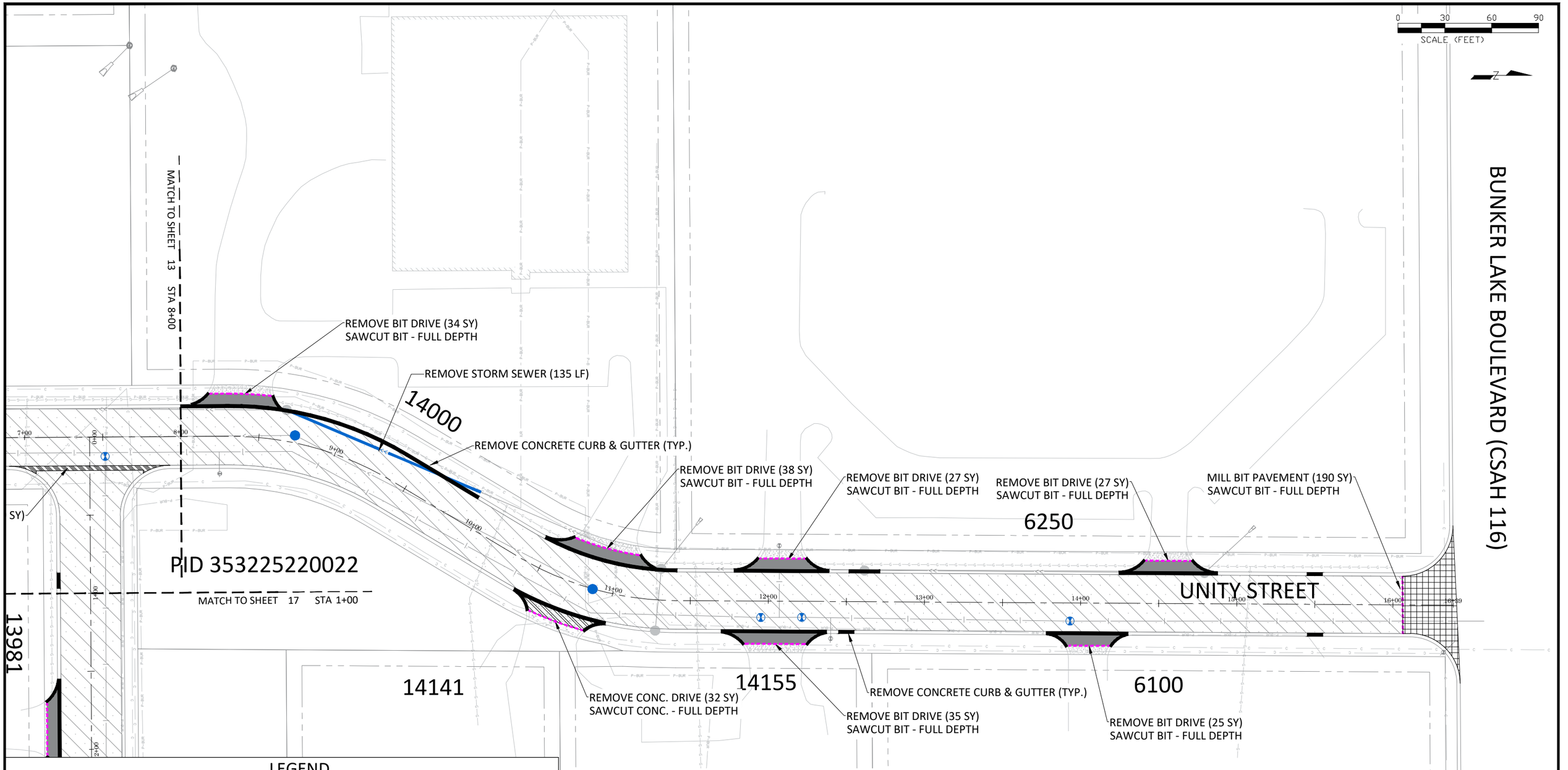
City of RAMSEY

CITY OF RAMSEY
7550 SUNWOOD DRIVE
RAMSEY, MN 55303
(763) 427-1410 FAX (763) 433-9898

EXISTING CONDITIONS & REMOVALS
UNITY STA. 0+00 TO 8+00

BUSINESS PARK 95 STREET RECONSTRUCTIONS
CITY PROJECT NO. 21-03
CITY OF RAMSEY, MINNESOTA

SHEET 13 OF 26 SHEETS



LEGEND

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CITY OF RAMSEY
7550 SUNWOOD DRIVE
RAMSEY, MN 55303
(763) 427-1410 FAX (763) 433-9898

EXISTING CONDITIONS & REMOVALS
UNITY 8+00 TO B.L. BLVD

BUSINESS PARK 95 STREET RECONSTRUCTIONS
CITY PROJECT NO. 21-03
CITY OF RAMSEY, MINNESOTA

SHEET 14 OF 26 SHEETS

LEGEND

- ADJUST FRAME AND RING CASTING
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- REMOVE DRIVEWAY PAVEMENT - BITUMINOUS
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0 30 60 90
SCALE (FEET)

PID 353225240023

PID 35

MATCH TO SHEET 12

STA 10+00

PID 353225240013

RADIUM STREET

REMOVE BIT DRIVE (29 SY)
SAWCUT BIT - FULL DEPTH

REMOVE BIT DRIVE (26 SY)
SAWCUT BIT - FULL DEPTH

REMOVE BIT DRIVE (29 SY)
SAWCUT BIT - FULL DEPTH

6191

REMOVE CONCRETE CURB & GUTTER (TYP.)

REMOVE STORM SEWER (43 LF)

REMOVE BIT DRIVE (21 SY)
SAWCUT BIT - FULL DEPTH

13900

REMOVE BIT DRIVE (38 SY)
SAWCUT BIT - FULL DEPTH

REMOVE CONC. DRIVE (28 SY)
SAWCUT CONC. - FULL DEPTH

13900

13

REN

RADIUM STREET

REMOVE STORM SEWER (43 LF)

REMOVE BIT DRIVE (23 SY)
SAWCUT BIT - FULL DEPTH

PID 3532252

MATCH TO SHEET 16 STA 9+00

DATE	REVISION

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JOE FERIANCEK, P.E.
Date 3/9/21 Lic. No. 57095

DESIGNED BY:	JJF	
DRAWN BY:	JJF	DATE: 3/9/21
CHECKED BY:	BRW	FILE: 21-03

Mar 09, 2021 – 11:29am
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City of RAMSEY

CITY OF RAMSEY
7550 SUNWOOD DRIVE
RAMSEY, MN 55303
(763) 427-1410 FAX (763) 433-9898

EXISTING CONDITIONS & REMOVALS
RADIUM STA. 0+00 TO 9+00

BUSINESS PARK 95 STREET RECONSTRUCTIONS
CITY PROJECT NO. 21-03
CITY OF RAMSEY, MINNESOTA

SHEET 15 OF 26 SHEETS

LEGEND

- ADJUST FRAME AND RING CASTING
- ADJUST VALVE BOX
- REMOVE TREE
- RECLAMATION - FULL DEPTH
- REMOVE DRIVEWAY PAVEMENT - BITUMINOUS
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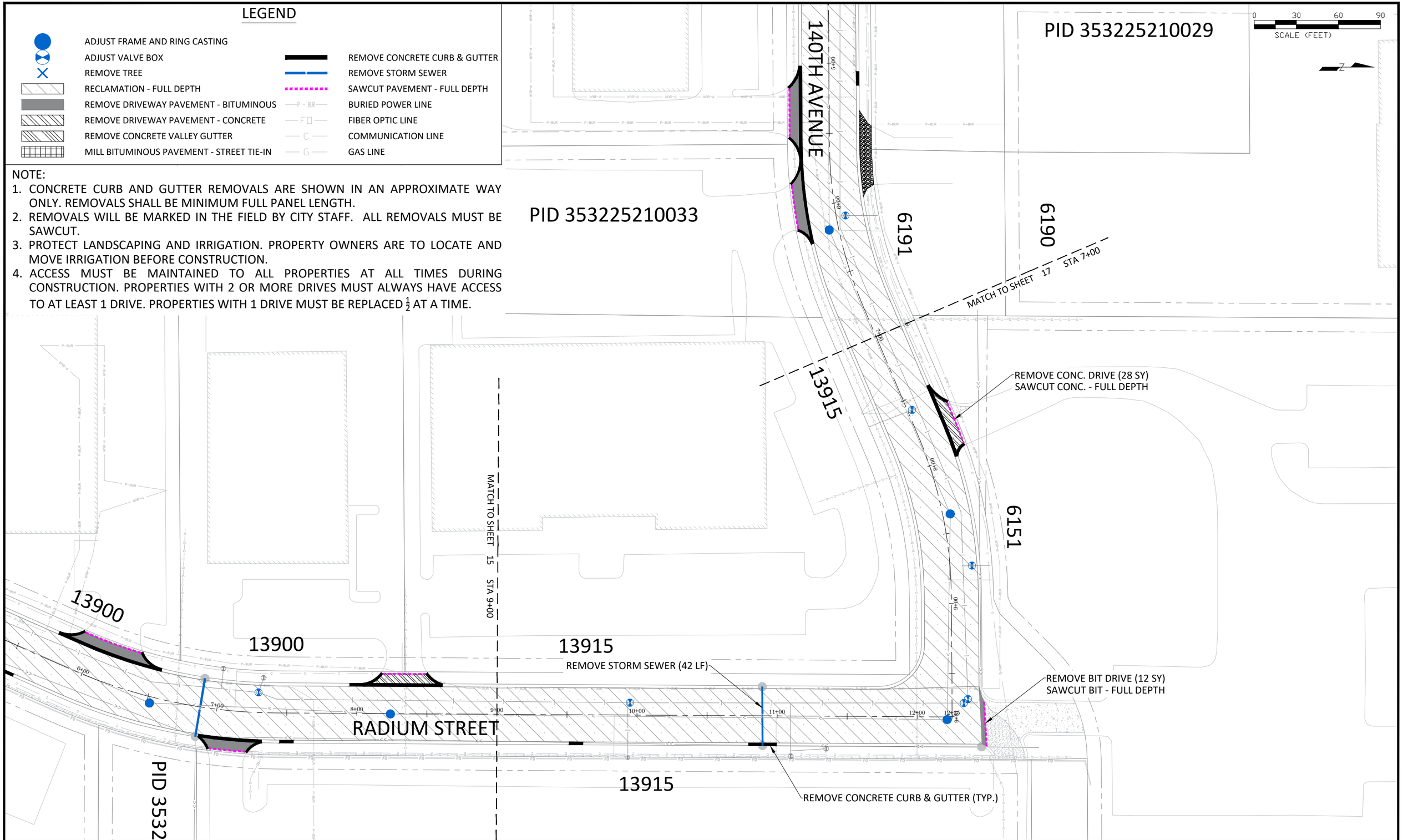

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CITY OF RAMSEY
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RAMSEY, MN 55303
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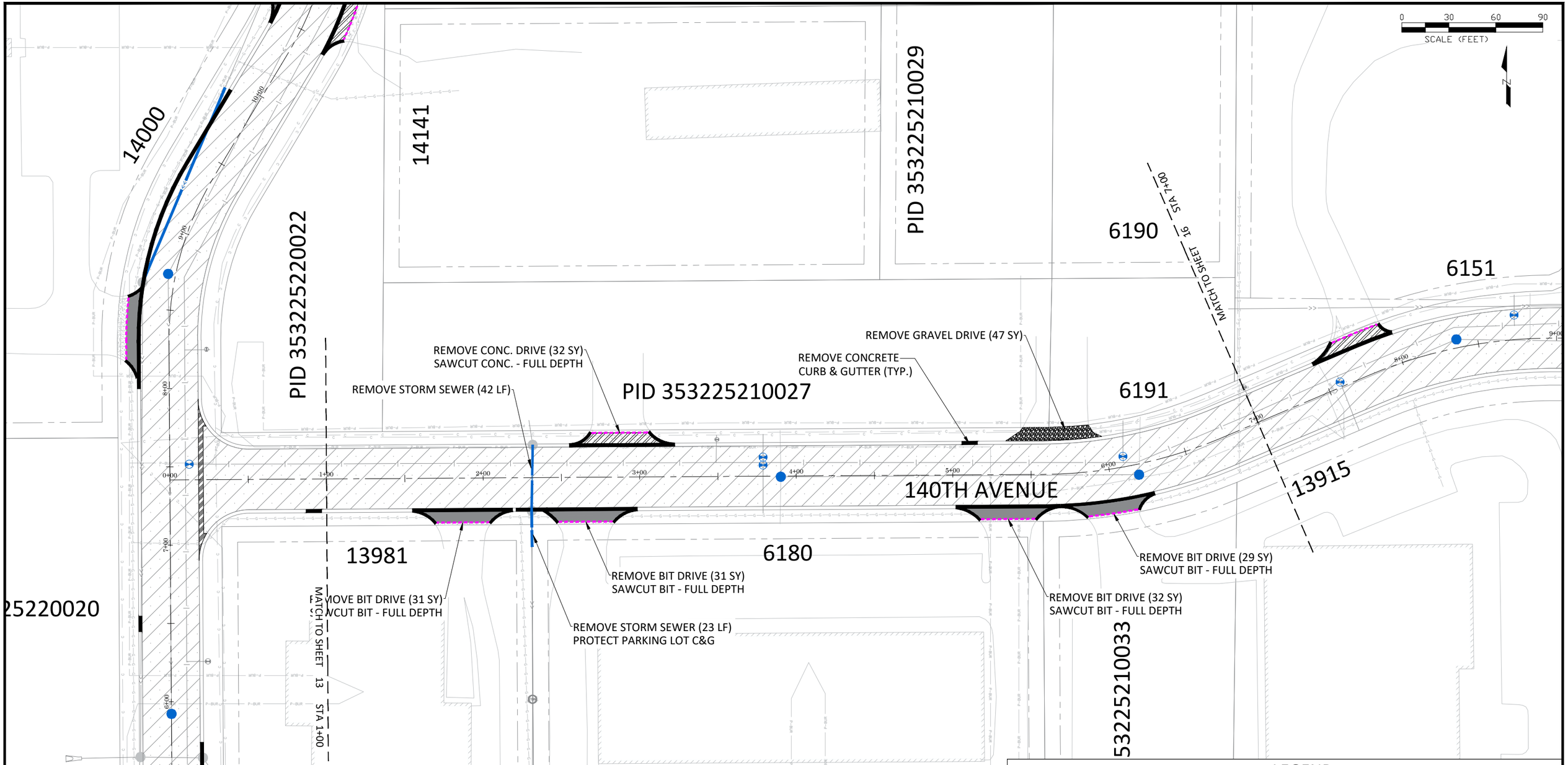
EXISTING CONDITIONS & REMOVALS
RADIUM STA. 9+00 TO 140TH 7+00

BUSINESS PARK 95 STREET RECONSTRUCTIONS
CITY PROJECT NO. 21-03
CITY OF RAMSEY, MINNESOTA

SHEET 16 OF 26 SHEETS

Mar 09, 2021 - 11:32am
G:\Engineering\AutoCad Dwgs\Projects A-M\Business Park 95 Recon 21-03\Plan Drawings\21-03 Existing Conditions & Removals.dwg



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LEGEND

- ADJUST FRAME AND RING CASTING
- ADJUST VALVE BOX
- REMOVE TREE
- RECLAMATION - FULL DEPTH
- REMOVE DRIVEWAY PAVEMENT - BITUMINOUS
- REMOVE DRIVEWAY PAVEMENT - CONCRETE
- REMOVE CONCRETE VALLEY GUTTER
- MILL BITUMINOUS PAVEMENT - STREET TIE-IN
- REMOVE CONCRETE CURB & GUTTER
- REMOVE STORM SEWER
- SAWCUT PAVEMENT - FULL DEPTH
- BURIED POWER LINE
- FIBER OPTIC LINE
- COMMUNICATION LINE
- GAS LINE

DATE	REVISION

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota

JOE FERIANCEK, P.E.
Date 3/9/21 Lic. No. 57095

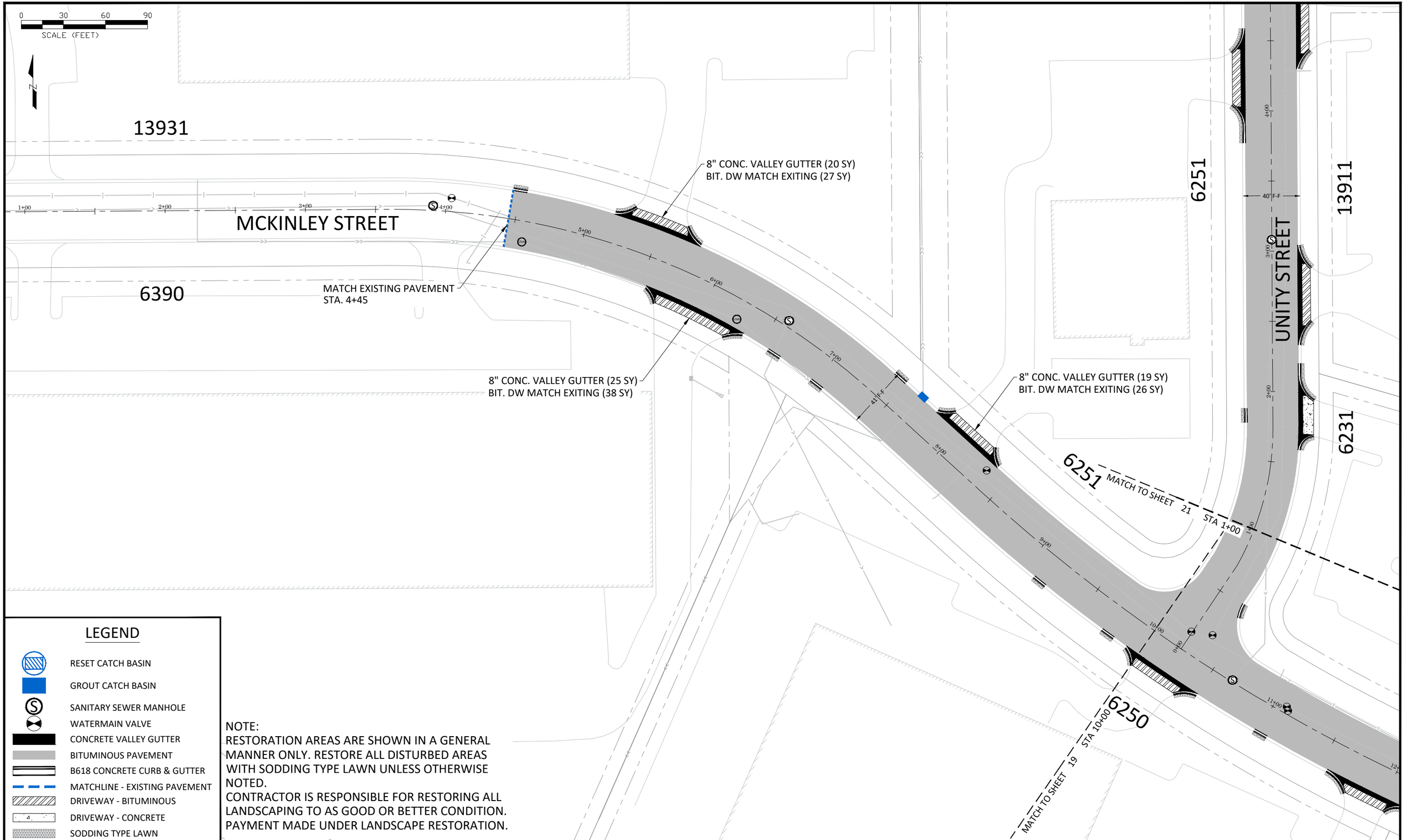
DESIGNED BY:	JJF	
DRAWN BY:	JJF	DATE: 3/9/21
CHECKED BY:	BRW	FILE: 21-03

City of RAMSEY
CITY OF RAMSEY
7550 SUNWOOD DRIVE
RAMSEY, MN 55303
(763) 427-1410 FAX (763) 433-9898

EXISTING CONDITIONS & REMOVALS
140TH STA. 0+00 TO 7+00

BUSINESS PARK 95 STREET RECONSTRUCTIONS
CITY PROJECT NO. 21-03
CITY OF RAMSEY, MINNESOTA

SHEET 17 OF 26 SHEETS



LEGEND

- RESET CATCH BASIN
- GROUT CATCH BASIN
- SANITARY SEWER MANHOLE
- WATERMAIN VALVE
- CONCRETE VALLEY GUTTER
- BITUMINOUS PAVEMENT
- B618 CONCRETE CURB & GUTTER
- MATCHLINE - EXISTING PAVEMENT
- DRIVEWAY - BITUMINOUS
- DRIVEWAY - CONCRETE
- SODDING TYPE LAWN

NOTE:
RESTORATION AREAS ARE SHOWN IN A GENERAL MANNER ONLY. RESTORE ALL DISTURBED AREAS WITH SODDING TYPE LAWN UNLESS OTHERWISE NOTED.
CONTRACTOR IS RESPONSIBLE FOR RESTORING ALL LANDSCAPING TO AS GOOD OR BETTER CONDITION. PAYMENT MADE UNDER LANDSCAPE RESTORATION.

DATE	REVISION

Mar 09, 2021 - 11:52am
G:\Engineering\AutoCad Dwgs\Projects A-M\Business Park 95 Recon 21-03\Plan Drawings\21-03 Street & Storm.dwg

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota

JOE FERIANCEK, P.E.
Date 3/9/21 Lic. No. 57095

DESIGNED BY:	JJF		
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CHECKED BY:	BRW	FILE:	21-03

City of RAMSEY

CITY OF RAMSEY
7550 SUNWOOD DRIVE
RAMSEY, MN 55303
(763) 427-1410 FAX (763) 433-9898

STREET IMPROVEMENTS
MCKINLEY STA. 0+00 TO 10+00

BUSINESS PARK 95 STREET RECONSTRUCTIONS
CITY PROJECT NO. 21-03
CITY OF RAMSEY, MINNESOTA

SHEET 18 OF 26 SHEETS

UNITY STREET

RADIUM STREET

PID 353225240016

PID 353225240005

MCKINLEY STREET

6231

6221

6211

6250

6230

6220

MATCH TO SHEET 21 STA 1+00

MATCH TO SHEET 23 STA 1+00

MATCH TO SHEET 18 STA 10+00

MATCH TO SHEET 20 STA 19+00

8" CONC. VALLEY GUTTER (26 SY)
BIT. DW MATCH EXITING (38 SY)

CONNECT TO EXISTING STORM CB
INV S. 856.78 (FIELD VERIFY)

8" CONC. VALLEY GUTTER (17 SY)
BIT. DW MATCH EXITING (22 SY)

8" CONC. VALLEY GUTTER (15 SY)
BIT. DW MATCH EXITING (18 SY)

CONNECT TO EXISTING STORM CBMH
INV S. 858.52 (FIELD VERIFY)

CONNECT TO EXISTING STORM CBMH
INV N. 856.52 (FIELD VERIFY)

44' - 30" RCP @ 0.59%

44' - 18" RCP @ 0.55%

8" CONC. VALLEY GUTTER (19 SY)
BIT. DW MATCH EXITING (25 SY)

8" CONC. VALLEY GUTTER (18 SY)
BIT. DW MATCH EXITING (22 SY)

8" CONC. VALLEY GUTTER (16 SY)
BIT. DW MATCH EXITING (19 SY)

8" CONC. VALLEY GUTTER (15 SY)
BIT. DW MATCH EXITING (18 SY)

CONNECT TO EXISTING STORM CBMH
INV N. 858.28 (FIELD VERIFY)

8" CONC. VALLEY GUTTER (18 SY)
BIT. DW MATCH EXITING (23 SY)

8" CONC. VALLEY GUTTER (15 SY)
BIT. DW MATCH EXITING (18 SY)

42' F-F

43' F-F

LEGEND

- RESET CATCH BASIN
- GROUT CATCH BASIN
- SANITARY SEWER MANHOLE
- WATERMAIN VALVE
- CONCRETE VALLEY GUTTER
- BITUMINOUS PAVEMENT
- B618 CONCRETE CURB & GUTTER
- MATCHLINE - EXISTING PAVEMENT
- DRIVEWAY - BITUMINOUS
- DRIVEWAY - CONCRETE
- SODDING TYPE LAWN

NOTE:
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0 30 60 90
SCALE (FEET)

DATE	REVISION

Mar 09, 2021 - 2:08pm
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JOE FERIANCEK, P.E.
Date 3/9/21 Lic. No. 57095

DESIGNED BY:	JJF	
DRAWN BY:	JJF	DATE: 3/9/21
CHECKED BY:	BRW	FILE: 21-03

CITY OF RAMSEY
7550 SUNWOOD DRIVE
RAMSEY, MN 55303
(763) 427-1410 FAX (763) 433-9898

STREET IMPROVEMENTS
MCKINLEY STA. 10+00 TO 19+00

BUSINESS PARK 95 STREET RECONSTRUCTIONS
CITY PROJECT NO. 21-03
CITY OF RAMSEY, MINNESOTA

0 30 60 90
SCALE (FEET)

PID 353225240

RADIUM STREET

42' F-F

MATCH TO SHEET 23 STA 1+00

6211

6220

CONNECT TO EXISTING STORM CB
INV S. 15" RCP 858.49 (FIELD VERIFY)
PROTECT LANDSCAPING

8" CONC. VALLEY GUTTER (16 SY)
BIT. DW MATCH EXITING (20 SY)

CONNECT TO EXISTING STORM CB
INV S. 857.60 (FIELD VERIFY)

63' - 15" RCP @ 1.01%

30' - 30" RCP @ 0.12%

44' - 12" RCP @ 1.00%

43' F-F

MCKINLEY STREET

17+00 18+00 19+00 20+00 21+00 22+00 23+00 24+00 25+00

CONNECT TO EXISTING STORM CBMH
INV E. 30" HDPE 855.50 (FIELD VERIFY)
INV N. 15" RCP 857.86 (FIELD VERIFY)

CONNECT TO EXISTING STORM CBMH
INV N. 857.16 (FIELD VERIFY)

6190

6191

8" CONC. VALLEY GUTTER (17 SY)
BIT. DW MATCH EXITING (22 SY)

ALT A PROJECT LIMITS

ALT A:
B 618 CURB & GUTTER (44' B-B WIDTH) (633 LF)

ALT A:
SODDING TYPE LAWN (710 SY)

FES 102
STA 24+87.10 46.2L
INV. S (CBMH 101) 855.00

R - 50'

104' - 42" RCP @ 0.96%

R - 50'

CBMH 101 60"
STA 25+28.64 48.9R
RIM 859.50
BUILD 8.50
INV. S (FES 100) 854.00
INV. N (FES 102) 854.00

R - 50'

ALT A: CONNECT TO EXISTING
STORM SEWER INV. 855.54
(FIELD VERIFY)

57' - 30" RCP @ 4.49%

15' - 42" RCP @ 6.86%

FES 200
STA 25+24.44 63.9R
INV. N () 853.00

FES 100
STA 25+35.49 61.7R
INV. N (CBMH 101) 853.00

ALT A:
8" CONC. VALLEY GUTTER (17 SY)
BIT. DW MATCH EXITING (81 SY)

NOTE:
TIE STORM SEWER PIPE

PID 353225240005

MATCH TO SHEET 19 STA 10+00

LEGEND

- RESET CATCH BASIN
- GROUT CATCH BASIN
- SANITARY SEWER MANHOLE
- WATERMAIN VALVE
- CONCRETE VALLEY GUTTER
- BITUMINOUS PAVEMENT
- B618 CONCRETE CURB & GUTTER
- MATCHLINE - EXISTING PAVEMENT
- DRIVEWAY - BITUMINOUS
- DRIVEWAY - CONCRETE
- SODDING TYPE LAWN

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DATE	REVISION

Mar 09, 2021 – 2:10pm
I:\Engineering\AutoCad Dwgs\Projects A-M\Business Park 95 Recon 21-03\Plan Drawings\21-03 Street & Storm.dwg

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Joe Feriancek

JOE FERIANCEK, P.E.
Date 3/9/21 Lic. No. 57095

DESIGNED BY:	JJF		
DRAWN BY:	JJF	DATE:	3/9/21
CHECKED BY:	BRW	FILE:	21-03

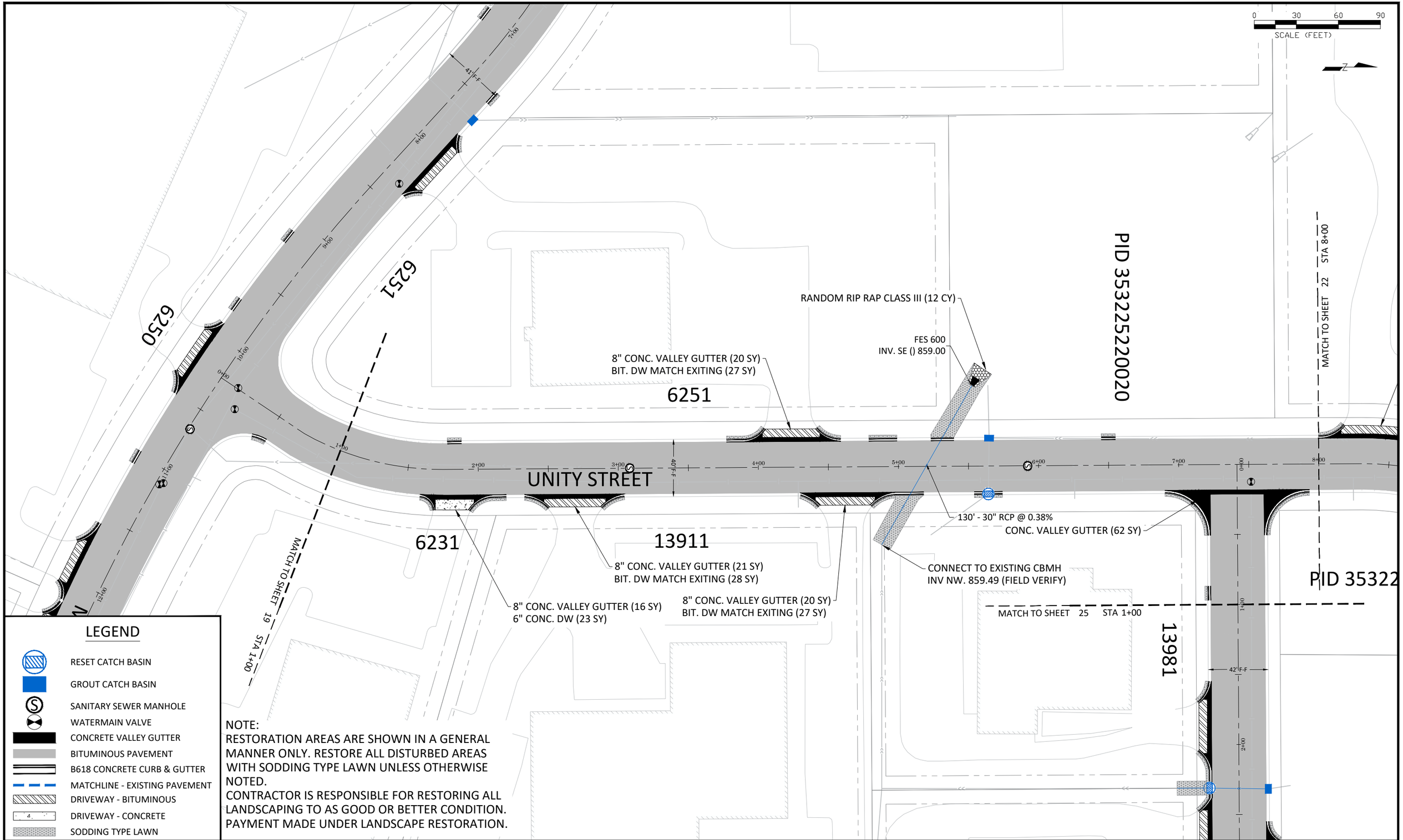
City of RAMSEY

CITY OF RAMSEY
7550 SUNWOOD DRIVE
RAMSEY, MN 55303
(763) 427-1410 FAX (763) 433-9898

STREET IMPROVEMENTS
MCKINLEY STA. 19+00 TO CDS

BUSINESS PARK 95 STREET RECONSTRUCTIONS
CITY PROJECT NO. 21-03
CITY OF RAMSEY, MINNESOTA

SHEET 20 OF 26 SHEETS



LEGEND

- RESET CATCH BASIN
- GROUT CATCH BASIN
- SANITARY SEWER MANHOLE
- WATERMAIN VALVE
- CONCRETE VALLEY GUTTER
- BITUMINOUS PAVEMENT
- B618 CONCRETE CURB & GUTTER
- MATCHLINE - EXISTING PAVEMENT
- DRIVEWAY - BITUMINOUS
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- SODDING TYPE LAWN

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DATE	REVISION

Mar 09, 2021 - 2:10pm
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JOE FERIANCEK, P.E.
Date 3/9/21 Lic. No. 57095

DESIGNED BY:	JJF		
DRAWN BY:	JJF	DATE:	3/9/21
CHECKED BY:	BRW	FILE:	21-03

City of RAMSEY
CITY OF RAMSEY
7550 SUNWOOD DRIVE
RAMSEY, MN 55303
(763) 427-1410 FAX (763) 433-9898

STREET IMPROVEMENTS
UNITY STA. 0+00 TO 8+00

BUSINESS PARK 95 STREET RECONSTRUCTIONS
CITY PROJECT NO. 21-03
CITY OF RAMSEY, MINNESOTA

0 30 60 90
SCALE (FEET)

N

BUNKER LAKE BOULEVARD (CSAH 116)

MATCH TO SHEET 21 STA 8+00

PID 353225220022

MATCH TO SHEET 25 STA 1+00

8" CONC. VALLEY GUTTER (20 SY)
BIT. DW MATCH EXITING (27 SY)

CONNECT TO EXISTING STORM CBMH
INV 863.72 (FIELD VERIFY)

135' - 18" RCP @ 2.02%

14000

CONNECT TO EXISTING STORM SEWER

8" CONC. VALLEY GUTTER (23 SY)
BIT. DW MATCH EXITING (32 SY)

8" CONC. VALLEY GUTTER (18 SY)
BIT. DW MATCH EXITING (22 SY)

6250

8" CONC. VALLEY GUTTER (18 SY)
BIT. DW MATCH EXITING (22 SY)

7+00 8+00 9+00 10+00 11+00 12+00 13+00 14+00 15+00 16+00 16+39

40' F-F

42' F-F

UNITY STREET

13981

14141

14155

6100

8" CONC. VALLEY GUTTER (19 SY)
6" CONC. DW (26 SY)

8" CONC. VALLEY GUTTER (21 SY)
BIT. DW MATCH EXITING (28 SY)

8" CONC. VALLEY GUTTER (16 SY)
BIT. DW MATCH EXITING (19 SY)

MATCH EXISTING PAVEMENT

LEGEND

- RESET CATCH BASIN
- GROUT CATCH BASIN
- SANITARY SEWER MANHOLE
- WATERMAIN VALVE
- CONCRETE VALLEY GUTTER
- BITUMINOUS PAVEMENT
- B618 CONCRETE CURB & GUTTER
- MATCHLINE - EXISTING PAVEMENT
- DRIVEWAY - BITUMINOUS
- DRIVEWAY - CONCRETE
- SODDING TYPE LAWN

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DATE	REVISION

Mar 10, 2021 - 5:10pm
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I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota

JOE FERIANCEK, P.E.
Date 3/9/21 Lic. No. 57095

DESIGNED BY:	JJF		
DRAWN BY:	JJF	DATE:	3/9/21
CHECKED BY:	BRW	FILE:	21-03

City of RAMSEY

CITY OF RAMSEY
7550 SUNWOOD DRIVE
RAMSEY, MN 55303
(763) 427-1410 FAX (763) 433-9898

STREET IMPROVEMENTS
UNITY STA. 8+00 TO B.L. BLVD

BUSINESS PARK 95 STREET RECONSTRUCTIONS
CITY PROJECT NO. 21-03
CITY OF RAMSEY, MINNESOTA

SHEET 22 OF 26 SHEETS

0 30 60 90
SCALE (FEET)

N

6220

6211

MATCH TO SHEET 20 STA 1+00

0005

PID 353225240023

PID 35

PID 353225240013

RADIUM STREET

8" CONC. VALLEY GUTTER (18 SY)
BIT. DW MATCH EXITING (23 SY)

CONNECT TO EXISTING STORM CBMH
INV 857.30 (FIELD VERIFY)

8" CONC. VALLEY GUTTER (16 SY)
BIT. DW MATCH EXITING (21 SY)

8" CONC. VALLEY GUTTER (14 SY)
BIT. DW MATCH EXITING (16 SY)

8" CONC. VALLEY GUTTER (23 SY)
BIT. DW MATCH EXITING (31 SY)

8" CONC. VALLEY GUTTER (17 SY)
6" CONC. DW (22 SY)

6191

42' - 12" RCP @ 0.93%

13900

CONNECT TO EXISTING STORM CBMH
INV 858.74 (FIELD VERIFY)

13900

13

MATCH TO SHEET 24 STA 9+00

8" CONC. VALLEY GUTTER (18 SY)
BIT. DW MATCH EXITING (23 SY)

CONNECT TO EXISTING STORM CBMH
INV 856.91 (FIELD VERIFY)

42' - 12" RCP @ 0.93%

RADIUM STREET

CONNECT TO EXISTING STORM CBMH
INV 858.35 (FIELD VERIFY)

PID 3532252

8" CONC. VALLEY GUTTER (15 SY)
BIT. DW MATCH EXITING (18 SY)

LEGEND

- RESET CATCH BASIN
- GROUT CATCH BASIN
- SANITARY SEWER MANHOLE
- WATERMAIN VALVE
- CONCRETE VALLEY GUTTER
- BITUMINOUS PAVEMENT
- B618 CONCRETE CURB & GUTTER
- MATCHLINE - EXISTING PAVEMENT
- DRIVEWAY - BITUMINOUS
- DRIVEWAY - CONCRETE
- SODDING TYPE LAWN

NOTE:
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DATE	REVISION

Mar 09, 2021 - 2:16pm
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JOE FERIANCEK, P.E.
Date 3/9/21 Lic. No. 57095

DESIGNED BY:	JJF		
DRAWN BY:	JJF	DATE:	3/9/21
CHECKED BY:	BRW	FILE:	21-03

City of RAMSEY

CITY OF RAMSEY
7550 SUNWOOD DRIVE
RAMSEY, MN 55303
(763) 427-1410 FAX (763) 433-9898

STREET IMPROVEMENTS
RADIUM STA. 0+00 TO 9+00

BUSINESS PARK 95 STREET RECONSTRUCTIONS
CITY PROJECT NO. 21-03
CITY OF RAMSEY, MINNESOTA

SHEET 23 OF 26 SHEETS

LEGEND

- RESET CATCH BASIN
- GROUT CATCH BASIN
- SANITARY SEWER MANHOLE
- WATERMAIN VALVE
- CONCRETE VALLEY GUTTER
- BITUMINOUS PAVEMENT
- B618 CONCRETE CURB & GUTTER
- MATCHLINE - EXISTING PAVEMENT
- DRIVEWAY - BITUMINOUS
- DRIVEWAY - CONCRETE
- SODDING TYPE LAWN

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0 30 60 90
SCALE (FEET)

N

PID 353225240023

PID 353225210033

PID 353225210029

140TH AVENUE

6191

6190

6151

13915

13900

MATCH TO SHEET 25 STA 7+00

MATCH TO SHEET 23 STA 9+00

8" CONC. VALLEY GUTTER (17 SY)
BIT. DW MATCH EXITING (22 SY)

8" CONC. VALLEY GUTTER (14 SY)

CONNECT TO EXISTING STORM CBMH
INV S. 12" RCP 860.74 (FIELD VERIFY)

42' - 12" RCP @ 0.93%

CONNECT TO EXISTING STORM CBMH
INV N. 12" RCP 860.35 (FIELD VERIFY)

RADIUM STREET

6+00 7+00 8+00 9+00 10+00 11+00 12+00 12+35

42' F-F

PID 3532

DATE	REVISION

Mar 08, 2021 - 2:18pm
G:\Engineering\AutoCad Dwgs\Projects A-M\Business Park 95 Recon 21-03\Plan Drawing\21-03 Street & Storm.dwg

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JOE FERIANCEK, P.E.
Date 3/9/21 Lic. No. 57095

DESIGNED BY:	JJF		
DRAWN BY:	JJF	DATE:	3/9/21
CHECKED BY:	BRW	FILE:	21-03

City of RAMSEY

CITY OF RAMSEY
7550 SUNWOOD DRIVE
RAMSEY, MN 55303
(763) 427-1410 FAX (763) 433-9898

STREET IMPROVEMENTS
RADIUM 9+00 TO 140TH 7+00

BUSINESS PARK 95 STREET RECONSTRUCTIONS
CITY PROJECT NO. 21-03
CITY OF RAMSEY, MINNESOTA

SHEET 24 OF 26 SHEETS

0 30 60 90
SCALE (FEET)

N

14000

14141

PID 353225210029

PID 353225220022

6190

STA 7+00
MATCH TO SHEET 24

6151

8" CONC. VALLEY GUTTER (20 SY)
6" CONC. DW (26 SY)

8" CONC. VALLEY GUTTER (20 SY)
BIT. DW MATCH EXITING (28 SY)

PID 353225210027

6191

42' - 15" RCP @ 0.31%

140TH AVENUE

13915

13981

6180

8" CONC. VALLEY GUTTER (19 SY)
BIT. DW MATCH EXITING (25 SY)

CONNECT TO EXISTING STORM CBMH
INV S 18" HDPE 861.44 (FIELD VERIFY)

23' - 18" HDPE @ 0.58%

8" CONC. VALLEY GUTTER (19 SY)
BIT. DW MATCH EXITING (25 SY)

8" CONC. VALLEY GUTTER (18 SY)
BIT. DW MATCH EXITING (23 SY)

8" CONC. VALLEY GUTTER (20 SY)
BIT. DW MATCH EXITING (26 SY)

MATCH TO SHEET 21 STA 1+00

PID 353225220020

PID 353225210100

LEGEND

- RESET CATCH BASIN
- GROUT CATCH BASIN
- SANITARY SEWER MANHOLE
- WATERMAIN VALVE
- CONCRETE VALLEY GUTTER
- BITUMINOUS PAVEMENT
- B618 CONCRETE CURB & GUTTER
- MATCHLINE - EXISTING PAVEMENT
- DRIVEWAY - BITUMINOUS
- DRIVEWAY - CONCRETE
- SODDING TYPE LAWN

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DATE	REVISION

Mar 30, 2021 - 5:53pm
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JOE FERIANCEK, P.E.
Date 3/9/21 Lic. No. 57095

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DRAWN BY:	JJF	DATE: 3/9/21
CHECKED BY:	BRW	FILE: 21-03

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7550 SUNWOOD DRIVE
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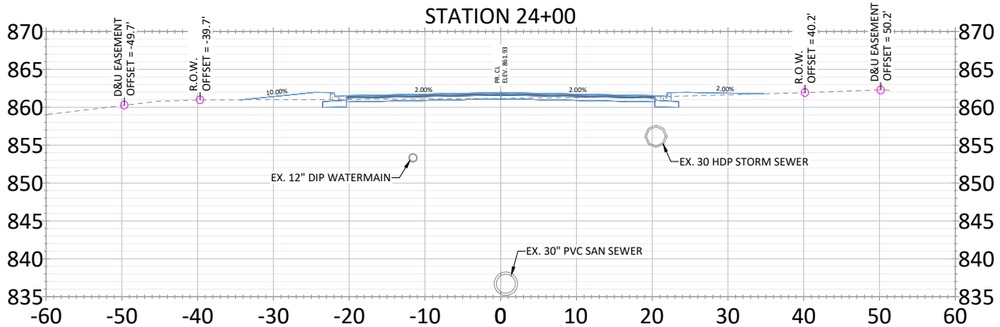
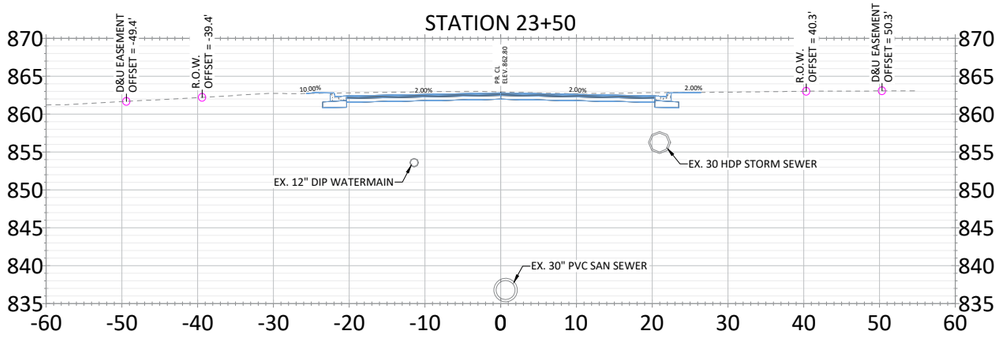
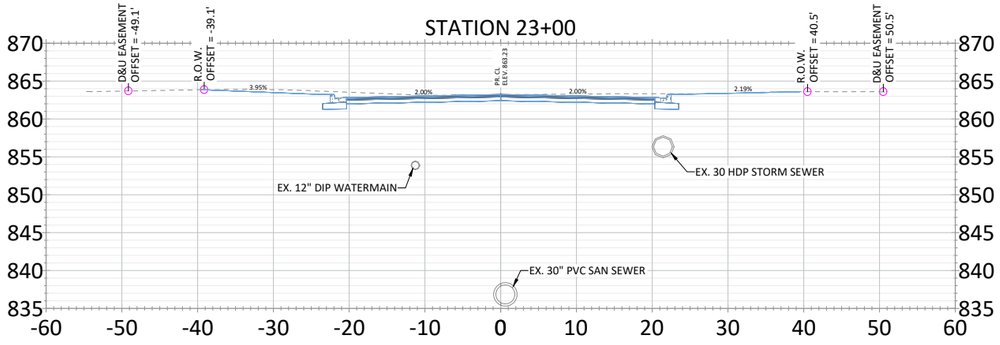
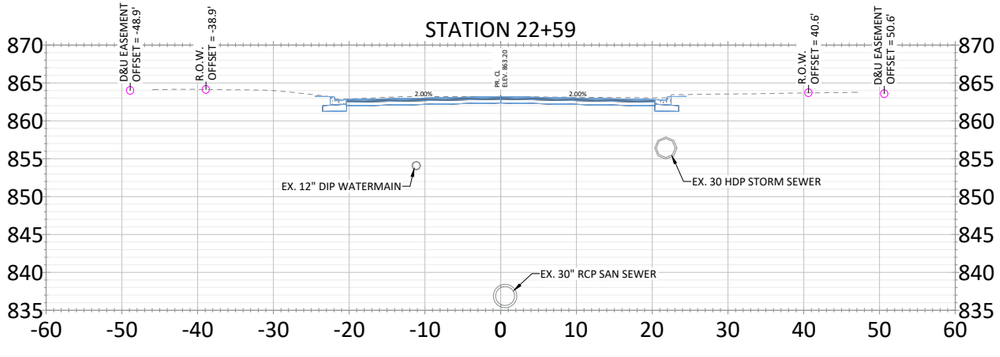
STREET IMPROVEMENTS
140TH STA. 0+00 TO 7+00

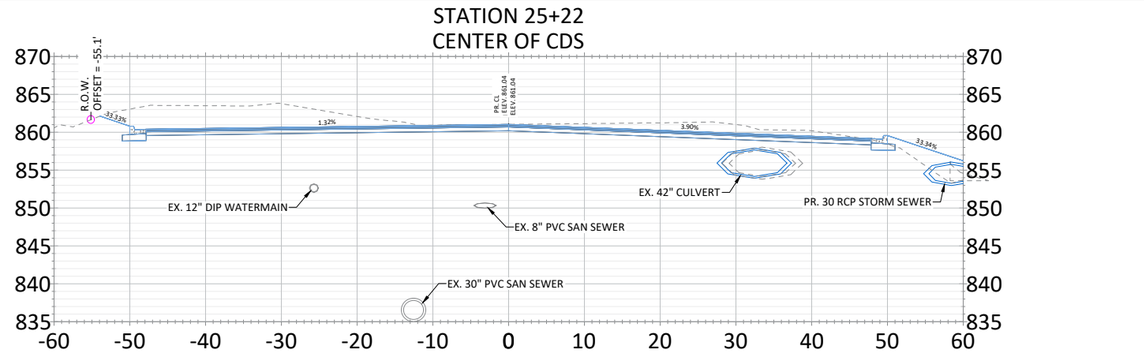
BUSINESS PARK 95 STREET RECONSTRUCTIONS
CITY PROJECT NO. 21-03
CITY OF RAMSEY, MINNESOTA

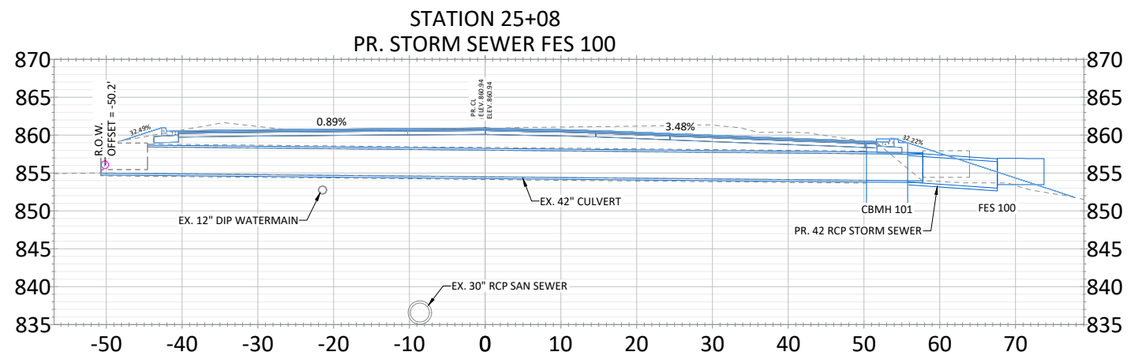


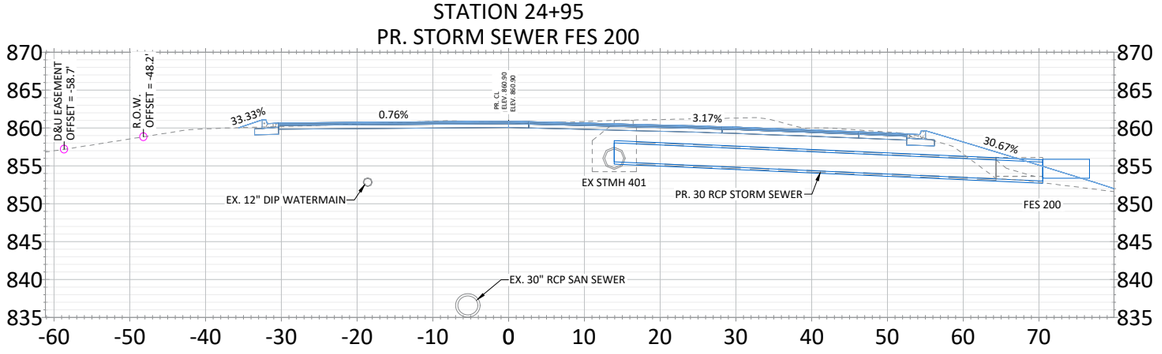


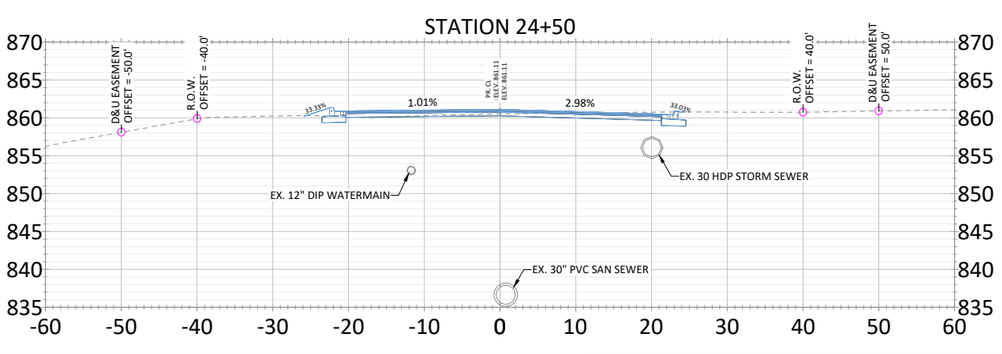












DATE	REVISION

Mar 09, 2021 - 10:31am
C:\Engineering\AutoCad Dwgs\Projects A-M\Business Park 95 Recon 21-03\Plan Drawings\21-03 Alt A CDS Alignment Layout.dwg

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota

JOE FERIANCEK, P.E.
Date 3/9/21 Lic. No. 57095

DESIGNED BY:	JJF	
DRAWN BY:	JJF	DATE: 3/9/21
CHECKED BY:	BRW	FILE: 21-03

CITY OF RAMSEY
7550 SUNWOOD DRIVE
RAMSEY, MN 55303
(763) 427-1410 FAX (763) 433-9898

ALT A MCKINLEY CDS - CROSS SECTIONS

BUSINESS PARK 95 STREET RECONSTRUCTIONS
CITY PROJECT NO. 21-03
CITY OF RAMSEY, MINNESOTA

SHEET 26 OF 26 SHEETS

IP 21-03 Business Park 95 Street Reconstructions
Street Segment Summary

Street Description				Street History				Pavement Coring Results				GPR Summary		
Street	**Segment Description**	**Length (feet)**	**Curb**	**2020 PASER**	**Year Built**	**Maint. 1**	**Maint. 2**	**Core No.**	**HMA Depth (inches)**	**Agg. Depth (inches)**	**WSB Recommended Maintenance**	**Avg HMA (inches)**	**Avg Agg. Base (inches)**	**Avg Section (inches)**
140th Avenue	Radium Street / Unity Street	981	concrete	4	1998	SC 2003	SC 2015	3	5	5.5	Full Depth Reclamation, Full Bituminous Removal and Replacement or Reconstruction	4.1	n/a	n/a*
McKinley Street	Unity Street / Sunfish Lake Boulevard	1,067	concrete	4	1995	SC 2003	SC 2015	5	6.5	6.5	2 Inch Mill and Overlay	6.0	n/a	n/a*
McKinley Street	Unity Street / End	1,320	concrete	4	1996	SC 2003	SC 2015	6	6	9.5	Full Depth Reclamation, Full Bituminous Removal and Replacement or Reconstruction	5.3	n/a	n/a*
								7	4.75	9	Full Depth Reclamation, Full Bituminous Removal and Replacement or Reconstruction			
Radium Street	McKinley Street / 140th Avenue	1,250	concrete	4	1998	SC 2003	SC 2015	8	4	5	Full Depth Reclamation, Full Bituminous Removal and Replacement or Reconstruction	4.0	n/a	n/a*
Unity Street	CR 116 / McKinley Street	1,696	concrete	4	1995	SC 2003	SC 2015	1	6	6	2 Inch Mill and Overlay	6.3	n/a	n/a*
								2	7	8	2.5 Inch Mill and Overlay			
								4	8	5.5	Full Depth Reclamation, Full Bituminous Removal and Replacement or Reconstruction			
	Total Length	**6,314**	**1.2 mi.**								* GPR was unable to determine agg. base thickness			

Memorandum

To: Joe Feriancek, PE

From: Andrea Blanchette, PE
Tom Wood
Sheue Torng Lee

Date: March 4, 2020

Re: Pavement Coring Forensic Report
City of Ramsey
WSB Project No. 015656-000

Introduction

WSB is pleased to submit this pavement forensics report detailing the results of the pavement coring which was completed on March 2, 2020 in the City of Ramsey. The various characteristics of the pavement cores were summarized to provide information to the City to assist in determining the appropriate pavement maintenance or rehabilitation method for the roadways.

A total of 8 (6 of which were taken in a patched area) pavement cores were obtained in the Business Park 95 Project Area and a total of 12 cores were obtained in the Regency Pond Project Area. The locations of the pavement cores are summarized in **Figure 1** and **Figure 2**. A summary of the pavement depths and conditions for the streets are shown in **Table 1**. Pictures of the cores obtained can be found in the **Appendix**.

701 XENIA AVENUE S | SUITE 300 | MINNEAPOLIS, MN | 55416 | 763.541.4800 | WSBENG.COM

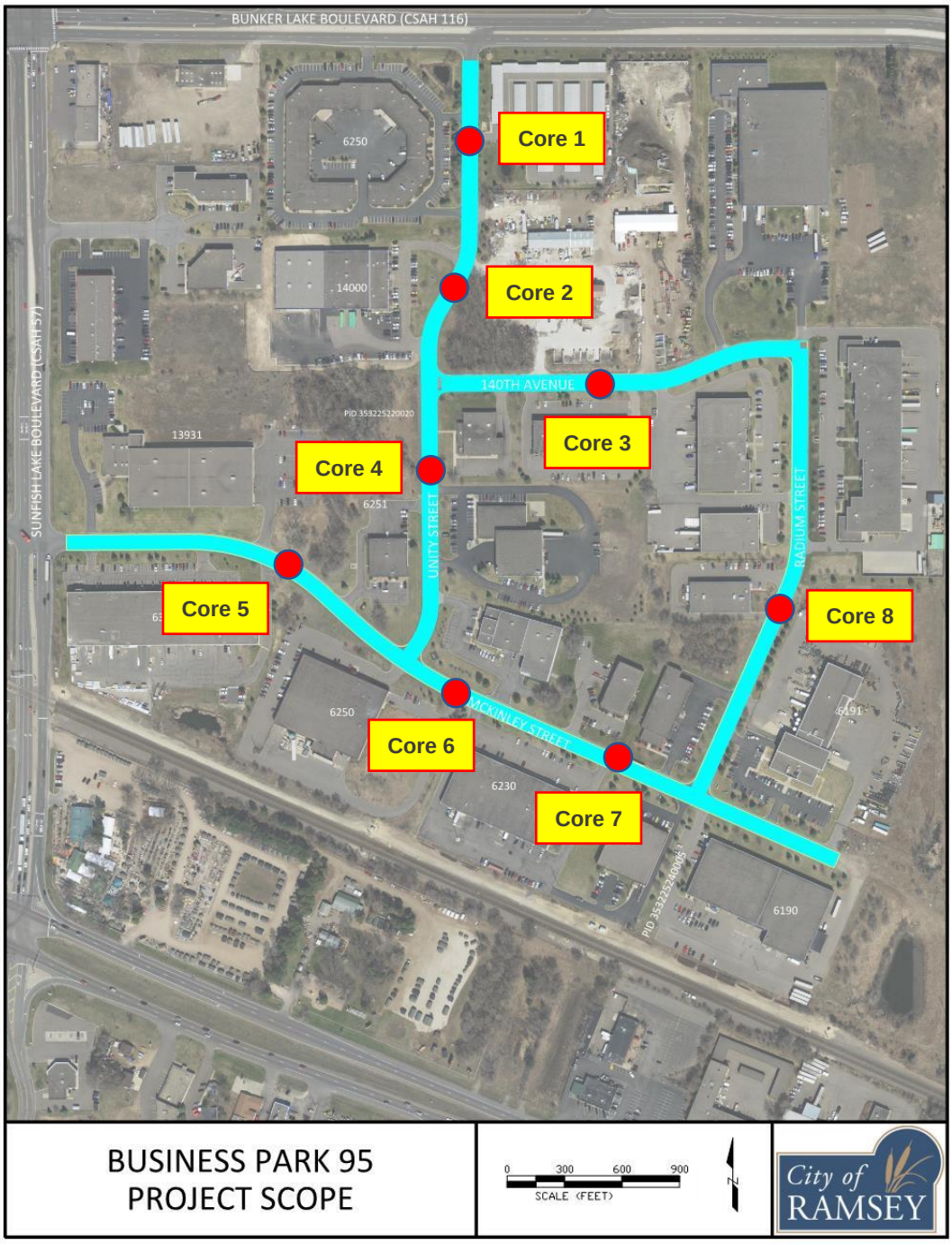


Figure 1. Pavement core locations in Business Park 95 Project Area

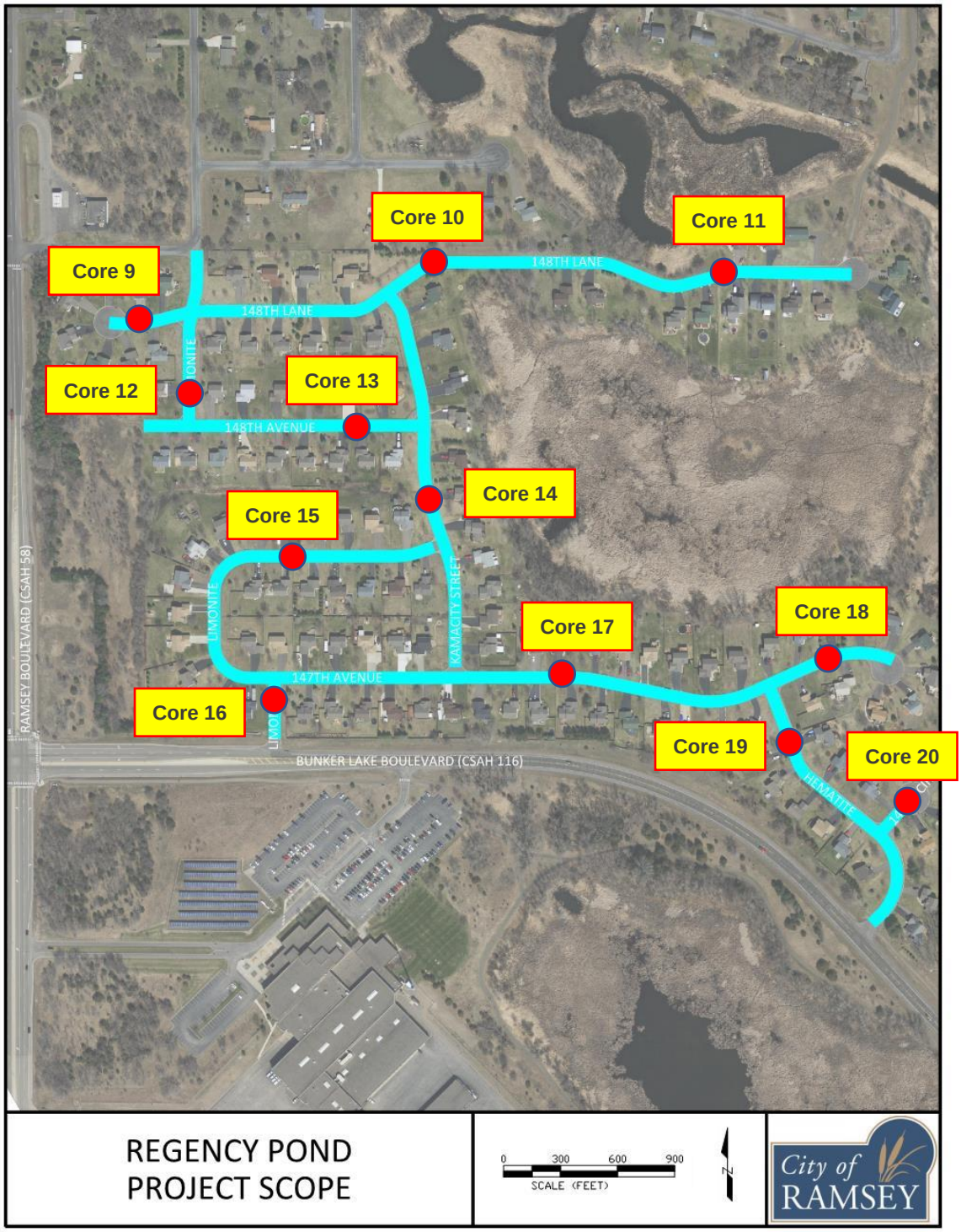


Figure 2. Regency Pond Project Area

Table 1. Pavement core location and information

Core ID	Location	Bit Depth (inches)	Agg. Depth [1] (inches)	Notes	Recommended Maintenance
1	Unity Street	6	6	The top lift of pavement was 1.25 inches. This layer was starting to show signs of deterioration losing fines and binder. The rest of the core was bonded and showing minimal signs of aging.	2 Inch Mill and Overlay
2	Unity Street **(On a Patched Area)**	7	8	The top lift of pavement was 2 inches. This layer was starting to show signs of deterioration losing fines and binder. The patch was not bonded to the pavement section and was completely delaminated. The rest of the core was in decent shape.	2.5 Inch Mill and Overlay
3	140th Avenue **(On a Patched Area)**	5	5.5	The top lift of pavement was 2.5 inches. The core completely fell apart upon removal from the hole.	Full Depth Reclamation, Full Bituminous Removal and Replacement or Reconstruction
4	Unity Street **(On a Patched Area)**	8	5.5	The top lift of pavement was 2 inches. The top 4 inches of pavement broke off from the rest of the core and showed parts were delaminated with no bond. Below the top 4 inches, the core completely fell apart.	Full Depth Reclamation, Full Bituminous Removal and Replacement or Reconstruction
5	McKinley Street	6.5	6.5	The top lift of pavement was 1.75 inches. The core was in good shape, all the layers were bonded together well.	2 Inch Mill and Overlay

6	McKinley Street **(On a Patched Area)**	6	9.5	The top 3 inches of pavement was completely raveled and broke apart upon removal from the core hole. The bottom 3 inches was bonded together. Because the top 3 inches crumbled the lift thickness of the wear course could not be determined.	Full Depth Reclamation, Full Bituminous Removal and Replacement or Reconstruction
7	McKinley Street **(On a Patched Area)**	4.75	9	This core was in very poor condition with delamination of the patch as well as a severe loss of fines and binder throughout.	Full Depth Reclamation, Full Bituminous Removal and Replacement or Reconstruction
8	Radium Street **(On a Patched Area)**	4	5	This core was in very poor condition with delamination of the patch as well as a severe loss of fines and binder throughout. The core broke apart upon removal from the core hole.	Full Depth Reclamation, Full Bituminous Removal and Replacement or Reconstruction
9	148th Lane	3	6	The core was in fair condition. The layers were bonded together. The core was starting to show signs of aging losing fines and binder.	Full Depth Reclamation, Full Bituminous Removal and Replacement or Reconstruction
10	148th Lane	3	4	This core was in very poor condition and broke apart upon removal from the core hole.	Full Depth Reclamation, Full Bituminous Removal and Replacement or Reconstruction
11	148th Lane	2.5	5	The core was in fair to poor condition. The layers were bonded together. The core was starting to show signs of aging losing fines and binder.	Full Depth Reclamation, Full Bituminous Removal and Replacement or Reconstruction
12	Limonite	2	4.5	The core was in fair condition. This was a very thin lift of	Full Depth Reclamation, Full Bituminous Removal

				pavement and was starting to show signs of aging, losing fines and binder.	and Replacement or Reconstruction
13	148th Avenue	2	6	This core was in very poor condition and broke apart upon removal from the core hole.	Full Depth Reclamation, Full Bituminous Removal and Replacement or Reconstruction
14	Kamacity Street	2.75	3.75	The core was in fair to poor condition. The layers were bonded together. The core was starting to show signs of aging losing fines and binder.	Full Depth Reclamation, Full Bituminous Removal and Replacement or Reconstruction
15	Limonite	2	7	This core was in very poor condition and broke apart upon removal from the core hole.	Full Depth Reclamation, Full Bituminous Removal and Replacement or Reconstruction
16	Limonite	2	5	The core was in fair condition. This was a very thin lift of pavement.	Full Depth Reclamation, Full Bituminous Removal and Replacement or Reconstruction
17	147th Avenue	3	4	The core was in fair condition. The layers were bonded together. The core was starting to show signs of aging losing fines and binder.	Full Depth Reclamation, Full Bituminous Removal and Replacement or Reconstruction
18	147th Avenue	4	5	This core was in very poor condition and broke apart upon removal from the core hole.	Full Depth Reclamation, Full Bituminous Removal and Replacement or Reconstruction
19	Hematite	3.75	4.75	The core was in fair condition. The layers were bonded together. The core was starting to show signs of aging losing fines and binder.	Full Depth Reclamation, Full Bituminous Removal and Replacement or Reconstruction
20	146th Circle	2.5	11	The core was in good to fair condition. This was a thin lift of pavement.	Full Depth Reclamation, Full Bituminous Removal and Replacement or Reconstruction
[1] Subgrade material was observed to be sand material on Cores 1 through 10 and sand/gravel on Cores 11 through 20.					

Summary of Findings

Business Park 95

The cores taken along the roadways in this project area varied in bituminous thickness from 4 to 8 inches. Cores 1, 2 and 5 were in good condition with the layers bonded together well and the bituminous condition not yet showing signs of aging. However, the remainder of the pavements in this project area were either showing severe signs of aging below the pavement surface, including crumbling upon removal from the core hole. Because of this, it is recommended to perform either a full depth reclamation, full depth bituminous removal and replacement or full reconstruction in this project area. There is not enough sound material in these locations to do a partial depth mill and overlay.

Regency Pond

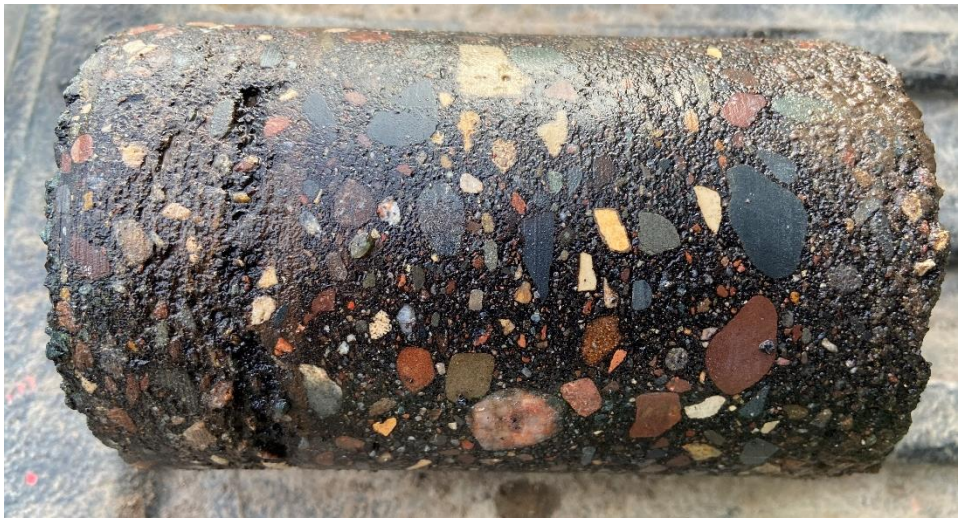
The cores taken along the roadways in this project area varied in bituminous thickness from 2 to 4 inches. In general, the bituminous was either very thin, or shown to be in very poor condition. Because of this, it is recommended to perform either a full depth reclamation, full depth bituminous removal and replacement or full reconstruction in this project area. There is not enough sound material in these locations to do a partial depth mill and overlay.

Appendix

City of Ramsey

Coring Pictures

Core 1 (Unity Street)

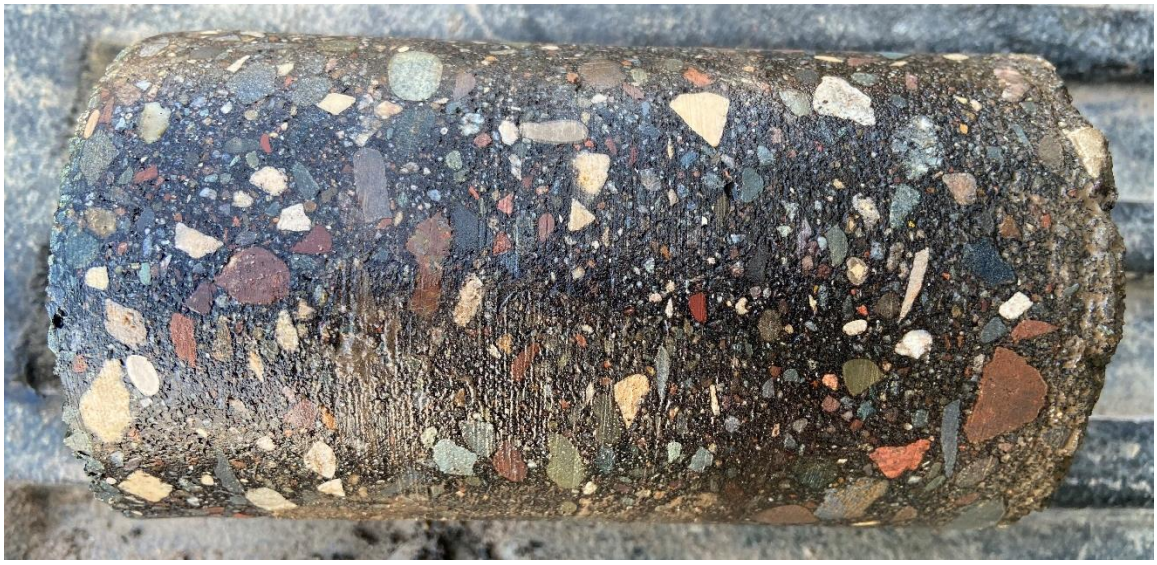


Core 2 (Unity Street on Patched Area)

Core 3 (140th Avenue on a Patched Area)

Core 4 (Unity Street on Patched Area)

Core 5 (McKinley Street)



Core 6 (McKinley Street on a Patched Area)

Core 7 (McKinley Street on a Patched Area)

Core 8 (Radium Street on a Patched Area)

Core 9 (148th Lane)

Core 10 (148th Lane)

Core 11 (148th Lane)

Core 12 (Limonite)

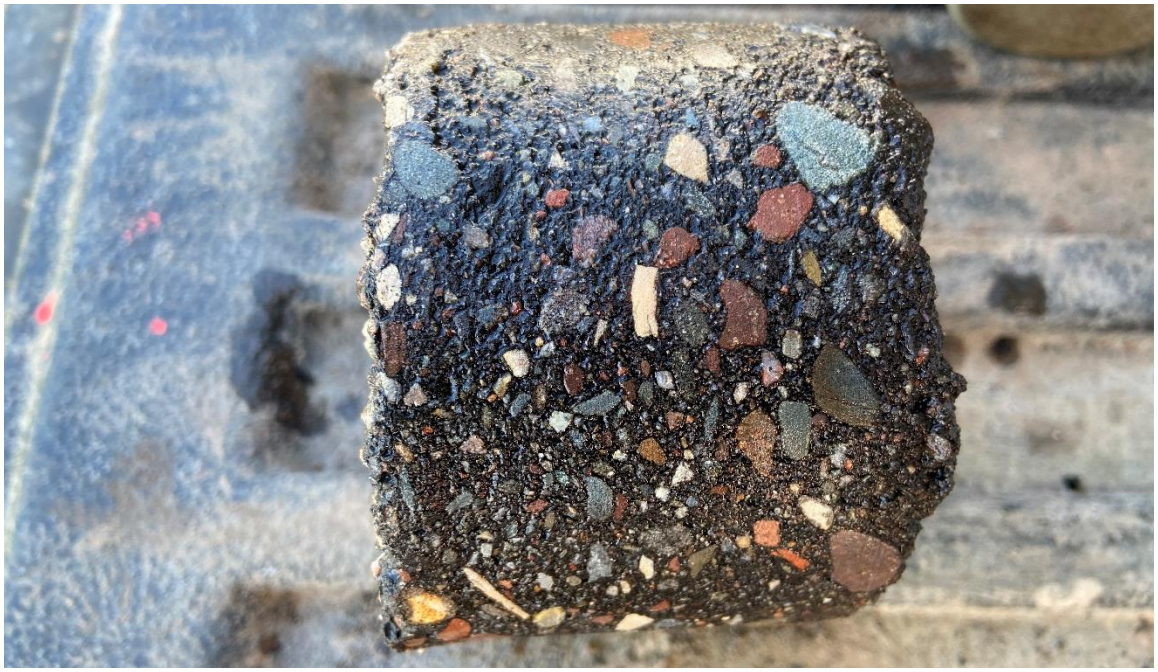
Core 13 (148th Avenue)

Core 14 (Kamacity Street)

Core 15 (Limonite)

Core 16 (Limonite)

Core 17 (147th Avenue)



Core 18 (147th Avenue)

Core 19 (Hematite)

Core 20 (146th Circle)

C V T

Chosen Valley Testing, Inc.

Design Phase Geotechnical Evaluation:

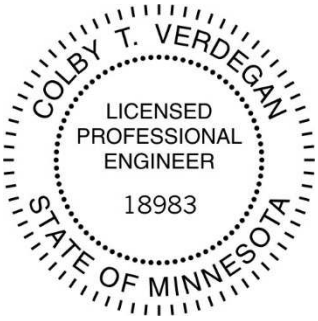
Proposed Ramsey Business Park Infrastructure
RepairMcKinley St NW, Unity St NE, Radium St. NW, 140th Ave NW
Ramsey, Minnesota

Prepared for:

City of Ramsey
c/o: Joe Feriancek

December 10, 2020
17624.20.MNS

Certification:



I hereby certify that this report was prepared by me or under my direct supervision, and that I am a duly licensed engineer under the laws of the State of Minnesota.

Colby T. Verdegan, PE
Geotechnical Engineer
Registration Number 18983
Date: December 10, 2020

Chosen Valley Testing, Inc.

Geotechnical Engineering and Testing, 141 37th Ave. N., St. Cloud, Minnesota 56303 (320) 774-3500 fax (320) 393-3309

City of Ramsey
c/o: Joe Feriancek
7550 Sunwood Drive NW
Ramsey, MN 55303
mweidner@ic.ramsey.mn.us

December 9, 2020

Re: Design Phase Geotechnical Evaluation
Proposed Business Park 95 Infrastructure Improvements
McKinley St. NW, Unity St. NW, Radium St. NW, 140th Ave. NW
Ramsey, Minnesota
CVT Number: 17624.20.MNS

Dear Mr. Feriancek,

As authorized, we have completed the geotechnical evaluation for the proposed infrastructure improvements of McKinley St. NW, Unity St. NW, Radium St, NW., 140th St NW in Ramsey, Minnesota. The attached report provides details of our findings and recommendations for the proposed project. Photographs of the pavement cores taken at each location are also attached. CVT appreciates the opportunity to provide geotechnical services on this project. If you have any questions about our report, please feel free to contact us at (320) 774-3500.

Sincerely,
Chosen Valley Testing, Inc.

Hannah Fischer
Graduate Engineer

Colby T. Verdegan, PE
President/Chief Engineer

TABLE OF CONTENTS

Design Phase Geotechnical Report
Proposed Business Park 95 Infrastructure Improvements
McKinley St. NW, Radium St NW., Unity St. NW 140th Ave NW.
Ramsey, Minnesota

CVT Project Number: 17624.20.MNS
Date: December 9, 2020

A. Introduction

The intent of this report is to present our findings and describe the means used to collect the data. The data was collected for a specific purpose and may not be suitable for other purposes. We should be consulted before attempting to use the data for other uses. A complete and thorough review of the entire document, including its assumptions and its appendices, should be undertaken immediately upon receipt.

A.1. Purpose

This geotechnical report was prepared to assist planning for proposed infrastructure improvements of McKinley St. NW, Unity St. NW, Radium St, NW., 140th St NW in Ramsey, Minnesota. Our services were authorized by Mr. Joe Feriancek from The City of Ramsey.

A.2. Scope

To obtain data for analysis, a total of 8 penetration test borings were performed. The borings were drilled to depths of about 10 feet. Our engineering scope consisted of providing this report of our findings and including geotechnical recommendations for construction and design of potential utility replacements and paved areas.

A.3. Boring Locations and Elevations

The preferred boring locations were indicated to Chosen Valley Testing (CVT) on a site plan provided by the city. Several of the borings were relocated due to the proximity of utilities. The Boring Location Sketch in the Appendix shows the approximate locations as drilled on aerial imagery using Google Earth software. Ground surface elevations were estimated using MnTOPO software from the Minnesota DNR and are indicated on the Log of Boring sheets in the Appendix. The elevations should be considered approximate.

A.4. Geologic Background

A geotechnical report is based on subsurface data collected for the specific structure or problem. Available geologic data from the region can help interpretation of the data and is briefly summarized in this section.

Geologic maps indicate the soils in the area are dominated by terrace deposited sands. Bedrock is commonly more than 50 feet below the surface and is not a consideration for this project.

B. Subsurface Data

The borings were performed using penetration test procedures (Method of Test D1586 of the American Society for Testing and Materials). This procedure allows for the extraction of intact soil specimen from deep in the ground. With this method, a hollow-stem auger is drilled to the desired sampling depth. A 2-inch OD sampling tube is then screwed onto the end of a sampling rod, inserted through the hole in the auger's tip, and then driven into the soil with a 140-pound hammer dropped repeatedly from a height of 30 inches above the sampling rod. The sampler is driven 18 inches into the soil unless the material is too hard. The samples are generally taken at 2½ to 5-foot intervals. The core of soil obtained was classified and logged by our drilling personnel at the site and a representative portion was then sealed and delivered to our laboratory for further review.

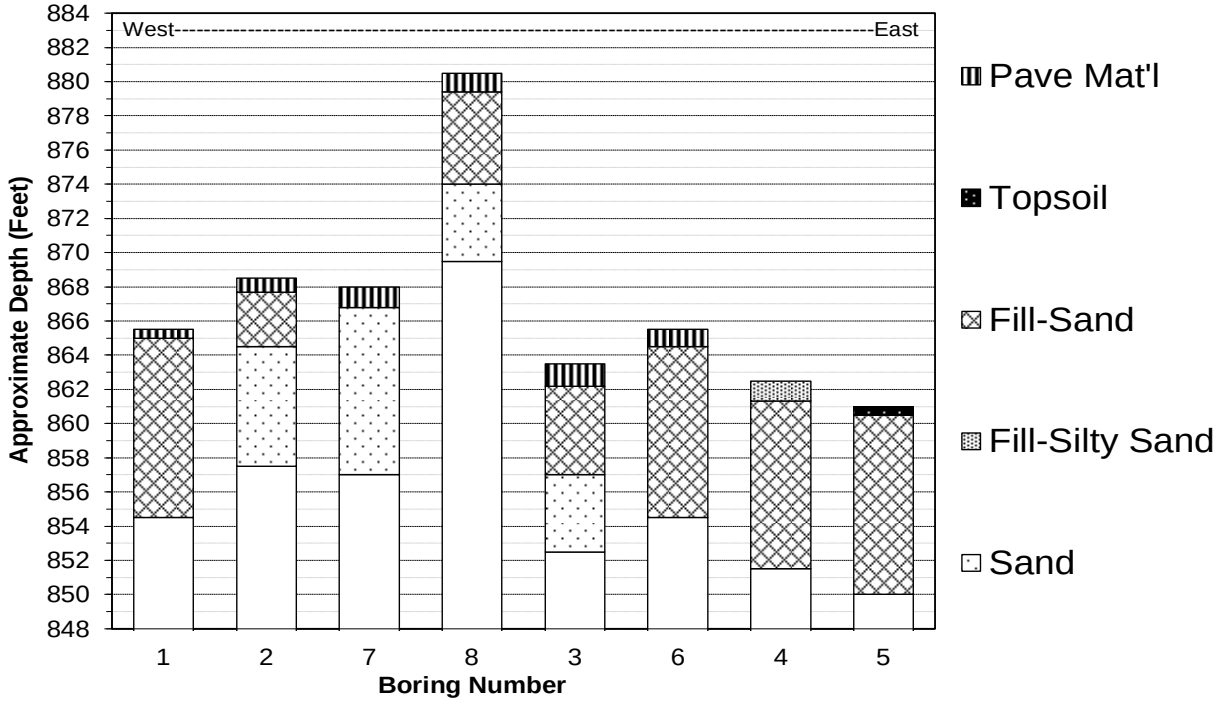
B.1. Strata

At the surface, the pavement borings encountered about 3 to 6 ½ inches of asphalt over 3 to 12 inches of aggregate base. Boring B-04 encountered about 1 foot of silty sand fill at the surface. About ½ foot of topsoil was encountered in Boring B-05 at the surface.

Below the surface materials, most of the borings encountered fill to possible fill to depths of 4 feet or more. The fill consisted primarily of rather clean sands but Boring B-06 contained some silty sand.

Below the surface materials and fill, most of the borings were dominated by clean sands natural sands (poorly graded sand and poorly graded sand with silt).

For the reader's convenience, we have summarized the soil boring data in the following cross-section. The reader is referred to the boring logs in the Appendix for more detailed information.



B.2. Penetration Test Results

Penetration Test Results: The number of blows needed for the hammer to advance the penetration test sampler is an indicator of soil characteristics. The results tend to be more meaningful for natural mineral soils, than for fill soils. In fill soils, density tests are more meaningful.

Penetration resistance values ("N" Value) of 5 to 25 blows per foot (BPF) were recorded in the fill and possible materials.

The natural sands on site returned values of 5 to 12 BPF, indicating they were very loose to medium dense.

A key to descriptors used to qualify the relative density of soil (such as *soft, stiff, loose,* and *dense*) can be found on the Legend to Soil Description in the Appendix.

B.3. Groundwater Data

During drilling, the drillers may note the presence of moisture on the sampler, in the cuttings, or in the borehole itself. These findings are reported on the Logs of Boring. Because water levels vary with weather, time of year, and other factors, the presence or lack of water during exploration is subject to interpretation and is not always conclusive.

Water was not observed in any of the borings. Groundwater levels at the site are expected to fluctuate seasonally similar to levels in the nearby Mississippi River and ponds, as well as with local weather patterns.

C. Project Design Data

Each structure has a different loading configuration and intensity, different grades, and different structural and performance tolerances. Therefore, the geotechnical exploration will be construed differently from one structure to another. If the initial structure should change design, we should be engaged to review these conditions with respect to the prevailing soil conditions. Without the opportunity to review any such changes, the recommendations may no longer be valid or appropriate.

The project consists of complete reconstruction of pavements and the installation of watermain, storm sewer and sanitary sewer along McKinley St. NE, Unity St. NW., Radium St NW., and 140th Ave. NW. CVT assumes the pipes will be installed at depths between 5 and 10 feet using open cut excavations or direction drilling.

We have assumed final grades will be at or close to the existing grades. The new pavement is expected to consist of asphalt over aggregate base.

D. Utility Recommendations

D.1. Groundwater/De-watering

As mentioned earlier, water was not observed in the borings. If water is encountered during the

excavation, well-points or dewatering wells will likely be required.

D.2. Trench Sidewalls

The contractor will be required to slope or shore the excavations as needed to meet OSHA requirements for safety. The soils encountered would be expected to classify as Type C soils as defined by OSHA. Trench boxes or other stabilization methods may be necessary if excavations encroach near existing utilities or structures.

D.3. Trench Bottom Stability

Depending upon location and depth, the utilities are expected to bear rather clean sands. These materials are considered generally suitable for support of pipes. If soft and unstable conditions are encountered, we recommend placing bedding of coarse sand or gravel at the base of the trenches to provide a more stable bottom for crews laying the pipes. Based on the data, we do not expect this will be needed.

In order to reduce the potential for point loads on the pipes, we recommend removing any cobbles or boulders to a depth of at least 6 to 8 inches from around pipes and replacing those materials with clean sand or gravel that can more readily conform to the culvert.

D.4. Fill Placement and Compaction

Soils placed as backfill below paved areas should ideally be compacted to 100% of their maximum standard Proctor density (ASTM D 698) in the upper 3 feet, and to at least 95% below. In green areas, 90% compaction is normally adequate.

The onsite soils are considered generally suitable for use as backfill above utilities, provided they can be adequately compacted. To reduce potential for differential frost action, fill placed in upper part of the trenches should ideally be placed in layers that align reasonably similar to the soil stratification on the trench side walls. In this case, all the soils appear to be reasonably uniform and layering does not appear to be necessary.

E. Pavement Recommendations

E.1. Stripping and Grading

We recommend removing the existing asphalt, aggregate base, and any organics soils from within 3 feet of the proposed pavement section subgrade before placing any new pavement material sections. The existing paving materials appeared to be quite varied, especially with regard to the depth of the aggregate base materials. It may be possible to reclaim and reuse the existing asphalt and aggregate for use as part of the new pavement's aggregate base, provided it meets MnDOT specifications.

After the removals, utility construction, and grading, the near-surface soils are expected to primarily consists of clean sands and silty sands. We recommend scarifying and compacting all near-surface soils in order to even out any localized discontinuities in the subgrade materials and to provide a more

gradational transition between differing materials. This action is intended to limit differential frost heave and provide more uniform pavement support.

Subgrades should be test rolled using a tandem axle truck. Any soft areas detected should be scarified, dried, and recompacted. If time constraints prohibit drying, soil corrections, extra aggregate base, breaker run, sand subbase, and/or geotextiles may be necessary for stabilization.

E.2. Preliminary Pavement Design

As mentioned earlier, subgrade soils are expected to consist primarily of clean sands and silty sands. The effective Hveem-stabilometer R-values for dominant sands and silty sands would be expected to range from 30 to 70, and associated Soil Factors from 50 to 75.

As noted before, the existing pavements could possibly be milled and then reused as base material provided the reclaimed material meets Mn/DOT Specification 3138 for Class 5 Aggregate Base.

F. Construction Testing and Documentation

F.1. Excavation

A variety of equipment is expected to be capable of performing earthwork and grading. An excavator or backhoe with a smooth-lipped bucket is recommended for completing any excavations. This is intended to limit disturbance to the supporting soils being left in place, while also producing a smooth working surface.

F.2. Compaction

Fill should be placed in lifts adjusted to the compactor being used and the material being compacted. We recommend limiting lifts to no more than 1 foot, assuming large, self-propelled or tow-behind compactors are used. Thinner lifts should be used for lighter compaction equipment.

F.3. Cold Weather

If the earthwork occurs during freezing temperatures, good winter construction practices should be used. No frozen fill should be used nor should structural filling take place on frozen ground.

F.4. Construction Phase Testing and Documentation

The bottom of all excavations, grading, and roadway subgrade should be evaluated and documented by geotechnical personnel after the unsuitable materials are removed and before placement of any fill or pavement. Samples of any fill materials and/or alternative gradations of materials proposed for use should be submitted for approval before use. The City may wish to have, or may be obligated to have tests performed regarding the other various paving components. Specification of such requirements is normally the responsibility of the City or their designated design consultant.

G. Level of Care

The services provided for this project have been conducted in a manner consistent with that level of care and skill ordinarily exercised by members of the profession currently practicing in this area, under similar budget and time constraints. This is our professional responsibility. No other warranty, expressed or implied, is made.

Appendix

Boring Location Sketch

Log of Boring # 1-8

C V T

Chosen Valley Testing, Inc.

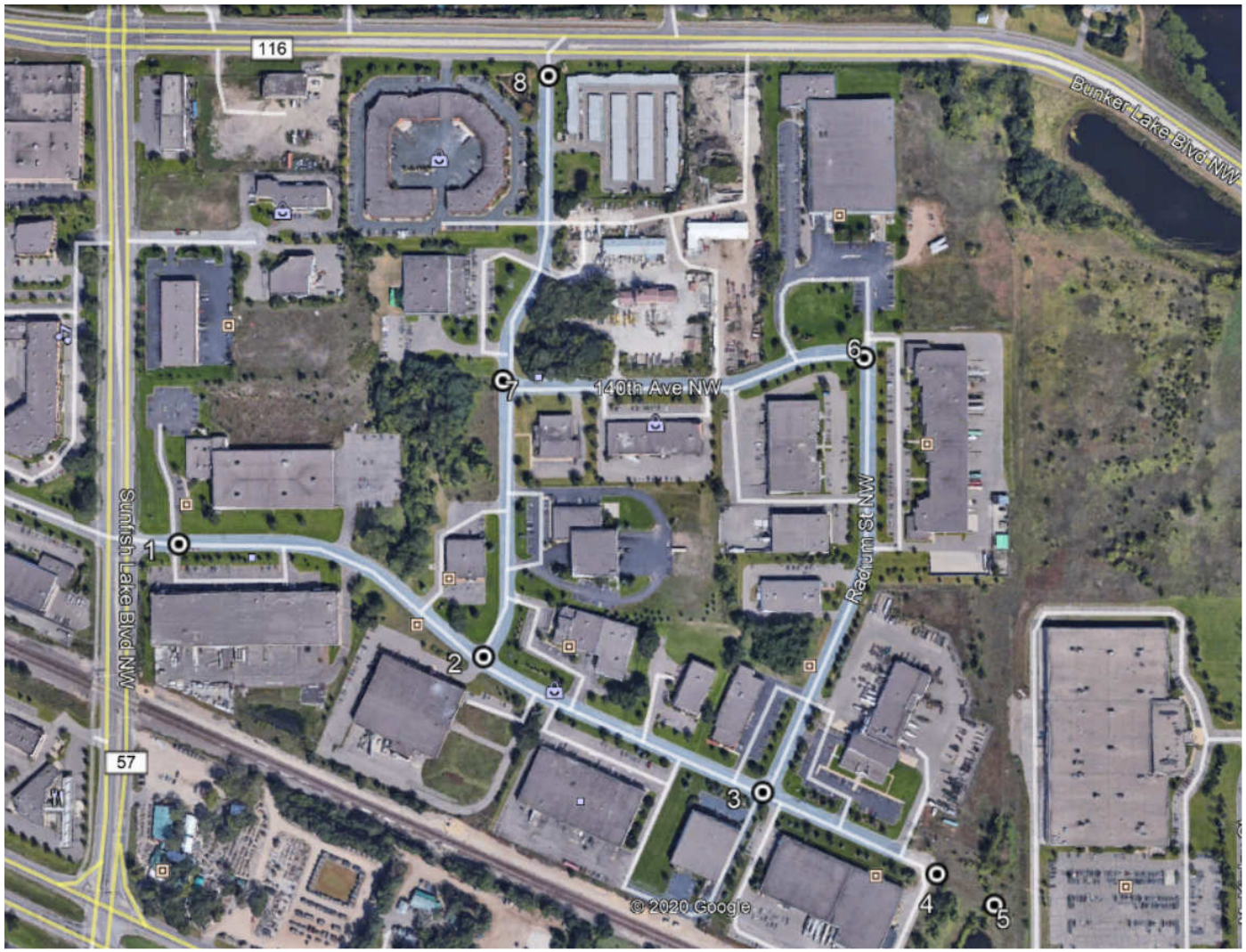
Legend

Boring Locations

Boring Location Sketch

Ramsey Business Park 95 Infrastructure Improvement
McKinley St NW., Unity St NW., Radium St NW., 140th Ave NW,
Ramsey, Minnesota
17624.20.MNS

N



LOG OF BORING

CHOSEN VALLEY TESTING CVT

PROJECT: 17624.20.MNS Design Phase Geotechnical Evaluation Proposed Business Park Unity Street NW Ramsey, Minnesota	BORING: **B-1** LOCATION: See attached sketch DATE: 11/24/2020 SCALE: 1" = 2'

Elev.	Depth	USCS Symbol	Description of Materials (ASTM D 2487/2488)	BPF	WL	Tests and Notes
865.5	0.0					
865.3	0.2		**1.5" BITUMINOUS**			
			1.5" RECYCLED BITUMINOUS			
865.2	0.3	SP SM	**3" AGGREGATE BASE**			
865.0	0.5		**POORLY GRADED SAND with SILT**, mostly fine to medium grained, trace gravel, brown, moist, loose to medium dense. (Possible Fill)	15		
				11		
				10		
				8		
854.5	11.0		End of boring. Water not encountered during drilling. Boring sealed upon completion.			

CVT STANDARD 17624.20.MNS (RAMSEY BUSINESS PARK).GPJ LOG A GNNN06.GDT 12/10/20

LOG OF BORING

CHOSEN VALLEY TESTING CVT

PROJECT: 17624.20.MNS Design Phase Geotechnical Evaluation Proposed Business Park Unity Street NW Ramsey, Minnesota	BORING: **B-2** LOCATION: See attached sketch DATE: 11/24/2020 SCALE: 1" = 2'

Elev.	Depth	USCS Symbol	Description of Materials (ASTM D 2487/2488)	BPF	WL	Tests and Notes
868.5	0.0					
868.1	0.4		**5" BITUMINOUS**			
			1.5" RECYCLED BITUMINOUS			
868.0	0.5	SP	**3" AGGREGATE BASE**			
		SM	**POORLY GRADED SAND with SILT**, mostly fine grained, trace gravel, brown, moist, medium dense. (Possible Fill)	11		
864.5	4.0	SP	**POORLY GRADED SAND**, mostly fine grained, trace gravel, brown, moist, loose to medium dense. (Terrace Deposit)	12		
			Brown to orange brown around 7.5 feet	6		
			Light brown around 10 feet	8		
857.5	11.0		End of boring. Water not encountered during drilling. Boring sealed upon completion.			

CVT STANDARD 17624.20.MNS (RAMSEY BUSINESS PARK).GPJ LOG A GNNN06.GDT 12/10/20

LOG OF BORING

CHOSEN VALLEY TESTING CVT

PROJECT: 17624.20.MNS Design Phase Geotechnical Evaluation Proposed Business Park Unity Street NW Ramsey, Minnesota	BORING: **B-3** LOCATION: See attached sketch DATE: 11/24/2020 SCALE: 1" = 2'

Elev.	Depth	USCS Symbol	Description of Materials (ASTM D 2487/2488)	BPF	WL	Tests and Notes
863.5	0.0					
863.2	0.3		**4" BITUMINOUS**			
			12" AGGREGATE BASE			
862.2	1.3	SP	**POORLY GRADED SAND**, mostly fine to medium grained, trace gravel, brown, moist, loose. (Possible Fill)	9		
				8		
857.0	6.5	SP	**POORLY GRADED SAND**, mostly fine to medium grained, trace gravel, light brown, moist, loose. (Terrace Deposit)	6		
				5		
852.5	11.0		End of boring. Water not encountered during drilling. Boring sealed upon completion.			

CVT STANDARD 17624.20.MNS (RAMSEY BUSINESS PARK).GPJ LOG A GNNN06.GDT 12/10/20

LOG OF BORING

CHOSEN VALLEY TESTING CVT

PROJECT: 17624.20.MNS Design Phase Geotechnical Evaluation Proposed Business Park Unity Street NW Ramsey, Minnesota	BORING: **B-4** LOCATION: See attached sketch DATE: 11/24/2020 SCALE: 1" = 2'

Elev.	Depth	USCS Symbol	Description of Materials (ASTM D 2487/2488)	BPF	WL	Tests and Notes
862.5	0.0	SM	**SILTY SAND**, dark brown to black, moist. (Fill)			
861.3	1.2	SP	**POORLY GRADED SAND**, mostly fine to medium grained, trace gravel and dark brown Silty Sand inclusions, brown, moist, loose. (Possible Fill)	6		
				5		
				7		
				7		
851.5	11.0		End of boring. Water not encountered during drilling. Boring sealed upon completion			

CVT STANDARD 17624.20.MNS (RAMSEY BUSINESS PARK).GPJ LOG A GNNN06.GDT 12/10/20

LOG OF BORING

CHOSEN VALLEY TESTING CVT

PROJECT: 17624.20.MNS Design Phase Geotechnical Evaluation Proposed Business Park Unity Street NW Ramsey, Minnesota	BORING: **B-5** LOCATION: See attached sketch DATE: 11/24/2020 SCALE: 1" = 2'

Elev.	Depth	USCS Symbol	Description of Materials (ASTM D 2487/2488)	BPF	WL	Tests and Notes
861.0	0.0	SM	**SILTY SAND**, trace roots, black. (Topsoil)			
860.5	0.5	SP SM	**POORLY GRADED SAND with SILT**, mostly fine grained, trace gravel, brown, moist, medium dense. (Possible Fill)	16		
857.0	4.0	SP	**POORLY GRADED SAND**, mostly fine grained, trace gravel, brown to light brown, moist, loose to medium dense. (Possible Fill)	10		
			Dark brown and grey Silty Sand inclusions around 7.5 feet	11		
			Trace organic fibers around 10 feet	11		
850.0	11.0		End of boring. Water not encountered during drilling. Boring sealed upon completion.			

CVT STANDARD 17624.20.MNS (RAMSEY BUSINESS PARK).GPJ LOG A GNNN06.GDT 12/10/20

LOG OF BORING

CHOSEN VALLEY TESTING CVT

PROJECT: 17624.20.MNS Design Phase Geotechnical Evaluation Proposed Business Park Unity Street NW Ramsey, Minnesota	BORING: **B-6** LOCATION: See attached sketch DATE: 11/24/2020 SCALE: 1" = 2'

Elev.	Depth	USCS Symbol	Description of Materials (ASTM D 2487/2488)	BPF	WL	Tests and Notes
865.5	0.0					
865.1	0.4		**5" BITUMINOUS**			
			7" AGGREGATE BASE			
864.5	1.0	SM	**POORLY GRADED SAND with SILT to SILTY SAND**, mostly fine grained, dark brown to brown, moist, loose to medium dense. (Fill)	25		
			Trace gravel below 5 feet	23		
				9		
			Trace roots around 10 feet	10		
854.5	11.0					

CVT STANDARD 17624.20.MNS (RAMSEY BUSINESS PARK).GPJ LOG A GNNN06.GDT 12/10/20

LOG OF BORING

CHOSEN VALLEY TESTING CVT

PROJECT: 17624.20.MNS Design Phase Geotechnical Evaluation Proposed Business Park Unity Street NW Ramsey, Minnesota	BORING: **B-7** LOCATION: See attached sketch DATE: 11/24/2020 SCALE: 1" = 2'

Elev.	Depth	USCS Symbol	Description of Materials (ASTM D 2487/2488)	BPF	WL	Tests and Notes
868.0	0.0					
867.5	0.5		**6" BITUMINOUS**			
866.8	1.2		**8" AGGREGATE BASE**			
		SP	**POORLY GRADED SAND**, mostly fine to medium grained, trace gravel, light brown, moist, loose to medium dense. (Terrace Deposit)	12		
				8		
			Mostly medium grained below 7.5 feet	10		
				11		
857.0	11.0		End of boring. Water not encountered during drilling. Boring sealed upon completion.			

CVT STANDARD 17624.20.MNS (RAMSEY BUSINESS PARK).GPJ LOG A GNNN06.GDT 12/10/20

LOG OF BORING

CHOSEN VALLEY TESTING CVT

PROJECT: 17624.20.MNS Design Phase Geotechnical Evaluation Proposed Business Park Unity Street NW Ramsey, Minnesota	BORING: **B-8** LOCATION: See attached sketch DATE: 11/24/2020 SCALE: 1" = 2'

Elev.	Depth	USCS Symbol	Description of Materials (ASTM D 2487/2488)	BPF	WL	Tests and Notes
880.5	0.0					
880.1	0.4		**5" BITUMINOUS**			
			8" AGGREGATE BASE			
879.4	1.1					
		SP SM	**POORLY GRADED SAND with SILT**, mostly fine grained, trace gravel, brown to dark brown, moist, medium dense. (Fill)	16		
				14		
874.0	6.5					
		SP	**POORLY GRADED SAND**, mostly fine grained, trace gravel, light brown, moist, loose to medium dense. (Terrace Deposit)	11		
				10		
869.5	11.0					
			End of boring. Water not encountered during drilling. Boring sealed upon completion.			

CVT STANDARD 17624.20.MNS (RAMSEY BUSINESS PARK).GPJ LOG A GNNN06.GDT 12/10/20

UNIFIED SOIL CLASSIFICATION (ASTM D-2487/2488)

MATERIAL TYPES	CRITERIA FOR ASSIGNING SOIL GROUP NAMES			GROUP SYMBOL	SOIL GROUP NAMES & LEGEND
COARSE-GRAINED SOILS >50% RETAINED ON NO. 200 SIEVE	GRAVELS >50% OF COARSE FRACTION RETAINED ON NO 4. SIEVE	CLEAN GRAVELS <5% FINES	Cu>4 AND 1<Cc<3	GW	WELL-GRADED GRAVEL
			Cu>4 AND 1>Cc>3	GP	POORLY-GRADED GRAVEL
		GRAVELS WITH FINES >12% FINES	FINES CLASSIFY AS ML OR CL	GM	SILTY GRAVEL
			FINES CLASSIFY AS CL OR CH	GC	CLAYEY GRAVEL
	SANDS >50% OF COARSE FRACTION PASSES ON NO 4. SIEVE	CLEAN SANDS <5% FINES	Cu>6 AND 1<Cc<3	SW	WELL-GRADED SAND
			Cu>6 AND 1>Cc>3	SP	POORLY-GRADED SAND
		SANDS AND FINES >12% FINES	FINES CLASSIFY AS ML OR CL	SM	SILTY SAND
			FINES CLASSIFY AS CL OR CH	SC	CLAYEY SAND
FINE-GRAINED SOILS >50% PASSES NO. 200 SIEVE	SILTS AND CLAYS LIQUID LIMIT<50	INORGANIC	PI>7 AND PLOTS>"A" LINE	CL	LEAN CLAY
			PI>4 AND PLOTS<"A" LINE	ML	SILT
		ORGANIC	LL (oven dried)/LL (not dried)<0.75	OL	ORGANIC CLAY OR SILT
	SILTS AND CLAYS LIQUID LIMIT>50	INORGANIC	PI PLOTS >"A" LINE	CH	FAT CLAY
			PI PLOTS <"A" LINE	MH	ELASTIC SILT
		ORGANIC	LL (oven dried)/LL (not dried)<0.75	OH	ORGANIC CLAY OR SILT
HIGHLY ORGANIC SOILS		PRIMARILY ORGANIC MATTER, DARK IN COLOR, AND ORGANIC ODOR		PT	PEAT

Relative Proportions of Sand and Gravel

TERM	PERCENT
Trace	< 15
With	15 - 29
Modifier	> 30

Relative Proportions of Fines

TERM	PERCENT
Trace	< 5
With	5 - 12
Modifier	> 12

Grain Size Terminology

TERM	SIZE
Boulder	< 12 in.
Cobble	3 in. - 12 in.
Gravel	#4 sieve to 3 in.
Sand	#200 sieve to #4 sieve
Silt or Clay	Passing #200 sieve

SAMPLE TYPES

Hollow Stem

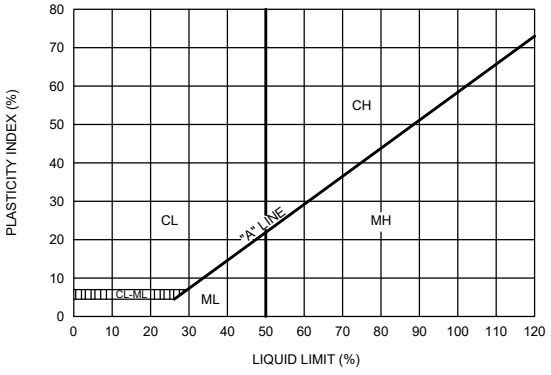
Standard Penetration Test

TEST SYMBOLS

MC	-	MOISTURE CONTENT	LL	-	LIQUID LIMIT
OC	-	ORGANIC CONTENT	PI	-	PLASTISITY INDEX
CN	-	CONSOLIDATION	SW	-	SWELL TEST
DD	-	DRY DENSITY	UU		Unconsolidated Undrained triaxial
PP	-	POCKET PENETROMETER			
RV	-	R-VALUE			
SA	-	SIEVE ANALYSIS			
P200	-	% PASSING #200 SIEVE			

- WATER LEVEL (WITH TIME OF) MEASUREMENT

PLASTICITY CHART



PENETRATION RESISTANCE
(RECORDED AS BLOWS / 0.5 FT)

SAND & GRAVEL		SILT & CLAY		
RELATIVE DENSITY	BLOWS/FOOT*	CONSISTENCY	BLOWS/FOOT*	COMPRESSIVE STRENGTH (TSF)
VERY LOOSE	0 - 4	VERY SOFT	0 - 1	0 - 0.25
LOOSE	4 - 10	SOFT	2 - 3	0.25 - 0.50
MEDIUM DENSE	10 - 30	RATHER SOFT	4 - 5	0.50 - 1.0
DENSE	30 - 50	MEDIUM	6 - 8	
VERY DENSE	OVER 50	RATHER STIFF	9 - 12	1.0 - 2.0
		STIFF	13 - 16	
		VERY STIFF	17 - 30	2.0 - 4.0
		HARD	OVER 30	OVER 4.0

* NUMBER OF BLOWS OF 140 LB HAMMER FALLING 30 INCHES TO DRIVE A 2 INCH O.D. (1-3/8 INCH I.D.) SPLIT-BARREL SAMPLER THE LAST 12 INCHES OF AN 18-INCH DRIVE (ASTM-1586 STANDARD PENETRATION TEST).

Chosen Valley Testing

Job No. 16987.20.MNR

LEGEND TO SOIL DESCRIPTIONS

CVT

Chosen Valley Testing, Inc.

CVT 16987.20.MNR (DODGE CENTER AIRPORT WATERMAIN EXTENSION).GPJ 8/4/20


City of Ramsey Business Park 95 Infrastructure Improvements
Boring B-01

City of Ramsey Business Park 95 Infrastructure Improvements

Boring B-02

City of Ramsey Business Park 95 Infrastructure Improvements

Boring B-03

City of Ramsey Business Park 95 Infrastructure Improvements

Boring B-06


City of Ramsey Business Park 95 Infrastructure
Improvements
Boring B-07

Public Works Committee **6. 1.**

Meeting Date: 03/16/2021

By: Bruce Westby, Engineering/Public Works

Title:

Receive Staff Updates on Improvement Projects, Studies and Items of Interest

Purpose/Background:

The purpose of this case is to update the Public Works Committee on current and proposed City, County and MnDOT improvement projects and studies, and on other items of interest to the Committee.

City Improvement Projects

- **Wetland 114P Outlet Control Improvements (#19-07)**
  - Requested by the Minnesota DNR
  - Construction proposed for 2022
- **Variolite Street Reconstruction (#20-01)**
  - Punch list work required in the spring/summer of 2021
  - Drain tile outlets will be routinely checked/cleaned to ensure pavement subgrade drainage is maintained, especially during winter months
  - Final payment anticipated summer/fall 2021
- **Riverdale Drive Reconstruction – Feldspar St. to Tungsten St. (#21-00)**
  - Contract execution in progress
  - Removal of Dolomite Street north of Riverdale is also proposed for 2021
  - Construction to be substantially complete by early September
- **Municipal Well #1 Casing Evaluation (#21-01)**
  - MDH Grant agreement executed
  - Work underway and will be completed this spring
- **Tiger Street Reconstruction (#21-02)**
  - Plans are being prepared in-house
  - Council will be asked to approve plans and authorize bids in April
  - Construction proposed 2021
- **Business Park 95 Street Reconstructions (#21-03)**
  - ***See separate case***
- **2021 Neighborhood Pavement Overlay Improvements (#21-04)**
  - Plans are being prepared in-house
  - Council will be asked to approve plans and authorize bids in April
  - Construction proposed 2021
- **2021 MSA Pavement Overlay Improvements (#21-05)**
  - Plans are being prepared in-house
  - Council will be asked to approve plans and authorize bids in April
  - Construction proposed 2021
- **2021 Crack Seal Improvements (#21-06)**
  - Contract execution in progress
  - Construction to be complete by September
- **Dolomite Street Demolition – Riverdale Drive to Highway 10 (#21-07)**
  - Bolton & Menk is preparing plans and specifications
  - Construction proposed for 2021

Anoka County Improvement Projects

- **Roundabout at Armstrong Boulevard/CSAH 83 and Alpine Drive**
  - Anoka County received $1.35M in HSIP funds (est. project cost = $1.5M)
  - Anoka County and City of Ramsey share is $150,000 each (per $1.5M est.)
  - ***UPDATE*** Construction proposed for ***2023***, pending City & County approvals
- **CSAH 116 Interim Improvements**
  - Anoka County revised concept level layout per Resolution #21-044 comments
  - Virtual Open House March 11th – 25th @ ***www.bunkerlakeproject.com***
  - Construction proposed to begin September 7, 2021
- **CSAH 116 & TH 47 Intersection Improvements**
  - Constructing additional turn lanes in 2021 to improve operations and safety
  - Forest Lake Contracting awarded the construction contract
  - Preconstruction meeting to be conducted March 19th

MnDOT Improvement Projects

- **US 10 / 169 & Ferry Street / TH 47 Interchange**
  - Construction proposed 2022 - 2023
- **Ferry Street / Trunk Highway 47 Grade Separation @ BNSF Rail Crossing**
  - Preliminary design still on hold
  - MnDOT exploring realignment of Highway 47 to remove S-curve, which would require the relocation of Alter Recycling
  - Tentatively proposed for construction in 2024 or later
- **Rum River Bridge Replacement**
  - Construction proposed 2022 - 2023
  - Proposing three lanes between Highway 47 and 7th Street

Studies & Items of Interest

- **Anoka Solution Highway 10 Improvements**
  - Construction proposed 2022 - 2023
- **NW Metro Surface Water Supply Feasibility Study**
  - Member cities include Corcoran, Dayton, Ramsey and Rogers
  - MCES funded 100% using Clean Water Funds
  - Study findings to be presented in April or May
- **City of Ramsey Centralized Water Treatment Plant Feasibility Study**
  - Feasibility Study is complete
  - Executing contract with SEH, Inc. to prepare plans and specifications for trunk watermain improvements
  - City Council to review project delivery options for Water Treatment Plant at a work session in March or April
- **Ramsey Gateway Highway 10 Improvements**
  - Preliminary design for grade-separation of Ramsey Blvd. and Sunfish Lake Blvd. is underway
  - Approximately $84M in project funding has been secured
  - Remaining funding continues to be pursued
  - Public Open House held February 18, 2021
- **NW Metro Mississippi River Crossing Feasibility Analysis**
  - No updates at this time
- **TH 47 Safety Study**
  - Staff plans to provide an update at the May PWC meeting
- **Reduced Speed Limits on Local Streets**
  - No new requests received since last discussed
  - Staff continues to monitor actions in other cities
  - Staff plans to provide an update in May or June

Timeframe:
Staff estimates up to 15 minutes will be needed for updates and discussion.

Observations/Alternatives:
NA

Funding Source:
NA

Recommendation:
NA

Action:
No formal action required. For Committee review and discussion purposes only.

Attachments

No file(s) attached.

Form Review

Inbox	Reviewed By	Date
Grant Riemer	Grant Riemer	03/11/2021 10:01 AM
Kurt Ulrich	Kurt Ulrich	03/11/2021 03:08 PM
Form Started By: Bruce Westby		Started On: 03/10/2021 10:45 AM
Final Approval Date: 03/11/2021		

Public Works Committee **6. 2.**

Meeting Date: 03/16/2021

By: Bruce Westby, Engineering/Public Works

Title:

Review Future Topics Calendar

Purpose/Background:

Attached is a calendar of future topics for review and discussion by the Public Works Committee. The calendar includes topics drawn from Committee requests received during meetings and/or unresolved topics previously discussed by the Committee. Calendar dates are subject to change based on the availability of information and required attendees, staff workload, and competing interests and objectives.

Timeframe:

Staff estimates less than 5 minutes will be necessary to review the future topics calendar and address questions.

Observations/Alternatives:

No formal action required. For Committee review and discussion purposes only.

Funding Source:

N/A

Recommendation:

Staff recommends reviewing the attached calendar and to either approve the calendar by consensus or to direct Staff to revise the calendar as follows; _____.

Action:

No formal action required. For Committee review and discussion purposes only.

Attachments

PWC Calendar Mar2021

Form Review

Inbox	Reviewed By	Date
Grant Riemer	Grant Riemer	03/11/2021 09:56 AM
Kurt Ulrich	Kurt Ulrich	03/11/2021 03:09 PM
Form Started By: Bruce Westby		Started On: 03/10/2021 10:46 AM
Final Approval Date: 03/11/2021		

Public Works Committee Future Topics Calendar *

Date	Topics for Discussion – Committee Action
May 2021	Sunfish Lake Sedimentation Basin Improvements *(Westby)*
April 2021	Available Funding Assistance for Wet Basement Repairs *(Westby)*
Future/TBD	Sunwood Drive Roundabout Landscaping *(Riemer)*
Date	**Topics for Discussion – Regulatory**
Future/TBD	Sunfish Lake Boulevard Speed Study Results *(Westby)*
Future/TBD	Bunker Lake Boulevard Speed Study Results *(Westby)*
Future/TBD	County Ditch Maintenance / Buffer Law *(Westby)*
Date	**Topics for Discussion – Policy**
Future/TBD	Landscaped Median Maintenance Policy *(Riemer)*
June 2021	Draft Trail Maintenance Policy *(Westby)*
July 2021	Draft Stormwater Pond Maintenance Policy *(Westby)*
Date	**Topics for Discussion – Planning and Budget**
April 2021	Municipal State Aid System (MSAS) Revisions *(Westby)*
August 2021	Review 1996 and 2007 (unadopted) TH 47 Corridor Studies *(Westby)*
Future/TBD	Asset Management Program *(Westby)*
Date	**Topics for Discussion – Staff Updates**
Ongoing	Water Conservation Opportunities / Incentives *(Westby)*
Ongoing	NW Metro Area Regional Surface Water Supply Study *(Westby)*
Ongoing	Centralized Water Treatment Facility – Prelim. Design Report *(Westby)*
Ongoing	NW Metro Mississippi River Crossing Feasibility Analysis *(Westby)*
Ongoing	TH 47 Safety Study *(Westby)*

* Dates subject to change based on availability of information, required attendees, staff workload, and competing interests and objectives.