



MANKATO PLANNING COMMISSION
Regular Meeting November 20, 2024 - 6:00 p.m.
Intergovernmental Center
Mankato Room

Any person speaking to the Commission shall give to the Secretary of the
Commission the NAME and HOME ADDRESS of such person prior to speaking.

1. **CALL TO ORDER**

2. **APPROVAL OF AGENDA**

3. **APPROVAL OF MINUTES**

1. **October 23, 2024 Draft Planning Commission minutes**

4. **OLD BUSINESS**

5. **NEW BUSINESS**

1.

CY44-24

Request of McDonald's Corporation for a certificate of design compliance for an approximately 832 square foot addition on the western side of the existing structure to allow for a new play place. The subject property is described the eastern 27.5' of Lot 2, and all of Lot 1, Block 1, Menard Addition. (1921 Adams Street).

The anticipated date of final action by the Planning Commission is November 20, 2024.

2.

CY45-24

Request of the City of Mankato for review of certain sections of Chapter 10 of the City Code pertaining to cannabis.

The anticipated date of final City Council action is November 25, 2024.

3.

CY46-24

Request of Andrew Manske for a conditional use permit to allow for cut, fill and development activities on a slope equal to or in excess of seventeen-point six (17.6) percent for ravine stabilization. The subject property is described as Lot 5, Block 1, Ironwood Oaks subdivision (80 Telemark Drive).

The anticipated date of final City Council action is December 9, 2024.

4.

CY48-24

Request of Mesenbrink Construction & Engineering, Inc. for an amended preliminary plat review and the final plat review of Mesenbrink Subdivision, and for the zoning of the subject property from T-Transition to B-1, Community Business District, O-R, Office Residential District, R-4, Multiple Family Dwelling District, and R-2, One- and Two-Family Dwelling District. The subject property is described as part of the West 30 acres of the SW ¼, Section 15-108-26, except the South 330 feet of the West 330 feet thereof, AND The SE ¼ of the NW ¼ of the SE ¼; The S. ½ of the NE ¼ of the SE ¼; The SE ¼ of the SE ¼; The SW ¼ of the SE ¼, Except the West 30 acres thereof; all in Section 15, Township 108, Range 26, Blue Earth County, Minnesota, with some exceptions. (Blue Earth County PID R430915400003 and R430915400009).

The anticipated date of final City Council action is December 9, 2024.

6.

MISCELLANEOUS

7.

ADJOURNMENT

Planning Commission Regular Meeting

3. 1.

Meeting Date: 11/20/2024

Title

October 23, 2024 Draft Planning Commission minutes

Attachments

October 23, 2024 Draft Planning Commission minutes

**Mankato Planning Commission
Regular Meeting
October 23, 2024**

1. CALL TO ORDER.

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

Commissioners Present: Chair Zehnder, Ms. Johnson, Mr. Wilke, Mr. Meister, Mr. Dieken, Ms. Surdy

Staff Present: Mark Konz – Director of Community Development, Sydney DePrenger-Planner, Travis Johnson- Permit Technician, Nick Peterson-Senior Management Analyst.

2. APPROVAL OF AGENDA.

Ms. Johnson made a motion to approve the agenda. Mr. Meister seconded the motion. The motion carried unanimously.

3. APPROVAL OF MINUTES.

Ms. Johnson made a motion to approve the minutes from September 25th, 2024. Mr. Dieken seconded the motion. The motion carried unanimously.

4. OLD BUSINESS

5. NEW BUSINESS

CY43-24 Request of Scott Carlson for the preliminary and final plat review of Carlson Addition. The subject property is described as the Southerly 125 feet of the following described tracts of land: The N 1/2 of Lot 9 Marsh & Brother's Addition to Mankato; Also the North 5 acres of the West 10 acres of the Northwest Quarter of the Southeast Quarter Section 8, Township 108, Range 26, except 1/2 acre taken therefrom for a street. (1010 Pfau Street).

Ms. DePrenger respectfully submits the following findings of fact:

1. General requirements

(CY43-24 Continued)

1. The site is designed in conformance with the location and no change is proposed to the existing streets, the general drainage situation, lot sizes and arrangement.
2. Streets
 1. The applicant will not construct any new public streets. The existing public road will remain the same.
3. Easements
 1. The plat provides the standard easements required in Chapter 11 of Mankato City Code.
4. Block Standards
 1. The proposed block layout conforms to Mankato City Code.
5. Lot Standards
 1. The subject parcel is not a corner lot and is not subject to extra width or depth for those purposes.
 2. The proposed lot depicts a conforming street frontage.
 3. The side lot lines are as established by other neighboring subdivisions.
 4. The subject property is not a double frontage lot and is not subject to said standards.
6. Public Sites and Open Spaces
 1. The applicant shall provide payment in lieu of parkland dedication fee of \$1,560 dollars.

Ms. DePrenger recommends the approval of the preliminary and final plat with the following conditions:

1. The applicant shall provide payment in lieu of parkland dedication fee of \$1,560 dollars prior to affixing signatures on the final plat.
2. The final plat shall dedicate the standard easements.

Chair Zehnder inquired whether, based on the age of the lot, there would be a grandfathered aspect to the ordinance that exempts the property from the requirement.

Mr. Konz explained that it is non-confirming right now and to add additional structures would increase the degree of non-conformance which is not allowed by zoning.

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

(CY43-24 Continued)

Mr. Meister made a motion for the approval of the preliminary and final plat with conditions. The motion was seconded by Ms. Surdy. The motion passed unanimously.

The anticipated date of final City Council Action is November 12, 2024.

AR-5936 Request of the Planning Agency to review the proposed 2025-2029 Community Investment Plan.

Mr. Peterson conducted the presentation to the council.

Mr. Dieken moved to approve the Community Investment Plan as presented. The motion was seconded by Mr. Meister. The motion passed unanimously

The anticipated date of City Council Action is December 2, 2024

MISCELLANEOUS

There were no miscellaneous items

ADJOURNMENT

There being no further business, Ms. Surdy moved to adjourn the meeting. The motion was seconded by Mr. Meister and carried unanimously.

The meeting adjourned at 6:20 pm

MINUTES APPROVED.

Chair, Mankato Planning Commission

Meeting Date: 11/20/2024

Title

CY44-24

Request of McDonald's Corporation for a certificate of design compliance for an approximately 832 square foot addition on the western side of the existing structure to allow for a new play place. The subject property is described the eastern 27.5' of Lot 2, and all of Lot 1, Block 1, Menard Addition. (1921 Adams Street).

The anticipated date of final action by the Planning Commission is November 20, 2024.

Applicant

The applicant is McDonald's Corporation.

Request

The applicant is requesting a certificate of design compliance for an approximately 832 square foot addition on the western side of the existing structure to allow for a new playplace in the Highway Gateway Overlay District.

Location

The subject property is described as the eastern 27.5' of Lot 2, and all of Lot 1, Block 1, Menard Addition (1921 Adams Street).

Existing Land Use

The property is currently the location of McDonald's Restaurant.

Zoning

The property is zoned B-3, Highway Commercial District.

Environmentally Sensitive Areas

There are no known environmentally sensitive areas on the property.

Public Utilities

The subject property is served by existing public utilities.

City Code

Mankato City Code pertaining to the B-3, Highway Commercial Business District can be found here: https://library.municode.com/mn/mankato/codes/code_of_ordinances?nodeId=CH10LAUSZO_PTVCODI_S10.47HICODI

Mankato City Code pertaining to the Highway Gateway Overlay District can be found here: https://library.municode.com/mn/mankato/codes/code_of_ordinances?nodeId=CH10LAUSZO_PTVCODI_S10.48GTGAOVDI

Site Plan Review Comments

The submission was reviewed by the Site Plan and Traffic Advisory Committee at their November 7, 2024, meeting. Below are the comments as presented, along with the applicant's responses.

1. Applicant shall be aware that a new condition will be included that when sidewalk improvements take place along Adams St., they will need to be a willing petitioner for said improvements.
 - *Landform Response: Acknowledged.*
2. All new exterior lighting shall conform to Mankato City Code 10.89. This shall include the submission of lighting cut sheets, and a photometric plan that demonstrates conformance with Mankato City Code.
 - *Landform Response: Acknowledged. There are no proposed changes to the site lighting.*
3. Application shall modify the existing landscaping plan to conform to Mankato City Code section 10.88. This shall include, but is not limited to, *Screening of Parking Areas. Wherever a surface parking area faces a street frontage, the parking area shall be screened from the street with a wall fence, or hedge to a minimum of four (4) feet nor more than eight (8) feet in height, nor be less than eighty percent (80%) opaque. This screening must be accomplished in the setback area between ten (10) feet and fifteen (15) feet from the right-of-way line.*
 - *Landform Response: A revised landscape plan is submitted for review. The landscape plan includes a continuous hedge row along the parking lot frontage on Adams St.*
4. Applicant shall confirm any pre-existing agreement that allows for access, parking, and signage to exist that encroach into neighboring properties. If an agreement does not already exist, one would need to be made or the subject property would need to be brought into conformance.
 - *Landform Response: Acknowledged. An access agreement will be provided to the city that demonstrates the neighboring property agrees to the encroachments.*
5. Applicant shall pay notification fees in the online portal, if not already done so.
 - *Landform Response: Acknowledged. The notification fees have been paid*

Review

The applicant is requesting a certificate of design compliance for an approximately 832 square foot addition on the western side of the existing structure to allow for a new PlayPlace in the Highway Gateway Overlay District. The subject property is described as the eastern 27.5' of Lot 2, and all of Lot 1, Block 1, Menard Addition. (1921 Adams Street). The subject property is located in the B-3, Highway Commercial District.

The property is located in the Highway Gateway District and requires a Certificate of Design Compliance. As with other construction in the Highway Gateway Overlay District, the expansion or exterior alteration of existing buildings requires a Certificate of Design Compliance to ensure that all construction activities within the District will enhance the visual and aesthetic character of the Gateways in accordance with the Urban Design Guidelines adopted as part of the City's Land Use Plan. The Highway Gateway Overlay District is intended to promote high quality design in Mankato's major entryways into the City. The design features and standards are intended to create a positive first impression upon entering the City, and to establish an image and character that is uniquely Mankato. The exterior work will be under 500,000 dollars, per Mankato City Code, this project is only required to be reviewed by the Planning Commission and will not need to be brought before the City Council for review.

A previous certificate of design compliance was approved in 2018 for facade and drive-through improvements.

The proposal includes an approximately 26' x 32' addition on the westerly side of the existing McDonald's restaurant structure and is intended to be used for an indoor PlayPlace. The proposed PlayPlace addition includes two exterior doorways, one to the parking area south of the building and one on the north side of the building facing westward, which creates one additional opening/entrance in the structure. The proposed addition increases the height of the building, but does not create additional floors.

Interior modifications will be made in tandem with the proposed addition, but are not subject to review with this certificate of design compliance.

Exterior finishes of the new addition are proposed to be similar to the existing finishes that were approved through a different certificate of design compliance in 2018. These finishes include: gray and tan colored "Exterior Finish System" (EIFS), which has a stucco-like look, a metal panel similar to what is currently used on the existing structure in a "cityscape" color, an aluminum trellis in both gray and white, gray colored split face block veneer with a matching sill cap, metal underscores in gold, and large areas of tempered glass.

Exterior elevations show recessed down light fixtures with white and yellow coloring as well as a radial sconce light fixture, and a number of accent lighting features. The narrative provided states that the site lighting will not change as a result of the building addition, but changes will be made to site lighting as the addition includes exterior lighting. All new exterior light fixtures will be required to be full cut-off, fully shielded fixtures that shall meet City Code Section 10.89.

The proposed addition is occurring in the B-3, Highway Commercial District. The proposed addition does not extend any further north (front yard setback), south (rear yard setback), or east (side yard setback) than the existing conforming building line. As the proposed addition would occur along the western side of the existing building, the 6' side yard building setback is the only setback under review. Submitted plans do not show the exact distance between the westernmost building line and the property line, but based on measurements provided, we can infer a minimum of a 6 to 10' setback from the property line. Proposed plans conform to all building setbacks. Based on provided materials, a number of existing parking stalls for McDonald's have been constructed within the parking setback and/or off-premises. With the proposed addition, two parking stalls will be identified as reserved parking, but others will remain as is. Due to the encroachment, an agreement must be made with the adjacent property owner in order to utilize these stalls, if one does not already exist.

If a preexisting shared parking and signage agreement already exists between McDonald's and the adjacent property to the west, the applicant will be asked to verify that the agreement allows for any proposed site modification that are shown to occur in areas covered by the agreement to occur. If no agreements exist, the applicant will be asked to work with the adjacent property owner on a shared access agreement and signage agreement for any modifications to off-premise signage.

Proposed plans show updated signage. Any approval of the proposed certificate of design compliance does not include approval of the proposed signage. All updated or new signage shall require separate sign permits prior to fabrication or installation. All signage, both permanent and temporary, shall adhere to Mankato City Code Section 10.87.

Bicycle parking that would be removed or relocated as part of the proposed addition shall be replaced or maintained on the subject property in order to retain bicycle parking requirements per the Mankato City Code.

Parking for the restaurant will be modified to account for the removal of two accessible parking stalls to the west of the existing building. This modification will occur along the southwest parking area. Submitted plans show replacement of the removed accessible parking stalls by converting four of the existing standard parking stalls into three accessible stalls and modifying those spaces identified as accessible. The applicant shows a reduction in the number of total parking stalls provided on site, reducing the number of total parking stalls from 72 stalls to 69 stalls. Despite a reduction in the number of available parking stalls, and concerns with drive-through queuing lines blocking full access to parking stalls, the property still provides over the number of required parking stalls (35 stalls) for this particular use.

Proposed plans show additional landscaping along the Adams Street and Haefner Drive frontages to provide additional screening along the property lines. Plans show 55 3-foot-tall juniper shrubs congregated in three groupings of four shrubs between the drive-through and Haefner Drive and a full line of shrubs screening the parking area from Adams St. In the 2018 certificate of design compliance, the applicant noted some limitations to the existing development due to the presence of existing utility lines and the width of green spaces, which causes some constraints to landscaping along Adams Street and Haefner Drive.

Findings

Staff respectfully submits the following findings of fact:

1. The property is located in the Highway Gateway Overlay District and the proposed value of the project does not exceed \$500,000. By Mankato City Code Chapter 10.48, this project only requires review by the Planning Commission.
2. The request is in keeping with the standards set forth in the B-3 Highway Business District.
3. The proposal, which includes implementation of the required conditions, conforms to Mankato City Code section 10.48 - Highway Gateway Overlay District.

Recommendation

Staff recommends approval of the Certificate of Design Compliance with the following conditions:

1. At the time when sidewalk improvements take place along Adams Street, the applicant shall serve as a willing petitioner for said improvements.
2. Applicant shall provide a copy of the access agreement demonstrating that the neighboring property at 1901 Adams Street agrees to all existing and proposed encroachments.
3. All new exterior light fixtures shall be full cut-off fixtures and lighting levels at the property line may not exceed ½ foot candle. All lighting shall meet City Code Section 10.89. prior to issuance of the certificate of occupancy.
4. Signage shall require a separate sign permit prior to fabrication or installation. All signage, both permanent and temporary, shall adhere to Mankato City Code Section 10.87.
5. Landscaping shall be installed in accordance with City Code Sections 10.48. and 10.88. prior to issuance of the certificate of occupancy.

Attachments

General Location Map

Aerial Plan

Site Plan

Exterior Elevations

Materials

Floor Plan

Landscaping Plan

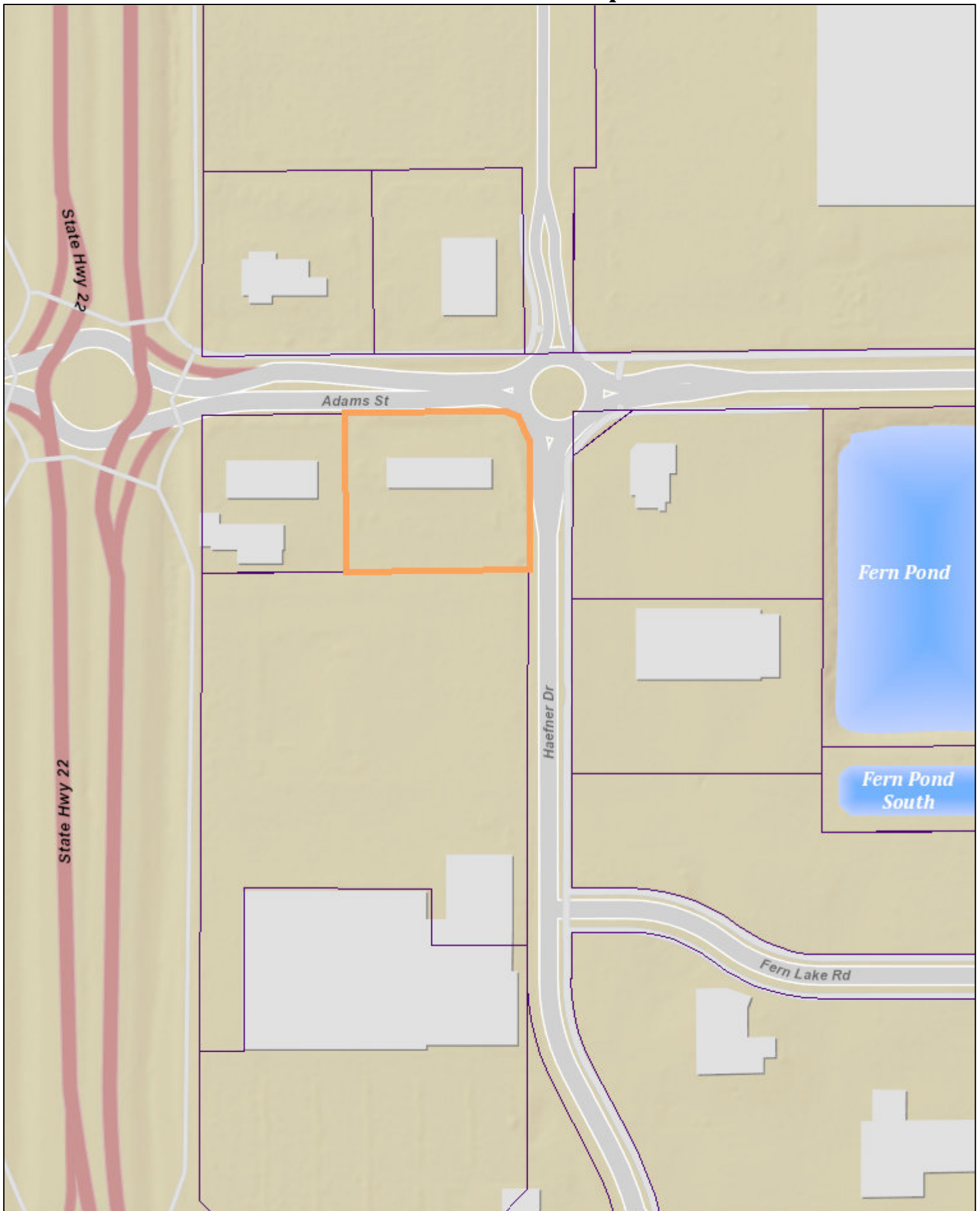
Civil Plans

Narrative

Site Plan Comments Response

Resolution

General Location Map

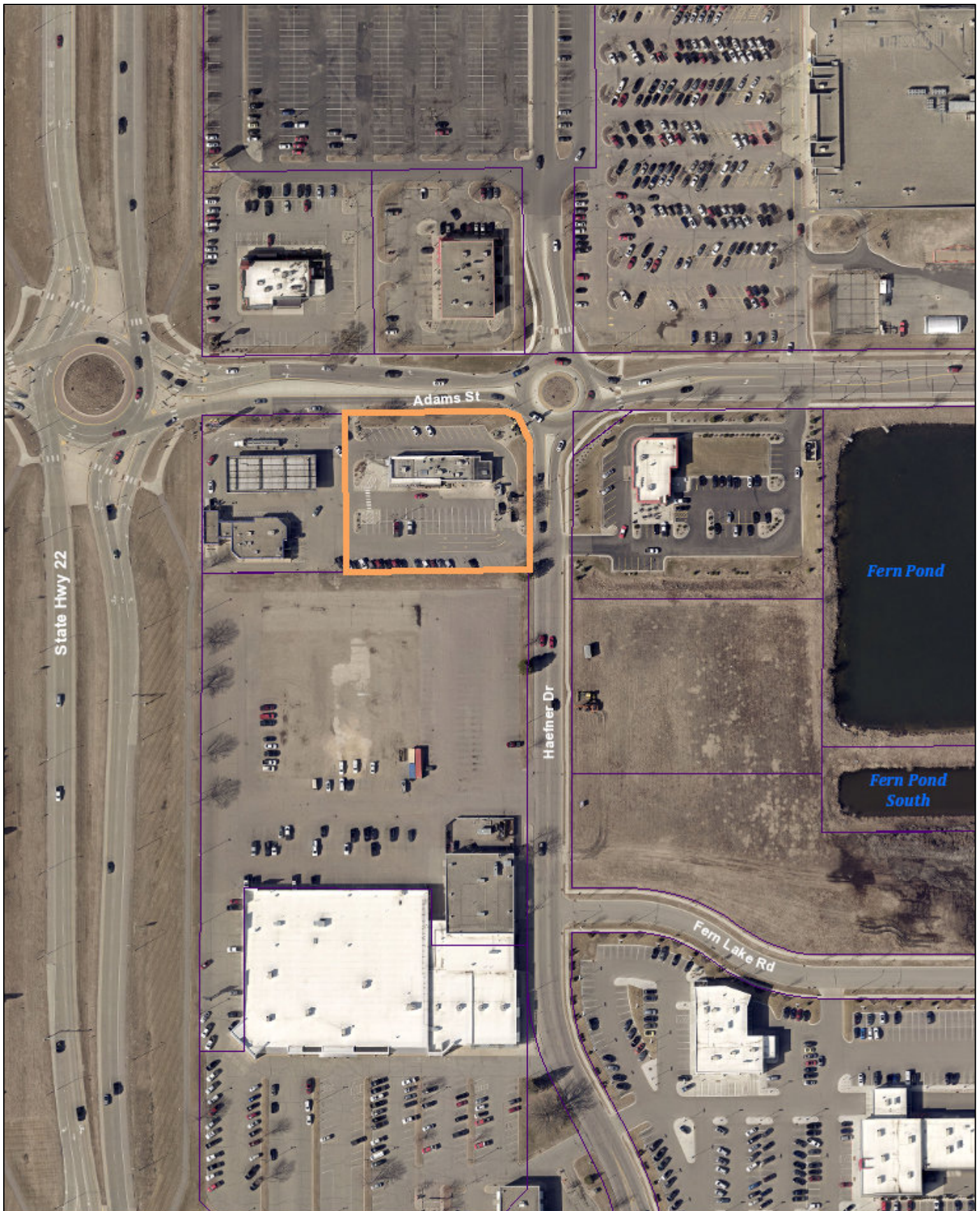


Date: October 2024

Author:

This information is to be used for reference purposes only. The City of Mankato does not guarantee accuracy of the material contained herein and is not responsible for misuse or misinterpretation.

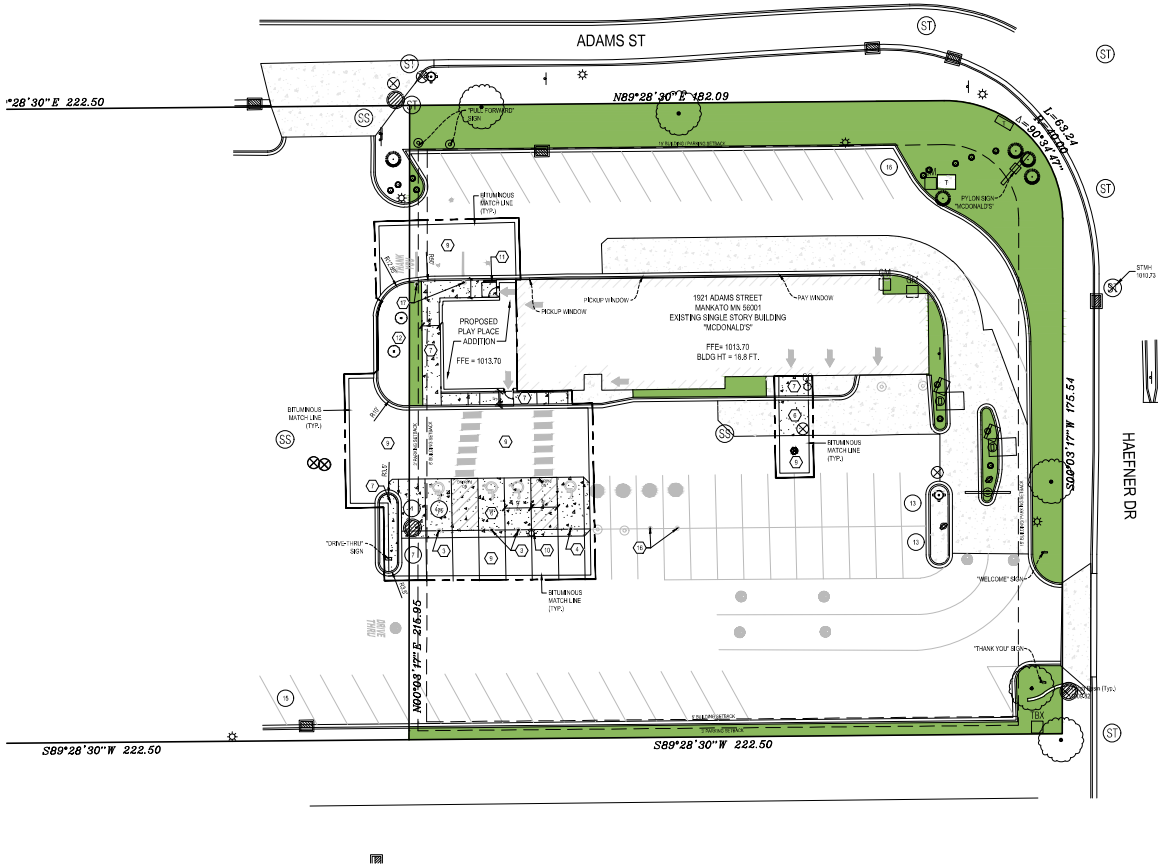
Aerial



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SITE CONSTRUCTION NOTES

- 1. Retain.
- 2. Retain.
- 3. State and ADA approved accessible sign and located per detail C7.18.
- 4. State and ADA approved accessible sign and located with "Van Accessible" sign per detail C7.18.
- 5. Retain.
- 6. Concrete drive apron and table, Refer to Sheet C3.1 for specifications.
- 7. Concrete sidewalk, clear and match existing sidewalk, Refer to sheet C3.1.
- 8. Retain.
- 9. Illuminated pavement, Refer to Sheet C3.1 for specifications.
- 10. Parking to Right - Center.
- 11. Retain.
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- 100. Retain.

DIRECTIONAL SIGNAGE NOTES

- 15. New or replaced directional signage is not being approved as part of this set with the jurisdiction.
- 16. Retain.

SITE PLAN NOTES

- 1. Obtain all necessary permits for construction within, or size of, public right-of-way.
- 2. The digital file, which can be obtained from the Engineer, shall be used for printing. Discrepancies between the drawings and the digital file shall be reported to the Engineer. The digital file, as shown on these drawings, and the digital file shall be considered the authoritative source for all dimensions.
- 3. Dimensions shown are to face of curb and exterior face of building unless noted otherwise.

ZONING AND SETBACK SUMMARY

The Property is Zoned R-2 Highway Commercial District

Building Setback Information is as follows:

Front Yard = 10 ft.

Side = 5 ft.

Back = 5 ft.

Parking Setback Information is as follows:

Front Yard = 10 ft.

Side = 5 ft.

Back = 5 ft.

Lot Coverage Information is as follows:

Lot Area Maximum = 10,000 sq. ft.

Total Site Area = 47,855 sq. ft.

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PARKING SUMMARY

- 1. Retain.
- 2. Retain.
- 3. State and ADA approved accessible sign and located per detail C7.18.
- 4. State and ADA approved accessible sign and located with "Van Accessible" sign per detail C7.18.
- 5. Retain.
- 6. Concrete drive apron and table, Refer to Sheet C3.1 for specifications.
- 7. Concrete sidewalk, clear and match existing sidewalk, Refer to sheet C3.1.
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- 99. Retain.
- 100. Retain.

AREA SUMMARY

- 15. New or replaced directional signage is not being approved as part of this set with the jurisdiction.
- 16. Retain.

LEGEND

- 1. Obtain all necessary permits for construction within, or size of, public right-of-way.
- 2. The digital file, which can be obtained from the Engineer, shall be used for printing. Discrepancies between the drawings and the digital file shall be reported to the Engineer. The digital file, as shown on these drawings, and the digital file shall be considered the authoritative source for all dimensions.
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ZONING AND SETBACK SUMMARY

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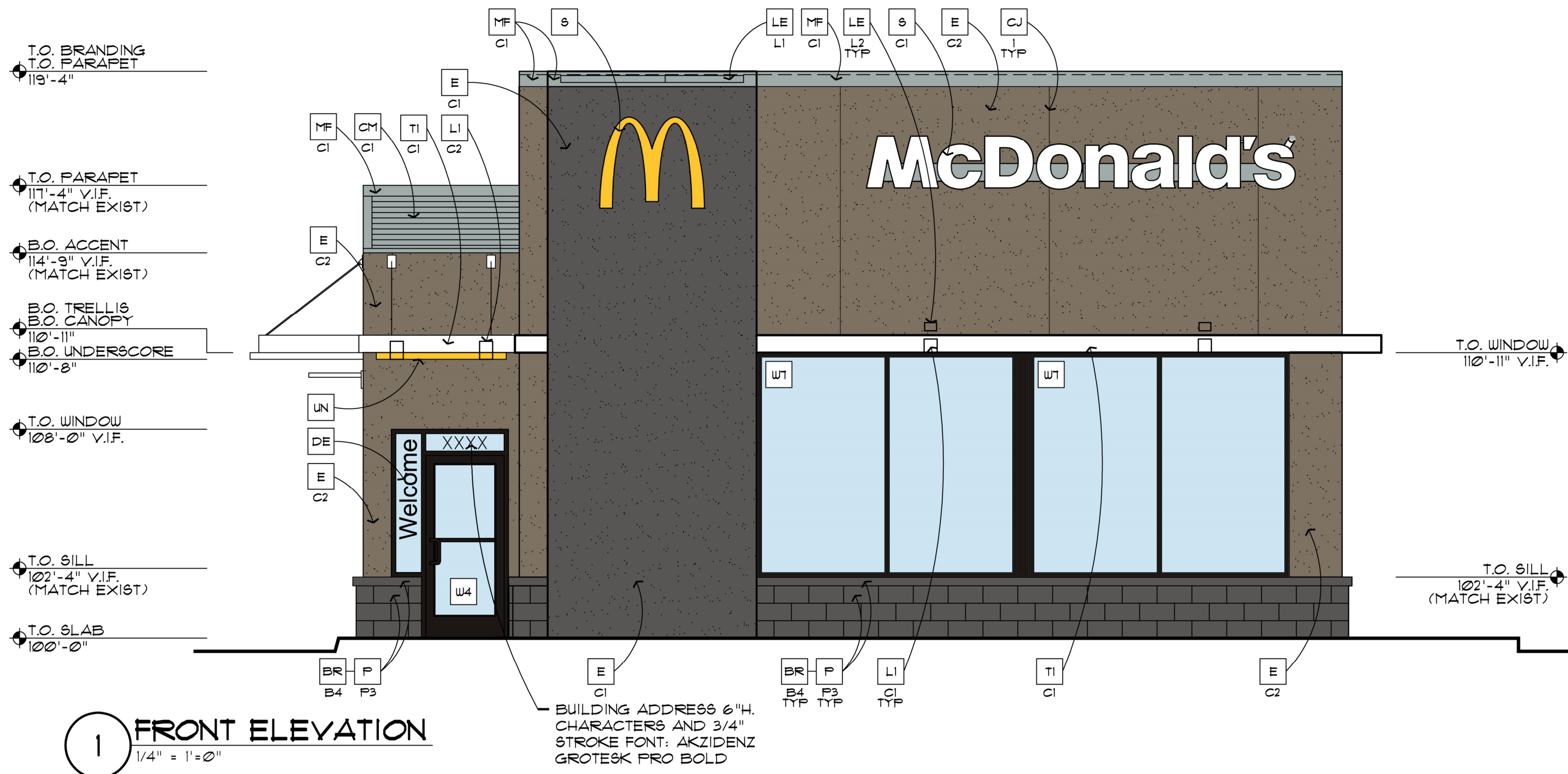
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SHEET NO.		13128		NOTIONAL NUMBER									

KEY NOTES:

- BM** BRAKE METAL - Ø40 ALUM COIL STOCK METAL WRAP, MATCH WINDOW COLOR
- BR** SPLIT FACE BLOCK VENEER (MATCH EXISTING) WITH SPLIT FACE SILL CAP TO MATCH COLOR:
B4 = BLOCK TO MATCH COLOR, SIZE AND TEXTURE OF EXISTING.
EXIST = EXIST SPLIT FACE BLOCK TO REMAIN, PATCH AND REPAIR AS REQ'D.
- CJ** CONTROL JOINT
TYPE: 1 = EIFS
- CH** CORRUGATED METAL PANEL (MATCH EXISTING) - SEE ASSEMBLY NOTES ON A3.Ø.
- CI** COLOR: (MATCH EXISTING)
C1 = CITYSCAPE
- DECAL BY GRAPHICS SUPPLIER SURFACE APPLIED, FIELD INSTALLED
FIRE CUT, FIRE RATED
SUPPLIERS:
VOMELA (865) 330-1331, annbowen@vomela.com
GFX INTERNATIONAL (847) 543-4600
mcdonaldsdecor@gfxi.com
- DE** EXTERIOR FINISH SYSTEM (EIFS) (MATCH EXISTING)
- E** COLOR: (MATCH EXISTING)
C1 = BENJAMIN MOORE 'IRON MOUNTAIN #2134-30'
C2 = BENJAMIN MOORE 'FAIRVIEW TAUPE BM HC-85'
- GR** NEW GUARDRAIL - SEE SITE PLAN FOR EXACT LOCATION AND LENGTH
PAINT: 'IRON ORE' SW 1069 BY SHERWIN WILLIAMS

- L1** RECESSED DOWN LIGHT FIXTURE - SEE ELECTRICAL
COLOR:
C1 = WHITE
C2 = GOLD
- L2** RADIAL SCONCE LIGHT FIXTURE (MATCH EXISTING) - SEE ELECTRICAL
COLOR: CITYSCAPE (MATCH EXISTING)
- LE** ACCENT LIGHTING - SEE ELECTRICAL
LED LIGHT:
L1 = SLIM LED (DOWN ONLY)
L2 = UP ONLY FLOOD FIXTURE
- MF** METAL FASCIA - BY METAL- ERA - REFER TO SECTIONS FOR ADD'L INFO
TYPE:
C1 = FRE-FAB ANCHOR-TITE FASCIA
COLOR: CITYSCAPE (MATCH EXISTING)
C2 = FRE-FAB ANCHOR TITE FASCIA
COLOR: RAL 7022
- P** PAINT
COLOR: (MATCH EXISTING)
P1 = NOT USED
P2 = BENJAMIN MOORE 'FAIRVIEW TAUPE BM HC-85'
P3 = BENJAMIN MOORE 'IRON MOUNTAIN #2134-30'
- S** McDONALD'S SIGNAGE BY OTHERS - UNDER SEPARATE PERMIT.
COLOR:
C1 = CITYSCAPE

- T1** ALUMINUM TRELLIS
COLOR:
C1 = WHITE
C2 = CITYSCAPE
- T2** TRELLIS/CANOPY TIE-BACK (COLOR: CITYSCAPE)
- T3** 2x8 ALUMINUM WALL FASCIA (MATCH EXISTING) COLOR: CITYSCAPE (MATCH EXISTING)
- UN** METAL UNDERSCORE
COLOR: GOLD
- W4** EXTERIOR WINDOW ASSEMBLY W/ TEMPERED GLASS - SEE ASSEMBLY NOTES 3/A2.2
COLOR: MATCH EXISTING



MCDONALD'S - MANKATO, MN (ADAMS ST)
PLAYPLACE ADDITION
COLOR/MATERIAL BOARD



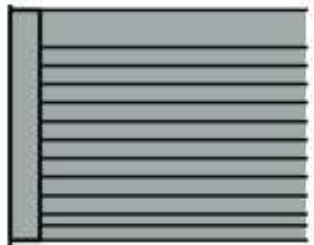
EXTERIOR FINISH SYSTEM (E.I.F.S.) (MATCH EXISTING)
COLOR: (MATCH EXISTING)
C1= BENJAMIN MOORE 'IRON MOUNTAIN #2134-30'

PAINT
COLOR: (MATCH EXISTING)
P3 = BENJAMIN MOORE 'IRON MOUNTAIN #2134-30'



EXTERIOR FINISH SYSTEM (E.I.F.S.) (MATCH EXISTING)
COLOR: (MATCH EXISTING)
C2= BENJAMIN MOORE 'FAIRVIEW TAUPE BM HC-85'

PAINT
COLOR: (MATCH EXISTING)
P2 = BENJAMIN MOORE 'FAIRVIEW TAUPE BM HC-85'



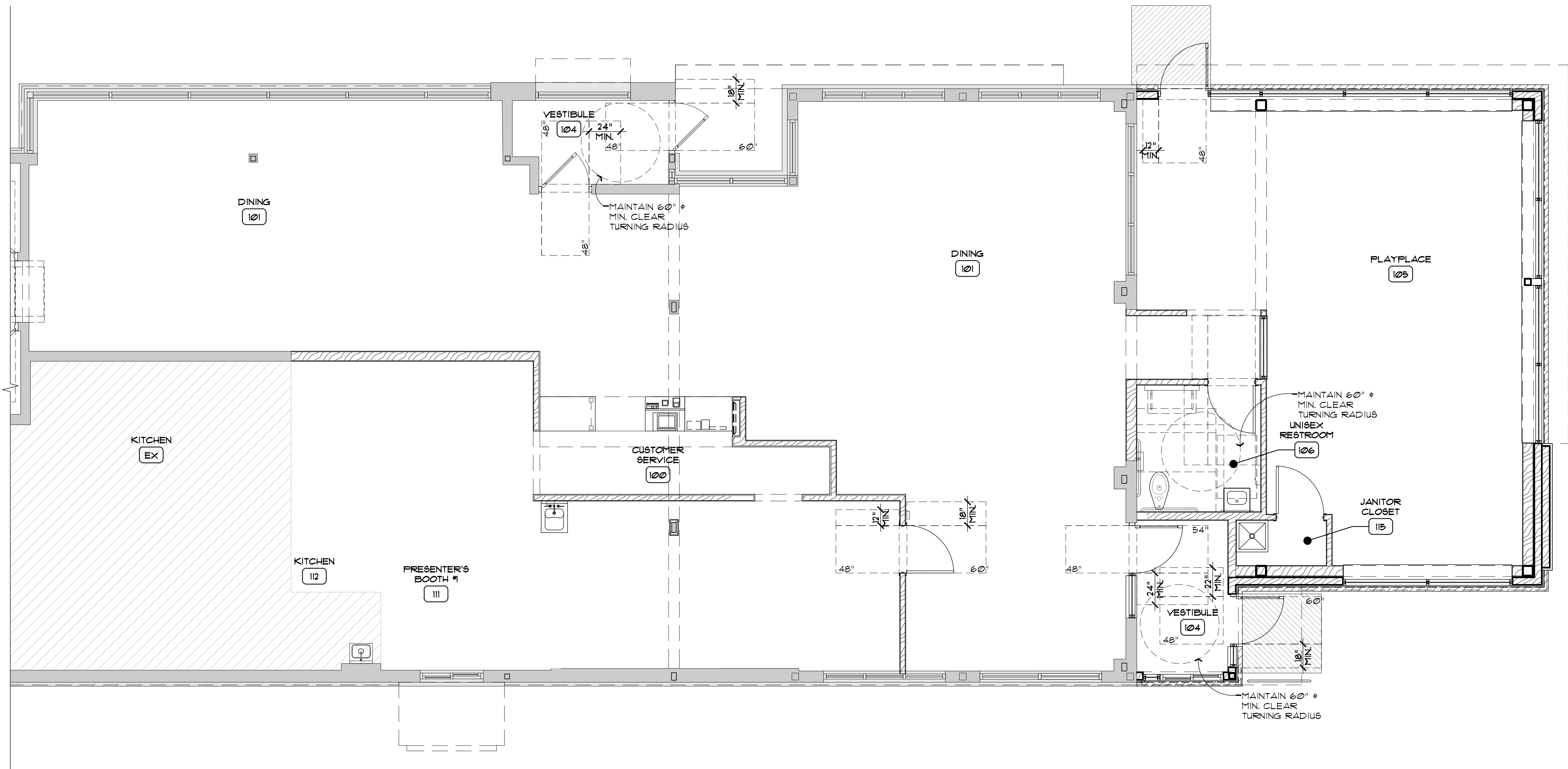
CORRUGATED METAL PANEL (MATCH EXISTING)
COLOR: (MATCH EXISTING)
C1 = CITYSCAPE

METAL FASCIA - BY METAL- ERA - REFER TO
SECTIONS FOR ADD'L INFO

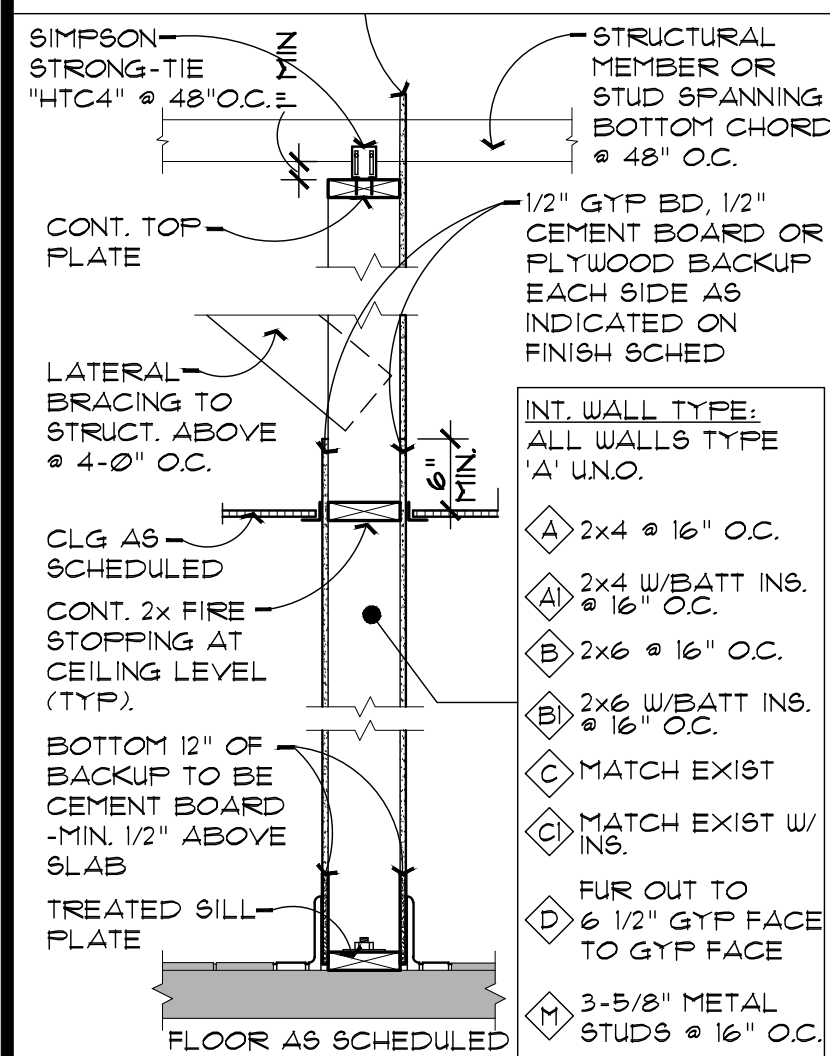
TYPE:
C1 = PRE-FAB ANCHOR-TITE FASCIA
COLOR: CITYSCAPE (MATCH EXISTING)



METAL UNDERSCORE
COLOR: GOLD



1 PARTIAL FLOOR PLAN
1/4" = 1'-0"



2 WALL TYPE DETAIL
N.T.S.

- HEALTH AND SANITARY GUIDELINES:
- IT WILL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO MAINTAIN A SAFE, CLEAN, AND SANITARY WORK ENVIRONMENT.
 - CONDUCT A DAILY MEETING WITH RESTAURANT MANAGEMENT TO ADDRESS HEALTH, CLEANLINESS AND OTHER ISSUES.
 - RESTAURANT MANAGEMENT IS TO REMOVE ALL FOOD AND RELATED ITEMS FROM WORK AREAS.
 - PRIOR TO REMOVING THE AIR-TIGHT PERIMETER, A DUSTLESS METHOD IS TO BE USED IN CLEANING FLOORS, WALLS, AND EQUIPMENT. THE USE OF VACUUMS, WET MOPPING OR A DUST RESISTING SWEEEPING COMPOUND IS ACCEPTABLE.
 - ALL EQUIPMENT WITHIN THE WORK AREA IS TO BE WASHED, RINSED, AND SANITIZED BEFORE USE.
 - KEEP ALL FOOD PREPARATION SURFACES WASHED, RINSED AND SANITIZED.
 - ALL OTHER LOCAL AND HEALTH CODES AND REQUIREMENTS SHALL BE IN FULL FORCE DURING CONSTRUCTION WORK.
 - ALL EXISTING KITCHEN EQUIPMENT IN CONSTRUCTION AREA TO BE TEMPORARILY RELOCATED DURING CONSTRUCTION. G.C. TO RE-INSTALL ALL RELOCATED EQUIPMENT PRIOR TO RESTAURANT RE-OPENING.
 - A TEMPORARY WALL SHALL BE CONSTRUCTED DIVIDING THE BUSINESS IN OPERATION FROM THE CONSTRUCTION SIDE OF THE PROJECT IN ORDER TO MAINTAIN SANITARY CONDITIONS FOR ALL FOOD SERVICE AREAS AND EQUIPMENT.
 - THIS WALL SHALL BE CONSTRUCTED IN ACCORDANCE WITH LOCAL BUILDING CODE REQUIREMENTS.
 - AIR DUST AND DEBRIS WILL BE PREVENTED FROM PENETRATING THE WALL AND CONTAMINATING FOOD SERVICE EQUIPMENT AS THE RENOVATION IS TAKING PLACE.
 - ANY SUPPLY OR RETURN DUCT WORK IN THE CONSTRUCTION AREA WILL BE TEMPORARILY TURNED OFF IN ORDER TO PREVENT CONTAMINATION OF THE ACTIVE KITCHEN AREA.
 - GENERAL CONTRACTOR TO COORDINATE WITH MCDONALD'S ARCH/ECM FOR SCHEDULING/ LOCATION.

- GENERAL NOTES:
- FIELD VERIFY ALL DIMENSIONS W/ EXISTING BUILDING CONDITIONS.
 - DRIVE-THRU WINDOW SUPPLIER: READY ACCESS: SERIES 600 - 47 1/2" x 43 1/2" TELEPHONE 800-621-5045.
 - ALL DIMENSIONS AND DASHED LINES REPRESENTING CLEAR FLOOR SPACE REQUIREMENTS MUST BE MAINTAINED WITHOUT EXCEPTION. IF EXISTING CONDITIONS PREVENT ANY CLEAR FLOOR SPACE FROM BEING MAINTAINED, CONTACT THE ARCHITECT FOR RESOLUTION.
 - NOT USED.
 - MAXIMUM OCCUPANCY SIGN TO BE POSTED PER LOCAL CODE. SIGN FURNISHED AND INSTALLED BY GC.
 - ALL NEW HAND SINK LOCATIONS SHALL HAVE CEMENT BOARD BACKING 48" IN HEIGHT AFF.
 - GC TO COORDINATE ALL REQUIRED BLOCKING FOR WALL HUNG EQUIPMENT, SHELVES, ETC. FOR PROPER INSTALLATION HEIGHTS.
 - GC TO PROVIDE ADA SIGNAGE PACKAGE AND INSTALL SIGNS AT LOCATIONS AND POSITIONS INDICATED IN PACKAGE OR AS REQUIRED BY LOCAL CODES. SIGNAGE PACKAGE SUPPLIED BY: FRANKIE
PHONE: 1-800-423-5247
ONLINE: www.frankiesupply.com
EMAIL: fs-frankiesupplyus@frankies.com

- GENERAL CEILING NOTES
- SEE SHT 441 FOR CEILING FINISHES.
 - GENERAL CONTRACTOR SHALL COORDINATE HVAC REGISTERS LOCATION WITH DECOR & MECHANICAL PLANS AND REPORT ANY DISCREPANCIES TO ARCHITECT.
 - REFERENCE MECHANICAL AND ELECTRICAL DRAWINGS FOR DIFFUSER AND LIGHTING INFORMATION.
 - ALL FINISH SURFACES OF WALL AND CEILING MATERIALS SHALL BE CLASS II AND SHALL HAVE A FLAME SPREAD RATING OF 4 TO 15 AND A SMOKE DENSITY OF 450 (PER IBC TABLE 804).
 - DRAPES AND OTHER DECORATIVE MATERIALS SHALL BE FLAME RETARDANT. CERTIFICATION THEREOF SHALL BE PROVIDED. EXIT, EXIT SIGNS, FIRE ALARM STATIONS, HOSE CABINETS AND EXTINGUISHER LOCATIONS SHALL NOT BE CONCEALED BY DECORATIVE MATERIAL.
 - MENU BOARD IS BY OTHERS. GENERAL CONTRACTOR TO VERIFY ALL REQUIREMENTS WITH SIGN COMPANY. TO BE UNDER SEPARATE PERMIT & SUBMITTAL.
 - PAINT EXISTING DIFFUSERS TO MATCH NEW CEILING.

WALL LEGEND:

	EXISTING TO REMAIN
	NEW WOOD STUD WALL
	NEW CONCRETE BLOCK
	NO WORK THIS AREA

[illegible]

EXISTING	DESCRIPTION	NEW	DESCRIPTION
	Clay		Sand
	Water Content		Water Content
	Soil Elevation		Soil Elevation
	Building Canopy / Overhang		Building Canopy / Overhang
	Concrete		Underground Foundation
	Bituminous		Concrete
	Landscaping		Concrete Curb
	Gravel		Edge of Pavement
	Paving Block		Finishing
	Paving Block		Guard Rail
	Storm Sewer Line		Concrete Retaining Wall
	Sanitary Sewer Line		Modular Retaining Wall
	Water Main		Falcated Retaining Wall
	Overhead Electric		A-Frame
	Underground Telephone		Cat Ladder
	Underground Fire Curb		S-Service
	Underground Electric		Light Standard
	Gas Line		Power Pole
	Concrete Curb		Bus Stop Sign
	Fencing		Chain Beam
	Retaining Wall		Manhole
	Set 1/2 X 1/8 Iron Pipe		Storm Sewer
	Iron Measurement Found		Sanitary Sewerline
	Survey Disk (Decorative)		Force Main
	Power Pole		Road System
	Guy Wire		Waterman
	Guard Post		Fine Line (if Separate)
	Gas Meter		Fire Dept Connection
	Transformer		Soil Substn
	Water Shutoff Valve		Gas Line underground
	Traffic Sign		Electric underground
	Flag Pole		Telecommunications underground
	Light Pole		Low Voltage Lines
	Trees		High Voltage Lines
			Directional Signage

SYMBOL	DESCRIPTION
	Solidment Control Fence
	Competitive Log
	No Protection

DRAWING SYMBOLS	
SYMBOL	DESCRIPTION
	No Reference
	Fishing Boat Count
	Large Shred Dred
	Coordinate Point
	Recess - Automobile, Bulbitt, etc
	Removal Area (No House)

LEGAL SYMBOLS	
Lot 1 and the East 27.5 feet of Lot 2, Block 1, Necedah Addition, Elk Earth County, MN	

LEGEND

LEGEND

McDONALD'S USA, LLC.

110 N. CARPENTER ST.
CHICAGO, IL 60607
TEL: (312) 350-5584
CONTACT: CARTER MANN

PROJECT CONTACTS

CIVIL ENGINEER LANDFORM	SURVEYOR LANDFORM
105 SOUTH 19TH AVE. SUITE 513 MINNEAPOLIS, MN 55457 TEL: 612-262-4075 FAX: 612-262-4077 CONTACT: TOM MCNEER	105 SOUTH 19TH AVE. SUITE 513 MINNEAPOLIS, MN 55457 TEL: 612-262-4075 FAX: 612-262-4077 CONTACT: LARRY HARRIN
LANDSCAPE ARCHITECT LANDFORM	ARCHITECT REPRISE
105 SOUTH 19TH AVE. SUITE 513 MINNEAPOLIS, MN 55457 TEL: 612-262-4075 FAX: 612-262-4077 CONTACT: JOSH POPEHN	12400 PORTLAND AVE. S. SUITE 100 BURNING WOOD, MN 55337 TEL: 612-262-4042 FAX: 612-262-4043 CONTACT: JIM BERTINOWICZ

CERTIFICATIONS

WE HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY US OR UNDER OUR CLOSE PERSONAL SUPERVISION AND THAT WE ARE LICENSED PROFESSIONAL ENGINEERS UNDER THE LAWS OF THE STATE OF MINNESOTA.

FILE NO.	C01	STATE	MN	ISSUED BY	ADH
CITY	MANKATO	COUNTY	BLUE EARTH	REVIEWED BY	TOM
STREET ADDRESS	1921 ADAMS ST	DATE RECEIVED			
SHEET NAME	CIVIL & LANDSCAPE TITLE SHEET	DATE ISSUED			
NATIONAL NUMBER	STATE NUMBER	DATE RECEIVED			

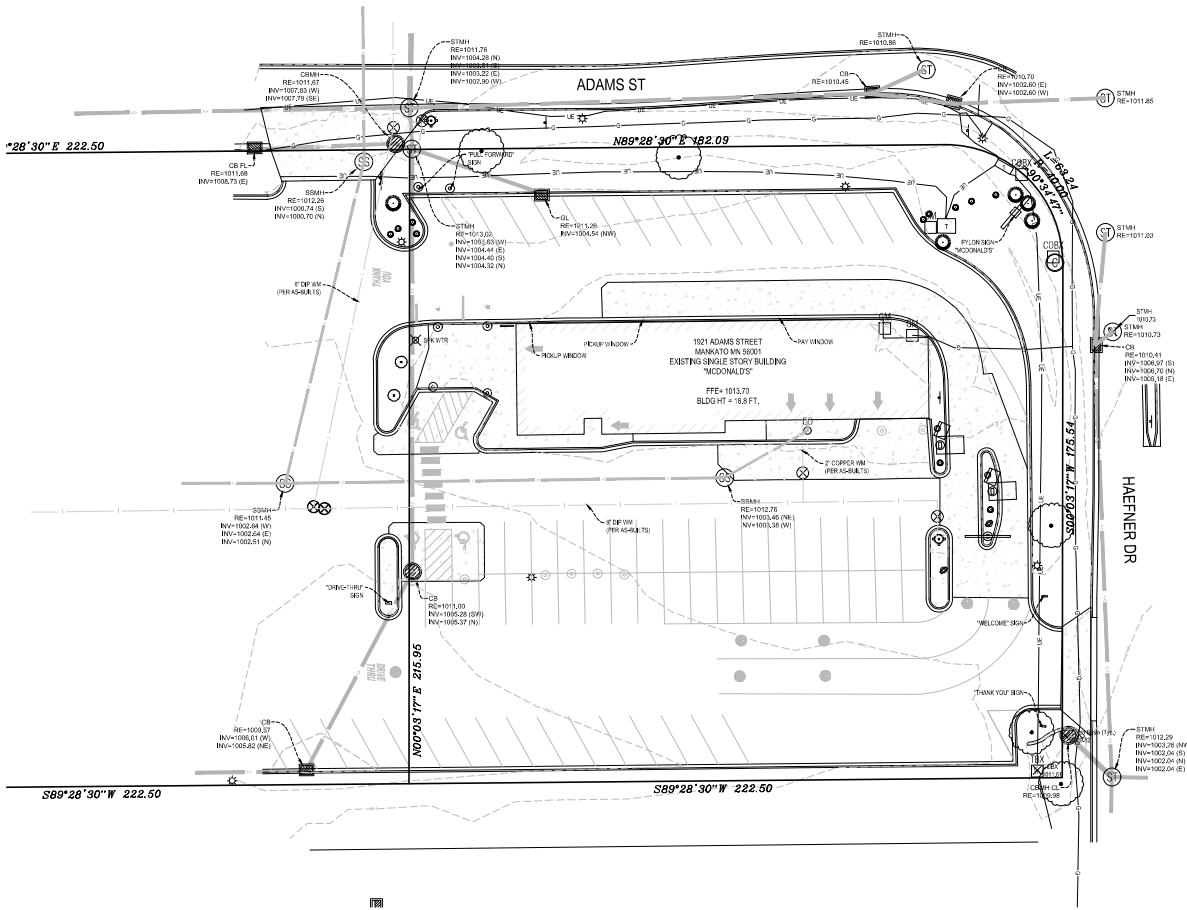
811.
Know what's Below.
Call before you dig.

LAND FORM
Power to the People

105 South Fifth Avenue
 Suite 513

Tel: 612-252-9071
 Fax: 612-252-9071

C0.1



EXISTING CONDITIONS

1. Background information shown is from a survey by Landform, Minneapolis, MN, on September 1, 2021, recorded for this project. Markable, 10' record drawings, and utility service providers. Landform offers no warranty, expressed or written, for information provided by others. Existing ground conditions shall be verified prior to beginning construction. Errors, omissions, or omissions discovered shall be reported to the Engineer immediately.
2. Reserved.
3. For Construction Staking or Surveying services contact Landform at 612-252-4077.

REV	DATE	DESCRIPTION
1	10/01/2021	ISSUED FOR PERMIT

CERTIFICATION

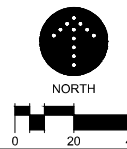
NOT FOR CONSTRUCTION

MCDONALD'S USA, LLC.

THESE DRAWINGS AND SPECIFICATIONS ARE THE SOLE PROPERTY OF MCDONALD'S USA, LLC. NO PART OF THESE DRAWINGS OR SPECIFICATIONS MAY BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF MCDONALD'S USA, LLC.

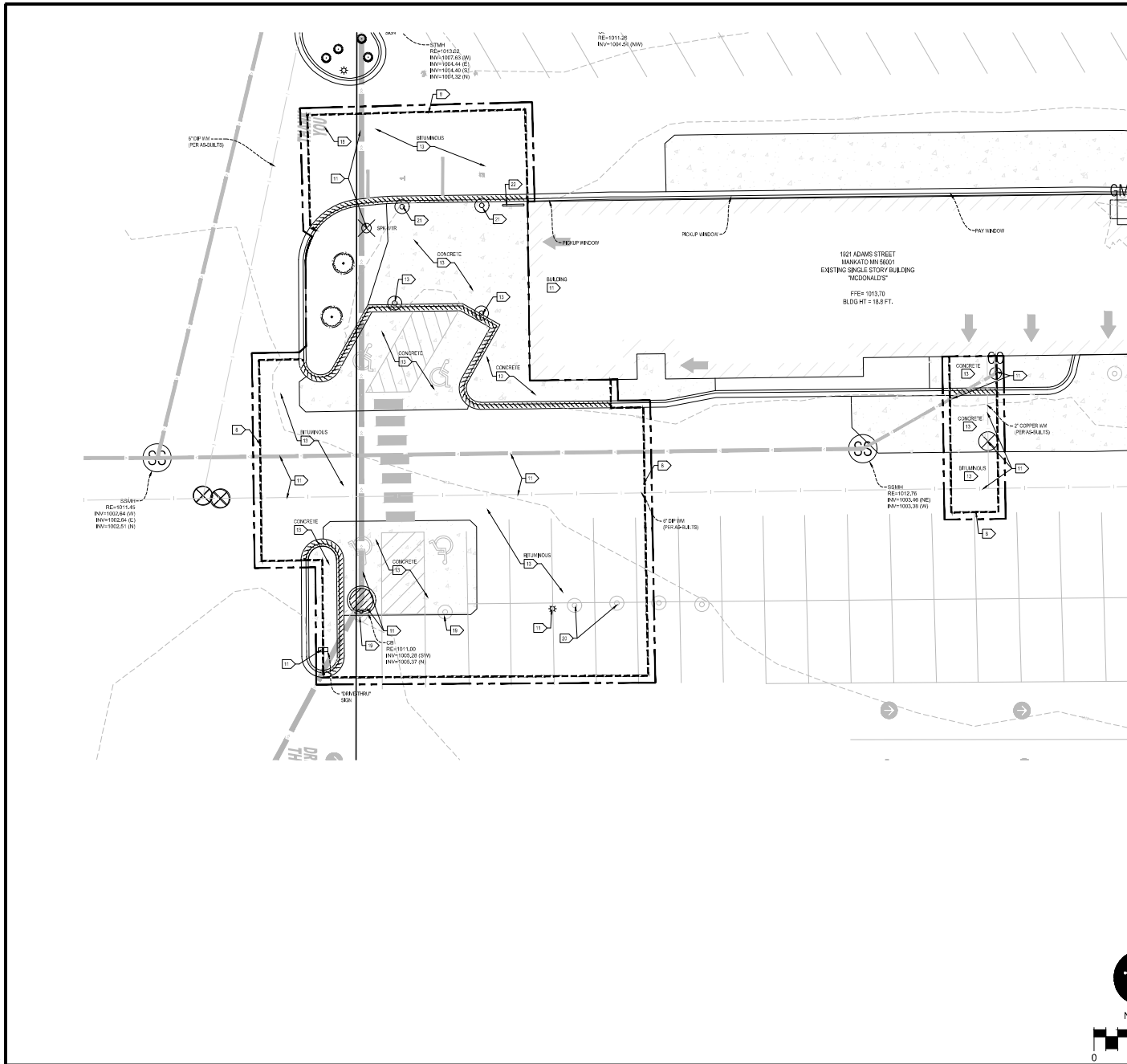
COUNTY	STATE	CITY	STREET	PROJECT	DATE	REVISION	DATE	REVISION	DATE	REVISION
MINNAPOLIS	MN	MINNAPOLIS	1501 ADAMS ST	EXISTING CONDITIONS	10/01/2021	1	10/01/2021	1	10/01/2021	1

SHEET NO. C1.1



105 South Fifth Avenue
Suite 513
Minneapolis, MN 55401
Tel: 612-252-4077
Fax: 612-252-4077
Web: landform.net

PROJECT NUMBER: 1501



DEMOLITION AND CLEARING NOTES

3. Obtain permits for drilling, building, and disposal prior to beginning.
4. Obtain civil service positions for field and office. 2 weeks prior to beginning operations and drilling.
5. Drill 200' shaft for waste prevention and sediment control measures that must be adequate to protect residents to allow.
6. Shovel cleanup until shovel wheel has been discolored by mud; inspect mud using special lighting or by using a complete pump. Remove sludge, oil, and debris, or any possible contamination to the extent of the pump is not for drilling.
7. Dimensions should be measured on occasion. Coordinate with new construction to ensure appropriate removal of debris.
8. Special drilling equipment, remove concrete walls, block and cutting to the nearest drilling rig beyond construction site to use as necessary.
9. Conduct demolition with minimal disruption of the community. Coordinate closely with the regulatory authority and provide assistance to affected citizens regarding removal of debris.
10. Provide maintenance, debris, traffic control, and other resources necessary for protection and safety of the public and thorough construction. The City may request that the contractor be in place during construction, including public safety and maintenance, minimal disruption and the demolition of the site.
11. Protect structures, utilities, trees, environmental soil, and adjacent property from damage during construction. Use erosion control. Generate dust to impact to neighbor below level at or below dust.
12. Remove items that impact structures to the site. Coordinate with owner to remove items to be saved or relocated. Remove items indicated and the protection from the street and the street.
13. Remove existing debris including, but not limited to, painting, curbs, sidewalks, signs, related foundations, spray, sidewalks, and sidewalks until the construction is complete. Coordinate with the city.
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DEMOLITION LEGEND

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[illegible]

NOT FOR
CONSTRUCTION

McDONALD'S USA, LLC.

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SHEET NO.	CITY	STATE	DRAWN BY
	MANKATO	MINN	ADH
	STREET ADDRESS	COUNTY	PHOTO SIZED
	1921 ADAMS ST	BLUE EARTH	REVIEWED BY
SHEET NAME			TOM
DEMOLITION			DATE RECEIVED
			10/1/2024
NATIONAL NUMBER	STATE NUMBER		DATE ISSUED
1318	224254		1/10/2024

C1.2

FILE NAME: C:\02MCD304.002.DWG
PROJECT NO.: MCD16304.00



C3.1



Introduction

On behalf of McDonald's USA, Landform is pleased to submit this application for a Certificate of Design Compliance and Site Plan Review to allow a building addition for a Play Place and other internal design upgrades for the McDonald's located at 1921 Adams Street in Mankato, Minnesota. We are excited about the improvements proposed for this site.

Site Plan

Submission Overview

All the requested materials are included except an Operational Narrative/Business Operational Details and a Site Lighting Plan. These were discussed in the pre-application meeting held on Thursday, October 11, 2024, with city staff and determined not to be required as neither of these items will change or be affected by the building addition.

The building addition will be for an indoor play place, as well as other internal design upgrades and modifications. A previous Certificate of Design Compliance was completed for this site in 2018 for exterior improvements and design upgrades.

The building addition does remove current ADA parking stalls, however they have been moved to another complaint place on site, and do not reduce the required number of parking stalls below what is required. The building addition will also not add new impervious surfaces as it will replace existing parking lot space. Additional shrubs and landscaping will also be provided to increase the amount of screening along the property lines.

Summary

We respectfully request approval for a Certificate of Design Compliance and Site Plan Review to allow a building addition for a Play Place and other internal design upgrades for the McDonald's located at 1921 Adams Street in Mankato, Minnesota. We also request to be placed on the November 20th Planning Commission and December 9th City Council meetings.

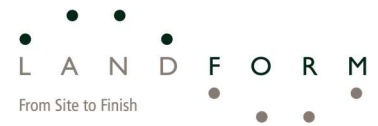
Contact Information

This document was prepared by:

Tom Meyer, PE
Landform
105 South Fifth Avenue, Suite 513
Minneapolis, MN 55401

Any additional questions regarding this application can be directed to Tom Meyer at tmeyer@landform.net or 612.638.0241

Response to Comments



105 South Fifth Avenue
Suite 513
Minneapolis, MN 55401

Tel: 612-252-9070
Web: landform.net

DATE	November 08, 2024
TO	City of Mankato, MN
CC	
FROM	Tom Meyer, PE
RE	McDonald's Adams St. - Response to Comments

The following is a response to the comments received from City of Mankato on November 7, 2024 for the building and site improvements proposed at the McDonald's restaurant located at 1921 Adams Street. Responses to comments are shown in *italics*.

Site Plan and Traffic Advisory Committee Comments

- A. Applicant shall be aware that a new condition will be included that when sidewalk improvements take place along Adams St., they will need to be a willing petitioner for said improvements.

Landform Response: Acknowledged.

- B. All new exterior lighting shall conform to Mankato City Code 10.89. This shall include the submission of lighting cut sheets, and a photometric plan that demonstrates conformance with Mankato City Code.

Landform Response: Acknowledged. There are no proposed changes to the site lighting.

- C. Application shall modify the existing landscaping plan to conform to Mankato City Code section 10.88. This shall include, but is not limited to, *Screening of Parking Areas. Wherever a surface parking area faces a street frontage, the parking area shall be screened from the street with a wall fence, or hedge to a minimum of four (4) feet nor more than eight (8) feet in height, nor be less than eighty percent (80%) opaque. This screening must be accomplished in the setback area between ten (10) feet and fifteen (15) feet from the right-of-way line.*

Landform Response: A revised landscape plan is submitted for review. The landscape plan includes a continuous hedge row along the parking lot frontage on Adams St.

- D. Applicant shall confirm any pre-existing agreement that allows for access, parking, and signage to exist that encroach into neighboring properties. If an agreement does not already exist, one would need to be made or the subject property would need to be brought into conformance.

Landform Response: Acknowledged. An access agreement will be provide to the city that demonstrates the neighboring property agrees to the encroachments.

- E. Applicant shall pay notification fees in the online portal, if not already done so.

Landform Response: Acknowledged. The notification fees have been paid.



**RESOLUTION OF THE MANKATO PLANNING COMMISSION
GRANTING A CERTIFICATE OF DESIGN COMPLIANCE UNDER
THE MANKATO ZONING ORDINANCE**

WHEREAS, the applicant of the following property located in the City of Mankato, to wit:

The eastern 27.5' of Lot 2, and all of Lot 1, Block 1, Menard Addition (1921 Adams Street).

Has applied for a certificate of design compliance for an approximately 832 square foot addition on the western side of the existing structure to allow for a new play place in the Highway Gateway Overlay District; and

WHEREAS, the Planning Agency of the City of Mankato has completed a review of the application and made a report pertaining to said request (CY 44-24); and

WHEREAS, the Mankato City Code Section 10.48 Subpart 3. Plan Review states that for projects with an estimated cost in excess of one hundred thousand dollars (\$100,000) and less than five hundred thousand dollars (\$500,000), the Planning Commission shall review the activity to determine whether the proposed project meets the intent and requirements of this section; and

WHEREAS, the Planning Commission of the City, on the 20th day of November 2024, following proper notice, held a public hearing regarding the request, and following said public hearing, adopted a recommendation that the request for a certificate of design compliance be approved; and

WHEREAS, based upon the Planning Agency report and recommendation, the Planning Commission hereby finds that:

1. The property is located in the Highway Gateway Overlay District and the proposed value of the project does not exceed \$500,000. By Mankato City Code Chapter 10.48, this project only requires review by the Planning Commission.
2. The request is in keeping with the standards set forth in the B-3 Highway Business District.
3. The proposal, which includes implementation of the required conditions, conforms to Mankato City Code section 10.48 - Highway Gateway Overlay District.

NOW, THEREFORE BE IT RESOLVED by the Planning Commission of the City of Mankato that the certificate of design compliance to allow for an approximately 832 square foot play place addition on the western side of the existing structure in the Highway Gateway Overlay District be approved subject to the following conditions:

1. At the time when sidewalk improvements take place along Adams Street, the applicant shall serve as a willing petitioner for said improvements.

Resolution Certificate of Design Compliance

Page 2 of 2

2. Applicant shall provide a copy of the access agreement demonstrating that the neighboring property at 1901 Adams Street agrees to all existing and proposed encroachments.
3. All new exterior light fixtures shall be full cut-off fixtures and lighting levels at the property line may not exceed ½ foot candle. All lighting shall meet City Code Section 10.89. prior to issuance of the certificate of occupancy.
4. Signage shall require a separate sign permit prior to fabrication or installation. All signage, both permanent and temporary, shall adhere to Mankato City Code Section 10.87.
5. Landscaping shall be installed in accordance with City Code Sections 10.48. and 10.88. prior to issuance of the certificate of occupancy.

This resolution shall become effective immediately upon passage.

Dated this _____ day of _____, 2024.

John Zehnder
Chair

ATTEST: _____
Mark Konz
Secretary of Planning Commission

Meeting Date: 11/20/2024

Title

CY45-24

Request of the City of Mankato for review of certain sections of Chapter 10 of the City Code pertaining to cannabis.

The anticipated date of final City Council action is November 25, 2024.

Applicant

The City of Mankato is the applicant.

Request

The applicant is requesting to amend certain sections of Chapter 10 of the Mankato pertaining to cannabis.

Review

The state legislature legalized cannabis in 2023. According to the legislation, the state is primarily responsible for regulation, while the city's authority to regulate cannabis is limited. The city has authority to:

- (1) register retail businesses
- (2) set zoning regulations within state limitations
- (3) regulate the use of cannabis in public spaces

Ordinances have been drafted addressing these subjects and were discussed by the Council at their Work Session on October 28. The zoning ordinance must be referred to the planning commission for review before consideration by the City Council. The City Council set the date of hearing to review the ordinance at the November 12, 2024, meeting. The Planning Commission review and comments will be forwarded to the Mankato City Council as part of the ordinance review on November 25, 2024.

The Planning Commission will only review the changes to Chapter 10 (Zoning Ordinance) of Mankato City Code.

In the legislation legalizing cannabis, the City of Mankato is required to determine which zoning districts cannabis related businesses are allowed to operate. The legislation prohibits cities from excluding cannabis-related businesses from the city. The cannabis related activities include:

- Retail
- Transportation and delivery service for cannabis items
- The cultivation/growing of cannabis
- Manufacturing, processing, testing, and wholesale
- On-site consumption of edible cannabis products and lower-potency hemp edibles

Sales and accessory sales of Low Potency Edibles are listed as a permitted use in each commercial zoning district (CBD-C, CBD-F, B-1, B-2, and B-3).

The proposed ordinance allows cannabis retail businesses and delivery service providers as permitted uses in B-3, Highway Business zoning district. This area is least impacted by the distance/buffering regulation. Cities are allowed to buffer cannabis-related businesses from schools, daycares, residential treatment facilities, and public parks used by minors, including a playground or athletic field. The proposed ordinance includes buffers of 1,000 feet from a school or 500 feet from a daycare, residential treatment facility, or public park that is used by

minors. The buffering distances are not part of the zoning ordinance changes, but rather, the proposed zoning ordinance amendment refers to the distances that are included in Chapter 5.

Businesses engaged in wholesale would be permitted in the B-2, General Business District, PI, Planned Industrial District, M-1, Light Industrial, and M-2, Heavy Industrial Districts.

Cultivation of cannabis will be allowed in the PI, Planned Industrial District, M-1, Light Industrial, and M-2, Heavy Industrial Districts (uses allowed in the PI and M-1 Districts are listed as permitted uses in the M-2).

Manufacturing, processing, testing, and transportation would be allowed uses in the M-2, Heavy Industrial Districts.

Cannabis related businesses shall comply with all other requirements of the zoning ordinance including for signage, parking, setbacks and height, floor area ratio, building design, and performance standards (lighting, noise, etc.).

Attachments

Chapter 10 Amendments

Chapter 5.52 Amendments

Chapter 5.53 Amendments

CITY OF MANKATO
STATE OF MINNESOTA

ORDINANCE AMENDING CHAPTER 10 LAND USE (ZONING)
RELATING TO CANNABIS

The City of Mankato hereby ordains that the City Code of Ordinances, Chapter 10, Land Use (Zoning), is hereby amended as follows:

PART I. SCOPE, DEFINITIONS, AND ESTABLISHMENT OF DISTRICTS.

Sec. 10.02. Definitions.

Subd. 4. Adult-use Cannabis Product. Means a cannabis product that is approved for sale by the Office or is substantially similar to a product approved by the Office. Adult-use cannabis product includes edible cannabis products but does not include medical *cannabinoid* products or lower-potency hemp edibles. Adult use products may also include products made from Cannabis Concentrate, Cannabis Flower, Artificially Derived Cannabinoid, Cannabis Concentrate, and Cannabis Flower.

Subd. 25. Cannabinoid. Any of the chemical constituents of hemp plants or cannabis plants that are naturally occurring, biologically active, and act on the cannabinoid receptors of the brain. Cannabinoid includes but is not limited to tetrahydrocannabinol and cannabidiol.

Subd. X. Cannabis Business. Any of the following licensed under this Minnesota Statutes, Chapter 342 and as defined in Minn. Stat. § 342.01, as amended from time to time:

cannabis microbusiness;

cannabis mezzobusiness;

cannabis cultivator;

cannabis manufacturer;

cannabis retailer;

cannabis wholesaler;

cannabis transporter;

cannabis testing facility;

cannabis event organizer;

cannabis delivery service;

medical cannabis combination business

Subd. X. Cannabis Retail Business. Any of the following licensed under Minnesota Statutes, § 342.10:

Cannabis microbusiness;

Cannabis mezzobusiness;

Cannabis retailer and

Medical cannabis combination business

Subd. X. **Cannabis Mezzobusiness.** Any business licensed to perform any or all of the following within the limits established by Minnesota Statutes, § 342.29:

grow cannabis plants from seed or immature plant to mature plant and harvest cannabis flower from a mature plant for use as adult-use cannabis flower or for use in adult-use cannabis products;

grow cannabis plants from seed or immature plant to mature plant and harvest cannabis flower from a mature plant for use as medical cannabis flower or for use in medical cannabinoid products;

make cannabis concentrate;

make hemp concentrate, including hemp concentrate with a delta-9 tetrahydrocannabinol concentration of more than 0.3 percent as measured by weight;

manufacture artificially derived cannabinoids;

manufacture adult-use cannabis products, lower-potency hemp edibles, and hemp-derived consumer products for public consumption;

process medical cannabinoid products;

purchase immature cannabis plants and seedlings and cannabis flower from a cannabis microbusiness, another cannabis mezzobusiness, a cannabis manufacturer, or a cannabis wholesaler;

purchase cannabis concentrate, hemp concentrate, and synthetically derived cannabinoids from a cannabis microbusiness, another cannabis mezzobusiness, a cannabis manufacturer, or a cannabis wholesaler for use in manufacturing adult-use cannabis products, lower-potency hemp edibles, or hemp-derived consumer products;

purchase hemp plant parts and propagules from a licensed hemp grower licensed under chapter 18K;

purchase hemp concentrate from an industrial hemp processor licensed under chapter 18K;

package and label adult-use cannabis flower, adult-use cannabis products, lower-potency hemp edibles, and hemp-derived consumer products for sale to customers;

sell immature cannabis plants and seedlings, adult-use cannabis flower, adult-use cannabis products, lower-potency hemp edibles, hemp-derived consumer products, and other products authorized by law to other cannabis businesses and to customers; and

perform other actions approved by the Office.

Subd. X. **Cannabis Microbusiness.** A business licensed to perform any or all of the following within the limits established by Minnesota Statutes, § 342.28:

grow cannabis plants from seed or immature plant to mature plant and harvest cannabis flower from a mature plant;

make cannabis concentrate;

make hemp concentrate, including hemp concentrate with a delta-9 tetrahydrocannabinol concentration of more than 0.3 percent as measured by weight;

manufacture artificially derived cannabinoids;

manufacture adult-use cannabis products, lower-potency hemp edibles, and hemp-derived consumer products for public consumption;

purchase immature cannabis plants and seedlings and cannabis flower from another cannabis microbusiness, a cannabis mezzobusiness, a cannabis manufacturer, or a cannabis wholesaler;

purchase hemp plant parts and propagules from an industrial hemp grower licensed under Minnesota Statutes Chapter 18K;

purchase hemp concentrate from an industrial hemp processor licensed under Minnesota Statutes Chapter 18K;

purchase cannabis concentrate, hemp concentrate, and artificially derived cannabinoids from another cannabis microbusiness, a cannabis mezzobusiness, a cannabis manufacturer, or a cannabis wholesaler for use in manufacturing adult-use cannabis products, lower-potency hemp edibles, or hemp-derived consumer products;

package and label adult-use cannabis flower, adult-use cannabis products, lower-potency hemp edibles, and hemp-derived consumer products for sale to customers;

sell immature cannabis plants and seedlings, adult-use cannabis flower, adult-use cannabis products, lower-potency hemp edibles, hemp-derived consumer products, and other products authorized by law to other cannabis businesses and to customers;

operate an establishment that permits on-site consumption of edible cannabis products and lower-potency hemp edibles; and

perform other actions approved by the Office.

Subd. X. Hemp Concentrate. Compounds that include (1) the extracts and resins of a hemp plant or hemp plant parts; (2) the extracts or resins of a hemp plant or hemp plant parts that are refined to increase the presence of targeted cannabinoids; or (3) a product that is produced by refining extracts or resins of a hemp plant or hemp plant parts and is intended to be consumed by combustion or vaporization of the product and inhalation of smoke, aerosol, or vapor from the product. Hemp concentrate does not include artificially derived cannabinoids, lower-potency hemp edibles, hemp-derived consumer products, or hemp-derived topical product.

Subd. X. Intoxicating Hemp Product. Any product that is intended to be eaten or consumed by humans, contains a contains hemp concentrate or an artificially derived cannabinoid, in combination with food ingredients, is not a drug, and meet the requirements to be sold under Minn. Stat. § 151.72 or after March 1, 2025, the requirements under Minnesota Statutes, Chapter 342. This product meets the definition of Lower-Potency Hemp Edibles in Minn. Stat. § 342.01, subd. 50, as amended from time to time and set forth herein in subd. 95. This does not include any product intended to be externally applied to skin. A product intended to only contain CBD but which may contain less than trace amounts of tetrahydrocannabinol (THC) as an unintended result of the manufacturing process is not considered an Intoxicating Hemp Product.

Subd. X. Lower-Potency Hemp Edibles.

Any product that (a):

(1) is intended to be eaten or consumed as a beverage by humans;

(2) contains hemp concentrate or an artificially derived cannabinoid, in combination with food ingredients;

(3) is not a drug;

(4) does not contain a cannabinoid derived from cannabis plants or cannabis flower;

(5) is a type of product approved for sale by the office or is substantially similar to a product approved by the office, including but not limited to products that resemble nonalcoholic beverages, candy, and baked goods

and meets either of the requirements of below (B)(1) or (B)(2):

B(1) a product that:

i) consists of servings that contain no more than five milligrams of delta-9 tetrahydrocannabinol; no more than 25 milligrams of cannabidiol, cannabigerol, cannabinol,

or cannabichromene; any other cannabinoid authorized by the office; or any combination of those cannabinoids that does not exceed the identified amounts;

- ii) does not contain more than a combined total of 0.5 milligrams of all other cannabinoids per serving; and
- iii) does not contain an artificially derived cannabinoid other than delta-9 tetrahydrocannabinol, except that a product may include artificially derived cannabinoids created during the process of creating the delta-9 tetrahydrocannabinol that is added to the product, if no artificially derived cannabinoid is added to the ingredient containing delta-9 tetrahydrocannabinol and the ratio of delta-9 tetrahydrocannabinol to all other artificially derived cannabinoids is no less than 20 to one;

or

B(2) a product that:

- i) contains hemp concentrate processed or refined without increasing the percentage of targeted cannabinoids or altering the ratio of cannabinoids in the extracts or resins of a hemp plant or hemp plant parts beyond the variability generally recognized for the method used for processing or refining or by an amount needed to reduce the total THC in the hemp concentrate; and
- (ii) consists of servings that contain no more than five milligrams of total THC.

Subd. X. Lower-Potency Hemp Edible Manufacturer. A manufacturer licensed by the OCM as lower-potency hemp edible manufacturer pursuant to Minn. Stat. § 342.10, as amended from time to time.

Subd. X. Lower-Potency Hemp Edible Retailer. An entity licensed by the OCM as a Lower-Potency Hemp Edible Retailer pursuant to Minn. Stat. § 342.10, as amended from time to time.

Subd. X. Medical Cannabis Combination Business. An entity licensed by the OCM as a Medical Cannabis Combination Business pursuant to Minn. Stat. § 342.515, as amended from time to time.

Subd. X. Medical Cannabis Distribution Facility. A facility operated by a medical cannabis manufacturer for purposes of distributing medical cannabis.

Subd. X. Non-Intoxicating Hemp Products. Includes hemp-derived topical products and hemp fiber products as those terms are defined in Minn. Stat. §342.01 and which are not intended for human or animal ingestion.

Subd. X. OCM. Refers to the Office of Cannabis Management.

Subd. X. School. Any property owned, leased, or controlled by an independent district, commonly referred to as a school district, under Minn. Stat. § 123A.05; or by an organization operating a nonpublic school, as that term is defined in Minn. Stat. § 123B.41, subd. 9, where an elementary, middle, secondary school, secondary vocational center or other school providing educational services for any grade kindergartner through grade 12 is located; or any property owned, leased or used as a community education program by a school district or districts for children and their caregivers, relatives or parents for the ages from birth to kindergarten, excluding properties exclusively used for the remote or online delivery of educational programming. A public or private facility that provides a curriculum of elementary and secondary academic instruction, including kindergartens, elementary, junior high schools, and high schools.

Subd. 140. THC. Tetrahydrocannabinol.

Sec. 10.43. CBD-C Central Business District-Core.

Subd. 1. Purpose. The CBD-C, Central Business District-Core, is designed and intended to provide locations in the downtown core area of the City for high density shopping and business developments on compact sites, stressing pedestrian orientation and access.

Subd. 2. Permitted Uses. Except as specifically limited herein, the following uses are permitted in the CBD-C, Central Business District-Core. Every use shall be operated in its entirety, within a completely enclosed structure, including the storage of all materials, products, and equipment:

- X. Sales of Low Potency Edibles and accessory sales of Low Potency Edibles.

Sec. 10.46. B-2 General Business District.

Subd. 1. Purpose. The B-2, General Business District, is designed and intended to provide for a broad range of commercial and light industrial developments.

Subd. 2. Permitted Uses. Except as specifically limited herein, the following uses are permitted in the B-2, General Business District. Every use, unless expressly exempted below or allowed by a conditional use permit, shall be operated in its entirety within a completely enclosed structure, including the storage of all materials, products, and equipment:

- X. Cannabis wholesale and sales of low potency edibles and accessory sales of Low Potency Edibles.

Sec. 10.47. B-3 Highway Commercial District.

Subd. 1. Purpose. The B-3, Highway Commercial District, is designed and intended to provide for automobile oriented commercial developments within the vicinity of streets with functional classifications of either arterials or major collectors. Such commercial developments are generally characterized by large parking areas. The district also encourages a broad range of business and light industrial activities.

Subd. 2. Permitted Uses. Except as specifically limited herein, the following uses are permitted in the B-3, Highway Commercial District. Every use, unless expressly exempted below or allowed by a conditional use permit, shall be operated in its entirety within a completely enclosed structure, including the storage of all materials, products, and equipment:

- X. Cannabis retail per the regulation contained in 5.52 and delivery.

Sec. 10.62. PI Planned Industrial District.

Subd. 1. Purpose. The PI, Planned Industrial District, is intended to provide strategic sites for certain light industrial development under exemplary standards that assist in making such developments compatible with property in neighboring residential and commercial districts.

Subd. 2. Permitted Uses. Except as specifically limited herein, the following uses are permitted in the PI, Planned Industrial District. Every use, unless expressly exempted below or allowed by a conditional use permit, shall be operated in its entirety within a completely enclosed structure, including the storage of all materials, products, and equipment:

X. Cultivation and testing of cannabis.

Sec. 10.63. M-1 Light Industrial District.

Subd. 1. Purpose. The M-1, Light Industrial District, is intended to provide sites for light manufacturing and light industrial uses under controls that minimize any adverse effects on property in neighboring residential, business or commercial districts.

Subd. 2. Permitted Uses. Except as specifically limited herein, the following uses are permitted in the M-1, Light Industrial District:

- X. Mezzobusiness and microbusiness; provided mezzobusiness and microbusiness retail conforms to Section 5.52, Subdivision 4, Letter K.
- X. Lower Potency Hemp Edibles manufacturing.

Sec. 10.82. Special Provisions Applicable to Specific Permitted and Conditional Uses.

Subd. 1. Home Occupations. It is the findings of the City Council that home occupations effect neighborhood character, have a potential to be a nuisance to neighbors, and may negatively affect City services. The purpose of this section is to regulate home occupations in order to avoid such negative impacts and to ensure the integrity and goals of the residential zoning districts. Standards for home occupations are intended to ensure compatibility with other permitted uses and the character of the residential neighborhood.

- C. **Prohibited Home Occupations.** The following uses, by the nature of the investment or operation, have a pronounced tendency to rapidly increase beyond the limits permitted for home occupations. The following uses, therefore, are not permitted as home occupations:

- 4. Commercial Cannabis sales, commercial cannabis manufacturing, low potency hemp edible sales, low potency edible manufacturing, commercial cultivators, commercial cannabis production, and/or commercial cannabis distribution.

RECODIFICATION IN PROCESS. The city of Mankato is currently in the process of updating and recodifying its City Code, with this, the formatting of the above will be revised once this process is complete.

This ordinance shall, in accordance with the provisions of Section 2.14 of the Mankato City Charter, become effective thirty (30) days after publication of notice of its adoption.

Adopted this ____ day of _____ 2024.

Najwa Massad
Mayor

Attest: _____
Renaë Kopischke, MMC
City Clerk

**CITY OF MANKATO
STATE OF MINNESOTA**

**ORDINANCE ESTABLISHING REGISTRATION REQUIREMENTS FOR THE SALE OF
LOWER-LEVEL INTOXICATING HEMP PRODUCTS, ARTIFICIAL OR OTHERWISE, AND
THE SALE OF ADULT-USE CANNABIS PRODUCTS**

The City of Mankato hereby ordains that the City Code of Ordinances, Chapter 6, Business and Licensing, is hereby amended by adding the following new Sec. 5.52:

Sec. 5.52. ADULT-USE CANNABIS RETAILERS & LOWER-POTENCY HEMP EDIBLE RETAILERS.

Subd. 1. Purpose.

The city recognizes that the sale of certain products containing the psychoactive cannabis compound THC is legal when those sales are to individuals 21 years of age or older, and that the increase of these types of products in the community increases the likelihood that youth will have access to and use products containing THC. The use of those products by individuals under the age of 21 places a burden on all levels of government, resulting in financial and other public resources being needed to address both violations of laws and regulations regarding such use, including the impacts on health. The purpose of this chapter is to regulate the sale of products containing THC for the purpose of enforcing and further existing laws and regulations.

Subd. 2. Definitions.

The following words, terms and phrases, when used in this section, shall have the meanings ascribed to them in this section or, if not defined herein, M.S.A., ch. 342, except where the context clearly indicates a different meaning. Other words, terms and phrases used in this chapter and not defined in this subdivision will have the meanings ascribed to them in M.S.A., ch. 342, if applicable.

Adult-use cannabis concentrate means cannabis concentrate that is approved for sale by the Office of Cannabis Management or is substantially similar to a product approved by the Office. Adult-use cannabis concentrate does not include any artificially derived cannabinoid.

Adult-use cannabis flower means cannabis flower that is approved for sale by the Office or is substantially similar to a product approved by the Office. Adult-use cannabis flower does not include medical cannabis flower, hemp plant parts, or hemp-derived consumer products.

Adult-use cannabis product means a cannabis product that is approved for sale by the Office or is substantially similar to a product approved by the Office. Adult-use cannabis product includes edible cannabis products but does not include medical cannabinoid products or lower-potency hemp edibles. Adult-use products may also include products made from adult-use cannabis concentrate, adult-use cannabis flower, artificially derived cannabinoid, cannabis concentrate, and cannabis flower.

Artificially derived cannabinoid means a cannabinoid extracted from a cannabis plant, cannabis flower, hemp plant, or hemp plant parts with a chemical makeup that is changed after extraction to create a different cannabinoid or other chemical compound by applying a catalyst other than heat or light. Artificially derived cannabinoid includes but is not limited to any tetrahydrocannabinol created from cannabidiol but does not include cannabis concentrate, cannabis products, hemp concentrate, lower-potency hemp edibles, or hemp-derived consumer products.

Athletic fields mean a piece of land and supporting facilities prepared and used for playing a game or sporting activity or regularly hosting sporting practices and events.

Cannabinoid means any of the chemical constituents of hemp plants or cannabis plants that are naturally occurring, biologically active, and act on the cannabinoid receptors of the brain. Cannabinoid includes but is not limited to tetrahydrocannabinol and cannabidiol.

Cannabis business means any of the following licensed businesses under M.S.A., ch. 342, the statutory definitions of which are incorporated by reference:

1. cannabis microbusiness;
2. cannabis mezzobusiness;
3. cannabis cultivator;
4. cannabis manufacturer;
5. cannabis retailer;
6. cannabis wholesaler;
7. cannabis transporter;
8. cannabis testing facility;
9. cannabis event organizer;
10. cannabis delivery service;
11. medical cannabis combination business.

Cannabis lounge means a portion of the premises of a cannabis microbusiness licensed or endorsed by the State of Minnesota Office of Cannabis Management for on-site consumption of edible cannabis products and lower-potency hemp edibles.

Cannabis retail business means any of the following licensed under M.S.A., ch. 342:

1. Cannabis microbusiness;
2. Cannabis mezzobusiness;
3. Cannabis retailer and
4. Medical cannabis combination business.

CBD means a compound of the cannabis plant known as cannabidiol that is not intoxicating.

Day care means a Minnesota licensed day care center which provides care of one or more children outside those children's own homes for gain, on a regular basis, for any part of a 24-hour day.

Intoxicating hemp product means any product that is intended to be eaten or consumed by humans, contains a contains hemp concentrate or an artificially derived cannabinoid, in combination with food ingredients, is not a drug, and meet the requirements to be sold under M.S.A. § 151.72 or after March 1, 2025, the requirements under M.S.A., ch. 342. This product meets the definition of lower-potency hemp edibles in M.S.A. § 342.01, subd. 50, as amended from time to time. This does not include any product intended to be externally applied to skin. A product intended to only contain CBD, but which may contain less than trace amounts of tetrahydrocannabinol (THC) as an unintended result of the manufacturing process is not considered an intoxicating hemp product.

Lower-potency hemp edible retailer means a business that sells intoxicating hemp products at retail. In state law, as amended from time to time, these businesses are licensed as lower-potency hemp edible retailers.

Playgrounds means improved open spaces designed, equipped and set aside for the recreation of children.

Premises means the area from which a cannabis retail business sells adult-use cannabis products, or a lower-potency hemp edible retailer sells intoxicating hemp products and, for an on-site lower-potency hemp edible retailers and liquor store, the area for which the licensed premises is identified pursuant to its license issued under M.S.A. ch. 340A.

Liquor store means a business licensed under M.S.A. ch. 340A to sell alcoholic beverages in original packages for consumption off the licensed premises only.

Moveable place of business means any form of business operated out of a truck, van, automobile, or other type of vehicle or transportable shelter and not a fixed address store front or other permanent type of structure authorized for sales transactions. Moveable place of business does not include instances when on-site lower-potency hemp edible retailers sell intoxicating hemp products at a location pursuant to a caterer's permit or cannabis special event permit.

Office means the Office of Cannabis Management.

Off-Sale lower-potency hemp edible retailer means a business that sells intoxicating hemp products for off-site consumption.

On-Site lower-potency hemp edible retailer means a business with an on-sale liquor license pursuant to M.S.A. ch. 340A and which sells intoxicating hemp products that are intended to be consumed as a beverage, for on-site consumption. A licensed cannabis microbusiness may sell intoxicating hemp edibles and adult-use edibles on-site as part of a cannabis lounge.

Registered products mean the products, whether adult-use cannabis products or intoxicating hemp products, for which the entity is licensed to sell.

Residential treatment facility means the type of facilities defined under M.S.A. § 245.462, subd. 23.

Sale means any transfer of goods for money, trade, barter or other consideration.

School means any property owned, leased, or controlled by an independent district, commonly referred to as a school district, under M.S.A. § 123A.05; or by an organization operating a nonpublic school, as that term is defined in M.S.A. § 123B.41, subd. 9, where an elementary, middle, secondary school, secondary vocational center or other school providing educational services for any grade kindergartner through grade 12 is located; or any property owned, leased or used as a community education program by a school district or districts for children and their caregivers, relatives or parents for the ages from birth to kindergarten, excluding properties exclusively used for the remote or online delivery of educational programming.

THC means the chemical compound of the cannabis plant tetrahydrocannabinol.

Subd. 3. Registration required

A. Pre-license certification of cannabis businesses.

1. The city manager, or their designee, is authorized to certify whether a proposed cannabis business complies with the city's zoning ordinances and, if applicable, with state fire code and building code, pursuant to M.S.A. § 342.13.
2. Potential licensees are responsible for making all necessary zoning applications prior to the city receiving the request for certification from the Office. If a potential licensee fails to obtain necessary zoning approvals prior to the city receiving a request for certification, the city will inform the Office that the potential licensee does not meet zoning and land use laws. If, at the time the city receives a request for zoning certification, there are no further intended alterations to the building where the business is to be conducted, the city will also certify compliance with building and fire code regulations, provided that the potential licensee has obtained inspections prior the city's receipt of a request for certification from the Office. Building and fire code inspections will be valid for one year from completion.

B. Intoxicating hemp products. Businesses may only sell intoxicating hemp products to customers, for on-site or off-site consumption, if one of the following two conditions apply:

1. For on-site consumption, an on-site lower-potency hemp edible retailer must be registered with the city before making sales to customers and must have an active on-sale liquor license pursuant to M.S.A. ch. 340A. Immediately after the Office begins licensing these retailers, the retailer must also be licensed by the Office pursuant to M.S.A. § 342.10 as a lower-potency

hemp edible retailer, as that term is defined by M.S.A. § 342.01, and as those sections are amended from time to time. A licensed cannabis microbusiness may sell intoxicating hemp edibles and adult-use edibles on-site as part of a cannabis lounge.

2. For off-site consumption, lower-potency, and edible retailer must be registered with the city before making sales to customers and immediately after the Office begins licensing, must be licensed by the Office pursuant to M.S.A. § 342.10 as a lower-potency hemp edible retailer, as that term is defined by M.S.A. § 342.01, and as those sections are amended from time to time, to sell product retail.

C. *Adult-use products.* Only cannabis retail businesses may sell adult-use cannabis products. A cannabis retail business must have an active license issued by the Office pursuant to M.S.A. ch. 342 which allows it to sell adult-use cannabis product at retail, and also must be registered with the city before making sales to customers.

D. *Buffers.* No cannabis retail business, any portion of a cannabis business selling product at retail, or any cannabis lounge operating pursuant to a licensed microbusiness, may be located within 1,000 feet of the property lines of a school, or within 500 feet of the property lines of a day care, residential treatment facility, or within 500 feet of public park where there is an attraction within that park that is regularly used by minors, including playgrounds and athletic fields.

E. *Hours of operation.* Cannabis retail businesses are limited to retail sale between the hours of 10:00 a.m. and 9:00 p.m. The hours of lower-potency hemp edible retailers who have an on-sale liquor license pursuant to M.S.A. ch. 340A may be consistent with the hours open as part of the on-sale liquor licensure.

F. *Exemption.* No city-issued registration is required for a business selling medical cannabis as part of the Minnesota's Medical Cannabis Program described in M.S.A. §§ 152.22 to 152.37, or for a liquor store.

Subd. 4. Registration application and general information

A. *General application information.* Cannabis retail businesses, and lower-potency hemp edible retailers, whether on-site or off-sale, must submit the following to the city:

1. Complete registration form, including confirmation that the business is registered with the Office.
2. A registration fee, in the amount provided in the city fee schedule or state law, whichever is less. The registration fee shall be non-refundable once processed. The city shall not charge an application fee. A medical combination business operating an adult-use cannabis retail business location may only be charged a single registration fee. The initial registration fee shall include the initial retail registration fee and the first annual renewal fee.
3. Copy of the active license issued by the Office and confirmation of criminal history checks on applicant's employees as required by M.S.A. § 342.151.
4. Full name of the property owner and applicant.
5. The address and parcel ID for the property which the registration is sought.
6. If the applicant does not own the business premises, a true and complete copy of the executed lease for the premises, if applicable. The name of the business, if it is to be conducted under a designation, name or style other than the name of the applicant and a certified copy of the certificate as required by M.S.A. § 333.01, as it may be amended from time to time.
7. Whether all real estate and personal property taxes that are due and payable for the premises have been paid and, if not paid, the years and amounts that are unpaid.
8. A written declaration by the applicant, under penalty of perjury, that the information contained in the application is true. If the applicant is a corporation, an officer must sign the written declaration. If the applicant is a partnership, a general partner must sign the written declaration. If the applicant is an unincorporated association, the manager or managing officer must sign the written declaration.

B. *Additional on-site lower-potency hemp edible retailers application information.* In addition to the application information contained in Subd. 4. A, on-site lower-potency hemp edible retailers must also submit confirmation that the premises either has an on-sale liquor license or a cannabis microbusiness license issued pursuant to M.S.A. ch. 340A.

C. *Additional application information.*

1. *Natural persons.* In addition to (A) above, natural person applicants may be required to provide:
 - i. Address, email address, telephone number and date of birth of the applicant;
 - ii. Street resident addresses of where the applicant has lived during the past five years and telephone numbers and dates for which such addresses and phone numbers were used;
 - iii. Whether the applicant has ever been known by a name other than the applicant's name and, if so, the name or names used, including maiden names, and information concerning dates and places used;
 - iv. The type, name and location of every business or occupation in which the applicant has been engaged during the preceding five years and the names or addresses of the applicant's employers and partners, if any, for the preceding five years, and corresponding dates of employment;
 - v. A physical description of the applicant; and
 - vi. If the applicant does not manage the business, the name of the managers or other persons in charge of the business and all information concerning each of them pursuant to above (i)-(v) in this subsection.
2. *Partnership.* If the applicant is a partnership, the applicant may be required to provide the following information:
 - i. The names and addresses of all general and limited partners and all information concerning each general partner pursuant to divisions c(1) above;
 - ii. The names of the managing partners and the interest of each partner in the licensed business;
 - iii. A copy of the partnership agreement. If the partnership is required to file a certificate as to a trade name pursuant to M.S.A. § 333.01, as it may be amended from time to time, a certified copy of the certificate must be attached to the application;
 - iv. The applicant's federal tax identification number and state employer identification number; and
 - v. If the applicant does not manage the business, the name of the managers or other persons in charge of the business and all information concerning each of them pursuant to divisions (c)(1) above.
3. *Corporation.* If the applicant is a corporation or other organization, the applicant may be required to provide the following information:
 - i. The name of the corporation or business and the state of incorporation;
 - ii. A copy of the articles of incorporation or association agreement and bylaws. If the applicant is a foreign corporation, a certificate of authority as required by M.S.A. § 303.06, as it may be amended from time to time, must be attached;
 - iii. The applicant's federal tax identification number and state employer identification number;
 - iv. The name of the managers or other persons in charge of the business and all information concerning each manager, proprietor or agent pursuant to (c)(1) above; and
 - v. A list of all persons who control or own an interest in excess of 5% in the organization or business or who are officers of the corporation or business and all information concerning the persons pursuant to (c)(1) above. This provision, however, does not apply to a corporation whose stock is publicly traded on a stock exchange and the corporation is applying for a license to be owned and operated by itself.

D. *No moveable place of business.* No lower-potency hemp edible retailer moveable place of business or cannabis retail business moveable place of business is allowed and, as a result, no registration will be issued for a moveable place of business.

E. *Term.* All registrations issued are valid for one calendar year from the date of issue. The initial registration fee shall include the fee for initial registration and the first annual renewal. Any renewal fee imposed by the local unit of government shall be charged at the time of the second renewal and each subsequent annual renewal thereafter. Businesses renewing their registration must submit a renewal fee at the time of renewal. A medical combination business operating an adult-use retail location may only be charged a single registration fee, not to exceed the lesser of a single retail registration fee, defined under this section, of the adult-use retail business. The city shall renew an annual registration of a retailer that otherwise meets city code and other criteria set forth herein, at the same time the Office renews the state license. Registration fees will not be prorated.

F. *Registration conditions.* Registrants are subject to the performance standards and penalties in this section and other applicable code sections. Violations of any of the applicable provisions of this Section are considered a violation of city code and may result in criminal penalties, administrative fines or the city action on a registration. Additionally, a registration shall not be approved or renewed if the registrant is unable to meet the requirements of this ordinance.

G. *Non-transferability.* Other than state approved transfers of ownership required by M.S.A. § 342.12, a registration is non-transferable. All registrations issued under this section are valid only on the premises for which the registration was issued. The transfer of any registration to another location is prohibited. If there is a change in the ownership of the license holder pursuant to M.S.A. § 342.12, the license holder must notify the city of the change, along with submitting a copy of the newly transferred state issued license so that the city can update the registration.

H. *Initial compliance check.* For all new and renewal registrations, the city shall conduct a preliminary compliance check to ensure compliance with this ordinance and to obtain proof of compliance with required criminal history checks on applicant's employees as required by M.S.A. § 342.151.

I. *Signage.* Notice of the legal sales age and age verification requirements must be posted at each location where registered products are offered for sale. The required signage, which shall be provided to the applicant by the city, must be posted in a manner that is clearly visible to anyone who is or is considering making a purchase. On-site signs advertising the business must comply with the city's sign code.

J. *Certification.* Pursuant to M.S.A. ch. 342, within 30 days of receiving a copy of a state license application from the Office, the city shall certify, on a form provided by the Office, whether a proposed retail business complies with local zoning ordinances, state fire code and building code, and if applicable, local registration requirements. If a renewal and the Office has started licensing pursuant to M.S.A. ch. 342, the city shall renew an annual registration of a state-licensed cannabis retail business or lower-potency hemp edible retailer to correspond when the Office renews the business' state license. A state-licensed retail business shall apply to renew its registration on a form established by the city. Any renewal retail registration fee imposed by the city shall be charged at the time of the second renewal and each subsequent renewal thereafter. A renewal retail registration fee shall not exceed the limits set forth in state statute, as amended from time to time.

K. *Basis for recommendation of denial of license.* Upon notice of application of license from the Office related to a retail business anticipated herein, any of the following reasons are grounds for recommending denial of licensing to the Office or denying registration, except as may otherwise be provided by law:

1. The proposed use does not comply with the zoning ordinance.
2. The proposed use does not comply with health, building, maintenance or other provisions of the city code, fire code or state law.
3. The applicant has failed to pay all of the appropriate fees related to the registration.
4. The applicant is under the age of 21 years.

5. The applicant has made fraudulent statements, misrepresentations, not fully disclosed information or made false statements in the application or investigation for or in the course of the applicant's business.
6. The applicant is prohibited by federal, state or other local law, ordinance or other regulation, from holding such a registration.
7. If the applicant is applying for a cannabis retailer business, the applicant is applying for a location in an area that is prohibited for such use by state law or the city zoning code or where the property line is within 1,000 feet of the property lines of a school, or within 500 feet of the property lines of a day care, residential treatment facility, or within 500 feet of a public park where there is an attraction within that park that is regularly used by minors, including playgrounds and athletic fields.
8. The applicant's application, if granted, would result in more than the allowable number of cannabis business retailers under city code and specifically in this chapter.

The city shall immediately notify the retailer in writing the grounds for its decision.

L. *Basis for suspension of registration.* A registration may be suspended if:

1. It does not comply with the zoning ordinance.
2. It is a cannabis retail business and the location is in an area that is prohibited for such use by state law or the city zoning code or where the property line is within 1,000 feet of the property lines of a school, or within 500 feet of the property lines of a day care, residential treatment facility, or within 500 feet of a public park where there is an attraction within that park that is regularly used by minors, including playgrounds and athletic fields.
3. It does not comply with health, building, maintenance or other provisions of the city code, fire code or state law.
4. It poses an immediate threat to the health or safety of the public.
5. It operates illegally under state law or city code or exceeds the allowable number of retailers, if applicable.
6. It sells to customers under the age of 21 years.
7. It sells or offers for sale products not complying with labeling or packaging requirements set forth in state law or sells or offers to sell products outside scope of state license.

The city shall immediately notify the retailer in writing the grounds for the suspension.

Subd. 5. Zoning requirements.

No registration issued under this chapter shall be granted until all applicable zoning requirements are met or until all conditions for approval of the use have been satisfied.

Subd. 6. Limit on registrations

A. *Lower-potency hemp edible retailer.* The city has not established a limit on the number of Lower-Potency Hemp Edible Retailer registrations.

B. *On-site intoxication hemp product retailer.* The city has not established a limit on the number of on-site lower-potency hemp edible retailer registrations other than requiring these businesses to have up to date on-sale liquor license.

C. *Cannabis retailer businesses.* The city has established a limit of four (4) cannabis retail business registrations available at one time.

D. *First come, first served.* Applications for registration will be processed on a first-come, first-served basis based on the city receiving a complete application and payment of all fees. Applications will be

considered complete when all materials in Subd. 4. are received by the city and include all required information.

Subd. 7. Responsibility.

All registrants under this chapter shall be responsible for the actions of their employees in regard to the sale of adult-use cannabis products and intoxicating hemp products, and the sale of such an item by an employee shall be considered a sale by the registrant. Nothing in this chapter shall be construed as prohibiting the city from also subjecting the registrant to whatever penalties are appropriate under this chapter, state or federal law, or other applicable law or regulation.

Subd. 8. Compliance checks and inspections.

All cannabis retail businesses, on-site lower-potency hemp edible retailers and lower-potency hemp edible retailers premises shall be open to inspection by the city police or other authorized city official during regular business hours. From time to time, but at least once per year, the city shall conduct compliance checks by engaging individuals over the age of 17 years old but less than 21 years old, to enter the premises to attempt to purchase adult-use cannabis products or intoxicating hemp products. Prior written parental or guardian consent is required for any person under the age of 18 who participates in a compliance check. Individuals used for the purpose of compliance checks shall be supervised by city designated law enforcement officers or other designated city personnel. Individuals used for compliance checks shall not be guilty of unlawful possession of adult-use cannabis products or intoxicating hemp products when such items are obtained as a part of the compliance check. No individual used in compliance checks shall attempt to use a false identification misrepresenting the individual's age, and all individuals lawfully engaged in a compliance check shall answer all questions about the individual's age asked by the registrant or their employee, and shall produce any identification, if any exists, for which they are asked. Nothing in this chapter shall prohibit compliance checks authorized by state or federal laws for educational, research or training purposes, or required for the enforcement of a particular state or federal law.

Subd. 9. Prohibited sales.

It shall be a violation of this chapter for any person to sell or offer to sell any adult-use cannabis products or intoxicating hemp products:

A. Not meeting the following requirements authorized in M.S.A. §151.72, or after March 1, 2025, the requirements of M.S.A. ch. 342, including, but not limited to:

1. Packaging - M.S.A. § 151.72, subd. 5a., or after March 1, 2025, the requirements of M.S.A. § 342.62;
2. Secured storage and sales - M.S.A. § 151.72, subd. 5a (h), or after March 1, 2025, the requirements of M.S.A. § 342.46, subd. 4;
3. Testing requirements - M.S.A. § 151.72, subd. 4., or after March 1, 2025, the requirements of M.S.A. § 342.61; and
4. Labeling requirements - M.S.A. § 151.72, subd. 5., or after March 1, 2025, the requirements of M.S.A. § 342.63;

B. To any person under the age of 21 years. Prior to initiating a sale or otherwise providing an edible cannabinoid product to an individual, an employee of a retailer must verify that the individual is at least 21 years of age pursuant to M.S.A. § 151.72, subd. 5c, or after March 1, 2025, the requirements of M.S.A. § 342.46, subd. 3;

C. For a nominal amount or by means of sampling, unless otherwise allowed under M.S.A. ch. 342;

D. By internet sales or delivery, unless the business utilizes an independent third-party age-verification system; or

E. By any other means, to any other person, or in any other manner or form prohibited by federal, state or other local law, ordinance provision, or other regulation.

Subd. 10. On-site intoxicating hemp business manufacturing.

A. On-site lower-potency hemp edible retailers may manufacture intoxicating hemp products intended to be consumed as a beverage as an accessory use at breweries and distilleries licensed as such under M.S.A. ch. 340A, as long as the manufacturing process for the beverages does not involve the cannabis plant. For purposes of this Section, accessory use is defined to mean not accounting for more than 50% of the production of total product produced at the brewery or distillery. The transporting or distribution of such Intoxicating Hemp Products manufactured as an accessory use at a brewery or distillery to locations outside of the city also is allowed as part of the accessory use during this time period.

B. Intoxicating hemp products manufactured as described in (A) herein may only be sold at retail for off-sale consumption by the on-site lower-potency hemp edible retailer when that business holds both a current Lower-Potency Hemp Edible Manufacturer license from the Office and a current Lower-Potency Hemp Edible Retailer license from the Office.

Subd. 11. On-Site Intoxicating Hemp Business Registration Condition.

An on-site intoxicating hemp business registration will terminate, with no further action of the city, if the registrant's on-sale liquor license expires or, when applicable, registrant's cannabis microbusiness license, terminates, or is otherwise not effective.

Subd. 12. Exceptions and defenses.

Nothing in this chapter shall prevent the providing adult-use cannabis products or intoxicating hemp products to an individual under the age of 21 as part of a lawfully recognized religious, spiritual or cultural ceremony. It shall be an affirmative defense to the violation of this chapter for a person to have reasonably relied on proof of age as described by state law.

Subd. 13. Offenses Involving Individuals Under the Age of 21.

A. *Illegal sales.* It shall be a violation of this Chapter for any person to sell or otherwise provide any adult-use Cannabis Product or Intoxicating Hemp Product to any individual under the age of 21.

B. *Illegal possession.* It shall be a violation of this Chapter for any individual under the age of 21 to have in their possession any adult-use Cannabis Product or Intoxicating Hemp Product. This subsection shall not apply to individual under the age of 21 lawfully involved in a compliance check.

C. *Illegal use.* It shall be a violation of this Chapter for any individual under the age of 21 to use any adult-use Cannabis Product or Intoxicating Hemp Product.

D. *Illegal procurement.* It shall be a violation of this Chapter for any individual under the age of 21 to purchase or attempt to purchase or otherwise obtain any adult-use Cannabis Product or Intoxicating Hemp Product, and it shall be a violation of this Chapter for any person to purchase or otherwise obtain such items on behalf of an individual under the age of 21. It shall further be a violation for any person to coerce or attempt to coerce an individual under the age of 21 to illegally purchase or otherwise obtain or use any adult-use Cannabis Product or Intoxicating Hemp Product. This subsection shall not apply to individual under the age of 21 lawfully involved in a compliance check.

E. *Use of false identification.* It shall be a violation of this Chapter for any individual under the age of 21 to attempt to disguise their true age by the use of a false form of identification, whether the identification is that of another person or one on which the age of the person has been modified or tampered with to represent an age older than the actual age of the person.

Subd. 14. Violations.

A. *Notice.* Upon discovery of a suspected violation, the alleged violator shall be issued, either personally or by mail, by the city manager or city manager's designee, a written citation that sets forth the alleged violation, and the determined consequence for the violation, which may include either an administrative or criminal penalty, in addition to a possible denial, suspension or revocation of a registration, and which shall inform the alleged violator of their right to be heard on the accusation pursuant to Sec. 5.03 of Chapter 5 of City Code.

B. *Hearings.* If a person accused of violating this Chapter so requests, a hearing shall be scheduled in front of the City Council.

C. *Notice.* As set forth in Sec. 5.03 of Chapter 5 of City Code, the applicant or registrant must file a written notice of appeal with the city manager or City Manager's designee within five (5) days of being informed of the decision regarding the registration status or the consequences of the violation. The city council will then review the decision to determine whether or not the action was correct. The City Council may, in connection with its review of the action either affirm, reverse or modify the actions. The applicant shall be advised by mail of the date and time that the Council will hear the applicant's appeal.

D. *Final Decision.* The Council may continue consideration of the registration or renewal to accommodate necessary notification to the Office or may temporarily suspend the registration upon such terms and conditions as it deems reasonable and necessary to accomplish the purposes of this Chapter. The decision by the city council is final and not appealable but is subject to licensing decisions by the Office.

E. *Misdemeanor prosecution.* Nothing in this chapter shall prohibit the city from seeking prosecution as a misdemeanor for any alleged violation of this chapter. If the city elects to seek misdemeanor prosecution, no administrative penalty shall be imposed.

F. *Notification to the Office.* Within ten (10) days of any decision which impacts a state licensed Cannabis Retail License or Lower-Potency Hemp Edible Retailer License, as that term is defined in M.S.A. § 342.01, subd 48, the City shall notify the Office of the decision and shall include the grounds for the decision. As required by state law, the Office will provide the city and retailer a response to the complaint within seven calendar days and perform any necessary inspections within 30 calendar days.

G. *Continuations.* The continuation of consideration of an application for registration, renewal for registration, the status of a registration or the suspension of either a cannabis retail business registration or lower-potency hemp edible retailer registration may be for up to 30 calendar days, unless the Office suspends the businesses' corresponding license for a longer period. The business may not make sales to customers if their registration is suspended or not on active status due to a continuation. With respect to suspensions, the city may reinstate a registration if it determines that the violations have been resolved and it has received any necessary notification from the Office that violations have been resolved.

Subd. 15. Penalties for violation of article. Any registration issued under this chapter may be revoked or suspended, subject to actions by the Office. In addition, any person who violates any provision of this chapter is subject to the general penalties section of city code. Nothing in this chapter shall prohibit the city from seeking prosecution as a misdemeanor for any violation of this chapter.

Subd. 16. Severability. If any section, clause, provision, or portion of this ordinance is adjudged unconstitutional or invalid by a court of competent jurisdiction, the remainder of this ordinance shall not be affected thereby.

INTERIM ORDINANCE TERMINATION. Upon the effective date of this Ordinance, Interim Ordinance IO-2024-0610-1 shall automatically terminate.

RECODIFICATION IN PROCESS. The city of Mankato is currently in the process of updating and recodifying its City Code, with this, the formatting of the above will be revised once this process is complete.

This ordinance shall, in accordance with the provisions of Section 2.14 of the Mankato City Charter, become effective thirty (30) days after publication of notice of its adoption.

Adopted this ____ day of _____ 2024.

Najwa Massad
Mayor

Attest: _____
Renae Kopischke, MMC
City Clerk

**CITY OF MANKATO
STATE OF MINNESOTA**

**ORDINANCE ESTABLISHING SPECIAL EVENT PERMIT REQUIREMENTS FOR
TEMPORARY CANNABIS EVENTS**

The City of Mankato hereby ordains that the City Code of Ordinances, Chapter 6, Business and Licensing, is hereby amended by adding the following new Sec. 5.53:

Sec. 5.53. TEMPORARY CANNABIS EVENT REGULATIONS.

Subd. 1. Purpose.

The purpose of this ordinance is to protect the public health, safety, welfare in the city by implementing regulations pursuant to M.S.A. ch. 342 related to temporary cannabis events within the city. The city finds and concludes that these regulations are appropriate and lawful, that the proposed amendments will promote the community's interest in reasonable stability in the development and redevelopment of the city for now and in the future, and that the regulations are in the public interest and for the public good.

Subd. 2. Definitions.

Cannabinoid product means cannabis product, a hemp derived consumer product, or a lower-potency hemp edible as defined in M.S.A. § 342.01.

Day care means a Minnesota licensed day care center which provides care of one or more children outside those children's own homes for gain, on a regular basis, for any part of a 24-hour day.

Park feature means an attraction within a public park that is regularly used by minors, including, but certainly not limited to, a playground or athletic field, as those terms are defined in this chapter.

School means any property owned, leased, or controlled by an independent district, commonly referred to as a school district, under M.S.A. § 123A.05; or by an organization operating a nonpublic school, as that term is defined in M.S.A. § 123B.41, subd. 9, where an elementary, middle, secondary school, secondary vocational center or other school providing educational services for any grade kindergartner through grade 12 is located; or any property owned, leased or used as a community education program by a school district or districts for children and their caregivers, relatives or parents for the ages from birth to kindergarten, excluding properties exclusively used for the remote or online delivery of educational programming

Special services means the exclusive allocation of city resources, including, but not limited to, city personnel, equipment, rights-of-way, property or facilities for use in conjunction with a specific event or activity, as requested by the host or sponsor of the event, or as requested by or on behalf of any person attending the event, or deemed necessary by city staff in order to maintain public safety. Special services shall include, but not be limited to, any of the following: street closures; requiring police officers to stop or reroute traffic; special police protection; stationing emergency vehicles at or in the immediate vicinity of the event; exclusive use of city streets or property as a staging area or for event parking; additional street cleaning and garbage removal services; special signage, such as temporary no parking signs; the use of any city building, equipment or other property for any purpose other than the normal operations of the facilities; or the city otherwise providing exclusive services.

Temporary cannabis event organizer means an individual or an organization licensed by the State of Minnesota to hold a temporary cannabis event, as described in M.S.A. §§ 342.39 and 342.40.

Subd. 3. Temporary cannabis event, permit required.

Any person or organization desiring to hold a temporary cannabis event in the city must first obtain a temporary cannabis event permit from the city.

Subd. 4. Permit application.

A. Application for a permit to hold a temporary cannabis event must be made in writing and must contain a statement made upon oath or affirmation that the statements contained therein are true and correct to the best knowledge of the applicant and must be signed and sworn to or affirmed by the temporary cannabis event organizer. The application must contain and disclose the following:

1. Applicant name, address, phone number and a copy of the applicant's state temporary cannabis event license and supporting documents submitted to the State for licensing as required by M.S.A. § 342.39 subd. 2, which included, but is not limited to date(s) of proposed temporary cannabis event, duration of temporary cannabis event, including beginning and ending times, and address of proposed temporary cannabis event;
2. Name of property owner, if different from applicant;
3. Additional description of the temporary cannabis event including;
 - a. Whether the general public will be permitted to attend, and estimated number of persons to attend;
 - b. Any public health plans, including supplying water to the site, solid waste collection and provision of toilet facilities, if applicable;
 - c. Any fire prevention and emergency medical services plans, if applicable;
 - d. Security plans;
 - e. The admission fee, donation, or other consideration to be charged or requested for admission, if applicable;
 - f. Whether food or alcohol will be served or sold at the event;
 - g. A detailed description of all public rights-of-way and private streets for which the applicant requests the city to restrict or alter normal parking, vehicular traffic or pedestrian traffic patterns, the nature of such restrictions or alterations, and the basis;
 - h. A description of any services, city personnel, city equipment and city property which the applicant requests the city to provide, including the applicant's estimate of the number and type needed, and the basis on which the estimate is made. However, the city retains sole discretion to determine the number and type of services required for the event;
 - i. Whether any sound amplification or public address system will be used or if there will be any playing of any music or musical instruments;
 - j. A statement signed by the applicant agreeing to pay all fees and meet all other requirements of this section;
 - k. Applicant signature and property owner's signature, if different from applicant; and

- I. Any other information requested by the city, acting through its city manager or their designee, deemed reasonably necessary in order to determine the nature of the temporary cannabis event and the extent of any special services required.

B. *Time for filing.* A temporary cannabis event permit application must be filed with the city at least 30 days in advance of the date in which the temporary cannabis event is to occur.

C. *Permit fee.* An applicant for a temporary cannabis event permit must pay a nonrefundable permit fee in the amount provided in the city fee schedule.

Subd. 5. Application review.

A. Upon receipt of a temporary cannabis event permit application, the city manager, or their designee, shall be responsible for promptly processing the application, including conferring with city staff and the applicant as necessary to implement the provisions of this section, and, when required by this section, forwarding the processed application to the city council with a recommendation to approve, approve with conditions or modifications, or deny the temporary cannabis event permit application.

B. *Special services.* The city manager shall work with city staff to determine whether special services may be necessary, and the cost for such special services.

C. *Review.* When a temporary cannabis event will not require any special services, the city manager, or their designee, may review and approve the permit application administratively. In cases where a temporary cannabis event requires special services, the application will be presented to the city council for review.

D. *Permit denial.* The city may deny an application for a temporary cannabis event permit and notify the State of such, if it determines from a consideration of the application or other pertinent information, that:

1. The event would be held in a public place or a place of public accommodation. A public place means a public park, ballparks or trails, public event centers or facilities, public street, sidewalk or right-of-ways, alleys, boulevards, publicly owned parking lots, and any other developed or undeveloped city owned property;
2. The event intends to allow offerings of samples of cannabinoid products;
3. The information contained in the application or supplemental information requested from the applicant is false or nonexistent in any material detail;
2. The applicant fails to supplement the application after having been notified by the city of additional information or documents needed;
3. The applicant fails to agree to abide or comply with all of the conditions and terms of the temporary cannabis event permit, including payment of all costs and expenses, and, if on-site consumption is intended, then consumption only within a designated area not visible from any public place;
4. The temporary cannabis event would substantially or unnecessarily interfere with traffic in the city, would interfere with access to the fire station or fire hydrants, or would interfere with access to businesses or residences in the immediate vicinity of the event and there are not sufficient city resources available at the time of the event to mitigate the disruption;
5. The temporary cannabis event is of the size or nature that requires the diversion of so many law enforcement officers to properly police the event, site and contiguous areas that

allowing the temporary cannabis event would unreasonably deny law enforcement protection to the remainder of the city and its residents;

6. The proposed date and time of the temporary cannabis event conflicts with a previously scheduled event and there are not available at the time of the proposed temporary cannabis event sufficient city resources to provide services for both events without substantially or unnecessarily interfering with police, fire, water, public works, or other services to the city as a whole;
7. The location of the temporary cannabis event will substantially interfere with any construction or maintenance work scheduled to take place upon or along public property or right-of-way;
8. The temporary cannabis event would likely endanger the public safety or health;
9. The temporary cannabis event would substantially or unnecessarily interfere with police, fire, water, public works, or other services to the city as a whole and there are not available at the time of the proposed event sufficient city resources to mitigate the disruption;
10. The applicant fails to comply with the liability insurance requirements or the applicant's insurance lapses or is canceled; or
11. The applicant has on prior occasions made material misrepresentations regarding the nature and extent of special services required for a temporary cannabis event in the city or has violated the terms of a prior temporary cannabis event permit.

Subd. 6. Fees.

A. *Special services fee deposit.* If any special services are to be used during the temporary cannabis event, the applicant may be required to pay a non-refundable special services fee deposit at least ten business days before the temporary cannabis event. The city manager, or their designee, shall determine the special services fee deposit. It shall be based upon an estimate of special services that are necessary as determined by the city's department heads.

B. *User fee.* Upon completion of the temporary cannabis event, the city may prepare a detailed account of all special services provided for the temporary cannabis event and in such cases, will set the final user fee using the rates, fees and charges established as provided in this ordinance. The city will then provide the applicant with a copy of the detailed account of the special services and an invoice for the user fee, less the fee deposit. The balance of the user fee will then become due and payable immediately upon its receipt.

C. *Special services rates.* The rates charged shall be in the amount provided in the city fee schedule.

Subd. 7. Indemnification and insurance.

A. If the temporary cannabis event requires special services, prior to the issuance of a temporary cannabis event permit, the permit applicant and authorizing officer of the sponsoring organization, if any, must sign an agreement to indemnify, defend and hold the city, its officials, employees, and agents harmless from any claim that arises in whole or in part out of the temporary cannabis event, except any claims arising solely out of the negligent acts or omissions of the city, its officials, employees and agents.

B. *Liability insurance required.* The applicant must possess or obtain liability insurance to protect against loss from liability imposed by law for damages on account of bodily injury or property damage arising from the temporary cannabis event. A certificate of insurance must be filed with the city prior to issuance of

the temporary cannabis event permit. The certificate of insurance must name the city, its officials, employees and agents as additional insureds. Insurance coverage must be maintained for the duration of the temporary cannabis event. Any company hired or working on behalf of the applicant or sponsor must also present the city with a certificate of insurance naming the city, its officials, its employees, and agents as additional insureds.

C. Minimum limits. Insurance coverage must be a commercial general liability policy. The minimum limits must be at least \$1,000,000. If on-site consumption is permitted at the temporary cannabis event, the policy must also include an endorsement for such consumption. The city may require additional endorsements depending upon the type of temporary cannabis event and the proposed activities.

D. Waiver or reduction of required limits. The city may waive or reduce insurance requirements of this section under the following circumstances:

1. The applicant or officer of the sponsoring organization signs a verified statement that the insurance coverage required by this section is impossible to obtain; or
2. The city determines that the insurance requirements are in excess of the reasonable risk presented by the proposed temporary cannabis event.

Subd. 8. Temporary cannabis event regulations.

A. Location restrictions. Temporary cannabis events are prohibited:

1. At, in or on any public place or a place of public accommodation. A public place means a public park, ballparks or trails, public event centers or facilities, public street, sidewalk or right-of-ways, alleys, boulevards, publicly owned parking lots, and any other developed or undeveloped city owned property.
2. Within 1,000 feet of the property lines a school, or within 500 feet of the property lines of a day care, residential treatment facility, or within 500 feet of a public park where there is an attraction within that park that is regularly used by minors, including playgrounds and athletic fields.

B. Hours restrictions: Temporary cannabis events may only be held between the hours of 10:00 a.m. and 9:00 p.m.

C. On-site consumption. On-site consumption of cannabinoid products at temporary cannabis events is not allowed.

D. Noise. The temporary cannabis event must be in compliance with the city's nuisance ordinance at all times.

E. All temporary cannabis events must follow all requirements of M.S.A. § 342.01, et seq.

Subd. 9. Permit revocation.

A temporary cannabis event permit may be revoked by the city manager, or their designee, at any time for failure to comply with the provisions of this Section or M.S.A. § 342.01, et seq., including the requirements of M.S.A. § 342.40.

Subd. 10. Enforcement.

A. Misdemeanor. Any person who violates this Section is guilty of a misdemeanor and, upon conviction, is subject to a fine and imprisonment as prescribed by state law. Each day each violation continues or exists, constitutes a separate offense.

B. *Administrative fine*. Any person who violates this section is subject to administrative fines in the amount provided in the city fee schedule. Each day each violation continues or exists, constitutes a separate offense.

C. Violation of any provision of this section shall also be grounds for revocation of the temporary cannabis event permit, denial of any future application for a temporary cannabis event permit, and action against any city-issued business license held by the temporary cannabis event organizer.

RECODIFICATION IN PROCESS. The city of Mankato is currently in the process of updating and recodifying its City Code, with this, the formatting of the above will be revised once this process is complete.

This ordinance shall, in accordance with the provisions of Section 2.14 of the Mankato City Charter, become effective thirty (30) days after publication of notice of its adoption.

Adopted this ____ day of _____ 2024.

Najwa Massad
Mayor

Attest: _____
Rena Kopischke, MMC
City Clerk

Meeting Date: 11/20/2024

Title

CY46-24

Request of Andrew Manske for a conditional use permit to allow for cut, fill and development activities on a slope equal to or in excess of seventeen-point six (17.6) percent for ravine stabilization. The subject property is described as Lot 5, Block 1, Ironwood Oaks subdivision (80 Telemark Drive).

The anticipated date of final City Council action is December 9, 2024.

Applicant

The applicant and property owner is Andrew Manske.

Request

The applicant is seeking a conditional use permit to allow cut, fill and development activities on a slope equal to or in excess of 17.6%.

Location

The subject property is located at 80 Telemark Drive and is legally described as Lot 5, Block 1, Ironwood Oaks subdivision.

Existing Land Use

The subject property is the location of an existing single-family residential home.

Zoning

The subject property is zoned T, Transition.

Environmentally Sensitive Areas

The property contains bluffs/ravines as defined by Mankato City Code.

Public Utilities

The property is served by public utilities.

City Code

Mankato City Code section 10.82 subd. 10 pertaining to Environmentally Sensitive Areas, Slopes, can be found at this link:

https://library.municode.com/mn/mankato/codes/code_of_ordinances?nodeId=CH10LAUSZO_PTIXSTGEAP_S10.82SPPRAPSPPECOUS

Site Plan Review Comments

The Site Plan and Traffic Advisory Committee reviewed the item at their November 5, 2024 meeting and provided the following comments:

- A. Applicant shall be aware that signed, engineered drawings will be required for construction to be permitted, and a building permit will need to be applied for the proposed work. A staging plan for the project will be required during application of permit.
- B. Applicant shall be aware that a condition will be put in place to fix all drainage issues on the property. New drainage plans that include pool drainage shall be provided, and this will need to demonstrate that it does not cause additional issues and shall be part of the plans as signed off by an engineer licensed to do with in the State of Minnesota.
- C. Applicant shall conduct a neighborhood meeting a minimum of 10 days prior to the start of the construction project unless emergency repairs are needed. The purpose of this meeting is to provide neighborhood with sufficient information about project in an effort to have a smooth construction process.
- D. Any emergency repairs, tree removal prior to official approval, etc. will first need to be evaluated by the City's designated engineer and the owner, or owner's representative.
- E. Applicant shall be aware that improvements should reestablish the minimum setbacks, which include all structures and surfaces at least 10' from the bluff line. This includes, but is not limited to, the sport court and pool areas.
- F. Applicant shall pay the neighborhood notification fee in the online portal prior to the hearing, if this has not already been done.

Review

Andrew Manske is requesting a conditional use permit to allow for cut, fill and development activities on a slope equal to or in excess of seventeen-point six (17.6) percent for ravine stabilization. The subject property is located at 80 Telemark Drive and is legally described as Lot 5, Block 1, Ironwood Oaks subdivision.

Mankato City Code section 10.82 Subd. 10, Environmentally Sensitive Areas, Slopes, states that, "All cut, fill, and development activities on a slope equal to or in excess of seventeen point six (17.6) percent may be permitted only as a conditional use. In addition to the submittal requirements for a conditional use permit application, a plan shall be submitted at a scale required in [Section 10.90](#), Subdivision 6, and the plan shall include two (2) foot topographic contour intervals depicting existing and proposed topography. The plan shall be signed by a registered surveyor or engineer in the State of Minnesota."

The existing residential house located at 80 Telemark Drive has a bluff/ravine area in the rear yard. In July 2024, due to excess rain events, slope failures

occurred in the bluff/ravine area of the subject property. According to the engineering report provided, the area had seen excessive rain (10+ inches of rain) prior to the slope failure. The house and property, including a pool area, driveway, and sport court are located at the top of a ravine that extends down approximately 40 feet in elevation to the southwest to a flat area. The slope failure extends adjacent to the property down into the ravine to the southwest.

According to the preliminary engineering report, based on the topographic map, prior to slope failure, the ravine slope had an inclination of approximately 30 to 40 degrees. A creek exists to the southwest of the property at the bottom of ravine area. Per the topographic map, the creek channel is approximately 100 feet southwest from the toe of the ravine slope adjacent to the house. The creek channel is incised approximately 8 to 10 feet. Maps also show a peninsula/ bluff extending to the south of the house before dropping off into the ravine area.

The applicant has obtained preliminary engineering outlining options for ravine stabilization in the area. The options provided in the report are:

1. Regrade the slope to an inclination suitable for the soils present at the site. Preliminarily, based on the soils observed, a stable inclination could be approximately 20 to 30 degrees (approximately 3H:1V to 2H:1V). This option would likely require clearing of most of the trees. Regraded slope extents may be controlled by property boundaries and permits required for construction and may require removal of the sport court and pool areas. Regraded soils should be keyed into the toe of the slope to reduce the potential for sliding.
2. A pattern of grouted soil nail anchors and a high-strength wire mesh (Tecomesh or similar product) facing installed in the slope. For this option, some slope clearing will be required, but large trees could potentially stay in place. This option allows for the site to freely drain and will allow for plant growth through the wire mesh on the slope. A fabric can also be installed below the wire mesh to control the fine-grained soils and allow for seeding and plant growth as well. A shotcrete facing could also be used instead of the wire mesh system. If shotcrete is used, additional clearing and drainage will be required.
3. A soldier pile and lagging wall with tieback anchors installed along the top of the slope adjacent to the yard, pool and sport court. Soldier piles would generally be installed to a depth below the creek bottom elevation to reduce the potential for undercutting and to provide lateral support. Tieback anchors would be installed in rows near the top of the wall to stabilize the soils in the upper slope and provide support for the yard, pool and sport court. The soil below the wall could be left in place but would be subject to future erosion.

A recommended condition is included herein that when the final corrective action path/method is selected, construction plans shall be prepared and signed by an engineer licensed to do work in the state of Minnesota that identifies the construction details and methods of the correction. The plans shall be submitted with a building permit request, and are subject to review and approval by the City's engineering department. A condition is also recommended that the proposed final design shall return the area to the most natural state possible, as approved by the City's engineering department.

The Braun engineering report states that for any of the slope repair options, the recommendation is that the homeowner review water runoff from the property down the ravine slope to reduce the potential for excessive runoff over and down these oversteepened slopes. If drainpipes are used, the pipes should extend to at least the toe of the ravine slope to reduce water runoff onto the slope. A recommended condition is included herein that addresses this engineering recommendation.

The Braun engineering report goes on to state that for each of the slope repair options, access may be difficult for construction equipment. A recommended condition is included that with the submission of the construction plans, a construction staging plan is provided that demonstrates how the construction equipment will access the site and how any potential material storage will be handled for the project. A recommended condition is also included that once the final scope of work is developed and the repair method established, a minimum of 10 days prior to work beginning, the applicant conducts an informal meeting with the neighbors to inform them that the project will be occurring. Staff will provide the applicant with the list of names and addresses that were used for the required conditional use for assisting with this condition.

The provided Braun report states, "additionally, the yard, pool and sport court will likely be affected by slope repair construction activities." A recommended condition is included herein that states that upon the completion of a project, all attempts shall be made to reestablish the minimum 10' bluff setbacks for code compliance for the sport court which was recently constructed. The pool is in an existing condition that was constructed in 2014 prior to the current property ownership. The recommendation related to the pool area is that all reasonable attempts shall be made to reestablish the previously approved pool setback location on the bluff. Ideally, the project will reestablish all minimum setbacks. However, if a licensed engineer determines that it is not feasible for the noted setbacks to be reestablished, the City's engineer department will analyze the engineering documentation for reasonableness and approval.

The Braun report makes reference to property boundaries. The information that has been provided indicates that all work will be contained wholly upon the subject property. A recommended condition is included that prior to any work occurring, the official property boundary be established to ensure that there are no encroachments onto adjacent properties. If, through the preparation of the engineered construction plans, encroachments are recommended, the property owner will be required to work with the adjacent property owner(s) and secure appropriate permissions for any desired encroachment prior to work occurring and being permitted.

The subject property is included within the plat of Ironwood Oaks, which was approved in 1984 while the property was located in Mankato Township. The plat identifies a 20' drainage easement on the southern boundary of the subject parcel. A recommended condition is included herein that the referenced drainage easement be maintained and that further changes or modifications to the existing 20' drainage way and easement area are prohibited.

A site visit was conducted with staff, the applicant and the applicant's construction professional on October 14, 2024. At the time of the inspection, the bluff was noted to be stable and additional failure was not actively occurring. In the event the stability of the bluff changes prior to the final approval, or the building permit being issued, a recommended condition is included herein that recommends that emergency repairs, including tree removal prior to official preparation and approval of the construction plans, will require evaluation by an engineer hired by the applicant, the city's designated engineer and the owner or owner's representative.

In addition to the bluffs on the site, the subject property contains areas identified as, "Environmentally Sensitive Areas, Woodlands" in Mankato City Code section 10.82 Subd. 12. Several of the existing trees located in the slope failure area were damaged when the slope failure occurred, and additional trees may need to be removed when the engineered plans are prepared for complete correction. Mankato City Code provides that removal of trees or other vegetation from woodlands where such action is necessary to protect public health, protect property from damage or to restore public order is an activity that is not subject to further limitation of the woodland section of the Code. As noted above, modifications to the property are necessary in order to protect the property from additional damage and to restore conformity on the subject site. A recommended condition is included herein that, in conjunction with the project, the applicant shall work with the City Forester to evaluate reasonable options for replanting trees and natural wooded vegetation where determined reasonable and feasible, and the applicant will be required to provide a landscaping plan incorporating the subject plantings and the plantings shall be installed in conjunction with the project. The landscaping plan shall incorporate restoration of the natural, wooded ravine to the greatest extent feasible, based on the final, approved engineering solution.

Findings

Staff submits the following findings with respect to the Conditional Use Permit request:

1. The proposed use, an existing residential dwelling, is not proposed to change. The fill, cut and development activities within the slope area equal to or in excess of seventeen point six (17.6%) percent is considered a conditional use permit in Mankato City Code section 10.82 Subd. 10.
2. The request is in keeping with the comprehensive planning policies of the City as the underlying land use plan identifies this parcel as "Low Density Residential", which is in keeping with this request that is not seeking any changes to the current use of the property.
3. The proposal does not interfere with or diminish the use of property in the immediate vicinity.
4. The primary structure will continue to be served by public facilities and services, and no utility service provider changes are proposed with this proposal.
5. The proposal does not cause undue traffic congestion as no changes are proposed to the public street system.
6. There are no known historical or architectural resources on the site.
7. The site contains bluffs and woodlands as natural or environmental features on the site. With the recommended conditions, it is intended that impacts to these areas will be corrected and minimized.
8. It will not cause a negative cumulative effect and effect on the City as a whole.
9. To the extent known, the development, when considered with the recommended conditions, conforms with all other applicable regulations of the district, and other applicable ordinances.
10. The proposal will not jeopardize the public's health, safety, or general welfare.

Recommendation

Staff recommends approval of the requested conditional use permit with the following conditions:

1. The existing drain pipes, new piping, and drainage routes that were found in the sloped area shall be adjusted according to recommendations contained in the Braun engineering report. New drainage plans, prepared and signed by an engineer licensed to do work in the state of Minnesota, shall include pool drainage, and should demonstrate that additional issues are not caused by the placement of the drainage.
2. The applicant shall submit engineered drawings, signed by an engineer licensed to do work in the State of Minnesota, for the proposed construction and bluff repair. The final design shall return the area to the most natural state possible. The plans will be subject to the review and approval of the City's engineering department. The applicant shall submit for a building permit for the subject work, and work may not commence until the building permit is in place.
3. With the submission of the construction plans, a construction staging plan shall be provided that demonstrates how the construction equipment will access the site and any potential material storage will be handled for the project.
4. The applicant shall conduct an informal neighborhood meeting a minimum of 10 days prior to work beginning.
5. All attempts to reestablish the minimum setbacks for the sport court, which include a setback of least 10' from the bluff line and reestablishment of the approved pool setback shall be made. If an engineer licensed to do work in the State of Minnesota determines that achieving the 10' setback is not possible, coordination and approval with the City's engineering department shall occur and verification that the bluff will be secure in the proposed manner will be required.
6. Prior to work beginning, the official property boundaries be clearly marked to ensure that encroachments onto adjacent properties do not occur.
7. The existing 20' drainage easement, as shown on the plat of record, shall be maintained and unaltered.
8. Work, including tree removal or any additional bluff activity, shall not begin until a building permit is in place, and the final engineering plans have been reviewed and approved. In the event of an emergency situation where the slope conditions change prior to the construction plans being completed and approved, temporary shoring and stabilization measures shall be evaluated and approved by an engineer hired by the applicant, the city's designated engineer and the owner or owner's representative.
9. The applicant shall work with the City Forester to determine what reasonable tree replanting and natural woodland vegetation efforts can be undertaken on the subject project in conjunction with the slope correction project. The applicant shall provide a landscaping plan incorporating the subject plantings (trees and vegetation) and the plantings shall be installed in conjunction with the project. The landscaping plan shall incorporate restoration of the natural, wooded ravine to the greatest extent feasible, based on the final, approved engineering solution. The landscaping plan shall be submitted to the City Forester and the City engineering department for final review and approval.

Attachments

General Location Map
Aerial Plan
Preliminary Engineering Report

General Location Map



Date: October 2024

Author:

This information is to be used for reference purposes only. The City of Mankato does not guarantee accuracy of the material contained herein and is not responsible for misuse or misinterpretation.



N

Aerial



Date: October 2024

Author:

This information is to be used for reference purposes only. The City of Mankato does not guarantee accuracy of the material contained herein and is not responsible for misuse or misinterpretation.

September 3, 2024

Project B2407711

Mr. Andrew Manske
80 Telemark Drive
Mankato, MN 56001

Re: Preliminary Geotechnical Evaluation
Slope Evaluation
80 Telemark Drive
Mankato, Minnesota

Dear Mr. Manske:

Braun Intertec Corporation is pleased to provide this letter report summarizing our preliminary slope evaluation for the failed slope adjacent to your residence at 80 Telemark Drive in Mankato, Minnesota.

Project Description

Based on information provided by you, it is our understanding that a slope failure occurred in July 2024 to the south of the house and property at 80 Telemark Drive in Mankato, Minnesota. The area had seen excessive rain (10+ inches of rain) prior to the slope failure.

The house and property, including a pool area, driveway, and sport court are located at the top of a ravine that extends down approximately 40 feet in elevation to the southwest to a flat area. The slope failure extends adjacent to the property down into the ravine to the southwest. Figure 1 shows an aerial photograph of the property with the area of the slope failure outlined with a red circle.

Figure 1. Approximate Area of Slope Failure

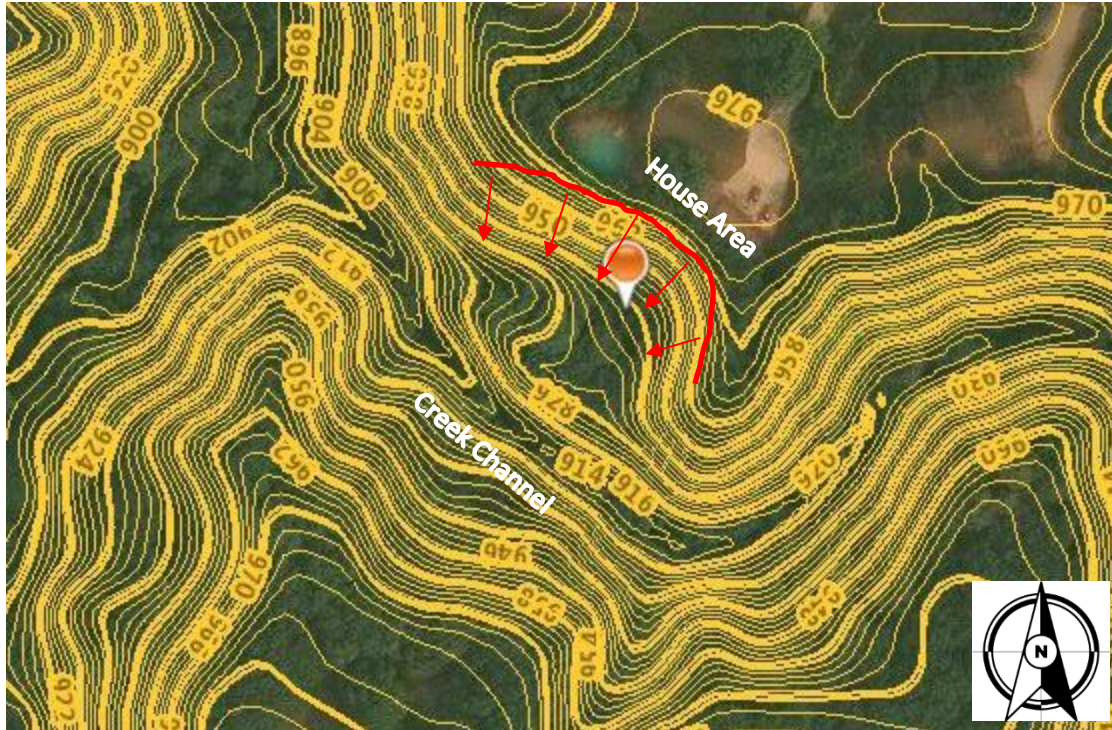


Figure provided by Google Earth dated July 1, 2023.

Figure 2 shows a topographic map, from the MN Department of Natural Resources online topographic map (MnTOPO <http://arcgis.dnr.state.mn.us/maps/mntopo/>), of the property with the approximate area of the slope failure head scarp shown with a red line. Based on the topographic map, prior to slope failure, the ravine slope had an inclination of approximately 30 to 40 degrees. A creek exists to the southwest of the property at the bottom of ravine area. Per the topographic map, the creek channel is approximately 100 feet southwest from the toe of the ravine slope adjacent to the house. The creek channel is incised approximately 8 to 10 feet. As shown in the topographic map, a peninsula/ bluff extends to the south of the house before dropping off into the ravine area.

Based on a review of the Blue Earth County Geological Atlas dated 2012, the geology at the site is generally composed of a mixed area of potential colluvium fine-grained sediments with gravel and potential rock fragments, silt and clay glacial lake sediments, sand and gravel glacial terrace deposits, and fine-grained glacial till soils.

Figure 2. Topographic Map of Project Area



Map provided by MNTopo.

Scope of Services

Based on our Authorization for Services to Mr. Andrew Manske (QTB199046) dated August 2, 2024, our scope of services included the following:

- Perform a preliminary site reconnaissance to review the existing slope condition. We documented the current observable extents and condition of the slope failure, took photographs, and looked for other signs of slope instability.
- Develop this letter report summarizing preliminary findings and recommendations for slope stabilization including additional site exploration, analyses, and design recommendations.
- Develop a scope of work for additional phase of exploration and evaluation based on our preliminary findings.

Preliminary Site Reconnaissance

We completed our preliminary field evaluation on August 23, 2024. We met you, Mr. Andy Manske, on site to discuss the area. The approximate width of the failure area based on the head scarp (exposed top of slope failure) ranges from 350 to 400 feet across. The head scarp extends from west/northwest of the pool in an arc shape continuing along the house and continues to arc out on the peninsula area south of the sport court. Figure 3 shows the top of the slope failure and head scarp directly south of the house. The pool area can be seen in the center of the photograph near the black umbrella and the sport court on the right side of the photograph at the black fence and basketballs.

Figure 3. Slope Failure Head Scarp Looking West



The slope is partially tree and brush covered and we observed a number of trees that had fallen or were leaning that appeared to be affected by the slope failure. Figure 4 shows the main head scarp on the south end along the peninsula that extends south of the sport court.

Figure 4. Observed Slope Failure Looking to South End of Failure



Figure 5 shows the main head scarp on the west/northwest end of the failure area. In general, the soils exposed in the slope were clayey and fine-grained soils with some sand, gravel, and cobbles. At the time of our site reconnaissance, we did not observe water seeping out of the slope.

Figure 5. Observed Slope Failure Looking to West/Northwest End of Failure



We also observed a second tension crack or head scarp lower down the slope along most of the slope failure area. Some of the larger trees that collapsed as part of the slope failure were located near this lower head scarp. Figure 6 shows a photograph of the lower head scarp around a tree that collapsed as part of the slope failure.

Figure 6. Lower Head Scarp Around Tree that Collapsed as Part of the Slope Failure



Based on the slope conditions and soil present on the slope, it is apparent that the soil became saturated and “flowed” down the slope during the slope failure. Figure 7 shows the soil that “flowed” down the slope to the flat area at the toe of the slope. The soil shows smaller channels from more recent water runoff down the slope.

Figure 7. Looking Downslope Showing Soil Movement on Slope Indicating Saturated Soils



We observed two drainpipes extending from the property partially down the slope. One drainpipe extends down from near the sport court and one drainpipe extends down from near the pool. The drainpipes are generally underground (however they are partially exposed due to the slope failure at the top of the slope) and then extend out of the ground partially down the slope. Water was not present coming out of the drainpipes during our site reconnaissance. Figures 8 and 9 show photographs of the two observed drainpipes, outlined with red boxes. We observed that the end of the drainpipes was near the elevation of the lower head scarp area observed and previously discussed. This lower head scarp can also be seen in Figures 8 and 9. There were two other perforated pipes exposed in the slope failure area. These could be conduits for water into the slope. Figure 10 shows a photograph of one of the perforated drainpipes near the sport court.

Figure 8. Drain Extending from House Partially Down the Slope Near Edge of Sport Court



Figure 9. Drain Extending from House Partially Down the Slope Near Pool Area



Figure 10. Buried Perforated Drain Extending into the Slope Near Edge of Sport Court



We observed a potential past slope stabilization measure employed on the slope along the peninsula to the south of the sport court (eastern end of the slope failure area). Metal pipes were observed in a section of the slope. Based on our experience, this appears to be a potential stabilization measure to control soil movement. The tops of the metal pipes appear to be slightly mushroomed in shape indicated they were top driven into the ground. However, the history of these pipes is unknown. Figure 11 shows a photograph of the metal pipes in the slope.

Figure 11. Potential Past Slope Stabilization Measure on Eastern End along the Peninsula



Preliminary Stabilization Options

Based on our preliminary site reconnaissance and experience with the area, it is our opinion that the following measures are options to repair and stabilize the slope and reestablish the slope and property edge:

1. Regrade the slope to an inclination suitable for the soils present at the site. Preliminarily, based on the soils observed, a stable inclination could be approximately 20 to 30 degrees (approximately 3H:1V to 2H:1V). This option would likely require clearing of most of the trees. Regraded slope extents may be controlled by property boundaries and permits required for construction and may require removal of the sport court and pool areas. Regraded soils should be keyed into the toe of the slope to reduce the potential for sliding.

2. A pattern of grouted soil nail anchors and a high-strength wire mesh (Teccomesh or similar product) facing installed in the slope. For this option, some slope clearing will be required, but large trees could potentially stay in place. This option allows for the site to freely drain and will allow for plant growth through the wire mesh on the slope. A fabric can also be installed below the wire mesh to control the fine-grained soils and allow for seeding and plant growth as well. A shotcrete facing could also be used instead of the wire mesh system. If shotcrete is used, additional clearing and drainage will be required.
3. A soldier pile and lagging wall with tieback anchors installed along the top of the slope adjacent to the yard, pool and sport court. Soldier piles would generally be installed to a depth below the creek bottom elevation to reduce the potential for undercutting and to provide lateral support. Tieback anchors would be installed in rows near the top of the wall to stabilize the soils in the upper slope and provide support for the yard, pool and sport court. The soil below the wall could be left in place but would be subject to future erosion.

For any of the slope repair options, we recommend that the homeowner review water runoff from the property down the ravine slope to reduce the potential for excessive runoff over and down these over-steepened slopes. If drainpipes are used, the pipes should extend to at least the toe of the ravine slope to reduce water runoff onto the slope. Additionally, Blue Earth County and the City of Mankato should be included based on property boundaries, permitting requirements, the ravine, steep slopes, and the seasonal creek.

For each of the slope repair options, access may be difficult to construction equipment. Additionally, the yard, pool and sport court will likely be affected by slope repair construction activities.

Evaluation and Design Scope of Services

To complete our geotechnical evaluation for slope stabilization of the 80 Telemark Drive slope, we recommend the following scope of services:

- Drill 50 to 75 feet deep soil borings adjacent to slope failure at 80 Telemark Drive.
- Complete one day of hand augers on the slope and at the toe of the slope to depths up to 6 to 8 feet below the existing ground surface.
- Perform slope stability analyses on existing slope to estimate soil parameters and on recommended stabilization option(s).

- Complete a geotechnical evaluation report summarizing findings and recommendations.
- Meet with you and potential slope stabilization contractors regarding slope stabilization measures.

We will provide a proposal for additional scope of services to you following this letter report.

General Remarks

In performing its services, Braun Intertec used that degree of care and skill ordinarily exercised under similar circumstances by reputable members of its profession currently practicing in the same locality. No warranty, express or implied, is made.

Thank you for making Braun Intertec your geotechnical consultant for this project. If you have questions about this letter report, or if there are other services that we can provide in support of our work to date, please contact Chad Lukkarila at 952.995.2322 (clukkarila@braunintertec.com).

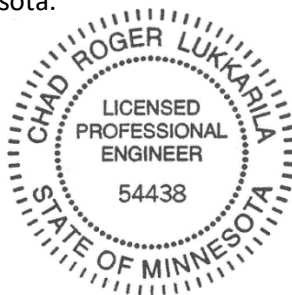
Sincerely,

BRAUN INTERTEC CORPORATION

Professional Certification:

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.

Chad R. Lukkarila, PE
Associate Director, Senior Engineer
License Number: 54438
September 3, 2024



Roch S. V. Player, PE
Vice President, Principal Engineer

Meeting Date: 11/20/2024

Title

CY48-24

Request of Mesenbrink Construction & Engineering, Inc. for an amended preliminary plat review and the final plat review of Mesenbrink Subdivision, and for the zoning of the subject property from T-Transition to B-1, Community Business District, O-R, Office Residential District, R-4, Multiple Family Dwelling District, and R-2, One- and Two-Family Dwelling District. The subject property is described as part of the West 30 acres of the SW ¼, Section 15-108-26, except the South 330 feet of the West 330 feet thereof, AND The SE ¼ of the NW ¼ of the SE ¼; The S. ½ of the NE ¼ of the SE ¼; The SE ¼ of the SE ¼; The SW ¼ of the SE ¼, Except the West 30 acres thereof; all in Section 15, Township 108, Range 26, Blue Earth County, Minnesota, with some exceptions. (Blue Earth County PID R430915400003 and R430915400009).

The anticipated date of final City Council action is December 9, 2024.

Applicant

The applicant and owner is Mesenbrink Construction and Engineering, Inc.

Request

The applicant is seeking a review of an amended preliminary plat, and the final plat review of Mesenbrink Subdivision, and for the zoning of the subject parcels.

Location

The subject property is located on the easterly side of CSAH 12, also known as 589th Avenue, near the eastern terminus of Hofman Road's roundabout. It is legally described as part of the West 30 acres of the SW ¼, Section 15-108-26, except the South 330 feet of the West 330 feet thereof, AND The SE ¼ of the NW ¼ of the SE ¼; The S. ½ of the NE ¼ of the SE ¼; The SE ¼ of the SE ¼; The SW ¼ of the SE ¼, Except the West 30 acres thereof; all in Section 15, Township 108, Range 26, Blue Earth County, Minnesota, with some exceptions. The associated Blue Earth County parcel identification numbers are R430915400003 and R430915400009.

Existing Land Use

The subject property is currently an agricultural field and the northern portion is an existing wetland.

Zoning

The subject property is zoned T, Transition, which is a zoning classification used for annexed property prior to its official zoning.

Environmentally Sensitive Areas

The northern portion of the subject area contains a public water, a wetland and, as a result, the property is subject to the City's shoreland ordinance. There are also wetlands located throughout the site in the currently farmed agricultural field.

Public Utilities

The subject parcels are proposed to be served by public utilities.

City Code

[Mankato City Code Chapter 11](#) provides standards for Subdivision and Development Regulations (platting).

Site Plan Review Comments

The Site Plan and Traffic Advisory Committee met on November 5, 2024 and submitted the following comments.

1. Applicant shall be aware that during an in person meeting with BMI and Mesinbrink, we discussed possibilities of a shallower sanitary sewer main. Need to explore the feasibility of serving properties to the east in another manner if this is why. - *Noted.*
2. If not paid already, differed assessment of \$178,162.97 (without interest) are due on the property. An additional year of interest would be applied if not paid before 2025.-*Noted.*
3. Applicant shall be aware that lot can have only one zoning designation. - *Noted. We would like the entire Lot 3, Block 1, to be rezoned to OR (see revised preliminary plat)*
4. Applicant shall sign cul-de-sac as no parking.-*Noted. Signs to be added to the final construction notes.*
5. Applicant to review if an access easement shall be provided over the existing gas easement on the north side of Hoffman Road.- *Noted. Future bus stop to be discussed during the Planned Unit Development process for Block 1.*
6. Applicant does need to enter into a subdivision agreement to address public items in the plat.- *Noted.*
7. Applicant shall be aware that all existing conditions will continue to apply such as parkland dedication, etc.-*Noted.*
8. Applicant shall pay notice fee as invoiced for the notices mailed. -*Noted. Fees have been paid.*

Review

Mesenbrink Construction & Engineering, Inc. is seeking an amended preliminary plat review and the final plat review of Mesenbrink Subdivision, and for the zoning of the subject property from T-Transition to B-1, Community Business District, O-R, Office Residential District, R-4, Multiple Family Dwelling District, and R-2, One- and Two-Family Dwelling District. The subject property is described as part of the West 30 acres of the SW ¼, Section 15-108-26, except the South 330 feet of the West 330 feet thereof, AND The SE ¼ of the NW ¼ of the SE ¼; The S. ½ of the NE ¼ of the SE ¼; The SE ¼ of the SE ¼; The SW ¼ of the SE ¼, Except the West 30 acres thereof; all in Section 15, Township 108, Range 26, Blue Earth County, Minnesota, with some exceptions. (Blue Earth County PID R430915400003 and R430915400009).

Previous Approvals

In early 2023, the City of Mankato received a development proposal, known as Mesenbrink Mixed-uses Development Project, located on an approximately 105-acre parcel in Blue Earth County Minnesota (which has been annexed into the City of Mankato). The proposed project would construct a new mixed-use development consisting of retail space, apartment units and single-family residential units. The area was previously subject to an environmental review for this area as part of the Greater East Mankato Infill Service District AUAR. The Greater East Mankato Infill Service District AUAR approval has expired, and therefore the applicant conducted the Environmental Assessment Worksheet (EAW).

The EAW documented the purpose and need of the project along with the anticipated social, economic, and environmental effects. The EAW was made available for public and agency review beginning on February 7, 2023. In addition to the standard comment period, staff notified the adjacent property owners and rental properties of the EAW and held an open house on March 1, 2023, to gather additional comments.

An original electronic copy of the EAW is available for review at the City's website at: <https://www.mankatomn.gov/home/showpublisheddocument/12958/638107513590968202>.

The comment period ended on March 9, 2023. The applicant submitted responses to the comments submitted during the comment period of the EAW. The responses can be found in the [Findings of Fact and Conclusions](#). The City Council adopted a resolution making a negative declaration on the need for an Environmental Impact Statement.

Following the EAW review, Mesenbrink Construction & Engineering, Inc. requested a Land Use Amendment to change the guided land use from Public/Semi-Public to Medium Density Residential to allow for a mixed-use development including single-family dwellings, apartment units, and commercial uses. At the time, the City's Land

Use Plan showed the area to be guided as Public/Semi-Public. Mesenbrink Construction & Engineering, Inc. submitted plans for the development of this site with a mix of low-, medium-, and high density residential and commercial development and is requesting a change to the Land Use Plan and Map to Medium Density Residential to support their development request. The City Council approved the Land Use Plan amendment on July 24, 2023.

A request for a conditional use permit to allow wetland sequencing and replacement was approved by City Council on August 12, 2024.

Current Request

The current request for an amendment from the previously reviewed preliminary plat is due to the modifications to the lot and block sizes to achieve the standards in Mankato City Code and for the zoning of the subject property from the T-Transition to B-1, Community Business District, O-R, Office Residential District, and R-2, One- and Two- Family Dwelling District.

Lots and Block Standards

The proposed Mensenbrink Subdivision plat contains just under 105 acres and includes 3 blocks. Block 1 includes 3 lots, Lot 1 is 2.59 acres and is noted to contain a "C-Store" ; Lot 2 is 3.04 Acres and is identified as "61 unit building and retail"; and Lot 3 is 19.03 Acres and is shown to contain multiple family dwelling structures and is identified as, "proposed PUD".

Block 2 includes one, 21.75 acre lot, which includes a single-family home development. The applicant has indicated that a planned unit development will be requested for the subject development. Block 3 includes one 43.19 acre lot, which also includes a single-family home development and a large wetland complex. This development will also have a requested planned unit development.

The city code criteria outlines that the maximum length of blocks shall be 1,200 feet. The blocks represented in this plat meet the required maximum block length.

Easements

An existing 90' wide Northern Natural Gas Main easement traverses through approximately the middle of the subject subdivision and borders the entire southerly boundary of the proposed platted lots and blocks. A recommended condition is included herein that the applicant will be responsible for securing any necessary permits from the easement holder for the proposed improvements shown in the easement area, including the proposed public improvements.

Standard five-foot drainage and utility easements are shown on the interior lot lines and a 40' utility easement is shown between Lot 1 and 2 and Lot 3. There is also an 80' Northern Gas Easement at the southern property line.

Streets

Of the approximately 105 acres within the proposed subdivision, 14.62 acres of the platted subdivision are proposed to be right of way areas, including streets and other public infrastructure. The proposed preliminary plat includes the extension and dedication of Hoffman Road (5.83 acres). The 100' proposed right of way width for Hoffman Road is consistent with Chapter 11 of Mankato City Code, which requires right of way widths for minor arterial connections of 100'. According to the [Long Range Transportation Plan](#) the functional classification of the subject street is a minor arterial.

Hoffman Road will provide access to the site from County Road 12 and will extend to the eastern property line. A temporary turnaround is shown at the eastern end of Hoffman Road. The subdivision agreement will address the extension of Hoffman Road, and the removal of the proposed turnaround area.

The current request for an amendment from the previously reviewed preliminary plat is due to the modifications to the lot and block sizes to achieve the standards in Mankato City Code. The proposed plat includes three blocks. Block 1 includes 3 lots as follows: Lot 1, which is 2.59 acres, Lot 2 which is 3.04 acres and Lot 3, which is 19.03 acres. Block 2 has one lot, Lot 1, which is 21.75 acres. Block 3 has one lot, Lot 1, which is 43.19 acres. The plat also dedicates to the public Hoffman Road which includes an area for storm water retention on the northern side of

the subdivision.

Storm water ponds, approximately 6.54 acres of area, located to the north of Hoffman Road are also shown to be contained in the right of way, and will be dedicated to the public with the plat.

Dedication of half of the current 211th Lane, a township road encompassing approximately 2.25 acres, to the east and south of the subdivision, is shown on the plat. A recommended condition is included herein that outlines the developer/applicant shall enter into a subdivision agreement addressing public improvements within the subdivision including 211th Lane as well as Hoffman Road and the storm water facilities within the subdivision.

The other road networks within the development are proposed to be private road systems. Recommended conditions are included herein that include that at the time of submission for a final plat, the applicant shall submit covenants that address the private streets and private utilities that are shown. The covenant will need to address ownership, construction, and maintenance of the private streets and utilities.

During the Environmental Assessment Worksheet (EAW) process, a traffic study was completed for the proposed project. The following provides a summary of the study, traffic operations and recommendations.

- AM and PM peak hour traffic operations were analyzed for the 2025 and 2045 conditions without and with the Proposed Project.
- The Proposed Project will generate 704 trips (276 entering and 428 exiting) during the morning traffic peak hour, 710 trips (395 entering and 315 exiting) during the evening traffic peak hour and 7,876 daily trips.
- Results of the traffic analysis for year 2025 for both the AM and PM peaks without the Proposed Project indicate acceptable operations with minimal vehicle delay and back-ups at adjacent intersections.
- Results of the traffic analysis for year 2025 for both the AM and PM peaks with the Proposed Project indicate acceptable operations with minimal vehicle delay and back-ups.
- Results of the traffic analysis for year 2045 AM Peak with and without the Proposed Project indicate the intersection of TH 22 and Hoffman Rd will be approaching capacity without improvements, long delays and long vehicle queues for some movements.
- Results of the traffic analysis for year 2045 PM Peak with and without the Proposed Project indicate acceptable operations with minimal vehicle delay and back-ups.

No mitigation measures are required to accommodate site-generated traffic. That said, if conditions deteriorate at the intersection of TH 22 and Hoffman Road by 2045, MnDOT should consider redesigning the intersection. Potential minimal improvements including extension of the existing westbound right turn lane back to Coneflower Lane and conversion of the lane to a shared through and right turn lane will provide adequate additional capacity. The new through and right turn lane from Coneflower Lane will require the reduction of the TH 22 southbound to westbound protective island and will change the right turn movement to permissive rather than free flowing. Preliminary analysis indicates this improvement alone will provide adequate LOS for the intersection and all approaches. Also, protected permissive traffic signal phasing on the north and southbound TH 22 approaches which is currently used at the TH 22 and Bassett Drive intersection could be considered. It is noted, the TH 22 volumes are greater at Bassett Drive, and the speed through the Bassett Drive intersection is only 45 mph. The change to protected/permissive phasing may or may not be practical as the speeds on TH 22 presently are 55 mph through the Hoffman Road intersection. That said, with the MAPO emphasis on urbanizing the study area through the year 2045 it is possible the speed on TH 22 will be reduced through the Hoffman Road intersection in the future. This improvement by itself would not restore operations to acceptable levels but could enhance the LOS by reducing overall delay. For long term areawide strategies it is suggested some of the potential improvements included in MnDOT's TH 22 Corridor study be reviewed and further developed.

Utilities

Public utilities will be extended to the property via the Hoffman Road right-of-way. The execution of the services within the private road areas will be privately constructed and maintained. The City of Mankato will reserve the right to inspect and require corrective action for issues related to private services. The applicant will be required to submit an agreement addressing access to the private utilities and addressing maintenance of the private utilities (including costs). All the public improvements within the subdivision will be subject to a subdivision agreement.

The applicant's narrative outlines that the proposed stormwater development design and associated stormwater management plan will meet all local, state, and federal regulations including, but not limited to, the MPCA NPDES Construction Stormwater Permit, the City of Mankato MS4 Permit, and the City of Mankato Grading Manual. These documents require the proposed development compared to the existing conditions to:

- not increase discharge rates, not increase total suspended sediments (TSS),
- not increase total phosphorus (TP),
- and where soils permit, retain 1.1 inches of runoff from all new and reconstructed impervious surfaces.

The applicant has provided that the proposed grading plan will ensure that overflows are designed to protect existing and proposed infrastructure from flooding that could otherwise result from increasingly large and intense rainfall events caused by climate change.

The existing agricultural drain tile is anticipated to be taken out of operation by abandonment and/or removed/bulkhead when encountered. Protections, such as outlet removal, will be considered and noted in the plan. Among other considerations, the contractor(s) will be made aware of the sensitivity to prevent sediment from entering the basin.

Wetlands and Shorelands

The subject parcel contains wetland areas and shoreland areas that are subject to additional review considerations.

Several wetlands have been delineated on the site, and these are reflected on the plat. The large wet area on the northern side of the parcel is considered public water and is surrounded by wetlands. As mentioned, on August 12, 2024, the conditional use permit for wetland sequencing and replacement was approved by City Council. The public water wetland will remain, and the other wetlands on the site will purchase credits. All wetland banking credits, for the wetlands approved for replacement, shall be purchased prior to any work occurring in the subdivision.

In 2022, the City of Mankato adopted a Shoreland Ordinance, and the proposed subdivision will be subject to the City of Mankato Shoreland ordinance since the area on the northern side of the development is located in a shoreland. The applicant has completed the DNR's "PUD/Cluster Evaluation sheet" relative to the allowable setback, density, coverage and other applicable shoreland components. The proposed shoreland impacts have been evaluated by the Department of Natural Resources, the DNR, and the following comments were provided:

- The most current version of the preliminary plat documents, dated 1/25/2024, shows an open space calculation of 55.8%; this adequately meets the >50% open space requirement outlined by the shoreland ordinance. During this meeting, it was also defined that this calculation included natural open space only and excluded any backyard or landscaped features.
- The 75-foot shoreland impact zone is to be protected via covenant. No development or mowing will be allowed in this area. This boundary will be restricted by signage to discourage tampering.
- For Unnamed Basin #07-71W, if any area was used in the calculation as an unsuitable area, that will need to be defined, as this same area cannot be duplicated in another calculation should future development occur on the adjacent parcels. The City of Mankato must keep this information accessible should any future developments arise.
- In the current preliminary plat, impervious surface coverage per lot is 23.8%. As part of the covenant for this PUD, a homeowner's association will manage additions on a lot-by-lot basis so as not to exceed an impervious surface coverage of 25%, with no possibility for variance for increased coverage within the shoreland area. This limitation should be expressly identified to sellers at the point of sale.

The letter goes on to indicate that a Public Waters Work Permit will be required for stormwater outflow into the Public Water, Unnamed Basin #07-71W to mitigate potential impacts. Further, it notes that a zero net increase in wetland flood stage and flood stage duration for the 5-100-year rainfall events will need to be achieved for the required Public Waters Work Permit and documented with approved hydrology modeling.

Further, the DNR correspondence indicates that Wetland Conservation Act (WCA) permitting will be required for any subsequent wetlands impacted by the development and the outcomes of these processes may affect the final platting determination.

The Shoreland criteria requires a property owners association agreement (for residential PUD's) with mandatory membership and all in accordance with the requirements of Part 6120.3800, subpart 5. (C). Deed restrictions, covenants, permanent easements, or other instruments that: 1) properly address future vegetative and topographic alterations, construction of additional buildings, (uncontrolled) beaching of watercraft, and construction of commercial buildings in residential PUD'S; and 2) ensure the long-term preservation and maintenance of open space will also be required to the project to achieve the shoreland standards. Conditions are included herein that require the submission of said documentation at the time of a future request for a final plat or other zoning requests.

The DNR has submitted an updated letter stating the permit application has been submitted for the Public Waters Work Permit, and that provided their consent to the applicant's requested review of the final plat.

Parkland Dedication

Natural resource areas, including areas outside the present city boundaries, should be targeted for joint preservation policies with the county and state. The City adopted a shoreland ordinance which serves as a joint preservation policy with the County and the State of Minnesota. The ordinance required review and approval from the State of Minnesota. Blue Earth County also has a shoreland ordinance.

There is a park in Groh Farm Subdivision which falls in the area delineated in the adopted Parks and Open Spaces Plan as needing a park.

The applicant will be required to make a payment-in-lieu of parkland dedication. The payment will be \$176,193 (based on \$159,303 for 98.59 acres of residential development and \$16,890 for 5.63 acres of commercial development).

Other required approvals

Planned unit development will be required prior to construction.

Final Plat

On April 8, 2024, the Mankato City Council approved the original preliminary plat. At that time the applicant proposed a preliminary plat that showed only 2 blocks. The amended preliminary plat shows 3 blocks. Block 1 has 3 lot, while Block 2 and 3 are both 1 block.

Block 1 has 3 Lots, Lot 1 is 2.59 acres, Lot 2 is 3.04 acres, and lot 3 is 19.03. Block 1 is in the south-west corner of the plat along County State Aid Highway 12 and Hoffman Road and will be accessed via private road. Block 2 is 1 lot that is 21.75 acres. Block 2 is located in the south-east corner of the plat and will have private road access off the extension of Hoffman Rd. Block 3 is 1 lot that is 33.77 acres. Block 3 is at the northeast corner of the plat and will have private road access off the extension of Hoffman Road. The proposed rezoning is consistent with the land use plan.

The final plat also shows a large wetland on the northern section of the plat. The wetlands that are shown within the Blocks are wetlands that have not yet been replaced. However, as mentioned before, the project has been approved a wetland sequencing and replacement plan on August 12, 2024 by the City Council. The plat also dedicates to the public Hoffman Road which includes an area for storm water retention on the northern side of the subdivision.

Rezone

This request also includes the rezoning of the subject areas. The property was officially annexed into the City of Mankato on June 5, 2024, and at the time of official annexation, properties are assigned a temporary zoning category of T-Transition. The applicant is now seeking the official zoning of the property in accordance with the underlying Land Use Plan.

Block 1 Lot 1 and Lot 2 is proposed to have a B-1, Community Business District. Block 1 Lot 3 is proposed to OR, Office Residential zoning district. Block 2 and 3 are both proposed to be zoned R-2, One- and Two- Family

Zoning district designation.

Findings

Staff finds that the rezoning of the plat from T-Transition to Community Business District, OR, Office Residential, and R-2, One- and Two- Family Dwelling District, is in the best interest and promotes the health and welfare of the community, and is in conformity with the comprehensive plan of and for the City.

Staff respectfully submits the following findings of fact for the Preliminary and Final Plat.

1. General Requirements

1. The site is designed in conformance with the location and widths of streets, the general drainage situation, lot sizes and arrangement.
2. A drainage study has been submitted to verify compliance with the City drainage requirements.
3. The site provides storm drains and stormwater ponds that outlet into the adjacent Public Water. A condition is included herein that requires that a Public Waters Work Permit is required to verify that the rate of discharge is acceptable for the proposed outfall and at the rates and volumes allowed by the MS4 permit.
4. On-site wetlands have been delineated, and will be required to be avoided or approval in place for replacement prior to submittal for a final plat.

2. Streets

1. The street right-of-way widths conform to the standards listed in Chapter 11 of Mankato City Code by meeting the right-of-way standards.
2. The applicant will be dedicating the required land for the Hoffman Road extension as well as the land for the adjacent township roads. All other access corridors within the development are proposed to be private.

3. Easements

1. The preliminary plat provides the standard easements required in Chapter 11 of the Mankato City Code.
2. An existing Northern Natural Gas easement traverses the site, which is proposed to remain.

4. Block Standards

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

5. Lot Standards

1. The lots within the subdivision are intended for residential and commercial development. The lots are designed in conformance with the standards set forth in Chapter 10.
2. The concept plans submitted for the commercial development depict areas for off-street parking.
3. The concept plan for the residential areas achieves larger lot sizes that will address corner lot requirements.

6. Public Sites and Open Spaces

1. The applicant will be making a \$176,193 payment-in-lieu of parkland dedication. The Parks and Open Space Plan shows the area near the public water as open space, which will be maintained as such. The area will be served by a community park to be located in the Groh Farm Subdivision, which falls in the area delineated by the Parks and Open Space Plan in need of a park.

Recommendation

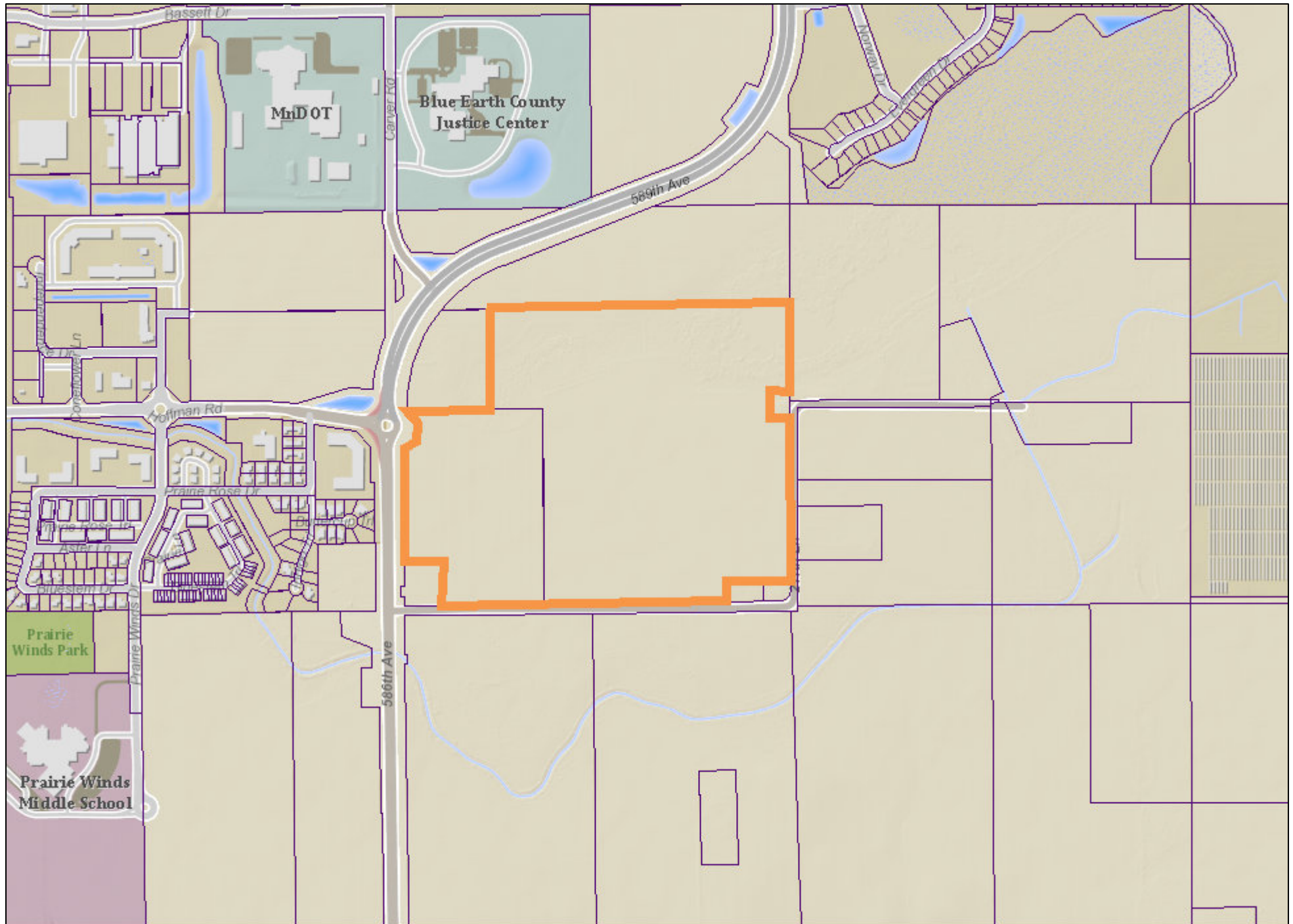
Staff recommends approval of the Mesenbrink preliminary plat recommends the approval of the preliminary plat and final plat with the following conditions:

1. At the time of submission for a final plat, the applicant shall provide a complete draft copy of the proposed property owners association documents and deed restrictions, covenants, and permanent easements or other instruments. The documents shall address, but are not limited to, private streets, private utilities, current and future building envelopes, future additions, and how this will be privately managed. Membership in the property owners association shall be mandatory and in accordance with all applicable shoreland standards. The deed restriction shall properly address future vegetative and topographic alterations, construction of additional buildings, and shall ensure the long-term preservation and maintenance of open space in accordance with the shoreland and DNR criteria.
 2. The applicant shall enter into a subdivision agreement addressing public improvements within the subdivision including Hoffman Road, 211th Lane, and public storm water facilities within the subdivision.
 3. The applicant will be responsible for all required permitting and authorization for the proposed improvements associated with the natural gas easement. Written authorization from the easement holder acknowledging the proposed development, and providing consent for the proposed improvements, shall be in place prior to the submission of a final plat.
 4. Prior to submission of a planned unit development, the applicant shall have applied for and obtained all necessary Public Waters Work Permit(s) from the Department of Natural Resources, DNR, for the proposed project.
 5. Applicant shall install signs at the required open space area at intervals acceptable to the DNR, and other applicable parties.
 6. The applicant shall submit a request for the desired residential rental density within the new low-density residential areas, and this shall proceed for review along with the ordinance amendment for rezoning, platting, etc. for the development.
 7. Bulk, height, setback, density, coverage, parking and other underlying zoning district criteria will apply to the subject lots and blocks.
 8. Approval of this preliminary plat does not imply future approval of planned unit developments or other future zoning requests.
 9. All wetland banking credits, for the wetlands approved for replacement, shall be purchased prior to any work occurring in the subdivision.
 10. All previous conditions from the previous approvals shall remain applicable.
- Staff recommends the approval of the rezoning from T-Transition to R-2, One- and Two- Family Dwelling District, OR Office Residential, and B-1, Community Business District.

Attachments

General Location Map
Aerial Plan
Preliminary Plat /Rezoning
Final Plat
Civil Plans
Revised Roundabout Plans Per BEC Requirements
Drainage Report
DNR Plat Submission letter
Heavy Duty Pavement Design
Standard Duty Payment Design
Hoffman Road Voltage Drop Calculations
Hoffman Road Extension Estimate

General Location Map

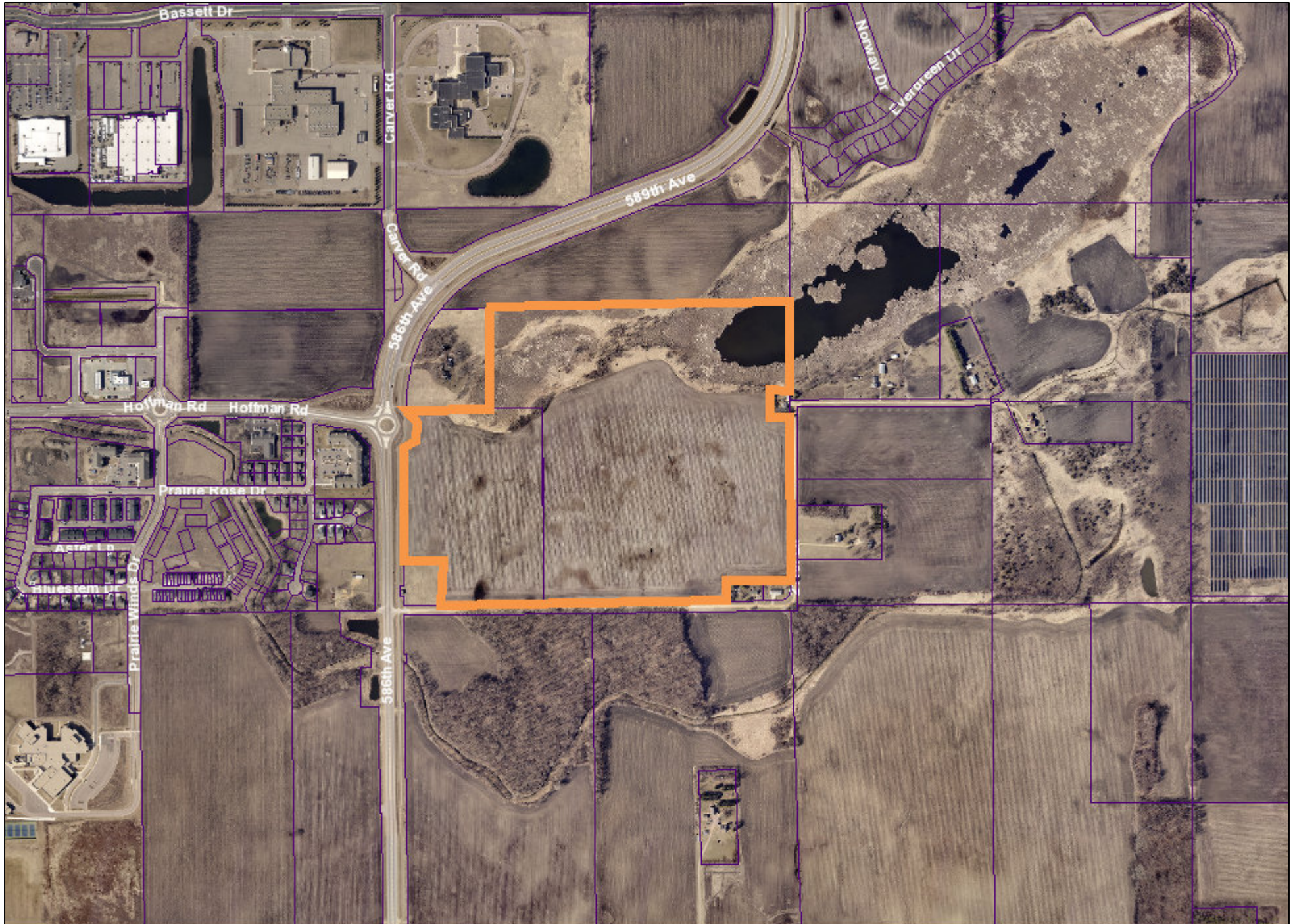


Date: February 2024

Author:

This information is to be used for reference purposes only. The City of Mankato does not guarantee accuracy of the material contained herein and is not responsible for misuse or misinterpretation.

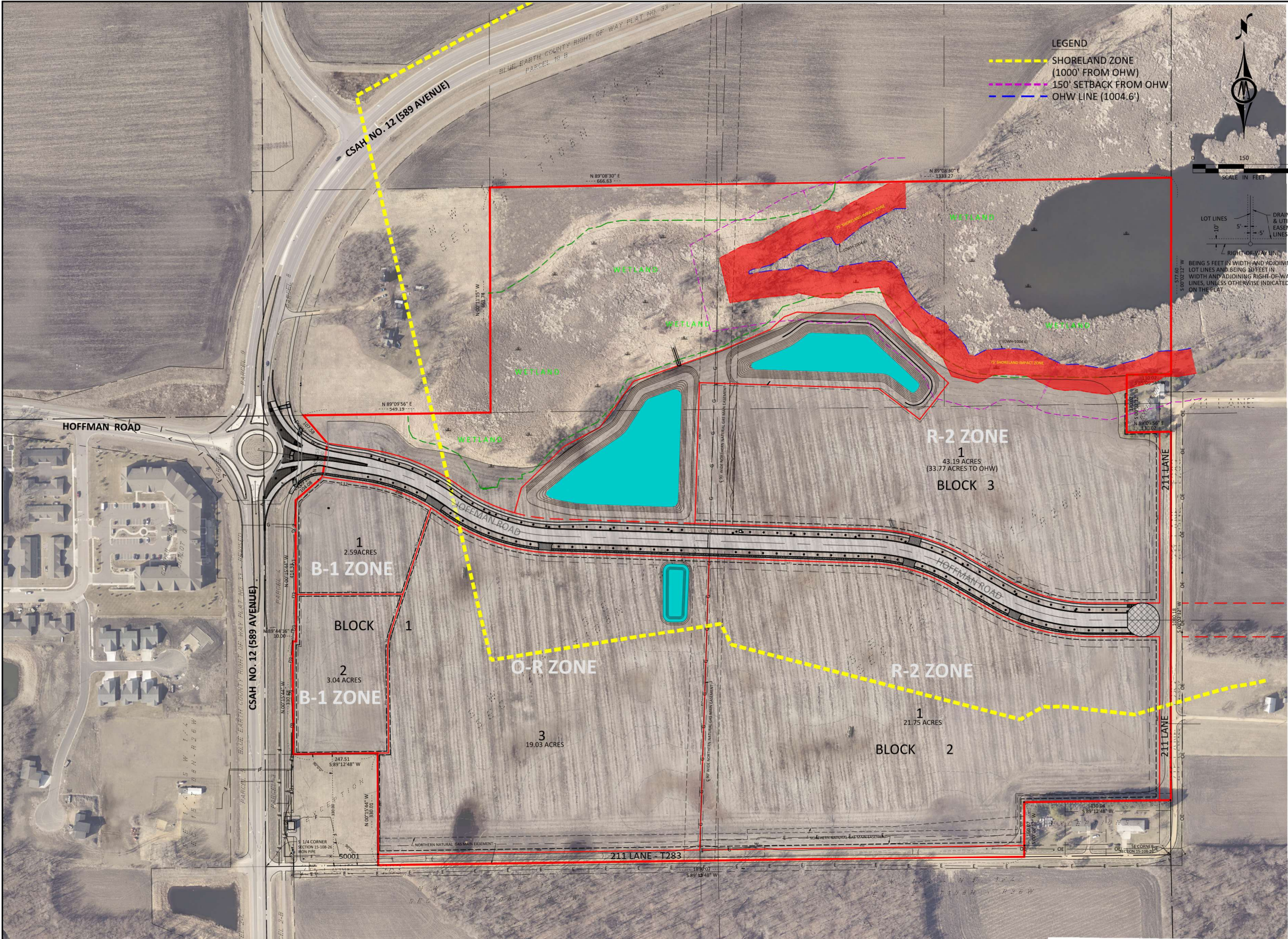
Aerial Location Map



Date: February 2024

Author:

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UTILITY & SITE DATA

All Zoning and Setback information was obtained from the City of Mankato Code. For detailed zoning information and specific interpretation of code requirements, contact the City of Mankato.

ZONING:
Subject property - T, Transitional District
Proposed Re-zone to R-2, One - and Two - Family Dwelling District

SETBACKS:
Front
Main and Accessory Building 30 feet

Side
Main and Accessory Buildings 6 feet

Rear
Main and Accessory Building 25 feet

Lot Area (minimum) = 6,000 sq.ft.
Lot Width (minimum) = 60 feet
Maximum Ground Coverage = 30% by all structures
Maximum Building Height = 35 feet

Proposed Re-zone to R-4, Multiple-Family Dwelling District

SETBACKS:
Front
Main and Accessory Building 25 feet

Side
Main and Accessory Buildings 6 feet

Rear
Main and Accessory Building 25% of the lot depth (min. 25 feet to max. 75 feet)

Lot Area (minimum) = 10,000 sq.ft. (for the first 4 units plus 2,000sqft for each unit over 4)
Lot Width (minimum) = 60 feet
Maximum Ground Coverage = 35% by all structures
Maximum Building Height = 45 feet

Proposed Re-zone to B-3, Highway Commercial District

SETBACKS:
Front
Main and Accessory Building 15 feet
Parking Areas 15 feet

Side
Main and Accessory Buildings 6 feet
Parking Areas 3 feet

Rear
Main and Accessory Building 6 feet
Parking Areas 3 feet

Lot Area (minimum) = 10,000 sq.ft.
Lot Width (minimum) = 150 feet
Maximum Ground Coverage = 75% by all structures
Maximum Building Height = No requirement

LEGAL DESCRIPTION

The West 30 acres of the SW ¼, Section 15-108-26, except the South 330 feet of the West 330 feet thereof.

AND

The SE ¼ of the NW ¼ of the SE ¼;

The S. ½ of the NE ¼ of the SE ¼;

The SE ¼ of the SE ¼;

The SW ¼ of the SE ¼, Except the West 30 acres thereof;

All in Section 15, Township 108, Range 26, Blue Earth County, Minnesota, except the following parcels:

- 1) Commencing at the Southeasterly corner Sec. 15-108-26, thence West along the Section line 190 feet, thence North 130 feet, thence East parallel to the South line of said section 190 feet, thence South along the East line of said Section 130 feet to the place of beginning.
- 2) Commencing on the Section line 190 feet West of the Southeast corner of Section 15, Township 108, Range 26 West; thence West along the Section line 120 feet; thence North 130 feet; thence East parallel to the South line of said Section 120 feet; thence South to the place of beginning.
- 3) All that part of the Southeast Quarter of Section 15, Township 108 North, Range 26 West, described as follows: Commencing at the Southeast corner of said Section; thence West along the South line of said Section, 310.0 feet; thence North and parallel to the East line of Section 15, 130.0 feet to the place of beginning of the following described tract; thence continuing North and parallel to the East line of said Section, 30.0 feet; thence East and parallel to the South line of Section, 120.0 feet; thence South and parallel to the East line of said Section, 30.0 feet; thence West parallel to the South line of said Section, 120.0 feet to the point of beginning.
- 4) That part of the Southeast Quarter of Section 15, Township 108 North, Range 26 West described as follows: Commencing at the Southeast corner of Section 15; thence West along the South line of said Section, 430.0 feet to the point of beginning of the following described tract; thence North parallel to the East line of said Section, 160.0 feet; thence East and parallel to the South line of said Section, 120.0 feet; thence South and parallel to the East line of said Section, 160.0 feet to the South line of said Section; thence West along said South line, 120.0 feet to the place of beginning, subject to existing easements for public roads.
- 5) That part of the Southeast Quarter of Section 15, Township 108 North, Range 26 West, as follows: Commencing at the southeast corner of said Section 15; thence West along the South line of said Section 190.0 feet; thence North and parallel to the East line of Section 15, 130.0 feet to the point of beginning of the following described tract; thence continuing North and parallel to the East line of said Section, 30.0 feet; thence East and parallel to the South line of said Section, 190.0 feet to the East line of said Section; thence South along said East line, 30.0 feet; thence West and parallel to the South line of said Section 190.0 feet to the place of beginning, subject to existing easements for public road.
- 6) Commencing at the NE corner of SE ¼ of the SE ¼ of Section 15, T108N, R26W, thence south along the East line of said Sec. 15, 85.00 feet, thence West 130.00 feet, thence North 170.00 feet, thence East 130.00 feet to the East line of said Sec. 15, thence South along said East line of Sec. 15, 85.00 feet to the point of beginning.

SURVEYOR'S CERTIFICATION

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

Michael M. Eichers
License Number 46564

11/12/2024
Date

MESENBRINK SUBDIVISION

PRELIMINARY PLAT
MANKATO, MINNESOTA



1960 PREMIER DRIVE
MANKATO, MINNESOTA 56001
(507) 625-4171

PART OF THE SW 1/4, SECTION 15,
TOWNSHIP 108 NORTH - RANGE 26 WEST

FOR: MESENBRINK CONSTRUCTION
& ENGINEERING, INC.

MESENBRINK SUBDIVISION

INSTRUMENT OF DEDICATION

Know all men by these presents that we, Mesenbrink Construction & Engineering, Inc., a Minnesota corporation, fee owner of the following described property to wit:

The West 30 acres of the SW ¼, Section 15-108-26, except the South 330 feet of the West 330 feet thereof.

AND

The SE ¼ of the NW ¼ of the SE ¼;

The S. ½ of the NE ¼ of the SE ¼;

The SE ¼ of the SE ¼;

The SW ¼ of the SE ¼, Except the West 30 acres thereof;

All in Section 15, Township 108, Range 26, Blue Earth County, Minnesota, except the following parcels:

- Commencing at the Southeasterly corner Sec. 15-108-26, thence West along the Section line 190 feet, thence North 130 feet, thence East parallel to the South line of said section 190 feet, thence South along the East line of said Section 130 feet to the place of beginning.
- Commencing on the Section line 190 feet West of the Southeast corner of Section 15, Township 108, Range 26 West; thence West along the Section line 120 feet; thence North 130 feet; thence East parallel to the South line of said Section 120 feet; thence South to the place of beginning.
- All that part of the Southeast Quarter of Section 15, Township 108 North, Range 26 West, described as follows: Commencing at the Southeast corner of said Section; thence West along the South line of said Section, 310.0 feet; thence North and parallel to the East line of Section 15, 130.0 feet to the place of beginning of the following described tract; thence continuing North and parallel to the East line of said Section, 30.0 feet; thence East and parallel to the South line of Section, 120.0 feet; thence South and parallel to the East line of said Section, 30.0 feet; thence West parallel to the South line of said Section, 120.0 feet to the point of beginning.
- That part of the Southeast Quarter of Section 15, Township 108 North, Range 26 West described as follows: Commencing at the Southeast corner of Section 15; thence West along the South line of said Section, 430.0 feet to the point of beginning of the following described tract, thence North parallel to the East line of said Section, 160.0 feet; thence East and parallel to the South line of said Section, 120.0 feet; thence South and parallel to the East line of said Section; 160.0 feet to the South line of said Section; thence West along said South line, 120.0 feet to the place of beginning, subject to existing easements for public roads.
- That part of the Southeast Quarter of Section 15, Township 108 North, Range 26 West, as follows: Commencing at the southeast corner of said Section 15; thence West along the South line of said Section 190.0 feet; thence North and parallel to the East line of Section15, 130.0 feet to the point of beginning of the following described tract; thence continuing North and parallel to the East line of said Section, 30.0 feet; thence East and parallel to the South line of said Section, 190.0 feet to the East line of said Section; thence South along said East line, 30.0 feet; thence West and parallel to the South line of said Section 190.0 feet to the place of beginning, subject to existing easements for public road.
- Commencing at the NE corner of SE ¼ of the SE ¼ of Section 15, T108N, R26W, thence south along the East line of said Sec. 15, 85.00 feet, thence West 130.00 feet, thence North 170.00 feet, thence East 130.00 feet to the East line of said Sec. 15, thence South along said East line of Sec. 15, 85.00 feet to the point of beginning.
Containing 104.23 acres.

do hereby declare that we have caused the above described property to be surveyed and platted and monuments to be set, that we have named said platted area MESENBRINK SUBDIVISION, and that we dedicate to the public use the public ways and easements as shown hereon.

Dated this _____ day of _____, 2024 by John Mesenbrink, president of Mesenbrink Construction & Engineering, Inc.

By: John Mesenbrink, president

NOTARY CERTIFICATES

State of Minnesota
County of Blue Earth

On this the _____ day of _____, 2024, before me a Notary Public within and for said County, personally appeared John Mesenbrink, who being duly sworn did say that he is the president of Mesenbrink Construction & Engineering, Inc., the Minnesota corporation named in the foregoing instrument, and that said instrument was signed in behalf of said corporation by authority of its board of directors, and said John Mesenbrink acknowledged said instrument to be the free act and deed of said corporation.

_____, Notary Public
Notary Public-Minnesota,
My Commission Expires _____

SURVEYOR'S CERTIFICATE

I, Michael M. Eichers, do hereby certify that this plat was prepared by me or under my direct supervision; that I am a duly Licensed Land Surveyor in the State of Minnesota; that this plat is a correct representation of the boundary survey; that all mathematical data and labels are correctly designated on this plat; that all monuments depicted on this plat have been, or will be correctly set within one year; that all water boundaries and wet lands, as defined in Minnesota Statutes, Section 505.01, Subd. 3, as of the date of this certificate are shown and labeled on this plat; and all public ways are shown and labeled on this plat.

Dated this _____ day of _____, 2024.

Michael M. Eichers, Licensed Land Surveyor
Minnesota License No. 46564

State of Minnesota
County of Blue Earth

The foregoing Surveyor's Certificate was acknowledged before me this ____ day of _____, 2024, by Michael M. Eichers, a Licensed Land Surveyor.

Nathan P Myhra, Notary Public
Notary Public-Minnesota
My Commission Expires Jan. 31, 2028

APPROVALS

Be it known that on this the ____ day of _____, 202__, the Planning Commission of the City of Mankato did duly review this plat of MESENBRINK SUBDIVISION.

Chair person:

Secretary:

Be it known that on this the ____ day of _____, 202__, the City Council of the City of Mankato did duly approve this plat of MESENBRINK SUBDIVISION.

Mayor:

Clerk:

TITLE OPINION

I, Justin Weinberg, Licensed Attorney, State of Minnesota, do hereby certify that the owner as indicated hereon represents all ownership interest in the land encompassed by this plat.

Justin Weinberg, Licensed Attorney

BLUE EARTH COUNTY PROPERTY AND ENVIRONMENTAL RESOURCES

I hereby certify that there are no delinquent taxes and/or delinquent special assessments, that the current taxes have been paid and that the transfer has been entered on the land described herein on the ____ day of _____, 2024.

Blue Earth County Property and
Environmental Resources Director

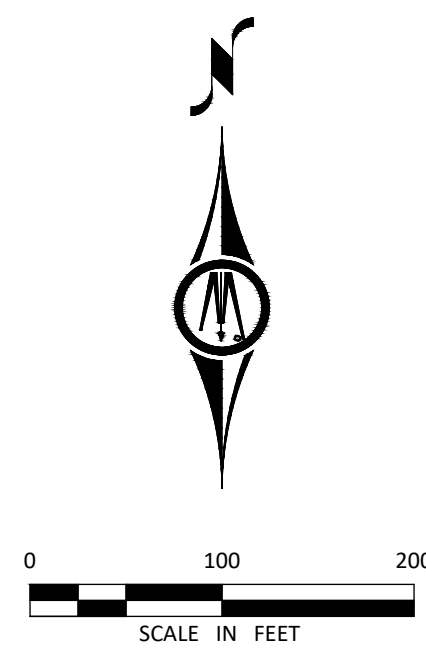
COUNTY RECORDER

I hereby certify that this instrument was filed in my office for record on this, the ____ day of _____, 2024, at ____ o'clock, __m., and that it was duly recorded on _____ Plats, Number _____.

County Recorder

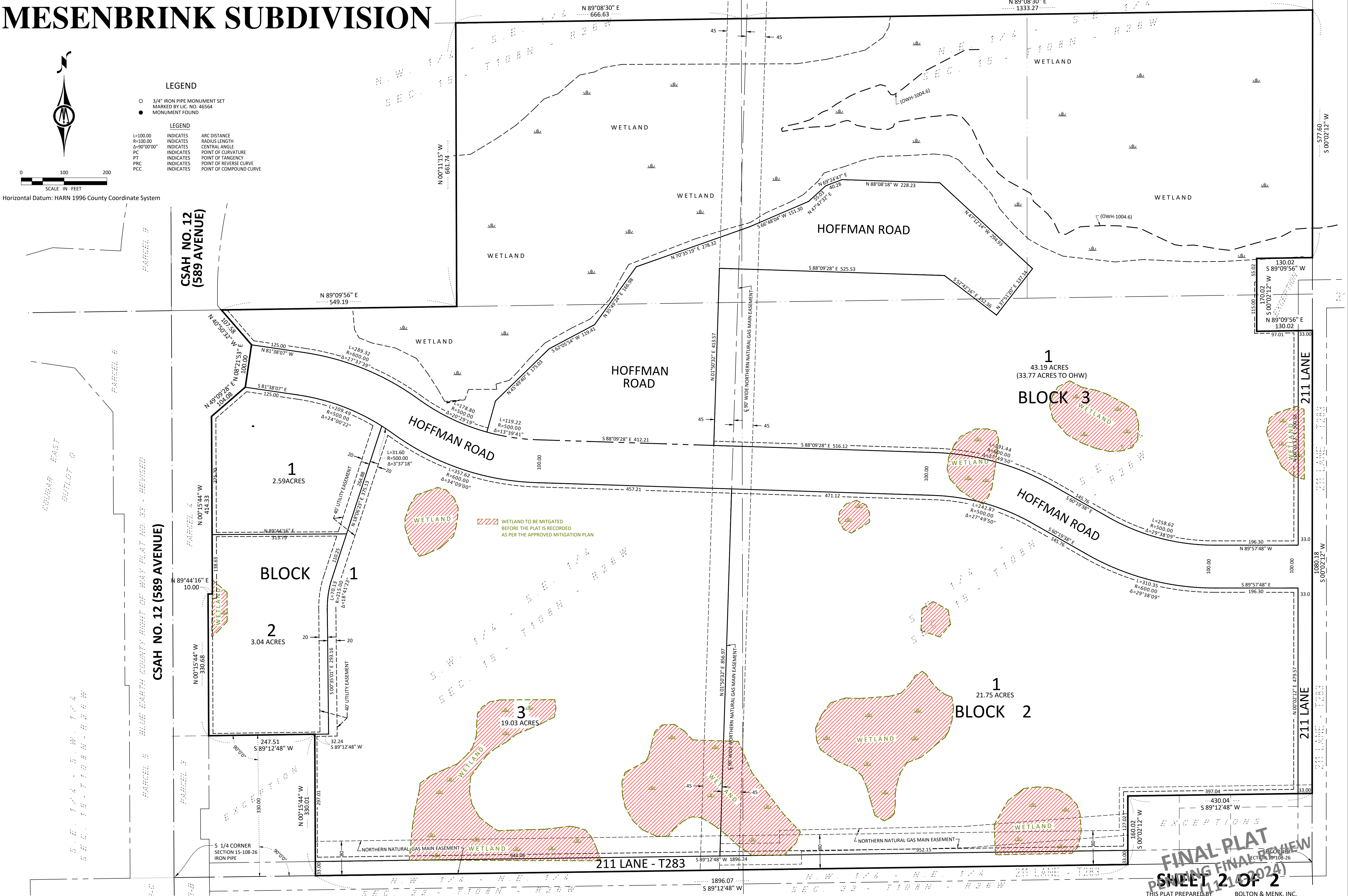
FINAL PLAT
PENDING FINAL REVIEW
(11/11/2024)
SHEET 1 OF 2
THIS PLAT PREPARED BY
BOLTON & MENK, INC.

MESENBRINK SUBDIVISION



- LEGEND**
- 3/4" IRON PIPE MONUMENT SET MARKED BY LIC. NO. 46564
 - MONUMENT FOUND
- LEGEND**
- L=100.00 INDICATES ARC DISTANCE
 - R=100.00 INDICATES RADIUS LENGTH
 - Δ=90°00'00" INDICATES CENTRAL ANGLE
 - PC INDICATES POINT OF CURVATURE
 - PT INDICATES POINT OF TANGENCY
 - PRC INDICATES POINT OF REVERSE CURVE
 - PCC INDICATES POINT OF COMPOUND CURVE

Horizontal Datum: HARN 1996 County Coordinate System



MESENBRINK CONSTRUCTION

CONSTRUCTION PLANS FOR

HOFFMAN ROAD EXTENSION

MANKATO, MN

PAVEMENT AND SIDEWALK CONSTRUCTION, SITE GRADING
WATERMAIN, SANITARY SEWER, AND STORM SEWER INSTALLATION

OCTOBER 2024

RESOURCE LIST

CITY OF MANKATO, MN

City Hall
10 Civic Center Plaza
Mankato, MN 56001
507-387-8695

City Manager:
Susan Arntz

Mayor: Najwa Massad

City Council Members:
Mike Laven
Karen Foreman
Dennis Dieken
Bryan Schneider
Jenn Melby-Kelley
Jessica Hatanpa

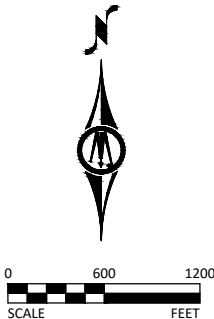
Public Works Director:
Jeffrey Johnson, P.E.

Infrastructure Superintendent:
Anthony Talamantez

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.

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

MAP OF THE
CITY OF MANKATO
BLUE EARTH COUNTY, MN



SHEET NUMBER	SHEET TITLE
-----------------	-------------

GENERAL	
G0.01 - G0.02	TITLE SHEET & LEGEND
G1.01	STATEMENT OF ESTIMATED QUANTITIES
G1.02	CONSTRUCTION DETAIL TABLES
G2.01 - G2.03	PROJECT OVERVIEW

CIVIL	
C0.01 - C0.03	EXISTING CONDITIONS & REMOVAL PLAN
C1.01 - C1.02	TYPICAL SECTIONS & STANDARD PLATES

STORMWATER POLLUTION PREVENTION PLAN	
C2.01 - C2.04	GENERAL INFORMATION & DETAILS
C2.05 - C2.07	EROSION & SEDIMENT CONTROL PLAN

SECTION C3	[SECTION NOT USED]
------------	--------------------

SANITARY SEWER & WATERMAIN PLAN & PROFILE	
SECTION C4	[CITY OF MANKATO PUBLIC IMPROVEMENTS PROJECT]

STORM SEWER AND STORMWATER MANAGEMENT PLAN	
C5.01 - C5.05	STORM SEWER PLAN & PROFILE
C5.06 - C5.10	STORMWATER MANAGEMENT PLAN

STREET & SURFACE CONSTRUCTION	
C6.01 - C6.04	HOFFMAN ROAD PLAN & PROFILE
C6.05 - C6.06	CSAH 12 ROUNDABOUT - EAST LEG
C6.07	HOFFMAN ROAD CUL-DE-SAC

SIGNING & STRIPING PLAN	
C7.01 - C7.02	PAVEMENT MARKING PLAN
C7.03 - C7.04	SIGNAGE PLAN
C7.05 - C7.10	DETAILS

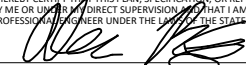
STREET LIGHTING PLAN	
E1.01 - E1.03	STREET LIGHTING PLAN AND DETAILS

TREE PLANTING PLAN	
L1.01 - L1.02	TREE PLANTING PLAN AND DETAILS

THIS PLAN SET CONTAINS 51 SHEETS.

ISSUE FOR PERMIT

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.


ALEC W. PIETZ, P.E.
LIC. NO. 59617 DATE 10/06/2024



1960 PREMIER DRIVE
MANKATO, MINNESOTA 56001
Phone: (507) 625-4171
Email: Mankato@bolton-menk.com
www.bolton-menk.com

DESIGNED	NO.	ISSUED FOR	DATE
AWP		DNR IFP	10/06/2024
DRAWN			
AWP			
CHECKED			
AWP			
CLIENT PROJ. NO.			
0M1.128460			

⊕ BM=1012.33 TOP NUT HYDRANT SE QUADRANT OF HOFFMAN / CSAH 12 ROUNDABOUT	PROJECT DATUM: BLUE EARTH COUNTY HORIZONTAL: 2011 COUNTY COORDINATES VERTICAL: NAVD 1988	RECORD DRAWING INFORMATION	
		OBSERVER:	
		CONTRACTOR:	
		DATE:	
MESENBRINK CONSTRUCTION		SHEET	
HOFFMAN ROAD EXTENSION		G0.01	
TITLE SHEET			

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EXISTING TOPOGRAPHIC SYMBOLS

	ACCESS GRATE		REGULATION STATION GAS
	AIR CONDITION UNIT		SATELLITE DISH
	ANTENNA		SIGN NON TRAFFIC
	AUTO SPRINKLER CONNECTION		SIGN TRAFFIC
	BARRICADE PERMANENT		SIGNAL CONTROL CABINET
	BASKETBALL POST		SOIL BORING
	BENCH		SIREN
	BIRD FEEDER		TELEPHONE BOOTH
	BOLLARD		TILE INLET
	BUSH		TILE OUTLET
	CATCH BASIN RECTANGULAR CASTING		TILE RISER
	CATCH BASIN CIRCULAR CASTING		TRANSFORMER-ELECTRIC
	CURB STOP		TREE-CONIFEROUS
	CLEAN OUT		TREE-DEAD
	CULVERT END		TREE-DECIDUOUS
	DRINKING FOUNTAIN		TREE STUMP
	DOWN SPOUT		TRAFFIC ARM BARRIER
	FILL PIPE		TRAFFIC SIGNAL
	FIRE HYDRANT		TRASH CAN
	FLAG POLE		UTILITY MARKER
	FLARED END / APRON		VALVE
	FUEL PUMP		VALVE POST INDICATOR
	GRILL		VALVE VAULT
	GUY WIRE ANCHOR		VAULT
	HANDHOLE		VENT PIPE
	HANDICAP SPACE		WATER SPIGOT
	IRRIGATION SPRINKLER HEAD		WELL
	IRRIGATION VALVE BOX		WETLAND DELINEATED MARKER
	LIFT STATION CONTROL PANEL		WETLAND
	LIFT STATION		WET WELL
	LIGHT ON POLE		YARD HYDRANT
	LIGHT-GROUND		
	MAILBOX		

PROPOSED TOPOGRAPHIC SYMBOLS

	CLEANOUT
	MANHOLE
	LIFT STATION
	STORM SEWER CIRCULAR CASTING
	STORM SEWER RECTANGULAR CASTING
	STORM SEWER FLARED END / APRON
	STORM SEWER OUTLET STRUCTURE
	STORM SEWER OVERFLOW STRUCTURE
	CURB BOX
	FIRE HYDRANT
	WATER VALVE
	WATER REDUCER
	WATER BEND
	WATER TEE
	WATER CROSS
	WATER SLEEVE
	WATER CAP / PLUG
	RIP RAP
	DRAINAGE FLOW
	TRAFFIC SIGNS

SURVEY SYMBOLS

	BENCHMARK LOCATION
	CONTROL POINT
	MONUMENT FOUND
	CAST IRON MONUMENT
	STONE MONUMENT

EXISTING TOPOGRAPHIC LINES

	RETAINING WALL
	FENCE
	FENCE-DECORATIVE
	GUARD RAIL
	TREE LINE
	BUSH LINE

SURVEY LINES

	CONTROLLED ACCESS
	BOUNDARY
	CENTERLINE
	EXISTING EASEMENT LINE
	PROPOSED EASEMENT LINE
	EXISTING LOT LINE
	PROPOSED LOT LINE
	EXISTING RIGHT-OF-WAY
	PROPOSED RIGHT-OF-WAY
	SETBACK LINE
	SECTION LINE
	QUARTER LINE
	SIXTEENTH LINE
	TEMPORARY EASEMENT

EXISTING UTILITY LINES

	FORCEMAIN
	SANITARY SEWER
	SANITARY SERVICE
	STORM SEWER
	STORM SEWER DRAIN TILE
	WATERMAIN
	WATER SERVICE

PROPOSED UTILITY LINES

	FORCEMAIN
	SANITARY SEWER
	SANITARY SERVICE
	STORM SEWER
	STORM SEWER DRAIN TILE
	WATERMAIN
	WATER SERVICE
	PIPE CASING

GRADING INFORMATION

	EXISTING CONTOUR MINOR
	EXISTING CONTOUR MAJOR
	PROPOSED CONTOUR MINOR
	PROPOSED CONTOUR MAJOR
	PROPOSED GRADING LIMITS / SLOPE LIMITS
	PROPOSED SPOT ELEVATION
	RISE:RUN (SLOPE)

HATCH PATTERNS

	BITUMINOUS		GRAVEL
	CONCRETE		

EXISTING PRIVATE UTILITY LINES

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.

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

	UNDERGROUND FIBER OPTIC
	UNDERGROUND ELECTRIC
	UNDERGROUND GAS
	UNDERGROUND COMMUNICATION
	OVERHEAD ELECTRIC
	OVERHEAD COMMUNICATION
	OVERHEAD UTILITY

UTILITIES IDENTIFIED WITH A QUALITY LEVEL :

LINE TYPES FOLLOW THE FORMAT: UTILITY TYPE - QUALITY LEVEL
EXAMPLE: G-A G-A UNDERGROUND GAS, QUALITY LEVEL A
UTILITY QUALITY LEVEL (A,B,C,D) DEFINITIONS CAN BE FOUND IN CI/ASCE 38-02.

UTILITY QUALITY LEVELS:

QUALITY LEVEL D: PROVIDES THE MOST BASIC LEVEL OF INFORMATION. IT INVOLVES COLLECTING DATA FROM EXISTING UTILITY RECORDS. RECORDS MAY INCLUDE AS-BUILT DRAWINGS, DISTRIBUTION AND SERVICES MAPS, EXISTING GEOGRAPHIC INFORMATION SYSTEM DATABASES, CONSTRUCTION PLANS, ETC.

QUALITY LEVEL C: INVOLVES SURVEYING VISIBLE SUBSURFACE UTILITY STRUCTURES SUCH AS MANHOLES, HAND-HOLES, UTILITY VALVES AND METERS, FIRE HYDRANTS, PEDESTALS AND UTILITY MARKERS, AND THEN CORRELATING THE INFORMATION WITH EXISTING UTILITY RECORDS TO CREATE COMPOSITE DRAWINGS. INCLUDES QUALITY LEVEL D ACTIVITIES.

QUALITY LEVEL B: INVOLVES DESIGNATING THE HORIZONTAL POSITION OF SUBSURFACE UTILITIES THROUGH SURFACE DETECTION METHODS AND COLLECTING THE INFORMATION THROUGH A SURVEY METHOD. INCLUDES QUALITY LEVEL C AND D TASKS.

QUALITY LEVEL A: PROVIDES THE HIGHEST LEVEL OF ACCURACY. IT INVOLVES LOCATING OR POTHOLING UTILITIES AS WELL AS ACTIVITIES IN QUALITY LEVELS B, C, AND D. THE LOCATED FACILITY INFORMATION IS SURVEYED AND MAPPED AND THE DATA PROVIDES PRECISE PLAN AND PROFILE INFORMATION.

ABBREVIATIONS

A	ALGEBRAIC DIFFERENCE	GRAV	GRAVEL	RSC	RIGID STEEL CONDUIT
ADJ	ADJUST	GU	GUTTER	RT	RIGHT
ALT	ALTERNATE	GV	GATE VALVE	SAN	SANITARY SEWER
B-B	BACK TO BACK	HDPE	HIGH DENSITY POLYETHYLENE	SCH	SCHEDULE
BIT	BITUMINOUS	HH	HANDHOLE	SERV	SERVICE
BLDG	BUILDING	HP	HIGH POINT	SHLD	SHOULDER
BMP	BEST MANAGEMENT PRACTICE	HWL	HIGH WATER LEVEL	STA	STATION
BR	BEGIN RADIUS	HYD	HYDRANT	STD	STANDARD
BV	BUTTERFLY VALVE	I	INVERT	STM	STORM SEWER
CB	CATCH BASIN	K	CURVE COEFFICIENT	TC	TOP OF CURB
C&G	CURB AND GUTTER	L	LENGTH	TE	TEMPORARY EASEMENT
CIP	CAST IRON PIPE	LO	LOWEST OPENING	TEMP	TEMPORARY
CIPP	CURED-IN-PLACE PIPE	LP	LOW POINT	TNH	TOP NUT HYDRANT
CL	CENTER LINE	LT	LEFT	TP	TOP OF PIPE
CL	CLASS	MAX	MAXIMUM	TYP	TYPICAL
CLVT	CULVERT	MH	MANHOLE	VCP	VITRIFIED CLAY PIPE
CMP	CORRUGATED METAL PIPE	MIN	MINIMUM	VERT	VERTICAL
C.O.	CHANGE ORDER	MR	MID RADIUS	VPC	VERTICAL POINT OF CURVE
COMM	COMMUNICATION	NIC	NOT IN CONTRACT	VPI	VERTICAL POINT OF INTERSECTION
CON	CONCRETE	NMC	NON-METALLIC CONDUIT	VPT	VERTICAL POINT OF TANGENT
CSP	CORRUGATED STEEL PIPE	NTS	NOT TO SCALE	WM	WATERMAIN
DIA	DIAMETER	NWL	NORMAL WATER LEVEL		
DIP	DUCTILE IRON PIPE	OHW	ORDINARY HIGH WATER LEVEL		
DWY	DRIVEWAY	PC	POINT OF CURVE	AC	ACRES
E	EXTERNAL CURVE DISTANCE	PCC	POINT OF COMPOUND CURVE	CF	CUBIC FEET
ELEC	ELECTRIC	PE	PERMANENT EASEMENT	CV	COMPACTED VOLUME
ELEV	ELEVATION	PED	PEDESTRIAN, PEDESTAL	CY	CUBIC YARD
EOF	EMERGENCY OVERFLOW	PERF	PERFORATED PIPE	EA	EACH
ER	END RADIUS	PERM	PERMANENT	EV	EXCAVATED VOLUME
ESMT	EASEMENT	PI	POINT OF INTERSECTION	LB	POUND
EX	EXISTING	PL	PROPERTY LINE	LF	LINEAR FEET
FES	FLARED END SECTION	PRC	POINT OF REVERSE CURVE	LS	LUMP SUM
F-F	FACE TO FACE	PT	POINT OF TANGENT	LV	LOOSE VOLUME
FF	FINISHED FLOOR	PVC	POLYVINYL CHLORIDE PIPE	SF	SQUARE FEET
F&I	FURNISH AND INSTALL	PVMT	PAVEMENT	SV	STOCKPILE VOLUME
FM	FORCEMAIN	R	RADIUS	SY	SQUARE YARD
FO	FIBER OPTIC	R/W	RIGHT-OF-WAY		
F.O.	FIELD ORDER	RCP	REINFORCED CONCRETE PIPE		
GRAN	GRANULAR	RET	RETAINING		

ISSUE FOR PERMIT

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.

ALEC W. PIETZ, P.E.
LIC. NO. 59617 DATE 10/06/2024



1960 PREMIER DRIVE
MANKATO, MINNESOTA 56001
Phone: (507) 625-4171
Email: Mankato@bolton-menk.com
www.bolton-menk.com

DESIGNED	NO.	ISSUED FOR	DATE
AWP		DNR IFP	10/06/2024
DRAWN			
CHECKED			
AWP			
CLIENT PROJ. NO.			
0M1.128460			

MESENBRINK CONSTRUCTION

HOFFMAN ROAD EXTENSION

LEGEND

SHEET

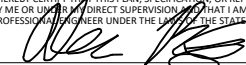
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STATEMENT OF ESTIMATED QUANTITIES					
ITEM NO.	MNDOT ITEM NO.	ITEM	NOTES	ESTIMATED QUANTITY	UNIT
1	2021.501	MOBILIZATION		1	LS
2	2104.503	REMOVE SEWER PIPE (STORM)		24	LF
3	2104.503	SAWING BITUMINOUS PAVEMENT (FULL DEPTH)		160	LF
4	2104.503	REMOVE CURB AND GUTTER		135	LF
5	2104.602	RELOCATE STREET LIGHT		1	EA
6	2104.504	REMOVE BITUMINOUS PAVEMENT		210	SY
7	2105.507	POND EXCAVATION (P)	(1) (5)	25300	CY
8	2105.507	TOPSOIL STRIP (EV) (P)	(2)	19550	CY
9	2105.507	COMMON EXCAVATION (EV) (P)	(3) (5)	1850	CY
10	2105.507	SELECT GRANULAR BORROW (CV) (P)		5525	CY
11	2105.604	GEOGRID		17450	SY
12	2106.507	COMMON EMBANKMENT (CV) (P)	(4)	21400	CY
13	2211.509	AGGREGATE BASE, CLASS 5 (CV) (P)		7500	CY
14	2360.504	TYPE SP 12.5 WEAR CRS MIX (3,C) 3.0" THICK (TEMPORARY CUL-DE-SAC)		875	SY
15	2360.504	TYPE SP 12.5 WEAR CRS MIX (3,C) 1.5" THICK (STREET WEAR COURSE)		11600	SY
16	2360.504	TYPE SP 12.5 NON WEAR CRS MIX (3,C) 1.5" THICK (2 LIFTS) (STANDARD DUTY SECTION)		11650	SY
17	2360.504	TYPE SP 12.5 NON WEAR CRS MIX (3,C) 2.0" THICK (2 LIFTS) (HEAVY DUTY SECTION)		11575	SY
18	2501.502	15" RC PIPE APRON		1	EA
19	2501.502	24" RC PIPE APRON		3	EA
20	2501.502	30" RC PIPE APRON		3	EA
21	2501.502	36" RC PIPE APRON		2	EA
22	2501.502	48" RC PIPE APRON		1	EA
23	2501.502	51" X 31" RC ARCH PIPE APRON		1	EA
24	2502.503	6" PERF PVC PIPE DRAIN, SDR 35		5225	LF
25	2502.602	6" PVC PIPE DRAIN CLEAN-OUT		18	EA
26	2503.503	15" RC PIPE SEWER DESIGN 3006		417	LF
27	2503.503	18" RC PIPE SEWER DESIGN 3006		12	LF
28	2503.503	24" RC PIPE SEWER DESIGN 3006		181	LF
29	2503.503	30" RC PIPE SEWER DESIGN 3006		888	LF
30	2503.503	36" RC PIPE SEWER DESIGN 3006		292	LF
31	2503.503	48" RC PIPE SEWER DESIGN 3006		136	LF
32	2503.503	51" X 31" RC ARCH PIPE		299	LF
33	2503.602	CONNECT TO EXISTING STORM SEWER		1	EA
34	2503.603	12" PIPE SEWER (STORM)		101	LF
35	2503.603	15" PIPE SEWER (STORM)		144	LF
36	2503.603	18" PIPE SEWER (STORM)		52	LF
37	2503.603	24" PIPE SEWER (STORM)		40	LF
38	2503.603	30" PIPE SEWER (STORM)		77	LF
39	2503.603	36" PIPE SEWER (STORM)		453	LF
40	2506.602	STORM SEWER CASTING ASSEMBLY		23	EA
41	2506.503	CONSTRUCT DRAINAGE STRUCTURE DESIGN 48-4020		18.5	LF
42	2506.503	CONSTRUCT DRAINAGE STRUCTURE DESIGN 60-4020		13.4	LF
43	2506.503	CONSTRUCT DRAINAGE STRUCTURE DESIGN 72-4020		15.8	LF
44	2506.503	CONSTRUCT DRAINAGE STRUCTURE DESIGN 84-4020		14.7	LF
45	2506.503	CONSTRUCT DRAINAGE STRUCTURE DESIGN 48-4022		5.5	LF
46	2506.503	CONSTRUCT DRAINAGE STRUCTURE DESIGN 60-4022		29.1	LF
47	2506.503	CONSTRUCT DRAINAGE STRUCTURE DESIGN 72-4022		6.2	LF
48	2506.602	CONSTRUCT DRAINAGE STRUCTURE MANKATO STD. 3		7	EA
49	2506.602	CONSTRUCT DRAINAGE STRUCTURE SPECIAL 1		1	EA
50	2511.507	RANDOM RIPRAP CLASS III/A		378	CY

STATEMENT OF ESTIMATED QUANTITIES					
ITEM NO.	MNDOT ITEM NO.	ITEM	NOTES	ESTIMATED QUANTITY	UNIT
51	2521.518	3" BITUMINOUS WALK		20950	SF
52	2521.518	4" CONCRETE WALK		11850	SF
53	2521.518	6" CONCRETE WALK		775	SF
54	2531.503	CONCRETE CURB & GUTTER DESIGN B618		5460	LF
55	2531.503	CONCRETE CURB & GUTTER DESIGN B624		230	LF
56	2531.504	4" CONCRETE MEDIAN		215	SY
57	2531.504	8" CONCRETE DRIVEWAY		455	SY
58	2531.618	TRUNCATED DOMES		84	SF
59	2545.502	LIGHTING UNIT TYPE E		14	EA
60	2545.502	LIGHTING UNIT TYPE SPECIAL		1	EA
61	2545.502	LUMINAIRE (LED)		16	EA
62	2545.502	LIGHT FOUNDATION DESIGN STEEL E		15	EA
63	2545.502	INSTALL LIGHTING SERVICE CABINET (MANKATO 100 AMP)		1	EA
64	2545.502	EQUIPMENT PAD		1	EA
65	2545.503	2" NON-METALLIC CONDUIT		2400	LF
66	2545.503	UNDERGROUND WIRE 1/C #6 AWG		7200	LF
67	2545.503	GROUNDWIRE 1/C #8 INS. GR.		2400	LF
68	2557.502	ELECTRICAL GROUND		9	EA
69	2563.601	TRAFFIC CONTROL		1	LS
70	2564.502	OBJECT MARKER		1	EA
71	2564.518	SIGN PANELS TYPE C		71.4	SF
72	2564.518	SIGN PANELS TYPE SPECIAL		1	EA
73	2565.602	TRANSFORMER AND SERVICE EQUIPMENT (DESIGN BY OTHERS)		1	EA
74	2571.524	DECIDUOUS TREE 2" CAL B&B - BICOLOR OAK		28	TREE
75	2571.524	DECIDUOUS TREE 2" CAL B&B - DISCOVERY ELM		27	TREE
76	2571.524	DECIDUOUS TREE 2" CAL B&B - HACKBERRY		23	TREE
77	2571.524	DECIDUOUS TREE 2" CAL B&B - HONEY LOCUST		26	TREE
78	2573.501	STORM DRAIN INLET PROTECTION		21	EA
79	2573.501	STABILIZED CONSTRUCTION EXIT		1	EA
80	2573.503	SILT FENCE, TYPE MS		3100	LF
81	2574.508	FERTILIZER TYPE 3		2520	LB
82	2575.504	ROLLED EROSION PREVENTION CATEGORY 20		15000	SY
83	2575.505	SEEDING		8.4	AC
84	2575.508	SEED MIXTURE 25-141		160	LB
85	2575.508	SEED MIXTURE 33-261		100	LB
86	2575.508	SEED MIXTURE 35-221		265	LB
87	2575.508	HYDRAULIC MULCH MATRIX		18550	LB
88	2582.503	4" SOLID LINE PAINT (WR)		4710	LF
89	2582.503	6" SOLID LINE PAINT (WR)		800	LF
90	2582.503	24" SOLID LINE PAINT (WR)		62	LF
91	2582.503	4" BROKEN LINE PAINT (WR)		1150	LF
92	2582.503	4" DOUBLE SOLID LINE PAINT (WR)		400	LF
93	2582.503	12" DOTTED LINE PREFORM PAINT		27	LF
94	2582.518	PAVEMENT MESSAGE PREFORM PAINT		7	EA
95	2582.518	CROSSWALK PREFORM PAINT		144	SF

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MESENBRINK CONSTRUCTION

HOFFMAN ROAD EXTENSION

STATEMENT OF ESTIMATED QUANTITIES

SHEET

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STORM SEWER TABLE									
SERIES / ALIGNMENT	STRUCTURE NUMBER	STRUCTURE DESIGN	STATION	CASTING	RIM ELEV	LOW INVERT ELEV	DOWNSTREAM STRUCTURE	HEIGHT	NOTES
A-SERIES	A-1	24" RC APRON	N/A	N/A	N/A	1009.30	OUTFALL	N/A	
	A-2	24" RC APRON	N/A	N/A	N/A	1009.30	OUTFALL	N/A	
	A-3	24" RC APRON	N/A	N/A	N/A	1009.59	A-2	N/A	
	A-4	15" RC APRON	1+44.9	N/A	N/A	1009.52	OUTFALL	N/A	
	A-5	MKTO 2402C	0+71.3	C-3	1013.79	1009.89	A-4	3.90 LF	
	A-6	MKTO 2402C	0+25.0	C-3	1013.62	1010.12	A-5	3.50 LF	
B-SERIES (WEST)	B-1	36" RC APRON	2+43.2	N/A	N/A	1006.00	BASIN	N/A	
	B-2	60-4022	0+94.8	C-2	1012.26	1006.45	B-1	5.81 LF	
	B-2A	MKTO 2402C	0+94.8	C-2	1012.35	1008.35	B-2	4.00 LF	
	B-3	60-4022	0+50.0	C-2	1012.26	1006.58	B-2	5.68 LF	
	B-3A	MKTO 2402C	0+50.0	C-2	1012.34	1008.34	B-3	4.00 LF	
B-SERIES (EAST)	B-4	30" RC APRON	1+78.9	N/A	N/A	1006.00	BASIN	N/A	
	B-5	60-4022	0+91.8	C-3	1012.33	1006.26	B-4	6.07 LF	
	B-6	60-4022	0+50.0	C-3	1012.33	1006.39	B-5	5.94 LF	
C-SERIES	C-1	36" RC APRON	506+64.6	N/A	N/A	1005.50	BASIN	N/A	
	C-2	72-4020	505+97.1	C-1	1012.01	1005.62	C-1	6.39 LF	
	C-3	60-4022	501+44.4	C-3	1012.10	1006.53	C-2	5.57 LF	
	C-4	84-4020	501+13.5	C-1	1012.44	1006.59	C-3	5.85 LF	
	C-4A	48-4022	501+01.6	C-3	1012.14	1006.65	C-4	5.49 LF	
	C-4B	48-4020	500+50.0	C-4	1012.98	1006.91	C-4A	6.07 LF	
	C-5	60-4020	513+12.9	C-1	1013.50	1007.08	C-4	6.42 LF	
	C-6	60-4020	516+02.7	C-1	1014.60	1007.66	C-5	6.94 LF	
	C-7	72-4022	516+74.2	C-3	1013.93	1007.80	C-6	6.13 LF	
	C-7A	MKTO 2402C	516+72.1	C-3	1013.96	1009.50	C-7	4.46 LF	
	C-8	48-4020	517+63.5	C-1	1014.87	1008.07	C-7	6.80 LF	
	C-9	48-4020	520+17.3	C-1	1014.39	1008.83	C-8	5.56 LF	
	C-10	MKTO 2402C	520+73.0	C-3	1013.94	1009.51	C-9	4.43 LF	
P-SERIES (WEST)	C-10A	MKTO 2402C	520+66.6	C-3	1013.94	1009.94	C-10	4.00 LF	
	P-1	48" RC APRON	0+63.9	N/A	N/A	1002.00	P-2	N/A	
	P-2	72-4020	1+38.6	C-5	1011.00	1001.63	P-3	9.37 LF	
	P-3	84-4020	2+00.0	C-1	1008.80	1000.00	P-4	8.80 LF	
P-SERIES (EAST)	P-4	51"X31" ARCH APRON	4+99.4	N/A	N/A	1000.00	BASIN	N/A	
	P-5	30" RC APRON	0+54.0	N/A	N/A	1001.00	P-6	N/A	
	P-6	SPECIAL 1	1+00.0	N/A	1011.00	1001.00	P-7	10.00 LF	SEE SHEET C5.10
	P-7	30" RC APRON	2+38.5	N/A	N/A	1005.00	OUTFALL	N/A	

CASTING ASSEMBLY TABLE			
CASTING ID	CASTING DESIGNATION	CASTING TYPE	NUMBER REQ'D
C-1	NEENAH R-1733	PLATEN LID LETTERED "STORM SEWER" WITH TWO CONCEALED PICKHOLES	7
C-2	NEENAH R-3067-V	CURB INLET FRAME & CURB BOX WITH TYPE V-VANE GRATE	4
C-3	NEENAH R-3067-VB	CURB INLET FRAME & CURB BOX WITH BI-DIRECTIONAL TYPE V-VANE GRATE	10
C-4	NEENAH R-2573-C	INLET FRAME, TYPE C GRATE	1
C-5	SPECIAL 1	INLET GRATE SHALL BE SIMILAR CONSTRUCTION AS SHOWN ON DESIGN SPECIAL 1 (SEE SHEET C5.10)	1

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MESENBRINK CONSTRUCTION

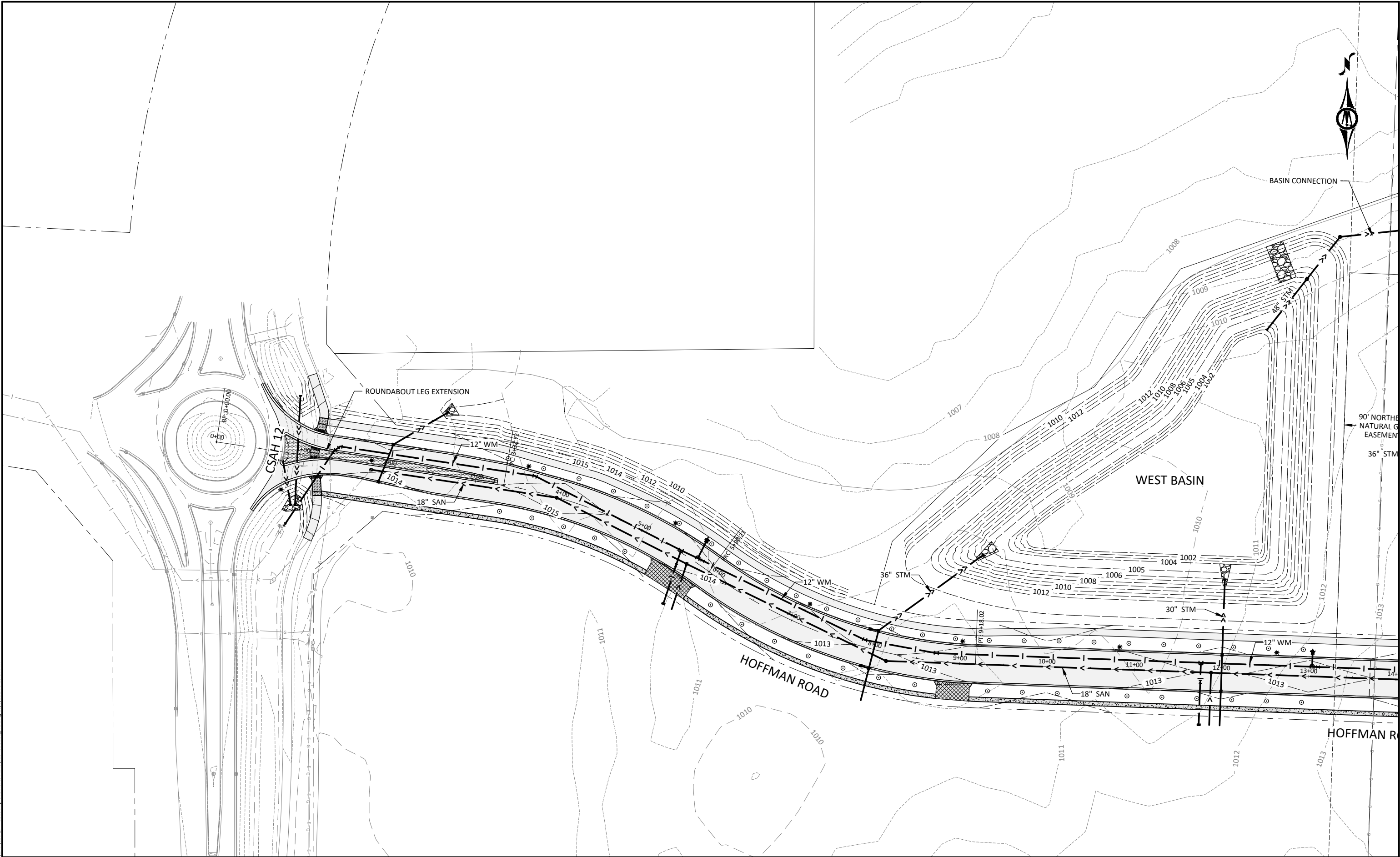
HOFFMAN ROAD EXTENSION

CONSTRUCTION DETAIL TABLES

SHEET

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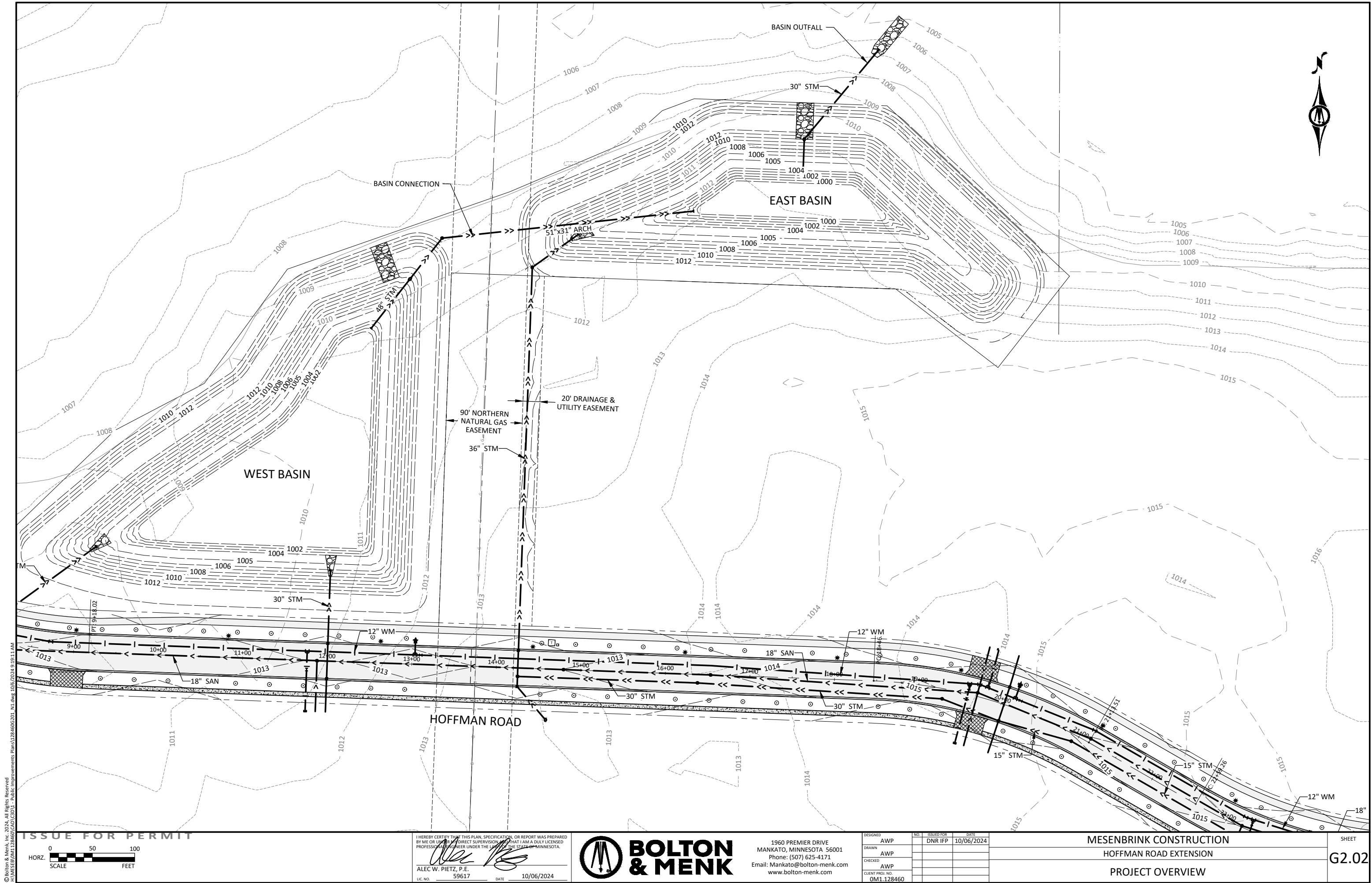


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MESENBRINK CONSTRUCTION
HOFFMAN ROAD EXTENSION
PROJECT OVERVIEW

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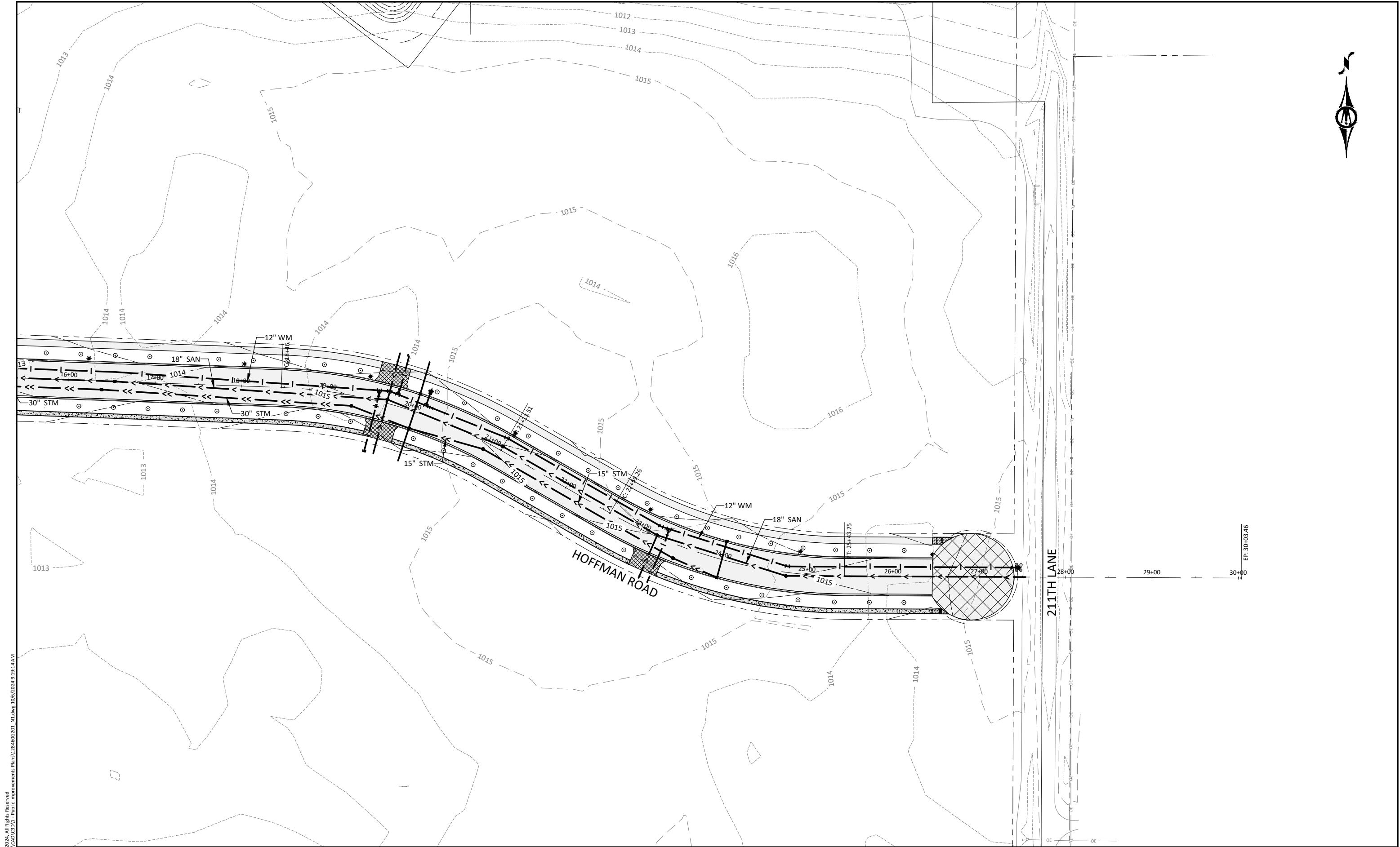


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MESENBRINK CONSTRUCTION
HOFFMAN ROAD EXTENSION
PROJECT OVERVIEW

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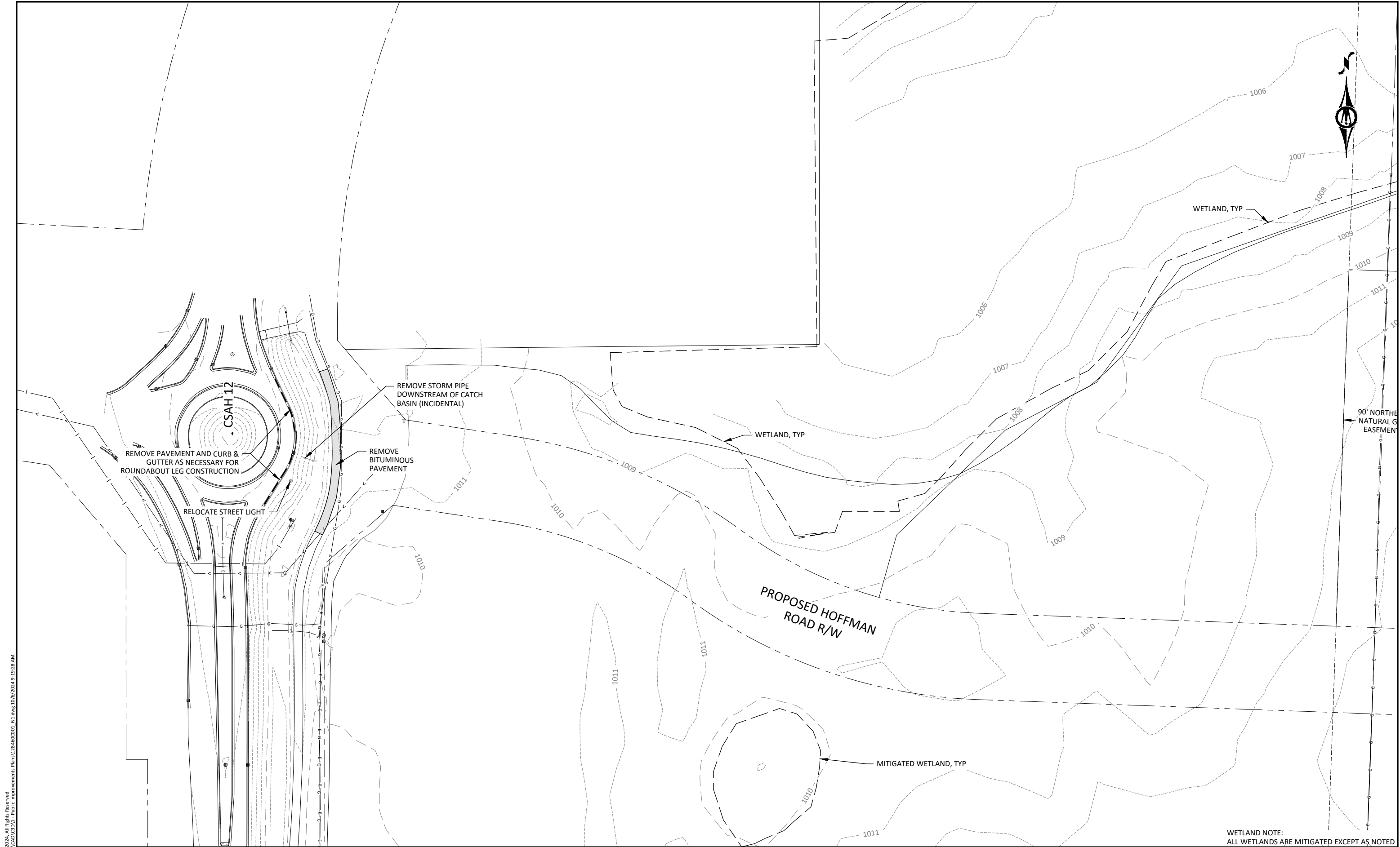
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MESENBRINK CONSTRUCTION
HOFFMAN ROAD EXTENSION
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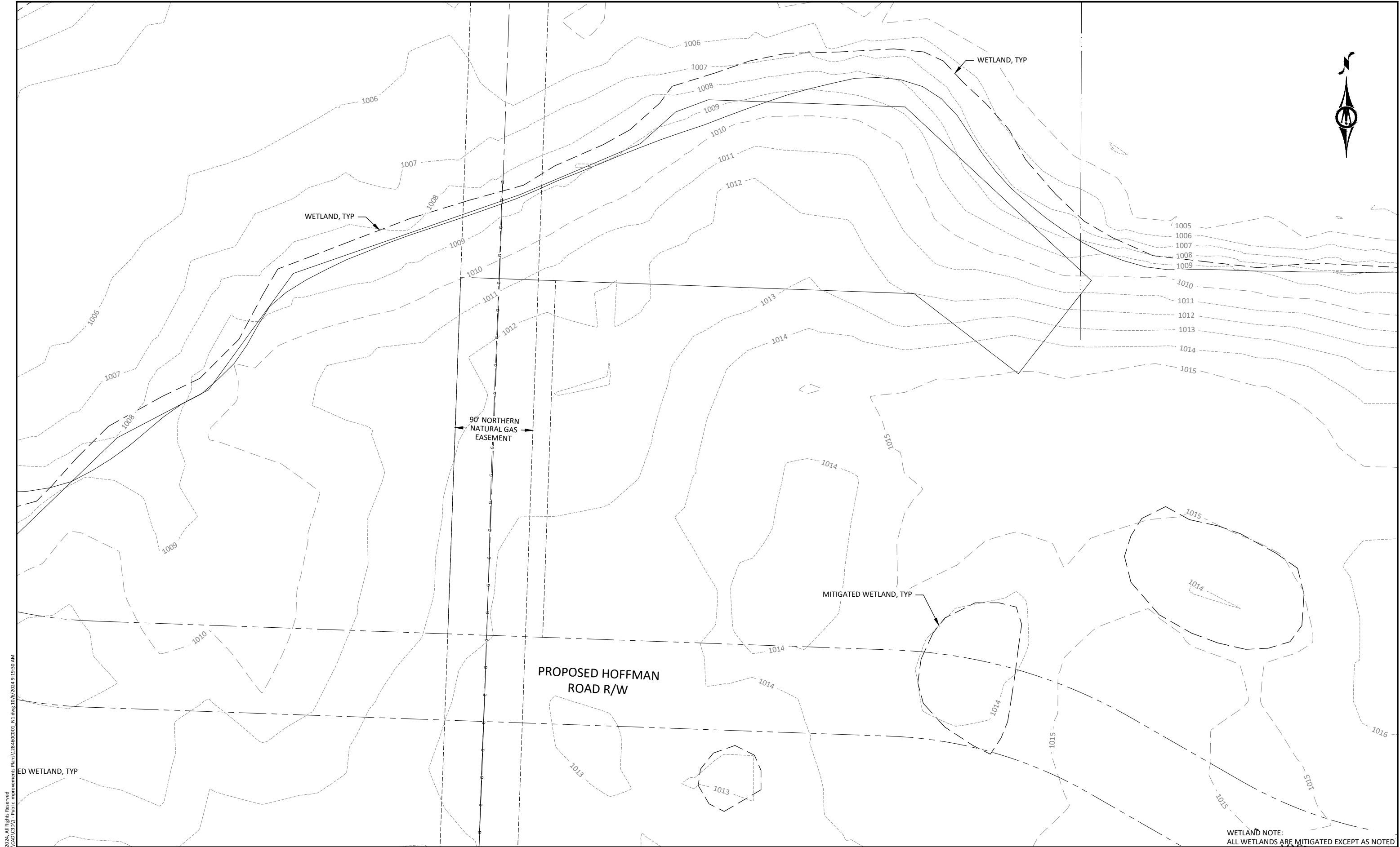
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MESENBRINK CONSTRUCTION	
HOFFMAN ROAD EXTENSION	
EXISTING CONDITIONS & REMOVAL PLAN	

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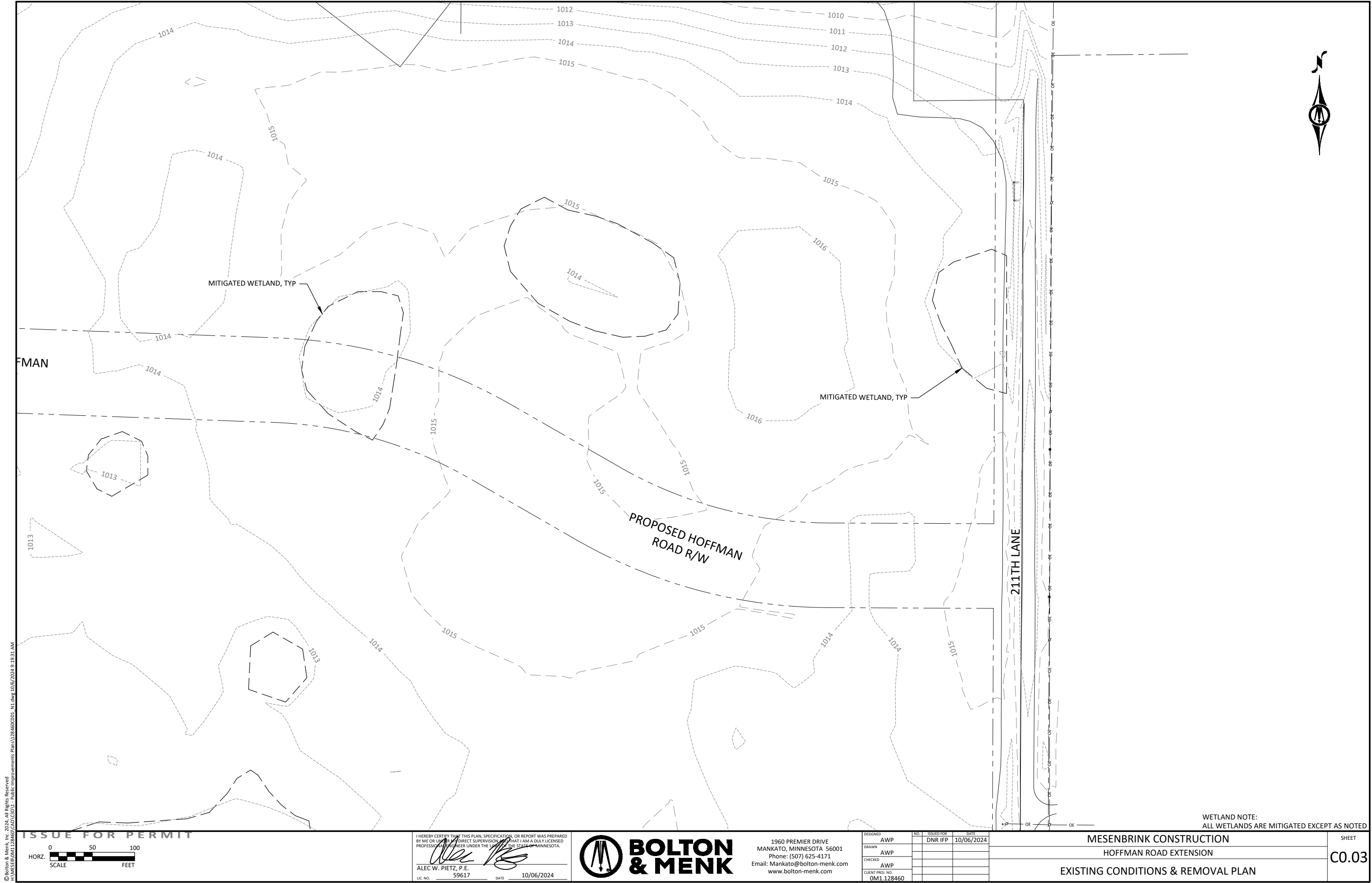
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MESENBRINK CONSTRUCTION		SHEET
HOFFMAN ROAD EXTENSION		
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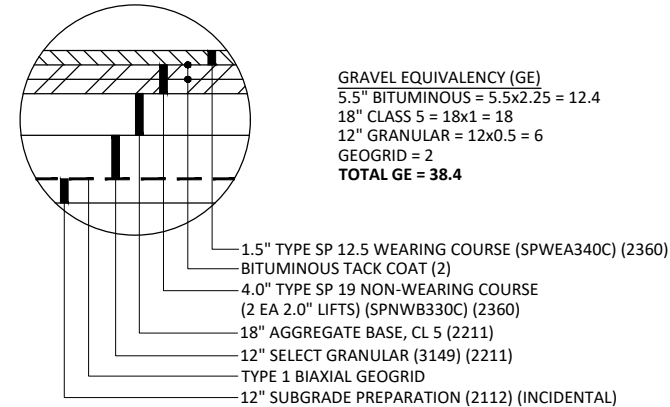
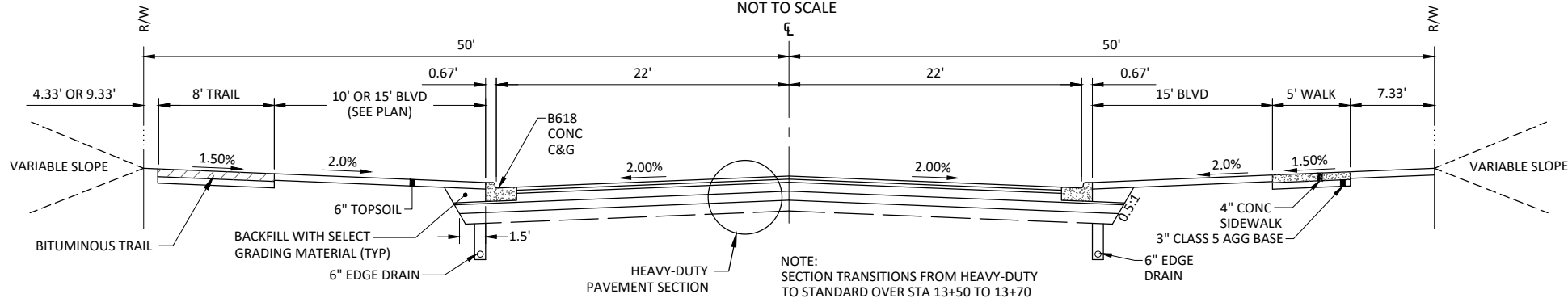
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MESENBRINK CONSTRUCTION
HOFFMAN ROAD EXTENSION
EXISTING CONDITIONS & REMOVAL PLAN

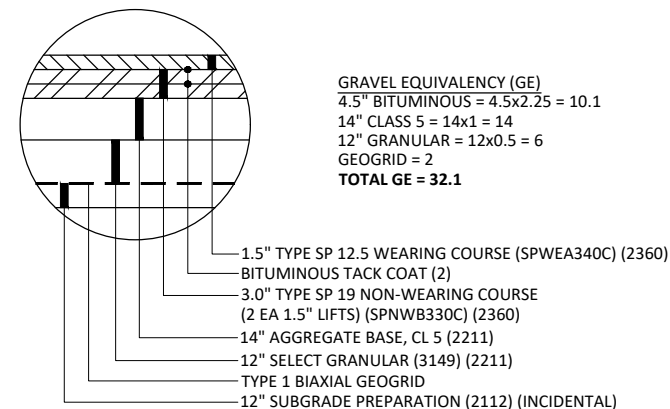
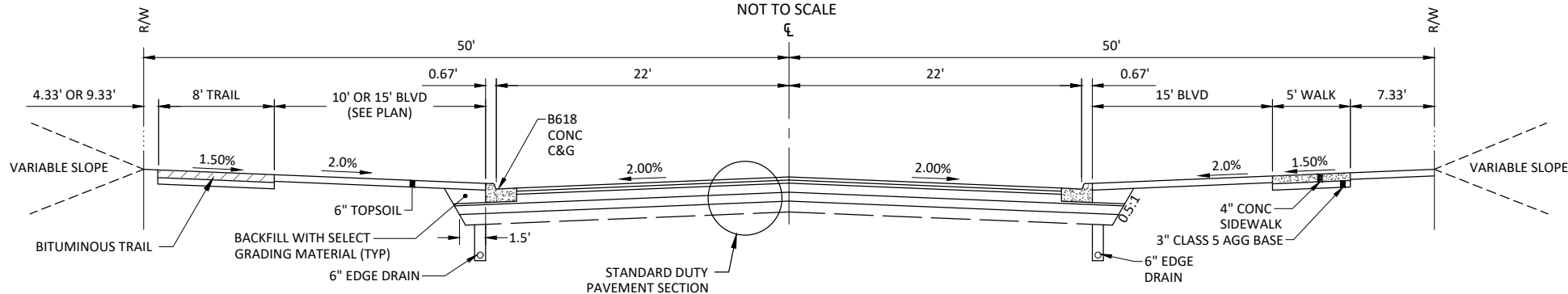
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PROPOSED TYPICAL SECTION
HOFFMAN ROAD - STA 0+00 TO 13+50
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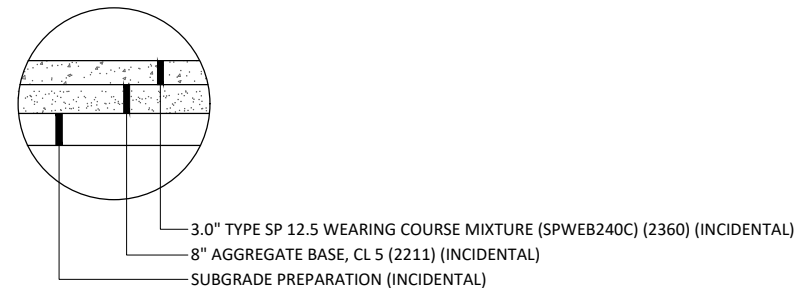
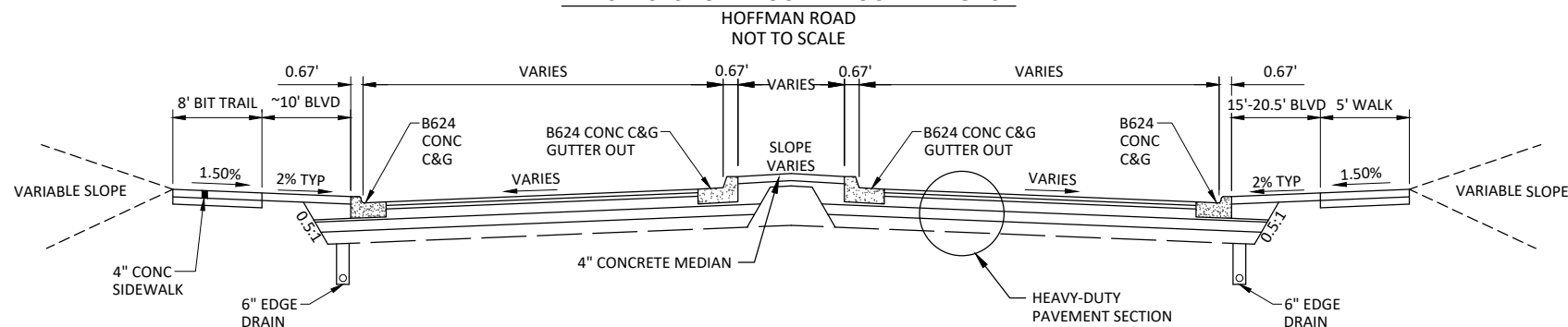
HEAVY-DUTY PAVEMENT SECTION
NOT TO SCALE

PROPOSED TYPICAL SECTION
HOFFMAN ROAD - STA 13+70 TO 26+45
NOT TO SCALE



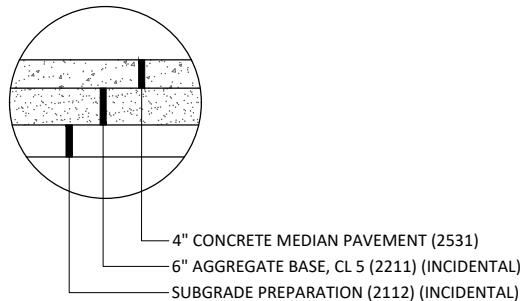
STANDARD DUTY PAVEMENT SECTION
NOT TO SCALE

TYPICAL SECTION - ROUNDABOUT APPROACH

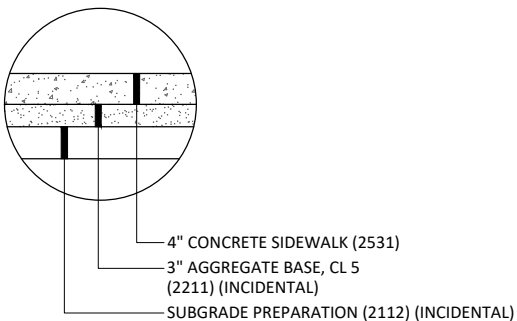


BITUMINOUS TRAIL
NOT TO SCALE

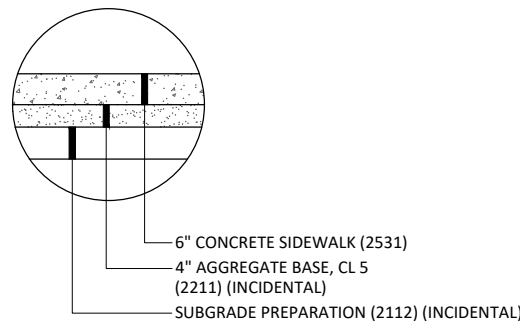
GENERAL NOTE:
SEE ROUNDABOUT GRADING &
CONSTRUCTION SHEETS FOR CURB
AND GUTTER ELEVATIONS/TYPES,
SIDEWALK, AND VARIOUS SLOPES



4" CONCRETE MEDIAN
NOT TO SCALE



4" CONCRETE SIDEWALK
NOT TO SCALE



6" CONCRETE SIDEWALK
NOT TO SCALE

ISSUE FOR PERMIT

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.

ALEC W. PIETZ, P.E.
LIC. NO. 59617 DATE 10/06/2024



1960 PREMIER DRIVE
MANKATO, MINNESOTA 56001
Phone: (507) 625-4171
Email: Mankato@bolton-menk.com
www.bolton-menk.com

DESIGNED	NO.	ISSUED FOR	DATE
AWP		DNR IFP	10/06/2024
DRAWN			
AWP			
CHECKED			
AWP			
CLIENT PROJ. NO.			
0M1.128460			

MESENBRINK CONSTRUCTION
HOFFMAN ROAD EXTENSION
TYPICAL SECTIONS

SHEET

C1.01

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MANKATO STANDARD PLATES	
AVAILABLE ON CITY WEBSITE	
mankatomn.gov/your-government/departments/public-works/engineering	
PLATE NO.	DESCRIPTION
2002A	TEMPORARY MANHOLE INSERTS
2003A	STABILIZED CONSTRUCTION EXIT
2100A	GRANULAR BEDDING AND ENCASEMENT
2200A	SANITARY SEWER MANHOLE
2203A	INTERNAL CHIMNEY SEAL
2240A	STANDARD SANITARY SERVICE
2241A	DEEP SANITARY SERVICE
2320A	WATERMAIN CONSTRUCTION AROUND OBSTACLES
2321A	GATE VALVE ADAPTOR
2322A	HYDRANT DETAIL
2340B	WATER SERVICE
2402C	MANKATO STANDARD CATCH BASIN 3
2420B	DRAIN TILE TRENCH DETAIL
2421A	DRAIN TILE CLEANOUT END/THRU BOULEVARD
2540B	STANDARD DRIVEWAY APPROACH FOR ALL CURB TYPES
2640A	EQUIPMENT PAD
2650A	LIGHT BASE DESIGN STEEL (E)
2660A	100 AMP LIGHTING SERVICE

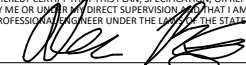
MNDOT STANDARD PLATES	
PLATE NO.	DESCRIPTION
3000L	REINFORCED CONCRETE PIPE (5 SHEETS)
3006G	GASKET JOINT FOR R.C. PIPE (2 SHEETS)
3100G	CONCRETE APRON FOR REINFORCED CONCRETE PIPE
3133D	RIPRAP AT RCP OUTLETS
4007C	PRECAST MECHANICAL JOINT SEWER MANHOLE
4011E	PRECAST CONCRETE BASE
4020J	MANHOLE OR CATCH BASIN (FOR USE WITH OR WITHOUT TRAFFIC LOADS) (2 SHEETS)
4022A	MANHOLE OR CATCH BASIN COVER (3 ft. X 2 ft. OPENING)
4026A	CONCRETE ENCASED CONCRETE ADJUSTING RINGS
4101D	RING CASTING FOR MANHOLE OR CATCH BASIN
4110F	COVER CASTING FOR MANHOLE (FOR USE IN ALL TRAFFIC AREAS) - CASTING NO. 715 AND 716
4180J	MANHOLE OR CATCH BASIN STEP
7038A	DETECTABLE WARNING SURFACE TRUNCATED DOMES
7100H	CONCRETE CURB AND GUTTER (DESIGN B AND DESIGN V)
7102K	CONCRETE CURB AND GUTTER (DESIGN D, S AND R)
7111J	INSTALLATION OF CATCH BASIN CASTINGS (CONCRETE CURB AND GUTTER)

PEDESTRIAN RAMP NOTE:
REFER TO THE LATEST MNDOT STANDARD PLANS 5-297.250
FOR PROPER PEDESTRIAN RAMP INSTALLATION

TRACER WIRE NOTE:
REFER TO THE MINNESOTA RURAL WATER ASSOCIATION (MRWA) TRACER
WIRE SPECIFICATION GUIDE & DETAILS TO PROPERLY INSTALL TRACER WIRE
WITH WATERMAIN AND SANITARY SEWER. THE GUIDE CAN BE FOUND AT:
mrwa.com/tools.html - Tracer Wire Specification Guide & Details

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& MENK**

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MESENBRINK CONSTRUCTION

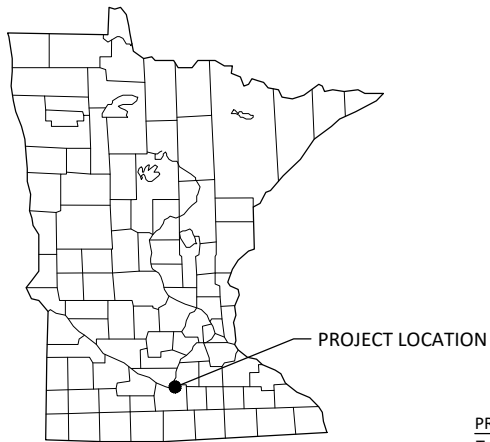
HOFFMAN ROAD EXTENSION

STANDARD PLATES AND DETAILS

SHEET

C1.02

HOFFMAN ROAD EXTENSION
CITY OF MANKATO
BLUE EARTH COUNTY, MINNESOTA



	1-MILE BOUNDARY
	PROJECT BOUNDARY
	PROTECTED AND/OR IMPAIRED WATERS
	NATIONAL WETLANDS INVENTORY

Total Project Size (disturbed area) =	12.1	ACRES
Existing area of impervious surface =	0.1	ACRES
Post construction area of impervious surface =	3.8	ACRES
Total new impervious surface area created =	3.7	ACRES

Planned Construction Start Date:	TBD
Estimated Construction Completion Date:	TBD

X	Wet Sedimentation Basin
	Infiltration/Filtration
	Regional Pond
	Permanent Stormwater Management Not Required

COUNTY	TOWNSHIP	RANGE	SECTION	LATITUDE	LONGITUDE
BLUE EARTH	T108N	R26W	15	44.1547° N	93.9340° W

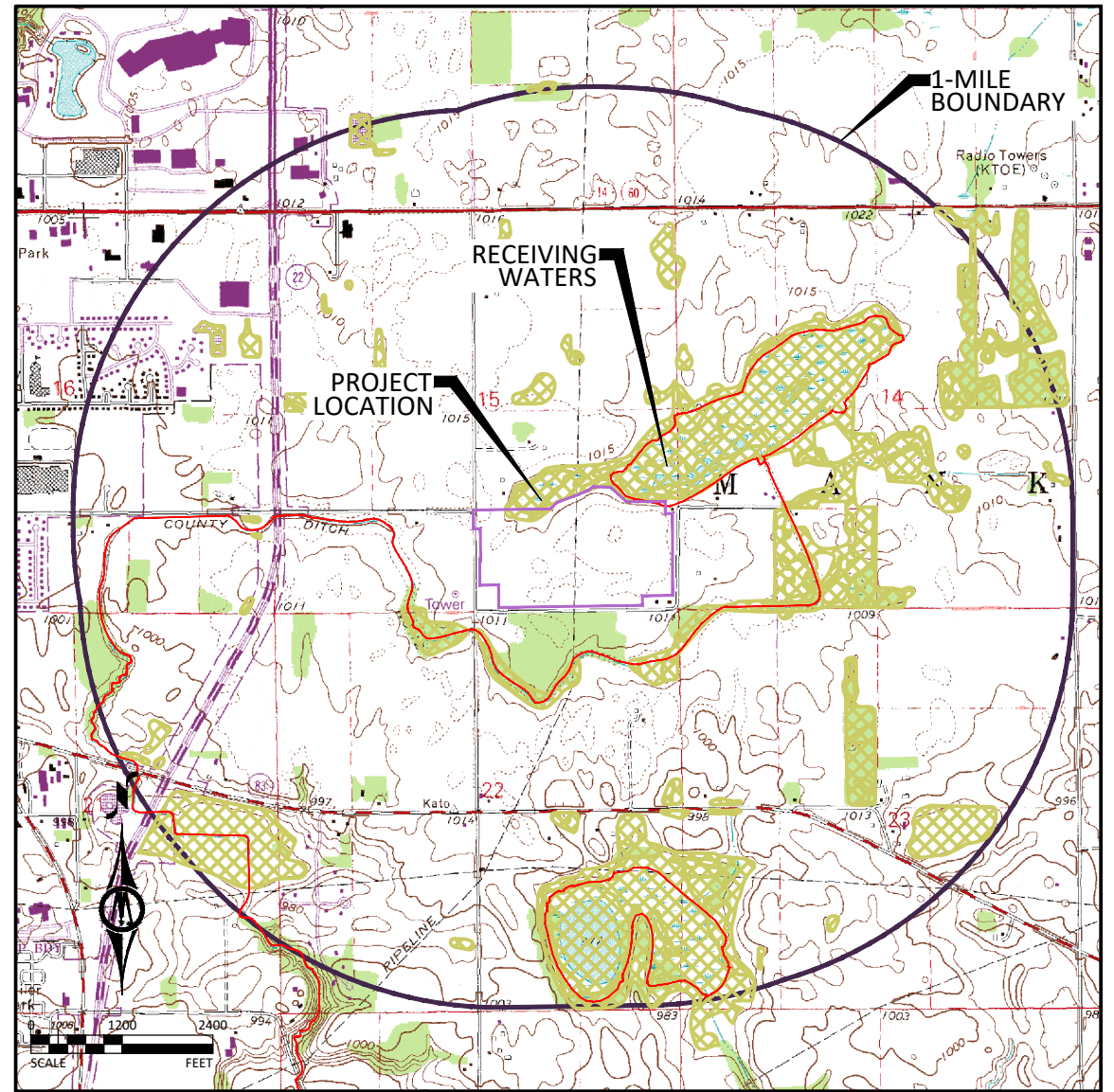
BMP SUMMARY	QUANTITY	UNIT
STABILIZED CONSTRUCTION EXIT	1	EACH
STORM DRAIN INLET PROTECTION	21	EACH
SILT FENCE, TYPE MACHINE SLICED	3100	LIN FT
SEED MIX 25-141, FERTILIZE, & MULCH	1.8	ACRE
SEED MIX 33-261 & FERTILIZE	1.8	ACRE
SEED MIX 35-221, FERTILIZE & MULCH	3.5	ACRE
SEED MIX 35-221 & FERTILIZE	1.3	ACRE
RANDOM RIPRAP CLASS III/A	378	CU YD
ROLLED EROSION PREVENTION CATEGORY 20	15000	SQ YD
NOTE: QUANTITIES LISTED ACCOUNT FOR ONE INSTALLATION. ADDITIONAL INSTALLATIONS MAY BE NECESSARY AS A RESULT OF SCHEDULING AND MAINTENANCE.		

Construction activities include: Construction of public roadways and infrastructure in Mankato, Minnesota to provide service to mixed density housing and commercial development. Site improvements include pavements, storm sewer, watermain, sanitary sewer, water and sanitary services, and wet sedimentation basin construction.

Currently, stormwater is conveyed by overland flow in various directions and local watersheds primarily to an existing unnamed lake to the north of the property.

After development, storm sewer and stormwater management systems will be installed to convey drainage of roadways and future site developments. Drainage district patterns were generally observed and a comprehensive drainage report was prepared detailing the stormwater design. The listed impervious area created with this project is based on the proposed public infrastructure, with the drainage report further elaborating on the full design.

A copy of the SWPPP must remain onsite at all times. Any modifications to the SWPPP shall be approved by the Engineer.



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

NAME OF WATER BODY	TYPE (ditch, pond, wetland, lake, etc.)	Special, Prohibited, Restricted Water ¹	Flows to Impaired Water Within 1-Mile ²	USEPA Approved Construction Related TMDL ³
Unnamed Lake	Lake	Yes	Yes	N/A

³ Construction Related TMDLs include those related to: phosphorus, turbidity, TSS, dissolved oxygen, and/or aquatic biota.

IMPLEMENTATION SCHEDULE AND PHASING: The Contractor is required to provide an updated schedule and site management plan meeting the minimum requirements of Section 1717 of the Minnesota Standard Specifications for Construction.

- 1) Submit SWPPP Updates to Engineer. Submittal shall include any requested changes to the SWPPP, including but not limited to: Trained Personnel, Locations for Stockpiles, Concrete Washout, Sanitation Facilities, Types and Locations of Erosion & Sediment Control. Failure to submit updates shall be considered acceptance of the SWPPP as designed with no changes.
- 2) Install perimeter sediment control, inlet protection, and construction exit.
- 3) Remove existing surfaces as required.
- 4) Complete site and utility improvements.
- 5) Install additional inlet protection as needed.
- 6) Reestablish turf.
- 7) Repeat steps 2-6 as necessary throughout the project.
- 8) Add additional temporary BMPs as necessary during construction based on inspection reports.
- 9) Ensure final stabilization measures are complete.
- 10) Provide digital copy of all Field SWPPP Documentation including Inspection Reports and SWPPP Revisions to the Owner.
- 11) Submit Notice of Termination (NOT) to MPCA. NOTE: The NOT must be submitted to MPCA before Final Stabilization is considered complete.

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Information contained in this SWPPP narrative sheet summarizes requirements of the GENERAL PERMIT AUTHORIZATION TO DISCHARGE STORMWATER ASSOCIATED WITH CONSTRUCTION ACTIVITY UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM/STATE DISPOSAL SYSTEM PROGRAM - Permit No: MN RI00001 (Permit) as they apply to this project. All provisions of the Permit including those not specifically cited herein shall apply to this project. The Contractor is responsible to be familiar with and comply with all conditions of the permit. The full text of the Permit is available at: <https://www.pca.state.mn.us/sites/default/files/wq-strm2-80a.pdf>

SWPPP AMENDMENTS AND SUBMITTALS

Contractor must prepare and submit to the Engineer a SWPPP amendment as necessary to include additional Best Management Practices (BMPs) to correct problems identified or address the following situations.

- Contact information and training documentation for Construction SWPPP Manager and BMP Installer,
- There is a change in construction method of phasing, operation, maintenance, weather or seasonal conditions not anticipated during the design of the SWPPP including but not limited to:
 - Types and/or Locations of BMPs
 - Material Storage and Spill Response
 - Fueling Plans
 - Locations for Stockpiles, Concrete Washout, and Sanitation Facilities and
 - Project Phasing
- It is determined that the SWPPP is not achieving objectives of minimizing pollutants in stormwater discharges associated with construction activity, or
- The SWPPP is not consistent with the terms and conditions of the permit.

The Contractor may implement SWPPP amendments immediately and is not required to wait for Engineer review of the submittal. The responsibility for completeness of SWPPP amendments and compliance with the Permit lies with the Contractor. Review, comment, or lack of comment by the Engineer on a SWPPP amendment shall not absolve the responsibilities of the Contractor in any way.

If a change order is issued for a design change the SWPPP amendment will be prepared by the Engineer and included in the change order.

In addition to SWPPP amendments, the Contractor shall submit to the Engineer Weekly Erosion and Sediment Control Schedule meeting the requirements of MnDOT 1717.

The Contractor shall keep copies of all SWPPP amendments, Weekly Erosion and Sediment Control Schedules, inspection logs, and maintenance logs with the field copy of the SWPPP. A PDF copy of these documents will be provided along with a copy of the final Field Copy of the SWPPP to the Engineer along with the signed Notice of Termination when final stabilization is complete.

EROSION PREVENTION PRACTICES

Stormwater conveyance channels shall be routed around unstabilized areas. Erosion controls and velocity dissipation devices shall be used at outlets within and along the length of any constructed conveyance channel.

The normal wetted perimeter of all ditches or swales, including storm water management pond slopes, that drain waters from the site must be stabilized within 200' of any property edge or discharge point, including storm sewer inlets, within 24 hours of connection.

Temporary or permanent ditches or swales used as sediment containment during construction do not need to be stabilized during temporary period of use and shall be stabilized within 24 hours after no longer used as sediment containment.

Mulch, hydromulch, tackifier, or similar practice shall not be used in any portion of the wetted perimeter of a temporary or permanent drainage ditch or swale section with a continuous slope of greater than 2 percent.

Energy dissipation shall be installed at all temporary or permanent pipe outlets within 24 hours of connection to a surface water or permanent stormwater treatment system.

The Contractor shall phase construction and use construction methods to the extent practical to minimize exposed soils. The project phasing shall be documented in the Weekly Erosion and Sediment Control Schedule.

SEDIMENT CONTROL PRACTICES

Down gradient BMPs including perimeter BMPs must be in place before up gradient land- disturbing activities begin and shall remain in place until final stabilization.

All BMPs that have been adjusted or removed to accommodate short-term activities shall be re-installed or replaced the earlier of the end of the work day or before the next precipitation event even if the activity is not complete.

Inlet BMPs may be removed for specific safety concerns. The BMPs shall be replaced as soon as the safety concern is resolved. The removal shall be documented in the SWPPP as a SWPPP amendment.

Temporary stockpiles must have sediment control BMPs. The Contractor shall prepare and submit to the Engineer a SWPPP amendment showing the location of temporary stockpiles and the BMPs for each stockpile. The SWPPP amendment must meet the minimum requirements of Section 9 of the Permit.

Soil compaction shall be minimized and topsoil shall be preserved, unless infeasible or if construction activities dictate soil compaction or topsoil stripping.

The use of polymers, flocculants, or other sedimentation treatment chemicals are not proposed as part of this SWPPP as designed by the Engineer. If methods or phasing of construction require the use of any of these chemicals, the Contractor shall prepare and submit to the Engineer a SWPPP amendment that meets the minimum requirements of Section 9 of the Permit.

TEMPORARY SEDIMENTATION BASINS

A temporary sedimentation basin has not been included in this SWPPP as designed by the Engineer. If a basin is later determined to be desirable or necessary the Contractor shall prepare and submit to the Engineer a SWPPP amendment. Temporary sedimentation basins shall meet or exceed the minimum requirements of Section 14 of the Permit and shall include a basin draining plan meeting or exceeding the minimum requirements of Section 10 of the Permit. Where the site discharges to Special and/or Impaired Waters the SWPPP amendment shall also meet or exceed the minimum requirements of Section 23 of the permit.

DEWATERING

A dewatering plan has not been included in this SWPPP as designed by the Engineer. If dewatering is required for this project, the Contractor shall prepare and submit to the Engineer a SWPPP amendment. All dewatering shall meet or exceed the minimum requirements of Section 10 of the Permit.

POLLUTION PREVENTION

Products and materials that have the potential to leach pollutants that are stored on the site must be stored in a manner designed to minimize contact with stormwater. Materials that are not a source of potential contamination to stormwater or that are designed for exposure to stormwater are not required to be covered.

Hazardous materials including but not limited to pesticides, fertilizer, petroleum products, curing compounds and toxic waste must be properly stored and protected from stormwater exposure as recommended by the manufacturer in an access restricted area.

Solid waste must be stored, collected and disposed of in compliance with Minnesota Administrative Rules Chapter 7035.

Portable toilets must be positioned so that they are secure and will not be tipped or knocked over. Sanitary waste must be disposed of properly in accordance with Minn. R. CH 7041.

Exterior vehicle or equipment washing on the project site shall be limited to a defined area of the site. No engine degreasing is allowed on site. A sign must be installed adjacent to each washout facility that requires site personnel to utilize the proper facilities for disposal of concrete and other washout wastes.

The Contractor shall prepare and submit a SWPPP amendment detailing the location and BMPs proposed for storage of materials, solid waste, portable toilets, and exterior vehicle or equipment washing on the site. The SWPPP amendment shall include a spill prevention and response plan that is appropriate for the materials proposed to be on the site. The SWPPP amendment shall meet or exceed the minimum requirements of Section 12 of the Permit.

INSPECTION & MAINTENANCE

A trained person shall routinely inspect the entire construction site at the time interval indicated on this sheet of the SWPPP 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 at the time interval indicated in the Receiving Waters Table found on the SITE PLAN AND INFORMATION SHEET of the SWPPP.

All inspections and maintenance conducted during construction must be recorded on the day it is completed and must be retained with the SWPPP. Inspection report forms are available in the Project Specifications. Inspection report forms other than those provided shall be approved by the engineer.

The Contractor may request a change in inspection schedule for the following conditions:

- Inspections of areas with permanent cover to be reduced to once per month,
- Inspections of areas that have permanent cover and have had no construction activity for 12 months to be suspended until construction resumes,
- Inspections of areas where construction is suspended due to frozen ground conditions, inspections to be suspended until the earlier of within 24 hours of runoff occurring, or upon resuming construction.

No change in inspection schedule shall occur until authorized by the Engineer.

Inspections must include:

- All erosion prevention and sediment control BMPs and Pollution Prevention Management Measures to ensure integrity and effectiveness.
- Surface waters, including drainage ditches and conveyance systems for evidence of erosion and sediment deposition.
- Construction site vehicle exit locations, streets and curb and gutter systems within and adjacent to the project for sedimentation from erosion or tracked sediment from vehicles.
- Infiltration areas to ensure that no sediment from ongoing construction activity is reaching the infiltration area and that equipment is not being driven across the infiltration area.

All non-functioning BMPs and those BMPs where sediment reaches one-half (1/2) of the depth of the BMP, or in the case of sediment basins one-half (1/2) of the storage volume, must be repaired, replaced, or supplemented by the end of the next business day after discovery, or as soon as field conditions allow.

Permittees must repair, replace or supplement all nonfunctional BMPs with functional BMPs by the end of the next business day after discovery, or as soon as field conditions allow.

Any sediment that escapes the site must be removed and the area stabilized within 7 calendar days of discovery unless precluded by legal, regulatory, or physical access in which case the work shall be completed within 7 calendar days of authorization. Paved surfaces such as streets shall have any escaped or tracked sediment removed by the end of the day that it is discovered. Sediment release, other than paved surfaces that can be cleaned up with street sweeping shall be reported immediately upon discovery to the Engineer.

PUBLIC WATER RESTRICTIONS:

For public waters that have been promulgated "work in water restrictions" during fish spawning time frames, all exposed soil areas that are within 200 feet of the water's edge, and drain to these waters must complete stabilization within 24-hours during the time period. MN DNR permits are not valid for work in waters that are designated as infested waters unless accompanied by an Infested Waters Permit or written notification has been obtained from MN DNR stating that such permit is not required. There is no exception for pre-existing permits. If a MN DNR Permit has been issued for the project and the water is later designated as infested, the Contractor shall halt all work covered by the MN DNR Permit until an Infested Waters Permit is obtained or that written notification is obtained stating that such permit is not required.

FINAL STABILIZATION

Final Stabilization is not complete until all the following requirements have been met:

- Substantial Completion has been reached and no ground disturbing activities are anticipated.
- Permanent cover has been installed with an established minimum uniform perennial vegetation density of 70 percent of its expected final growth. Vegetation is not required in areas where no vegetation is proposed by this project such as impervious surfaces or the base of a sand filter.

- Accumulated sediment has been removed from all permanent stormwater treatment systems as necessary to ensure the system is operating as designed.
- All sediment has been removed from conveyance systems
- All temporary synthetic erosion prevention and sediment control BMPs have been removed. BMPs designated on the SWPPP to remain to decompose on-site may remain.
- For residential construction only, permit coverage terminates on individual lots if the structures are finished and temporary erosion prevention and downgradient perimeter control is complete, the residence sells to the homeowner, and the permittee distributes the MPCA's "Homeowner Fact Sheet" to the homeowner.
- For agricultural land only (e.g., pipelines across cropland), the disturbed land must be returned to its preconstruction agricultural use prior to submitting the NOT.

SITE STABILIZATION COMPLETION:

Stabilization of exposed soils shall begin immediately and shall be completed after the construction activity has temporarily or permanently ceased no later than:	7 calendar days
--	-----------------

SITE INSPECTION INTERVAL:

A trained person shall routinely inspect the entire construction site during active construction at an interval of no less than:	3 calendar days
--	-----------------

SPECIAL ENVIRONMENTAL CONSIDERATIONS AND PERMITS:

1)	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
2)	Does any portion of the site have the potential to affect threatened or endangered species or their critical habitat?	NO
3)	Does any portion of this site discharge to a Calcareous fen.	NO
4)	Will any portion of the site potentially affect properties listed on the National Register of Historic Places or a known or discovered archeological site?	NO
5)	Have any Karst features have been identified in the project vicinity?	NO
6)	Is compliance with temporary or permanent stormwater management design requirements infeasible for this project?	NO
7)	Has the MN DNR promulgated "work in water restrictions" for any Public Water this site discharges to during fish spawning?	NO

SWPPP DESIGNER TRAINING DOCUMENTATION:

UNIVERSITY OF MINNESOTA
Alec W. Pietz
Design of Construction SWPPP (May 31 2027)

ISSUE FOR PERMIT

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.	
	
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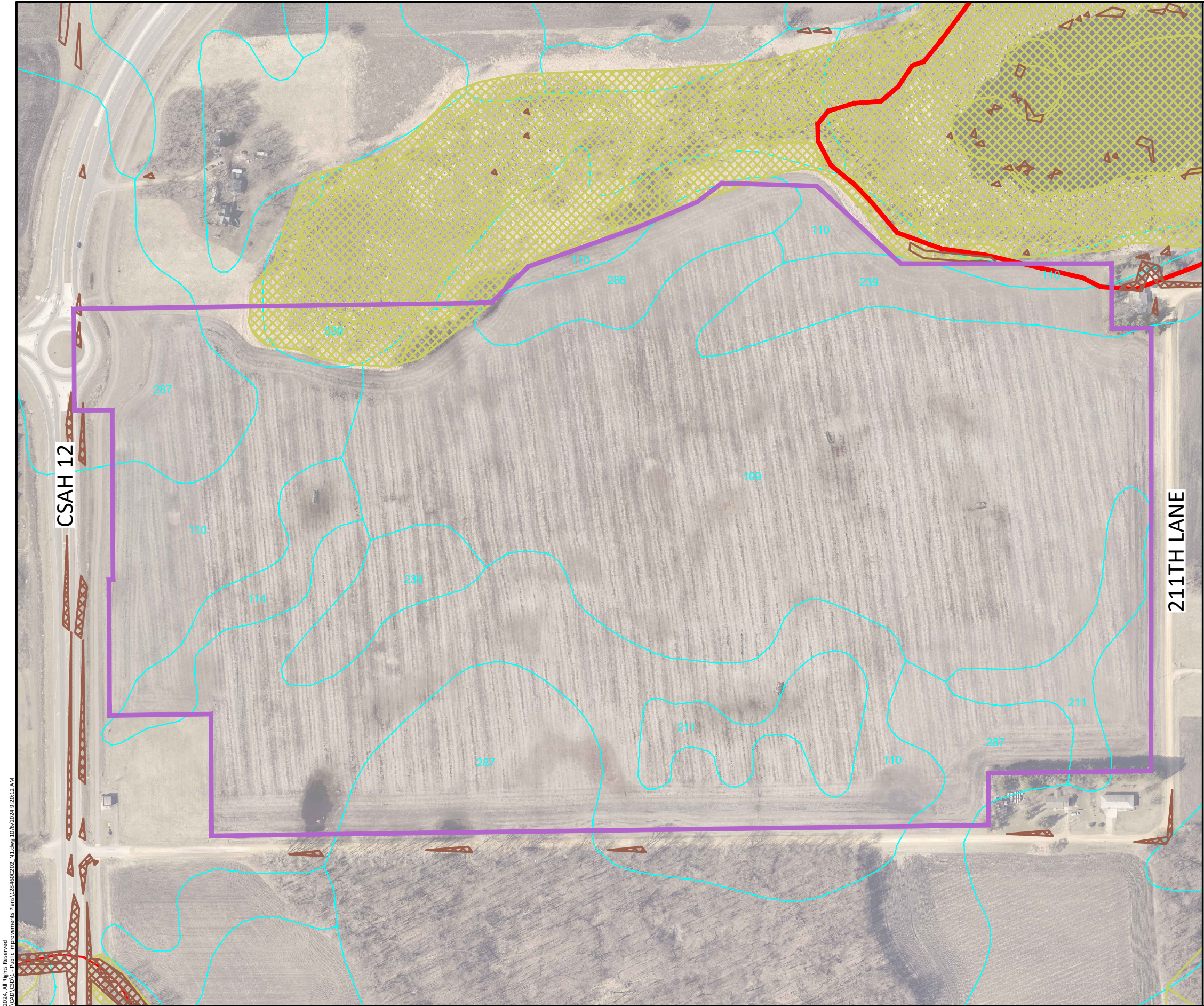


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MESENBRINK CONSTRUCTION		SHEET
HOFFMAN ROAD EXTENSION		
STORMWATER POLLUTION PREVENTION PLAN		
NARRATIVE		C2.02



LEGEND

- PROJECT BOUNDARY
- SOIL TYPE
- STEEP SLOPES (>33.3%)
- NATIONAL WETLANDS INVENTORY
- RECEIVING WATERS



SOIL TYPE SUMMARY

Map Unit Symbol	Soil Name	Hyd. Soil Group	Erodibility
109	Cordova clay loam	C/D	NHEL
110	Marna silty clay loam	C/D	NHEL
114	Glencoe silty clay loam	B/D	NHEL
211	Lura silty clay	C/D	NHEL
239	Le Sueur clay loam, 1 to 3 percent slopes	B/D	NHEL
286	Shorewood silty clay loam, 1 to 6 percent slopes	C/D	NHEL
287	Minnetonka silty clay loam	C/D	NHEL
539	Klossner muck, lake plain, depressional, 0 to 1 percent slopes	C/D	NHEL

NHEL - Not Highly Erodible Land
PHEL - Potentially Highly Erodible Land
HEL - Highly Erodible Land

LOCATION OF SWPPP REQUIREMENTS IN PROJECT PLAN

DESCRIPTION	SHEET NO.
SITE MAP	C2.01
NARRATIVE & NOTES	C2.01 - C2.02
SOILS	C2.03
EROSION & SEDIMENT CONTROL DETAILS	C2.04
DIRECTION OF FLOW	C2.05 - C2.07
FINAL STABILIZATION	C2.05 - C2.07
STORM SEWER & STORMWATER MANAGEMENT	C5.01 - C5.10

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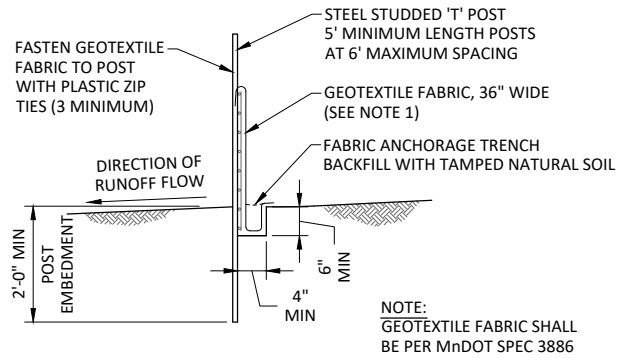
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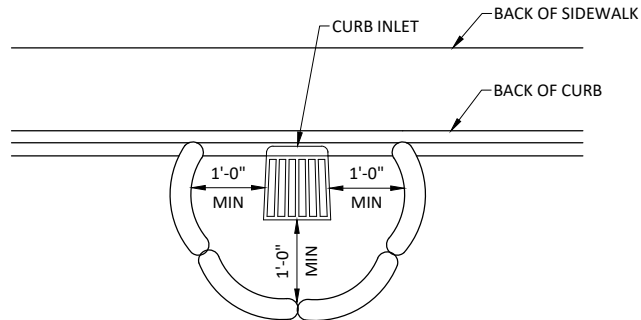
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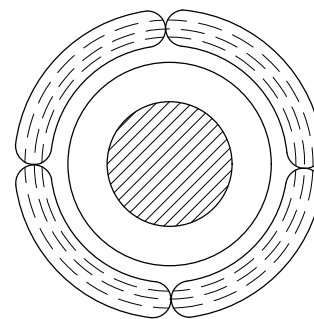
MESENBRINK CONSTRUCTION	SHEET
HOFFMAN ROAD EXTENSION	C2.03
STORMWATER POLLUTION PREVENTION PLAN	
SITE & SOILS MAP	



SILT FENCE - HEAVY DUTY
NOT TO SCALE



PAYMENT SHALL INCLUDE ALL MATERIALS, FILLING OF LOG, PLACEMENT, MAINTENANCE & REMOVAL; 80% OF BID PRICE SHALL BE PAID UPON PROPER PLACEMENT WITH THE FINAL 20% PAID UPON REMOVAL

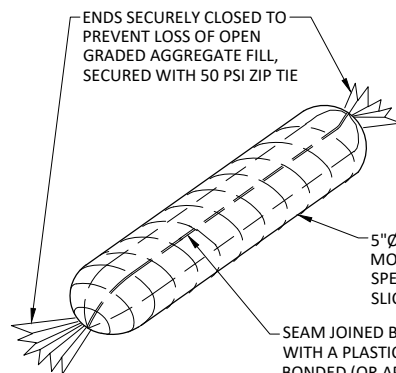


INLET PROTECTION WITH ROCK LOG

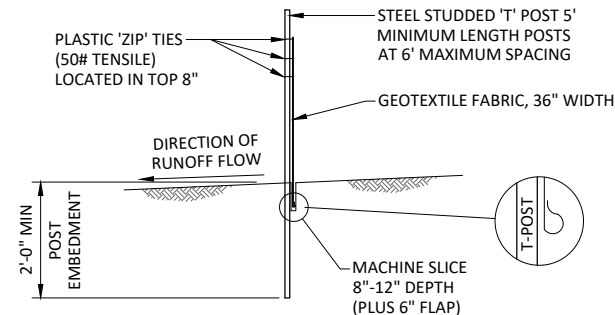
FILL ROCK LOG WITH 45 LBS. OF OPEN GRADED AGGREGATE CONSISTING OF SOUND, DURABLE PARTICLES OF CRUSHED QUARRY ROCK OR GRAVEL CONFORMING TO THE FOLLOWING GRADATION.

GRADATION	
SIEVE SIZE	PERCENT PASSING
1 1/2"	100
1"	95-100
3/4"	65-95
3/8"	30-65
NO 4	10-35
NO 10	3-20
NO 40	0-8
NO 200	0-3

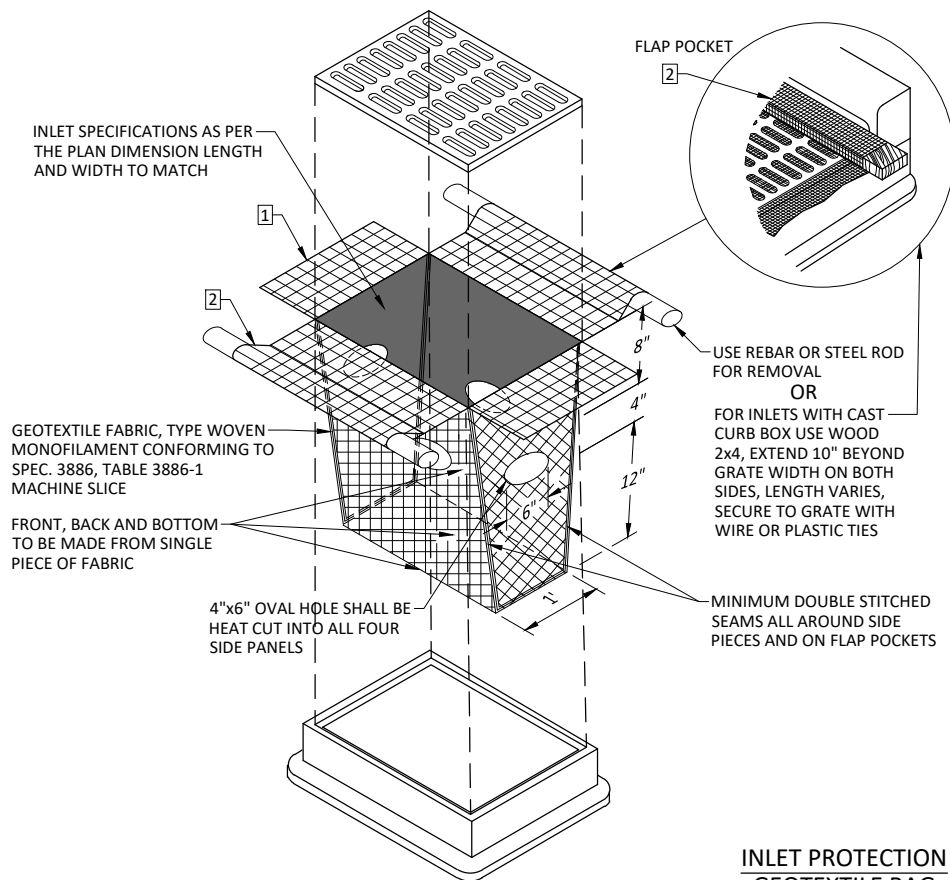
NOTE: CRUSHED CONCRETE OR BITUMINOUS SHALL NOT BE USED FOR OPEN GRADED AGGREGATE.



INLET PROTECTION ROCK BAG
NOT TO SCALE



SILT FENCE - MACHINE SLICED
NOT TO SCALE



INLET PROTECTION GEOTEXTILE BAG
NOT TO SCALE

NOTES:
1 INLET PROTECTION DEVICES SHALL BE MAINTAINED OR REPLACED AT THE DIRECTION OF THE ENGINEER. MANUFACTURED ALTERNATIVES APPROVED AND LISTED ON THE DEPARTMENT'S EROSION CONTROL PRODUCT ACCEPTABILITY LIST MAY BE SUBSTITUTED. WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL IN THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

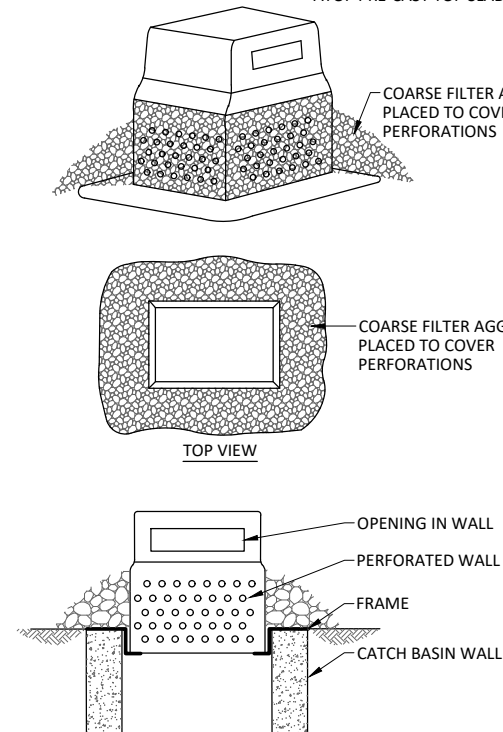
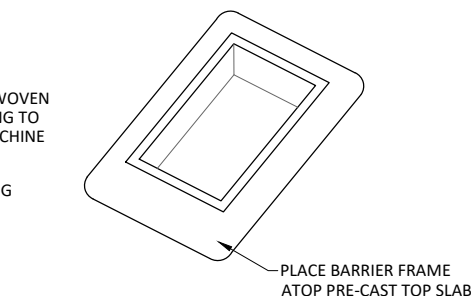
2 FINISHED SIZE, INCLUDING POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.

FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2x4.

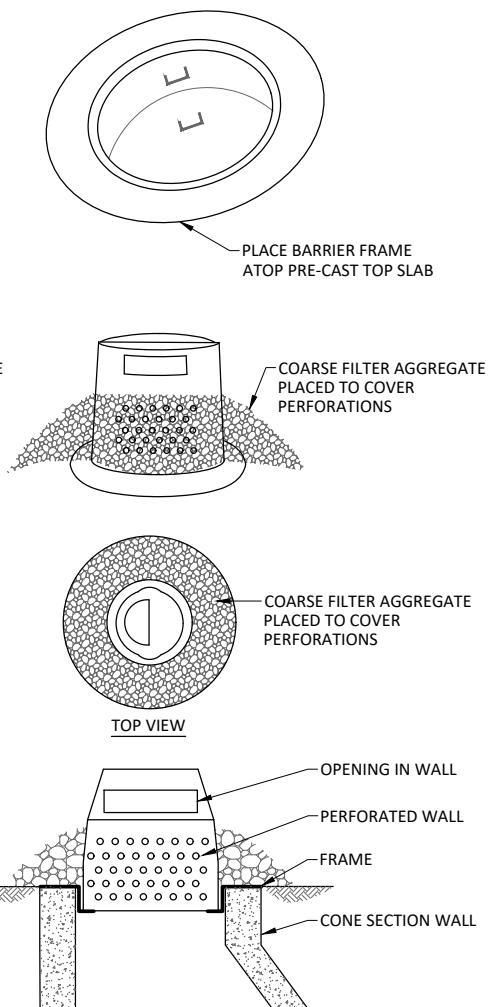
INSTALLATION NOTES:
DO NOT INSTALL PROTECTION IN INLETS SHALLOWER THAN 30", MEASURED FROM THE BOTTOM OF THE INLET TO THE TOP OF THE GRATE.

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CLINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE BOTTOM OF THE BAG.



INLET PROTECTION PERFORATED WALL
NOT TO SCALE



ISSUE FOR PERMIT

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ALEC W. PIETZ, P.E.
LIC. NO. 59617 DATE 10/06/2024



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0M1.128460			

MESENBRINK CONSTRUCTION
HOFFMAN ROAD EXTENSION
STORMWATER POLLUTION PREVENTION PLAN
BEST MANAGEMENT PRACTICE DETAILS

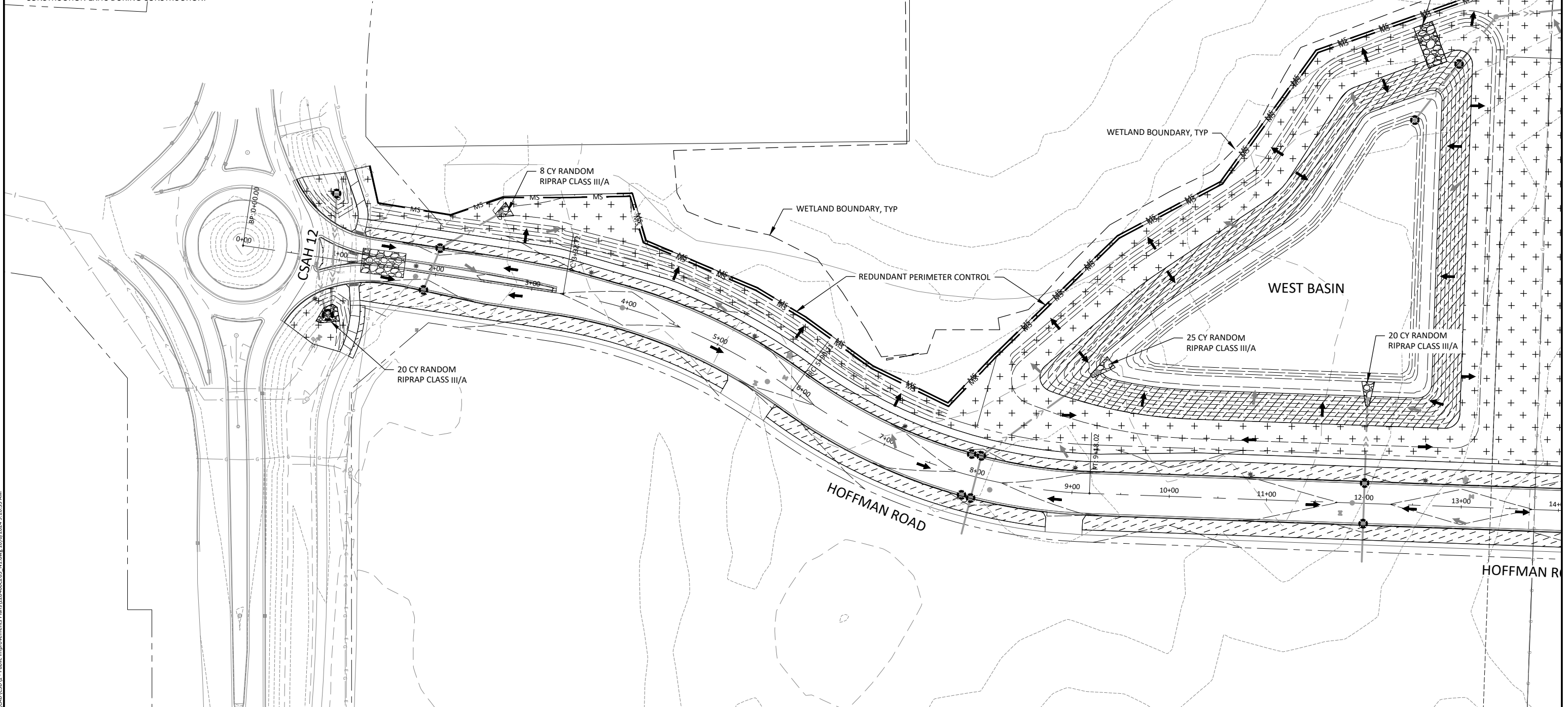
SHEET

C2.04

EROSION CONTROL LEGEND	
	EXISTING/PROPOSED DRAINAGE FLOW
	SILT FENCE, MACHINE SLICED OR APPROVED EQUAL
	STABILIZED CONSTRUCTION EXIT
	STORM DRAIN INLET PROTECTION
	SEED MIX 25-141 & FERTILIZE, & MULCH
	SEED MIX 33-261, FERTILIZE, & ROLLED EROSION PREVENTION CAT 20
	SEED MIX 35-221, FERTILIZE, & MULCH (ROLLED EROSION PREVENTION CAT 20 IN STEEP SLOPES)



1. ALL NECESSARY BMP'S SHALL BE IN PLACE PRIOR TO THE START OF CONSTRUCTION. ALL BMP'S SHALL BE INSPECTED EVERY 7 DAYS AND WITHIN 72 HOURS AFTER A RAINFALL EVENT GREATER THAN 0.5 INCHES IN A 24 HOUR PERIOD. ALL NON FUNCTIONING BMP'S SHALL BE REPAIRED OR REPLACED WITHIN 24 HOURS OF DISCOVERY.
2. ALL STORM SEWER INLETS SHALL HAVE INLET PROTECTION IN PLACE AS NEEDED UNTIL DISTURBED TURF IS STABILIZED.
3. ALL PERIMETER CONTROL IS TO BE REMOVED UPON ESTABLISHED TURF RESTORATION.
4. CONTRACTOR TO COORDINATE THE REMOVAL AND REPLACEMENT OF TEMPORARY ROCK CONSTRUCTION EXITS DURING CONSTRUCTION.



A horizontal scale bar labeled "HORIZ." on the left. It has numerical markings at 0, 50, and 100. The bar is divided into alternating black and white segments, with the word "SCALE" below the 0 mark and "FEET" below the 100 mark.

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MESENBRINK CONSTRUCTION
HOFFMAN ROAD EXTENSION
STORMWATER POLLUTION PREVENTION PLAN
EROSION & SEDIMENT CONTROL PLAN

C2.05

→ →

EXISTING/PROPOSED DRAINAGE FLOW

— MS —

SILT FENCE, MACHINE SLICED OR APPROVED EQUAL

STABILIZED CONSTRUCTION EXIT

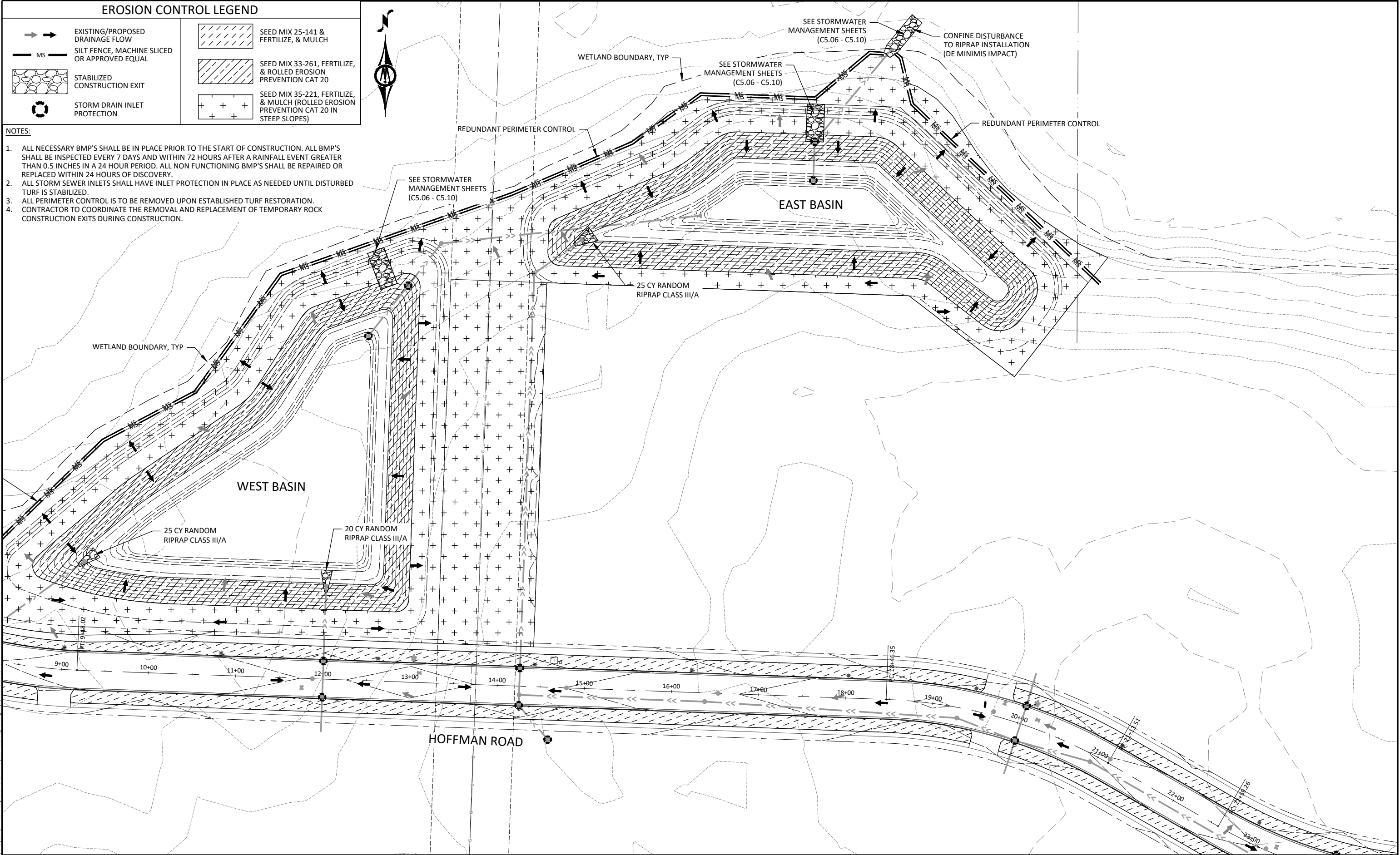
STORM DRAIN INLET PROTECTION

SEED MIX 25-141 & FERTILIZE, & MULCH

SEED MIX 33-261, FERTILIZE, & ROLLED EROSION PREVENTION CAT 20

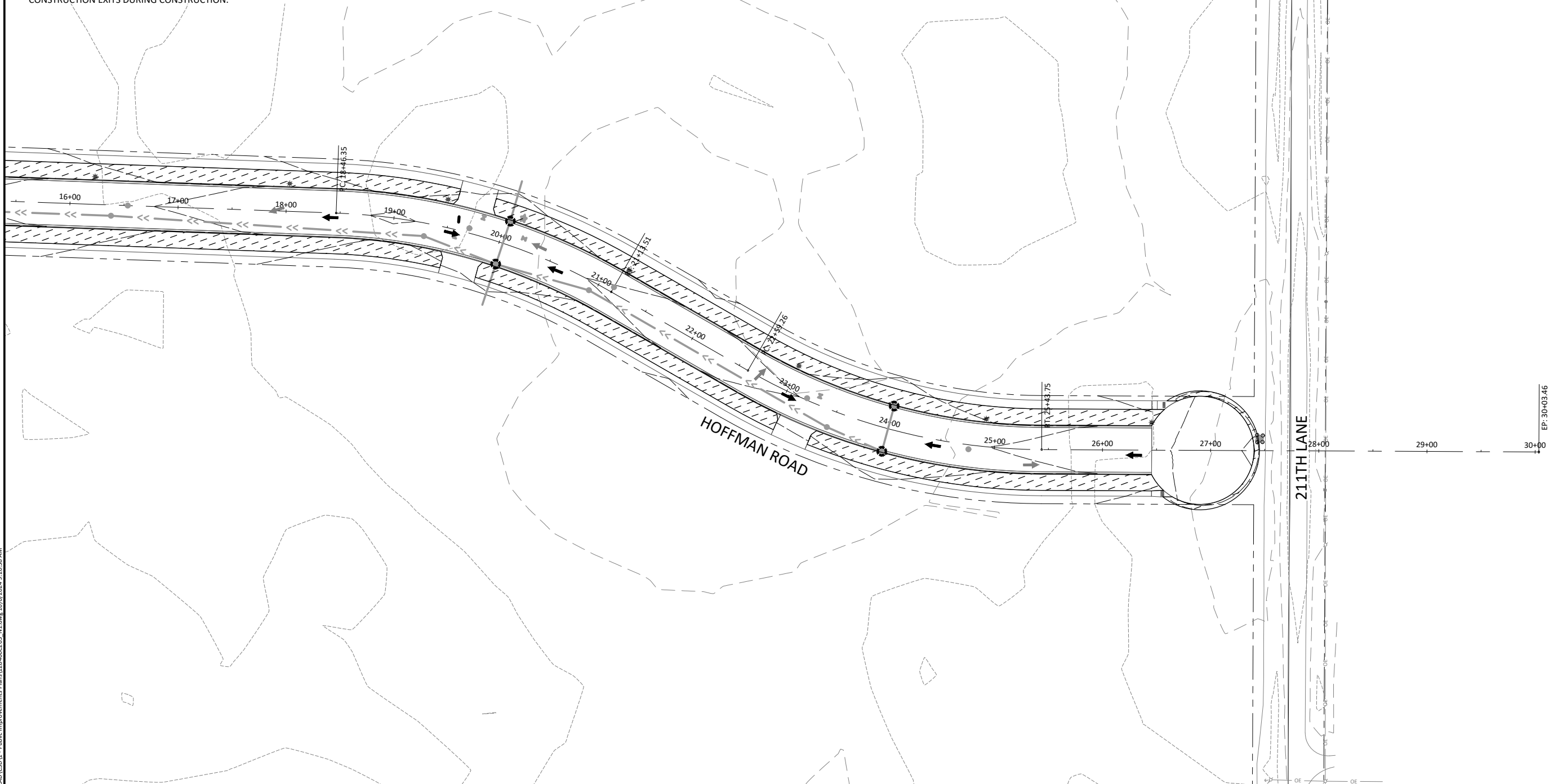
SEED MIX 35-221, FERTILIZE, & MULCH (ROLLED EROSION PREVENTION CAT 20 IN STEEP SLOPES)

- NOTES:
- ALL NECESSARY BMP'S SHALL BE IN PLACE PRIOR TO THE START OF CONSTRUCTION. ALL BMP'S SHALL BE INSPECTED EVERY 7 DAYS AND WITHIN 72 HOURS AFTER A RAINFALL EVENT GREATER THAN 0.5 INCHES IN A 24 HOUR PERIOD. ALL NON FUNCTIONING BMP'S SHALL BE REPAIRED OR REPLACED WITHIN 24 HOURS OF DISCOVERY.
 - ALL STORM SEWER INLETS SHALL HAVE INLET PROTECTION IN PLACE AS NEEDED UNTIL DISTURBED TURF IS STABILIZED.
 - ALL PERIMETER CONTROL IS TO BE REMOVED UPON ESTABLISHED TURF RESTORATION.
 - CONTRACTOR TO COORDINATE THE REMOVAL AND REPLACEMENT OF TEMPORARY ROCK CONSTRUCTION EXITS DURING CONSTRUCTION.



	EXISTING/PROPOSED DRAINAGE FLOW		SEED MIX 25-141 & FERTILIZE, & MULCH
	SILT FENCE, MACHINE SLICED OR APPROVED EQUAL		SEED MIX 33-261, FERTILIZE, & ROLLED EROSION PREVENTION CAT 20
	STABILIZED CONSTRUCTION EXIT		SEED MIX 35-221, FERTILIZE, & MULCH (ROLLED EROSION PREVENTION CAT 20 IN STEEP SLOPES)
	STORM DRAIN INLET PROTECTION		

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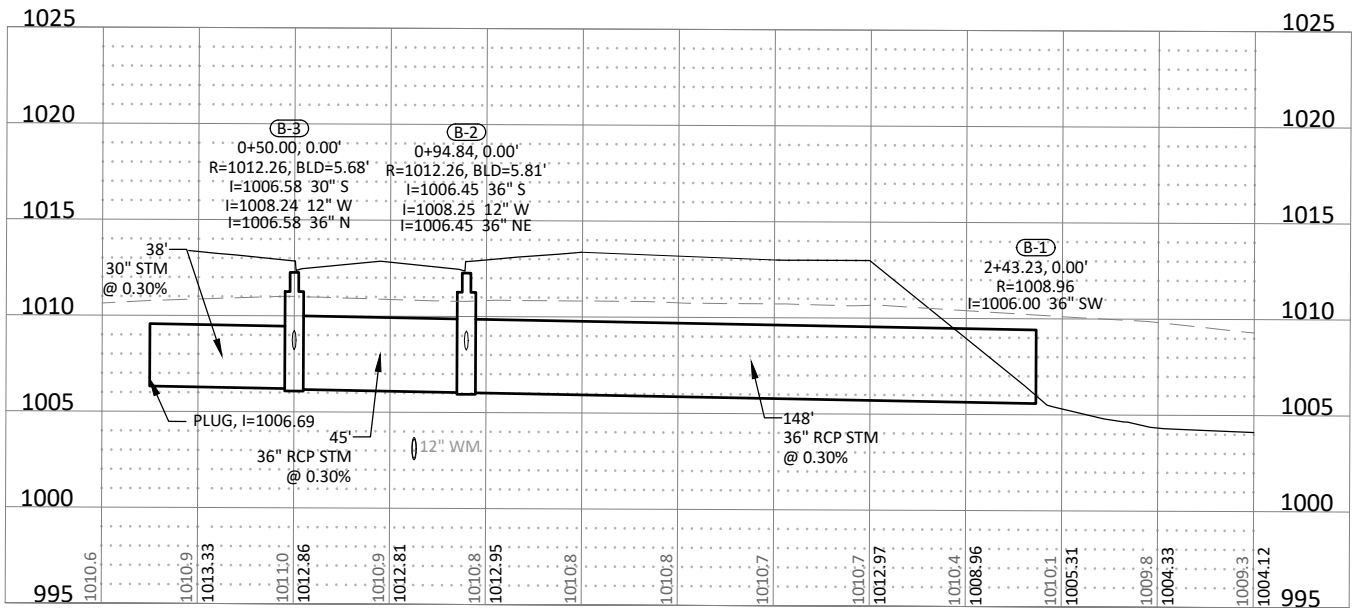
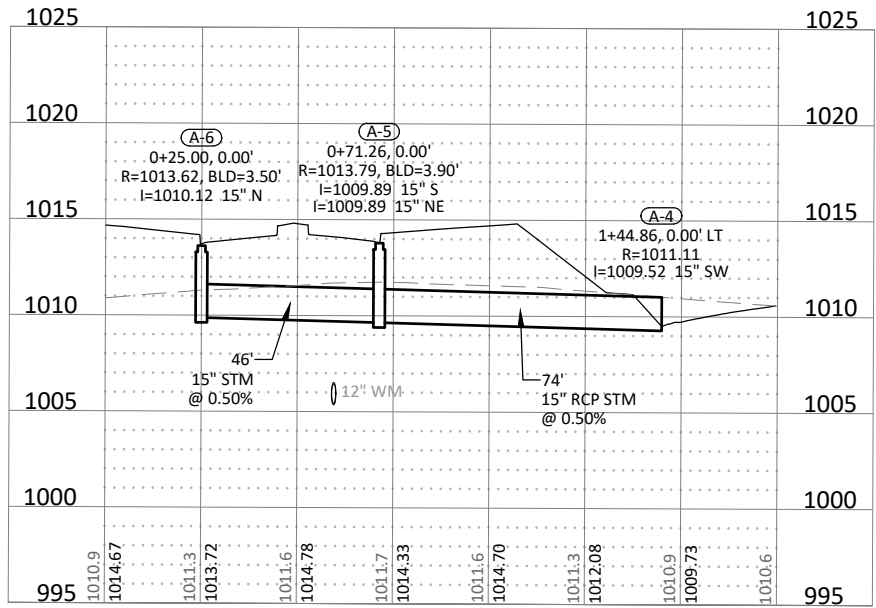
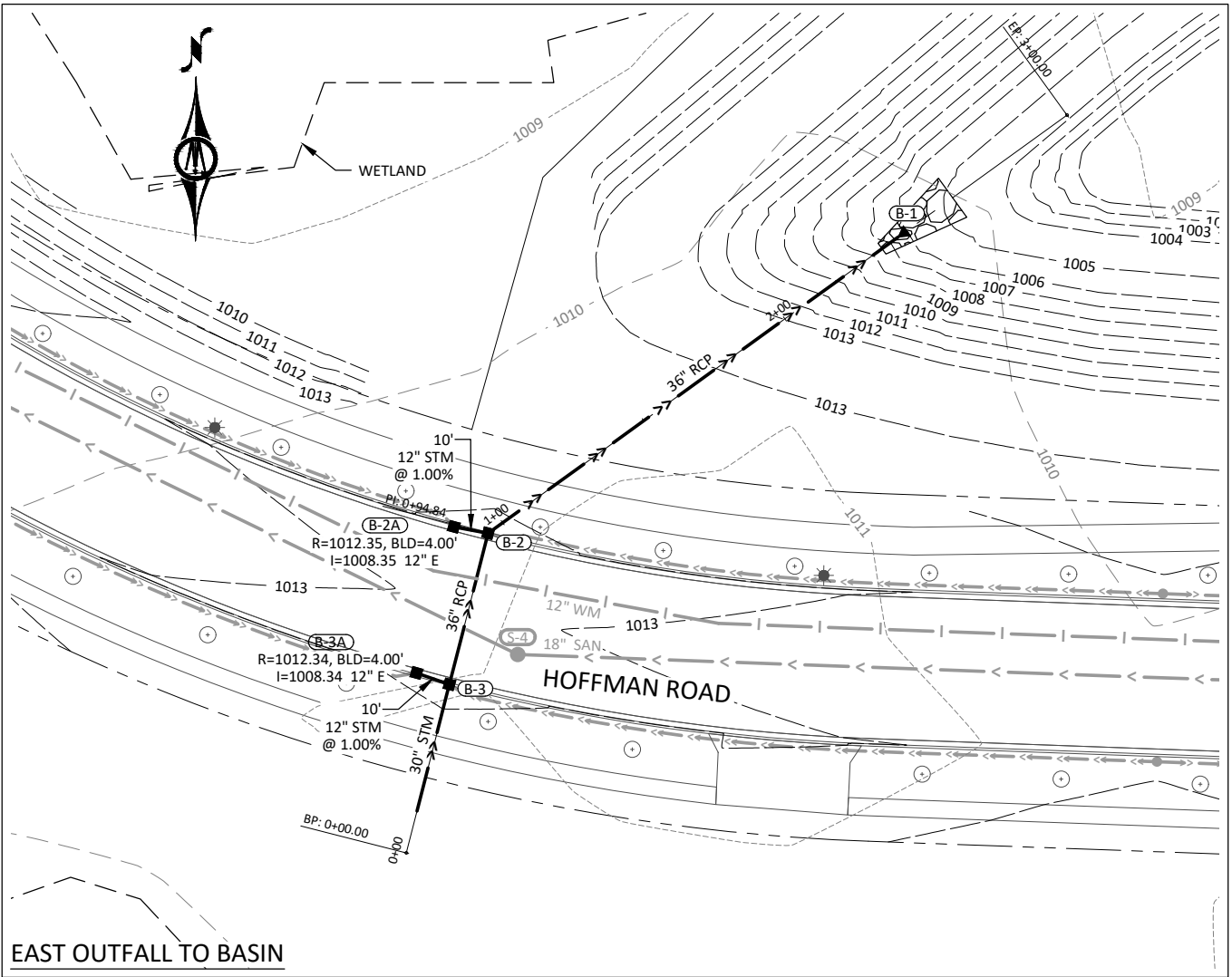
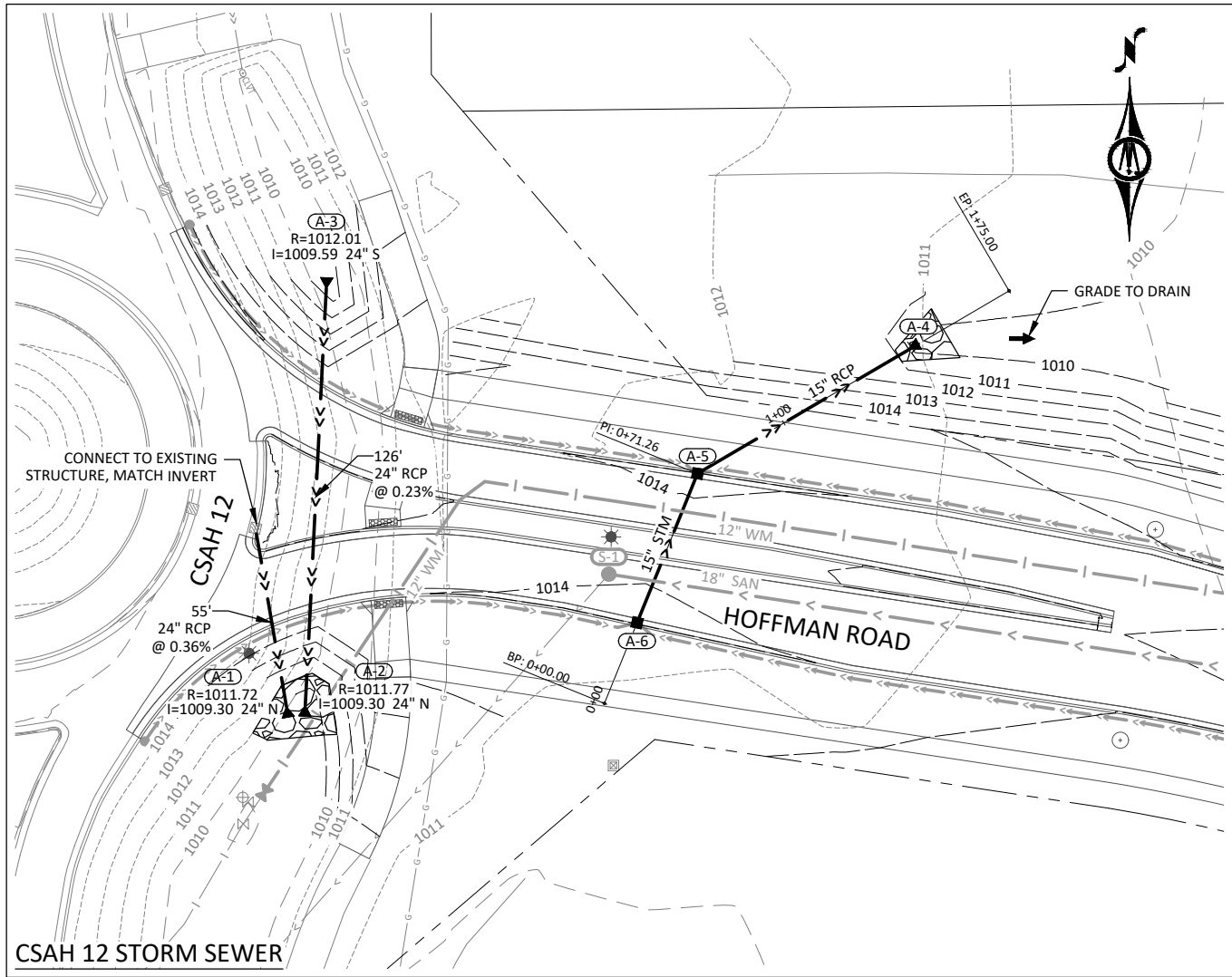
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MESENBRINK CONSTRUCTION
HOFFMAN ROAD EXTENSION
STORMWATER POLLUTION PREVENTION PLAN
EROSION & SEDIMENT CONTROL PLAN

SHEET

C2.07



NOTE:
WATERMAIN AND SANITARY SEWER TO BE DONE AS A CITY
OF MANKATO PROJECT. FINAL DESIGN TO BE DETERMINED.

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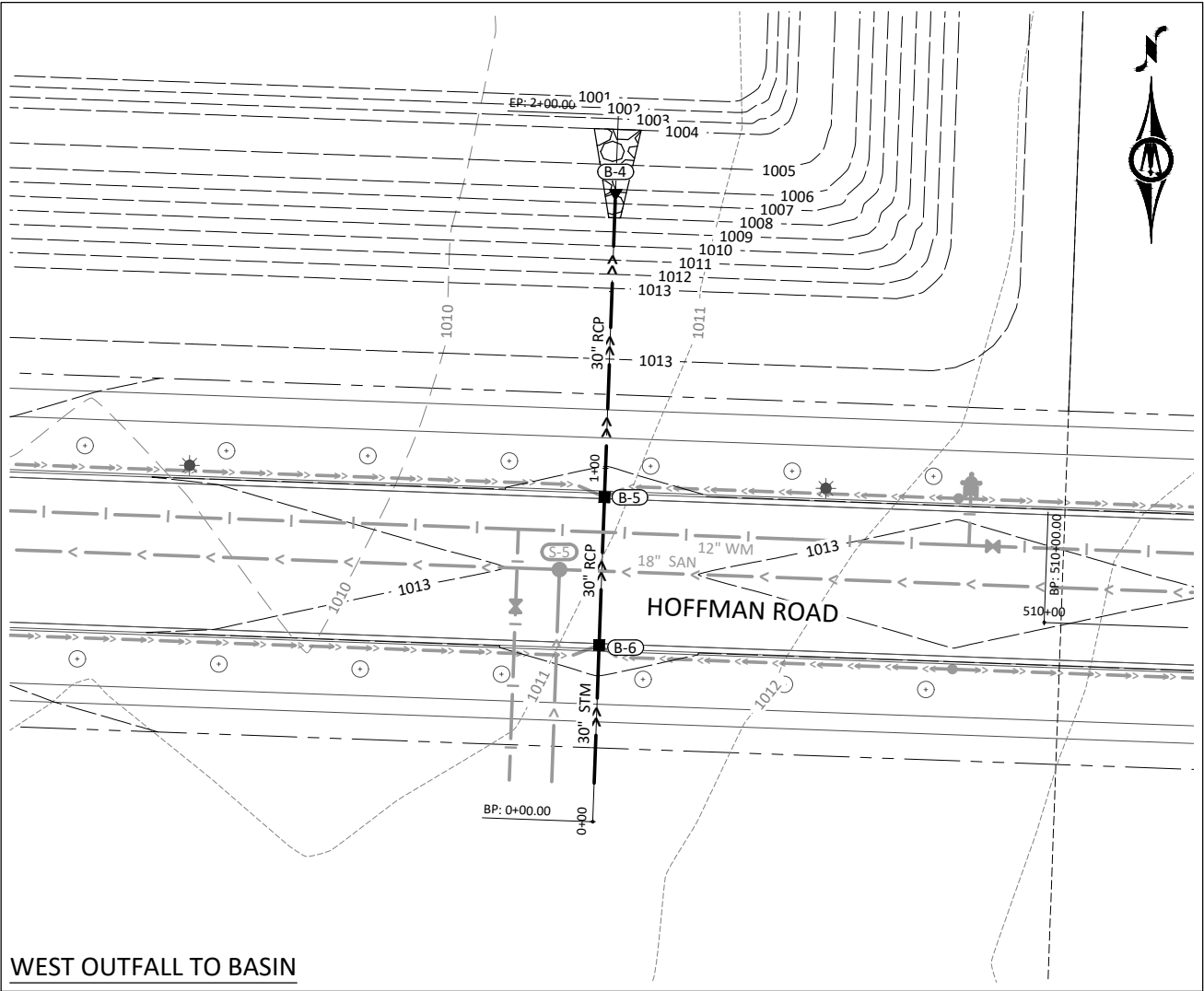
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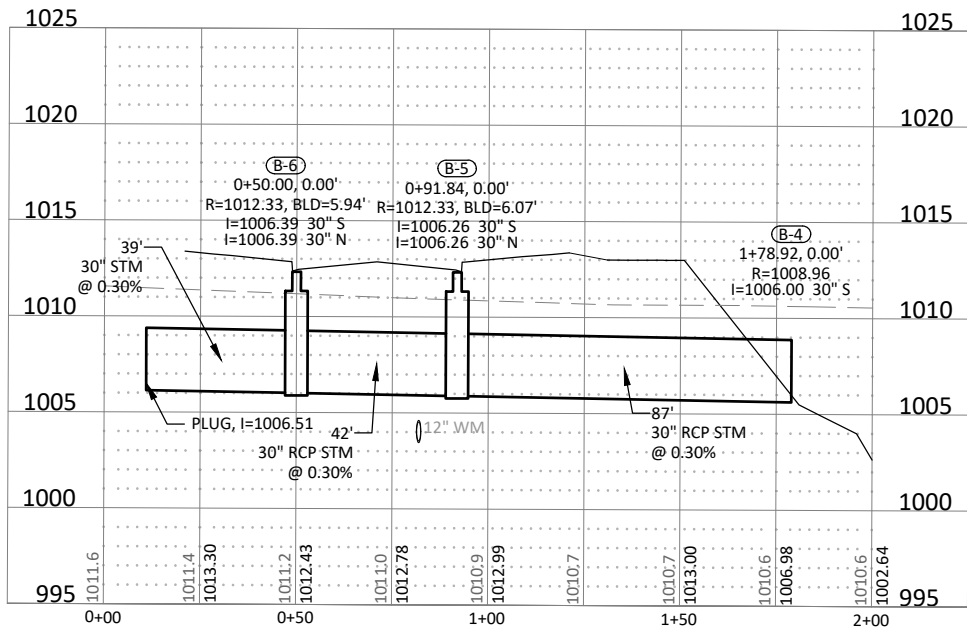
MESENBRINK CONSTRUCTION
HOFFMAN ROAD EXTENSION
STORM SEWER PLAN & PROFILE
CSAH 12 & EAST OUTFALL TO BASIN

SHEET

C5.01

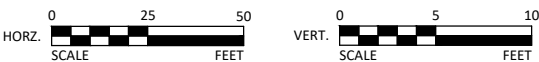


WEST OUTFALL TO BASIN



NOTE:
WATERMAIN AND SANITARY SEWER TO BE DONE AS A CITY
OF MANKATO PROJECT. FINAL DESIGN TO BE DETERMINED.

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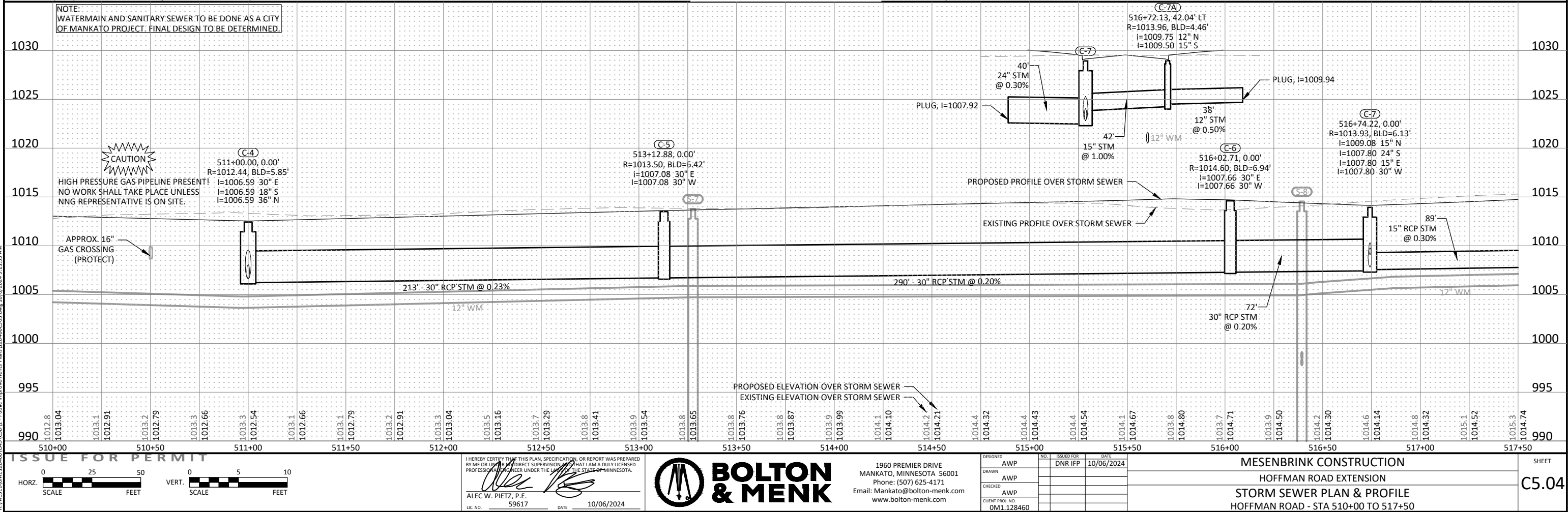
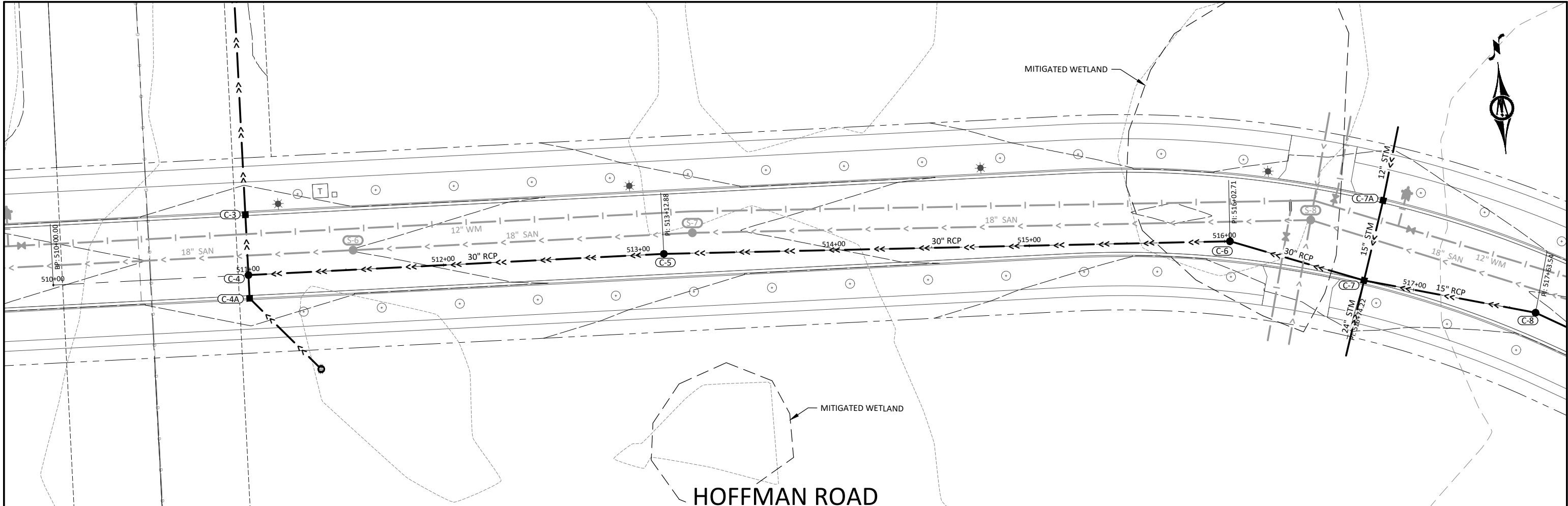
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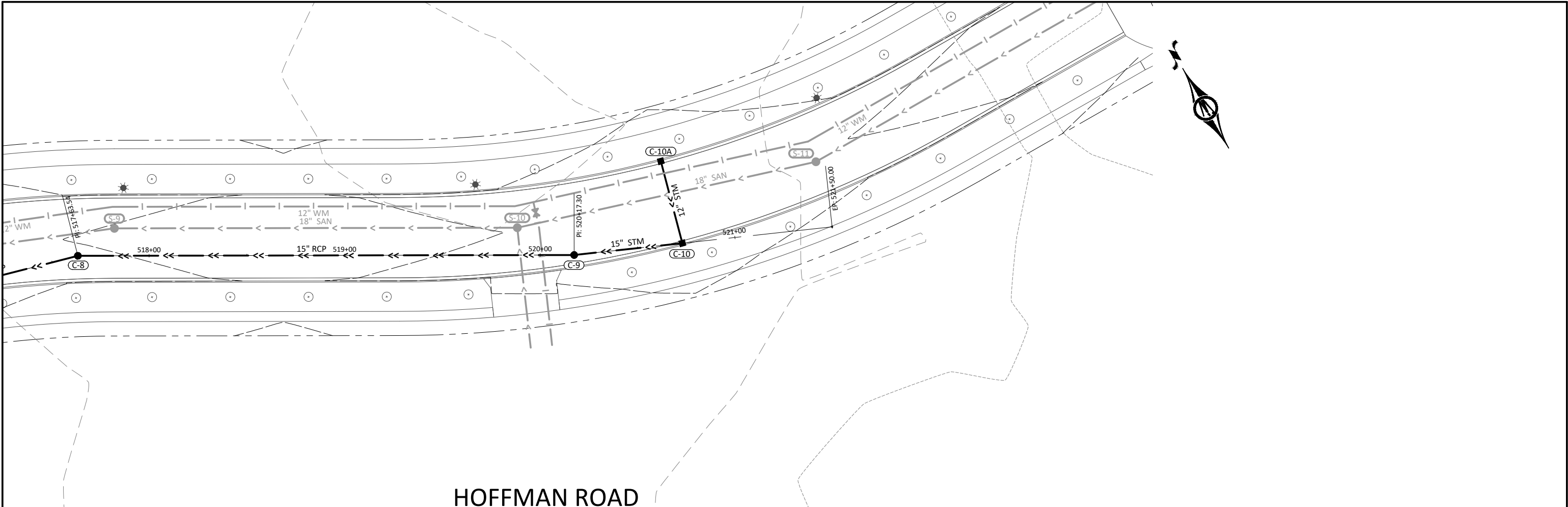
MESENBRINK CONSTRUCTION
HOFFMAN ROAD EXTENSION
STORM SEWER PLAN & PROFILE
WEST OUTFALL TO BASIN

SHEET

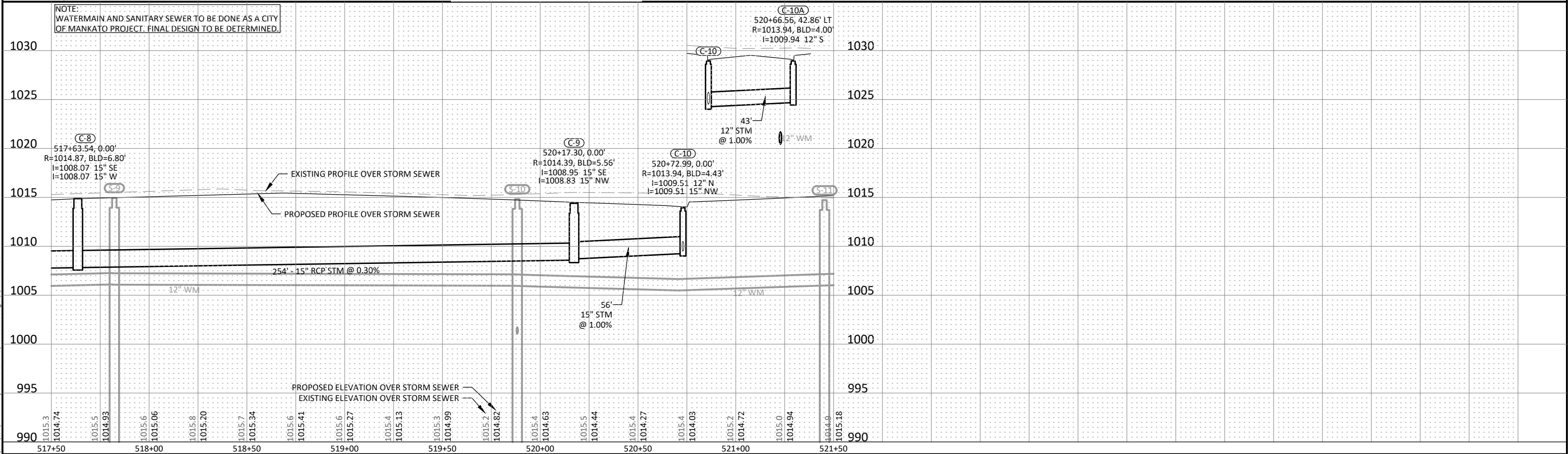
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HOFFMAN ROAD



ISSUE FOR PERMIT

0

25

50

HORZ. SCALE FEET

0

5

10

VERT. SCALE FEET

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MESENBRINK CONSTRUCTION

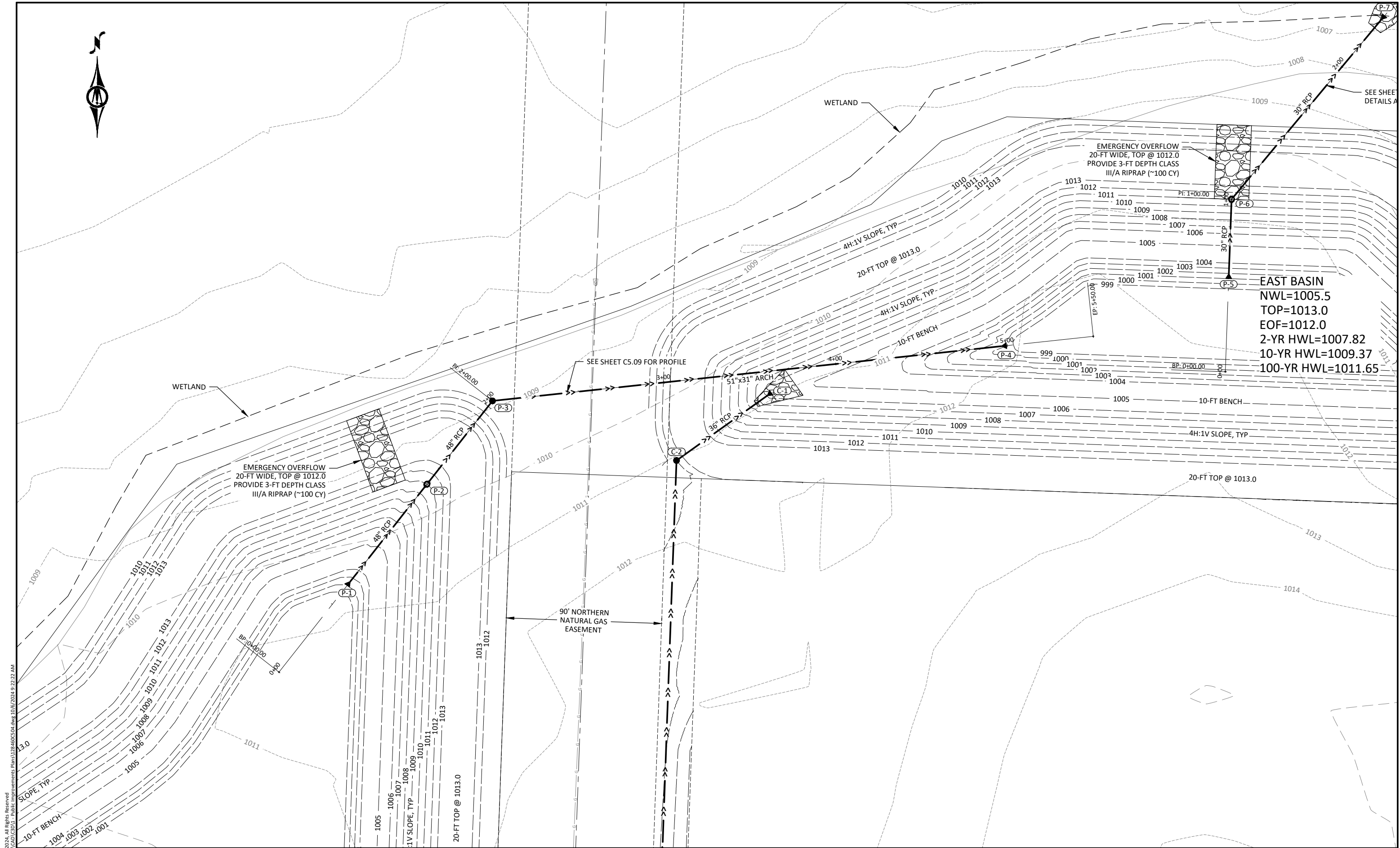
HOFFMAN ROAD EXTENSION

STORM SEWER PLAN & PROFILE

HOFFMAN ROAD - STA 517+50 TO 521+50

SHEET

C5.05



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HORZ. SCALE 0 25 50 FEET

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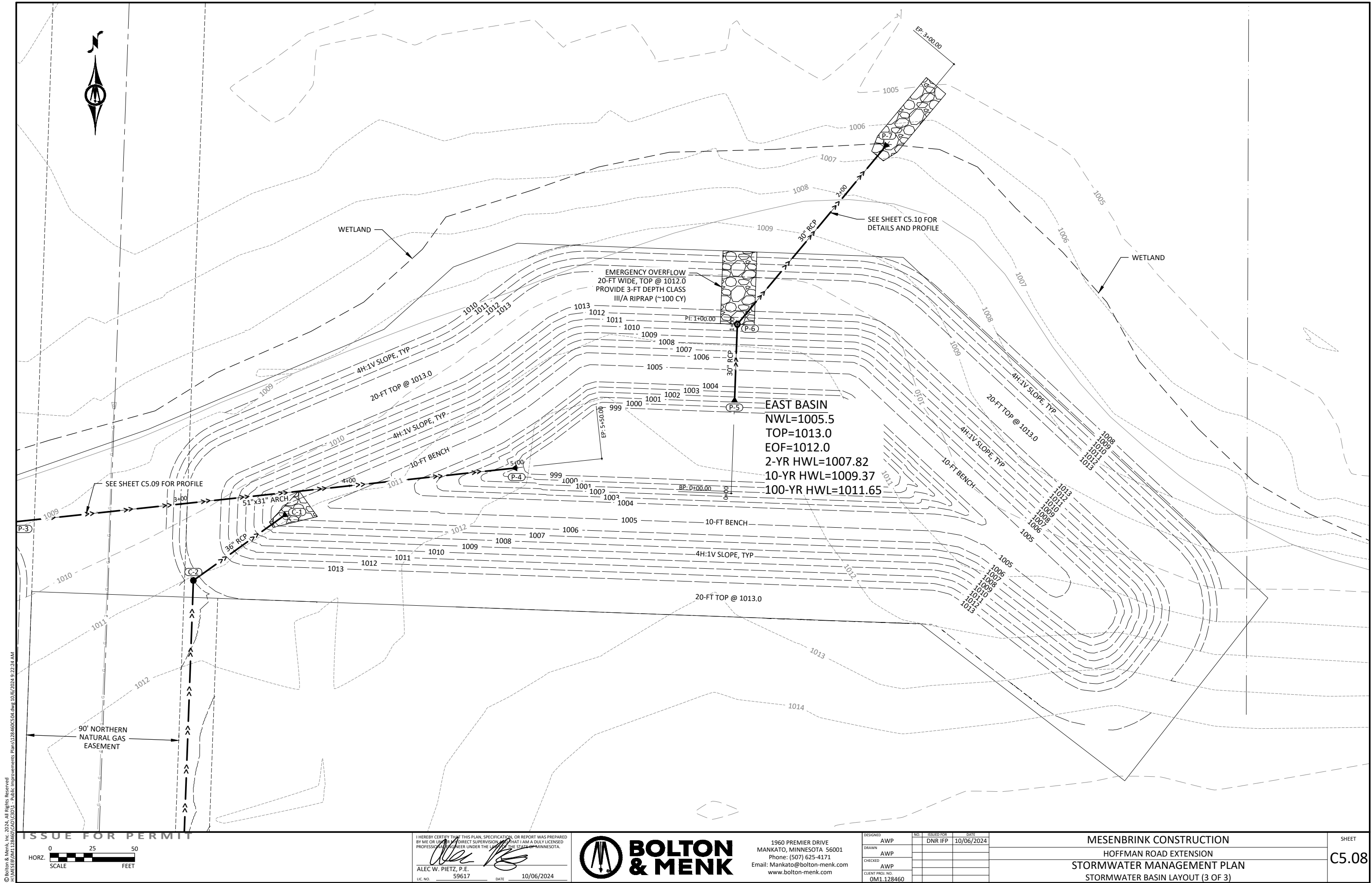
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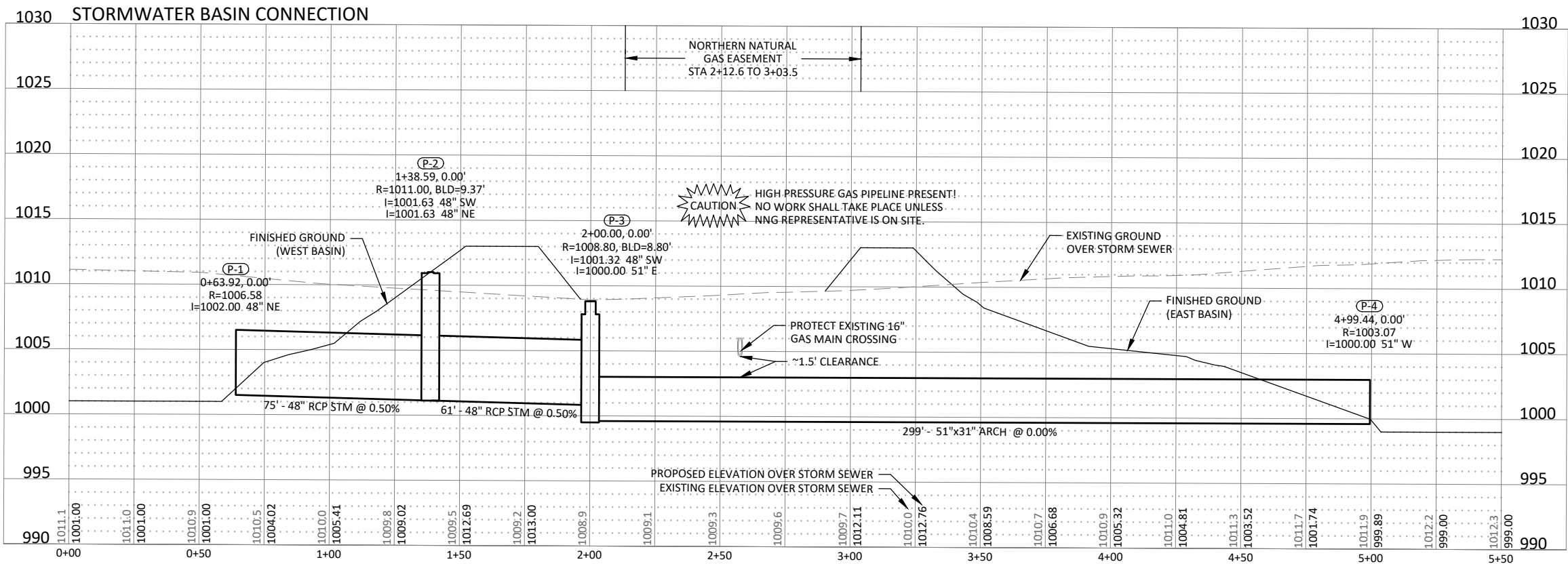
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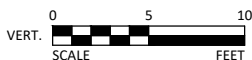
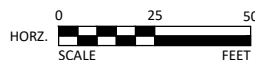
MESENBRINK CONSTRUCTION HOFFMAN ROAD EXTENSION STORMWATER MANAGEMENT PLAN STORMWATER BASIN LAYOUT (2 OF 3)	SHEET
	C5.07



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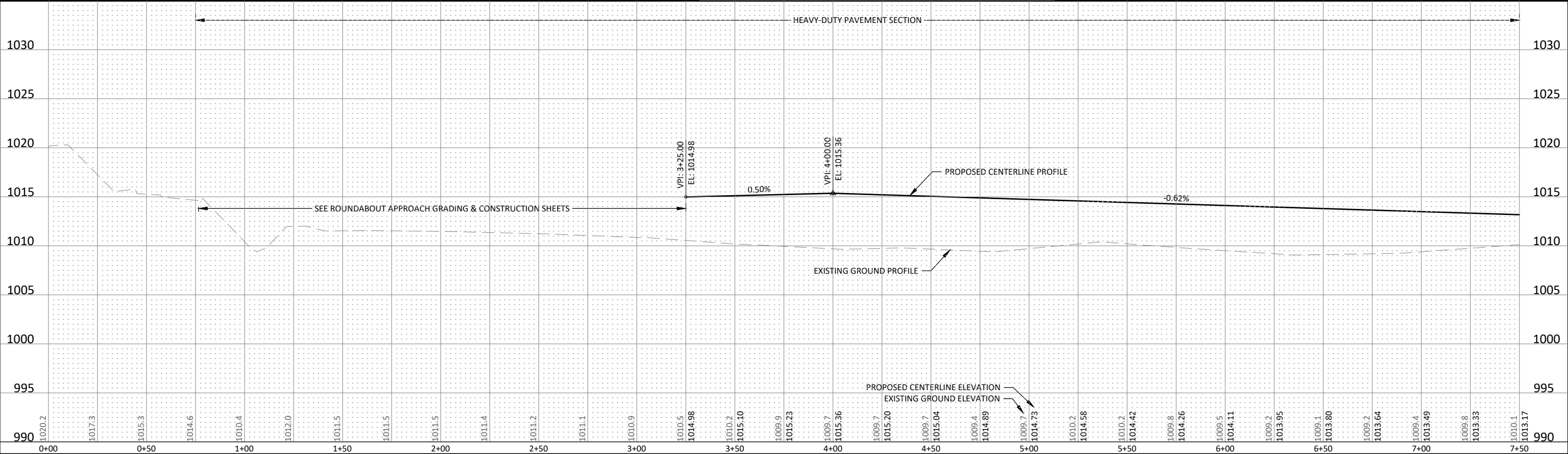
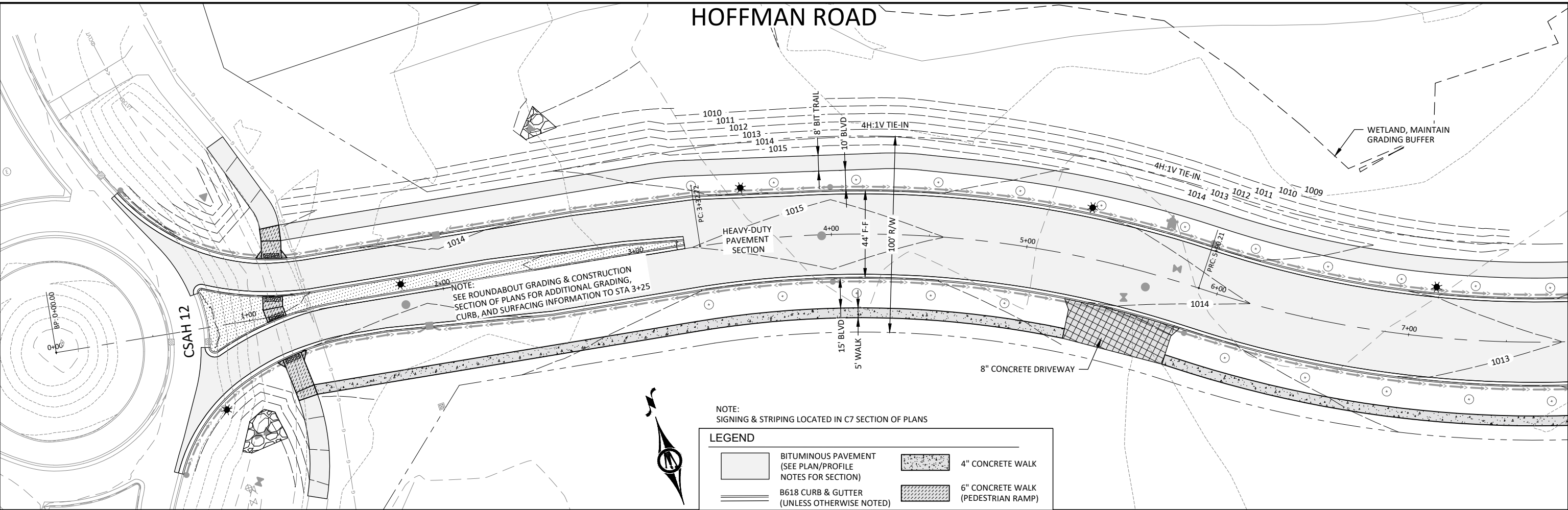
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MESENBRINK CONSTRUCTION
HOFFMAN ROAD EXTENSION
STORMWATER MANAGEMENT PLAN
STORMWATER BASIN CONNECTION PROFILE

SHEET

C5.09



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HORIZ. SCALE 0 25 50 FEET

VERT. SCALE 0 5 10 FEET

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MESENBRINK CONSTRUCTION

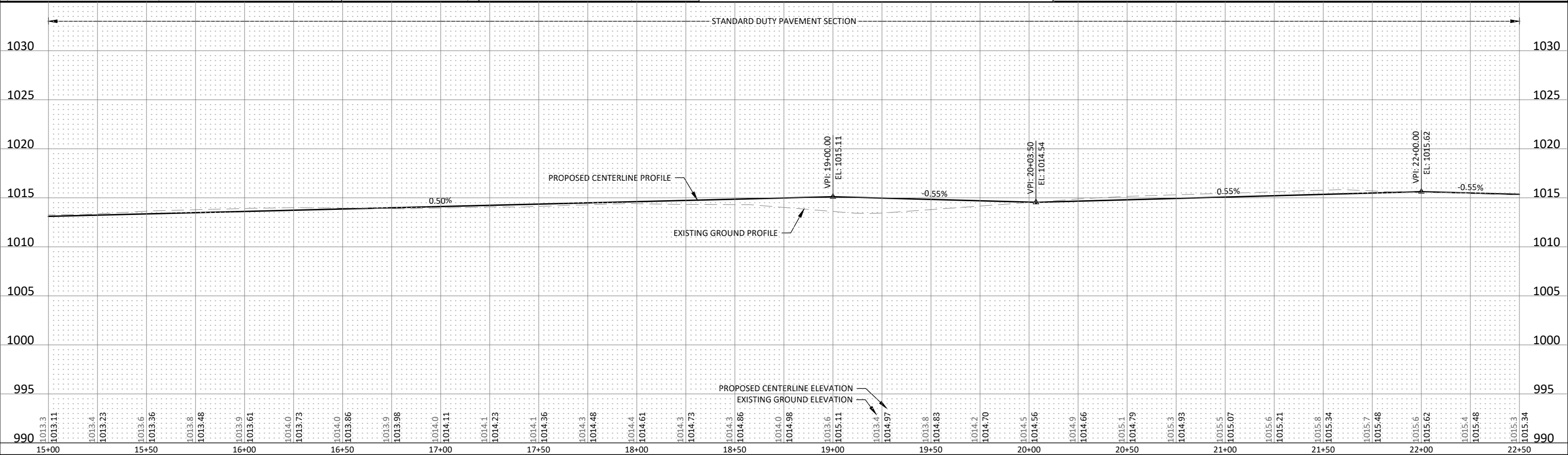
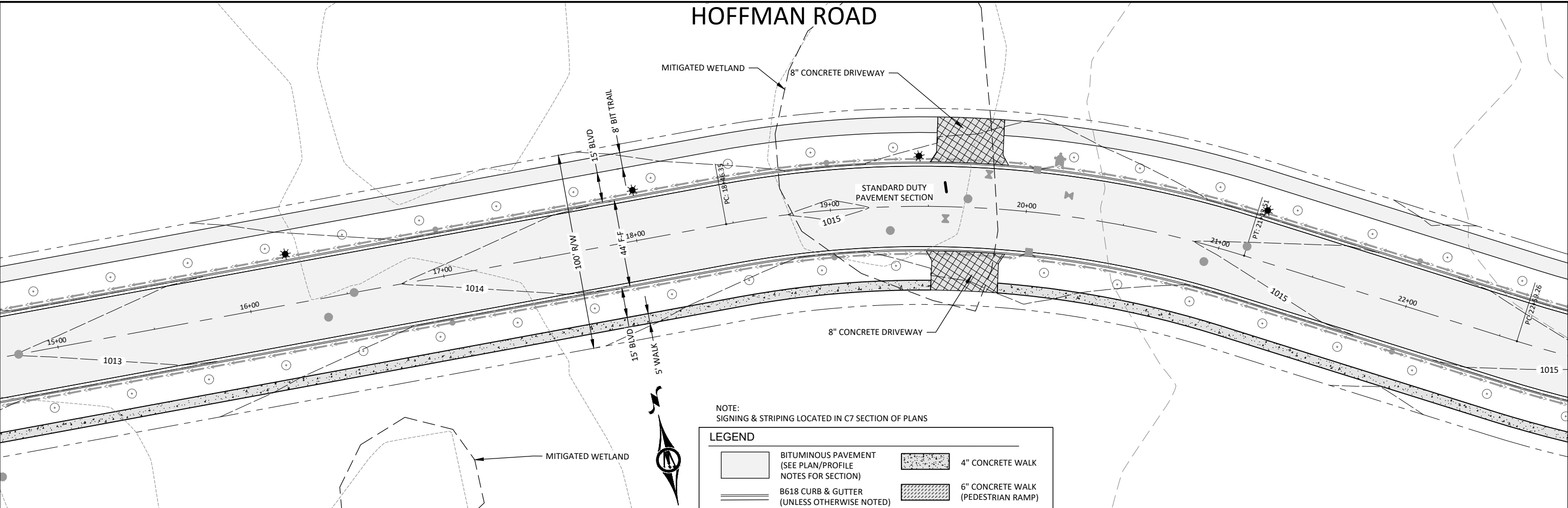
HOFFMAN ROAD EXTENSION

STREET PLAN & PROFILE

HOFFMAN ROAD - STA 0+00 TO 7+50

SHEET

C6.01



ISSUE FOR PERMIT

HORIZ. SCALE 0 25 50 FEET

VERT. SCALE 0 5 10 FEET

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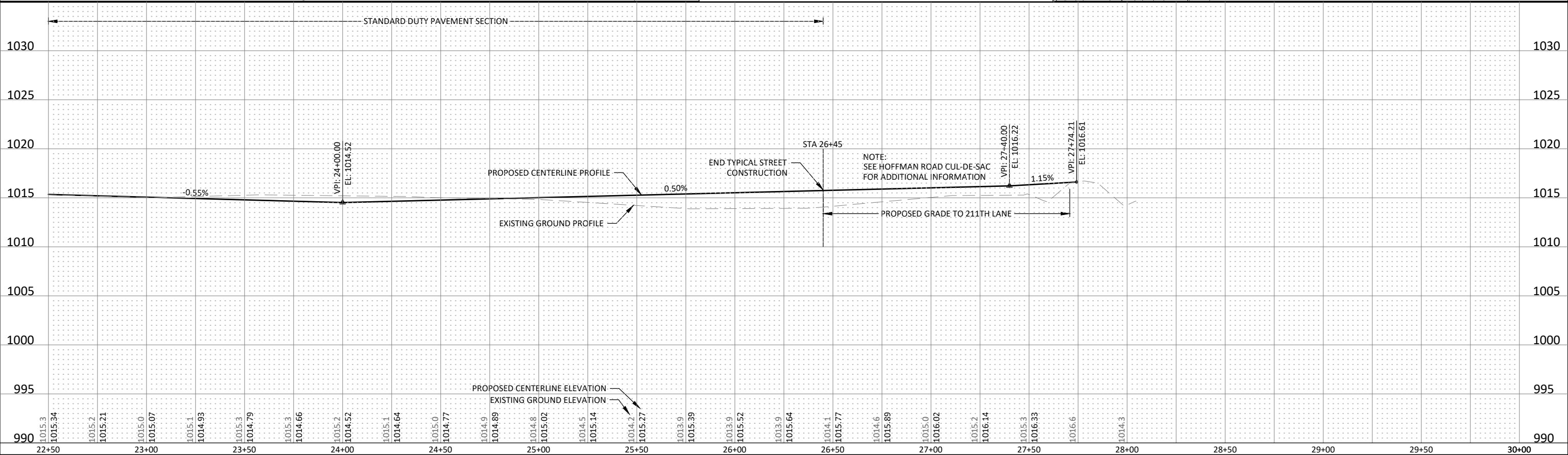
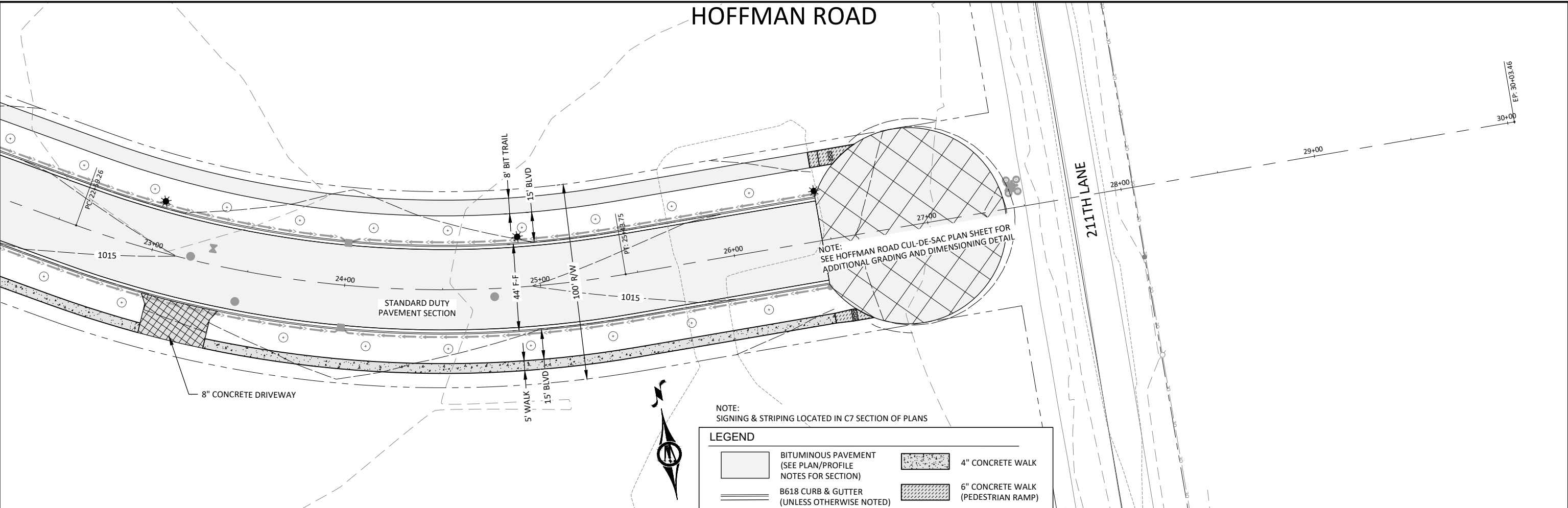
MESENBRINK CONSTRUCTION

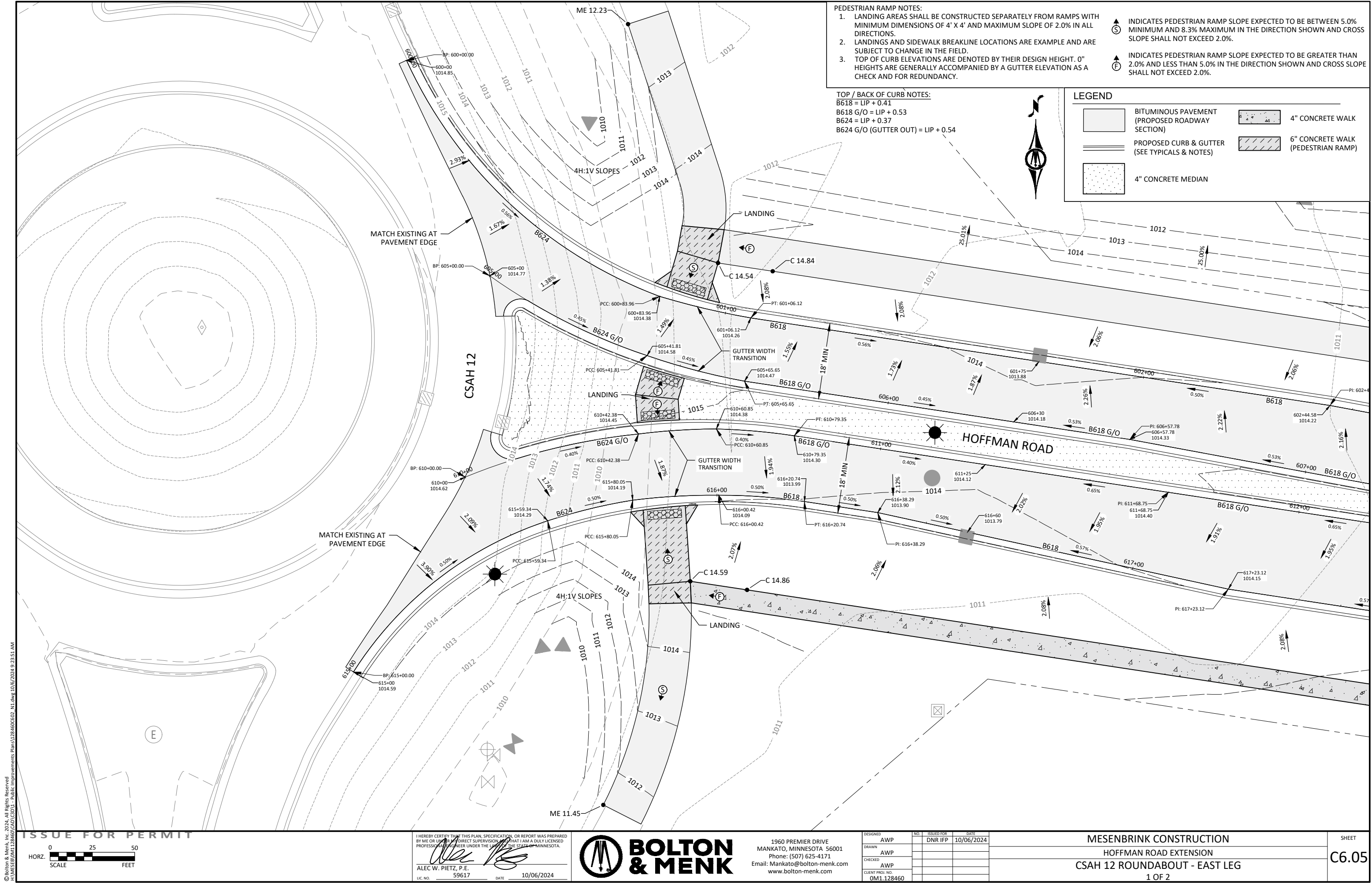
HOFFMAN ROAD EXTENSION

STREET PLAN & PROFILE

HOFFMAN ROAD - STA 15+00 TO 22+50

SHEET C6.03





PEDESTRIAN RAMP NOTES:

1. LANDINGS ARE SHOWN SEPARATELY FROM RAMP WITH MINIMUM DIMENSIONS OF 4' X 4' AND MAXIMUM SLOPE OF 2.0% IN ALL DIRECTIONS.
2. LANDINGS AND SIDEWALK BREAKLINE LOCATIONS ARE EXAMPLE AND ARE SUBJECT TO CHANGE IN THE FIELD.
3. TOP OF CURB ELEVATIONS ARE DENOTED BY THEIR DESIGN HEIGHT. 0" HEIGHTS ARE GENERALLY ACCOMPANIED BY A GUTTER ELEVATION AS A CHECK AND FOR REDUNDANCY.

TOP / BACK OF CURB NOTES:

B618 = LIP + 0.41
B618 G/O = LIP + 0.53
B624 = LIP + 0.37
B624 G/O (GUTTER OUT) = LIP + 0.54

- INDICATES PEDESTRIAN RAMP SLOPE EXPECTED TO BE BETWEEN 5.0% MINIMUM AND 8.3% MAXIMUM IN THE DIRECTION SHOWN AND CROSS SLOPE SHALL NOT EXCEED 2.0%.
- INDICATES PEDESTRIAN RAMP SLOPE EXPECTED TO BE GREATER THAN 2.0% AND LESS THAN 5.0% IN THE DIRECTION SHOWN AND CROSS SLOPE SHALL NOT EXCEED 2.0%.

LEGEND

- BITUMINOUS PAVEMENT (PROPOSED ROADWAY SECTION)
- PROPOSED CURB & GUTTER (SEE TYPICALS & NOTES)
- 4" CONCRETE WALK
- 6" CONCRETE WALK (PEDESTRIAN RAMP)
- 4" CONCRETE MEDIAN

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HORZ. SCALE 0 25 50 FEET

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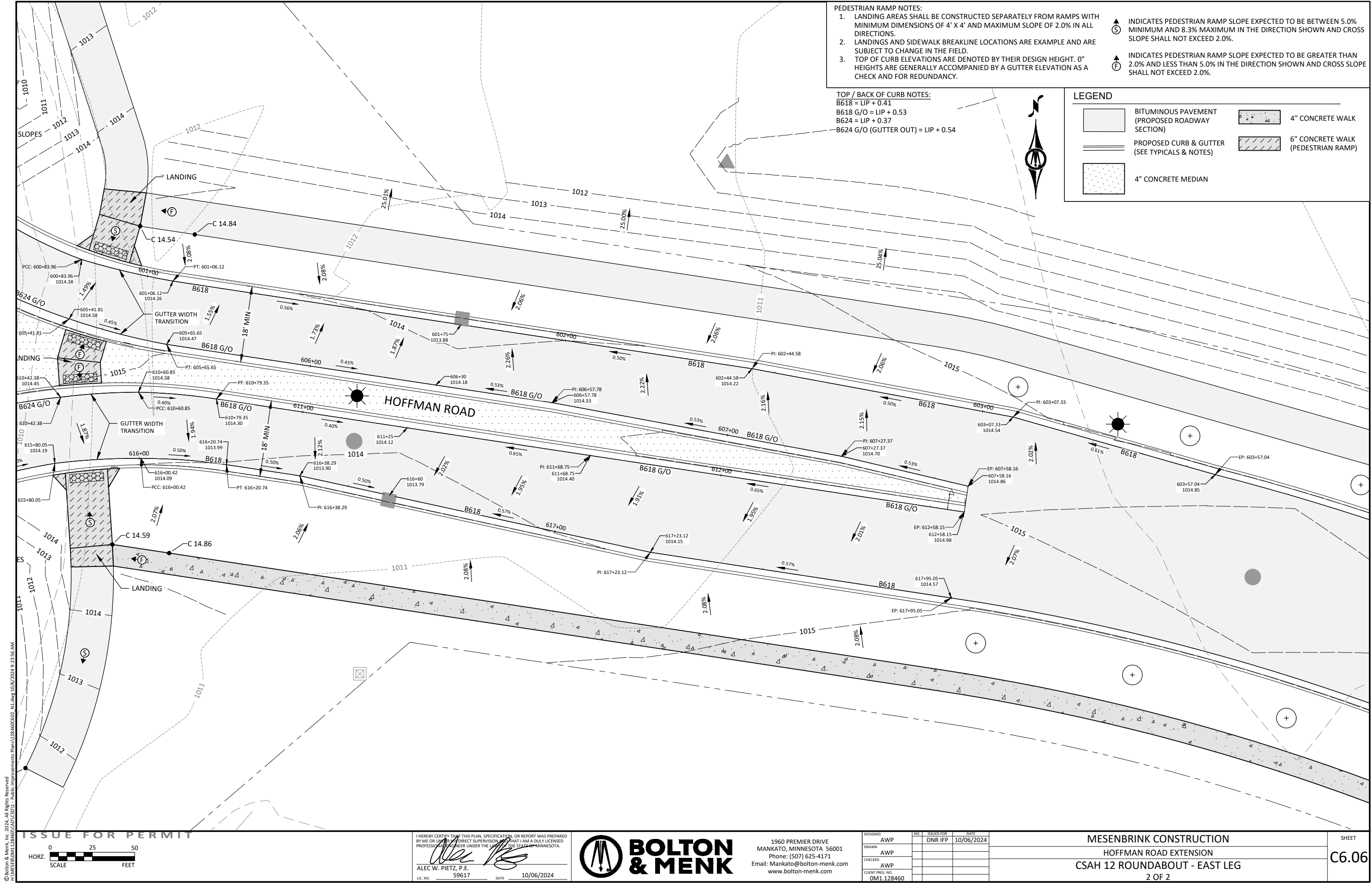


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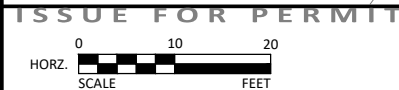
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MESENBRINK CONSTRUCTION
HOFFMAN ROAD EXTENSION
CSAH 12 ROUNDABOUT - EAST LEG
1 OF 2

SHEET
C6.05



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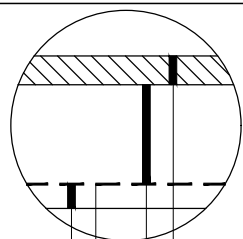


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MESENBRINK CONSTRUCTION
HOFFMAN ROAD EXTENSION
HOFFMAN ROAD CUL-DE-SAC
GRADING DETAILS

SHEET
C6.07



TEMPORARY CUL-DE-SAC SECTION
NOT TO SCALE

SPOT ELEV. LEGEND

B= BITUMINOUS
C= CONCRETE
GU= GUTTER

PEDESTRIAN RAMP NOTES:

- LANDING AREAS SHALL BE CONSTRUCTED SEPARATELY FROM RAMPS WITH MINIMUM DIMENSIONS OF 4' X 4' AND MAXIMUM SLOPE OF 2.0% IN ALL DIRECTIONS.
- LANDINGS AND SIDEWALK BREAKLINE LOCATIONS ARE EXAMPLE AND ARE SUBJECT TO CHANGE IN THE FIELD.
- TOP OF CURB ELEVATIONS ARE DENOTED BY THEIR DESIGN HEIGHT. 0" HEIGHTS ARE GENERALLY ACCOMPANIED BY A GUTTER ELEVATION AS A CHECK AND FOR REDUNDANCY.



INDICATES PEDESTRIAN RAMP SLOPE EXPECTED TO BE BETWEEN 5.0% MINIMUM AND 8.3% MAXIMUM IN THE DIRECTION SHOWN AND CROSS SLOPE SHALL NOT EXCEED 2.0%.



INDICATES PEDESTRIAN RAMP SLOPE EXPECTED TO BE GREATER THAN 2.0% AND LESS THAN 5.0% IN THE DIRECTION SHOWN AND CROSS SLOPE SHALL NOT EXCEED 2.0%.

LEGEND



BITUMINOUS PAVEMENT
(PROPOSED ROADWAY
SECTION)



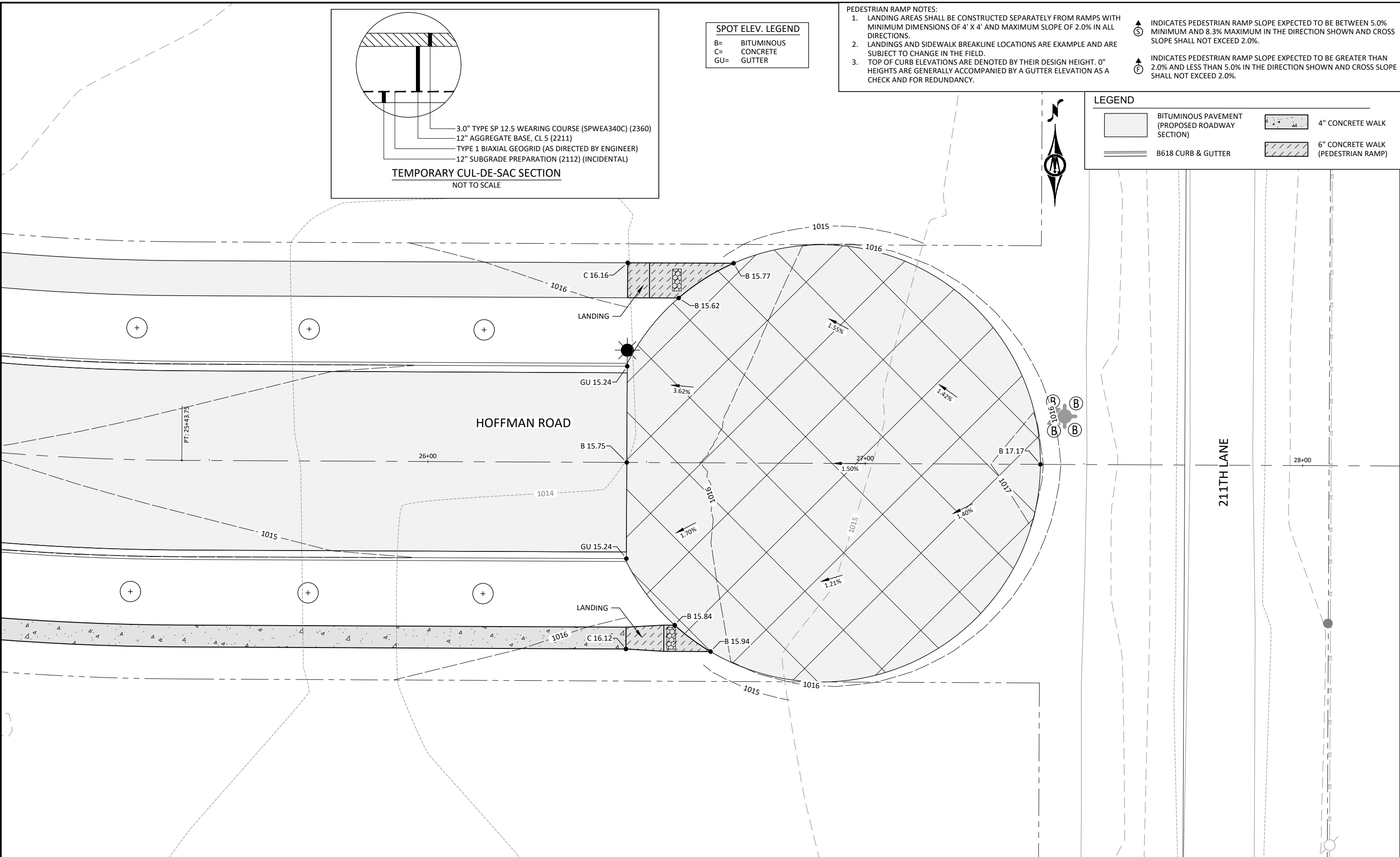
B618 CURB & GUTTER

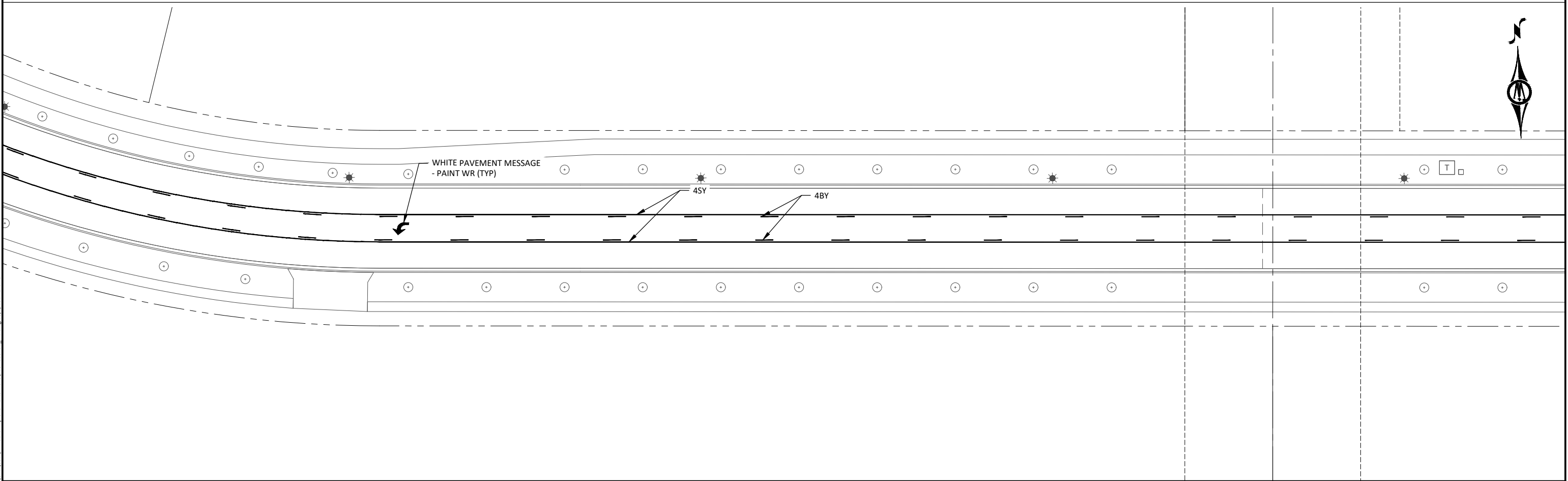
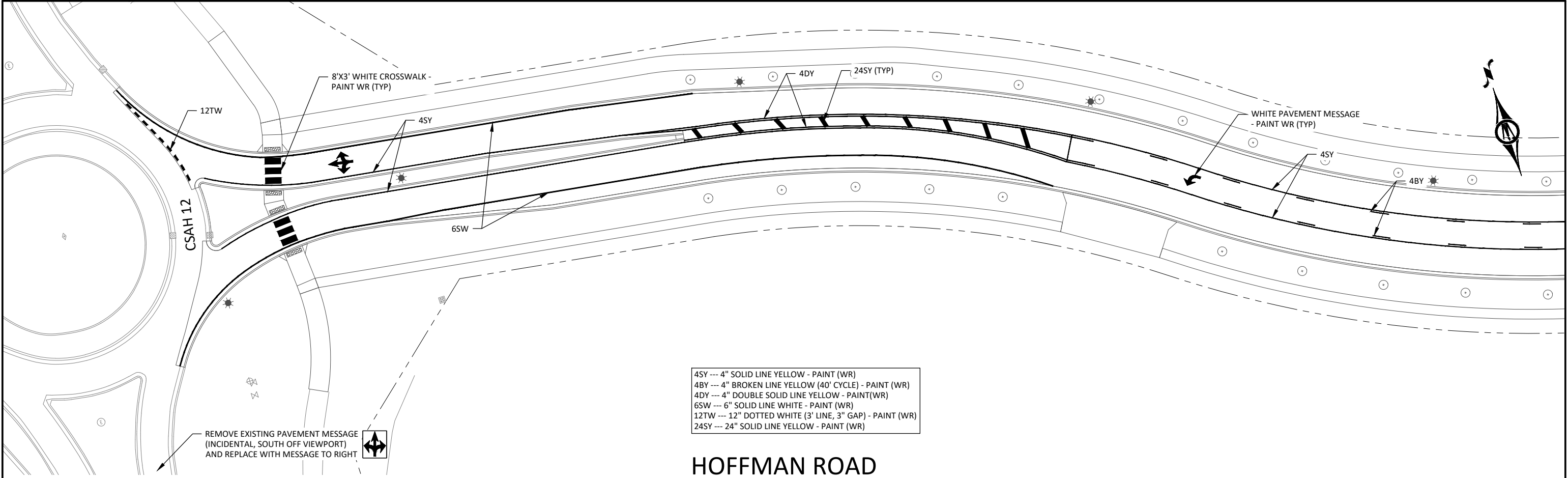


4" CONCRETE WALK



6" CONCRETE WALK
(PEDESTRIAN RAMP)





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0 25 50
HORIZ. SCALE FEET

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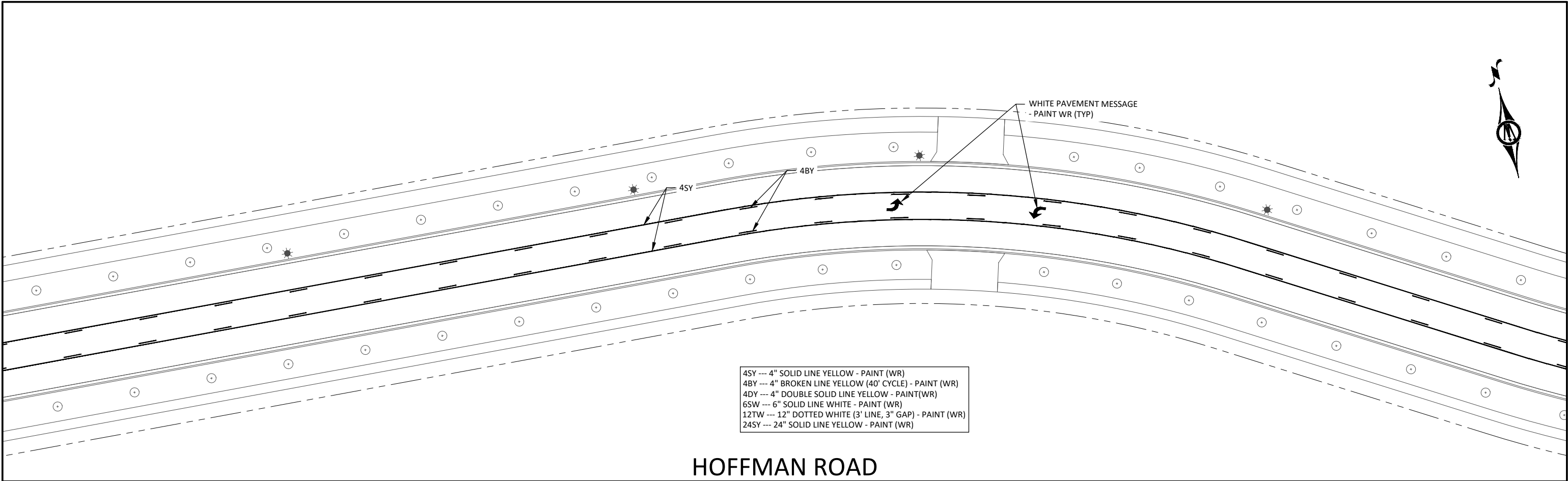


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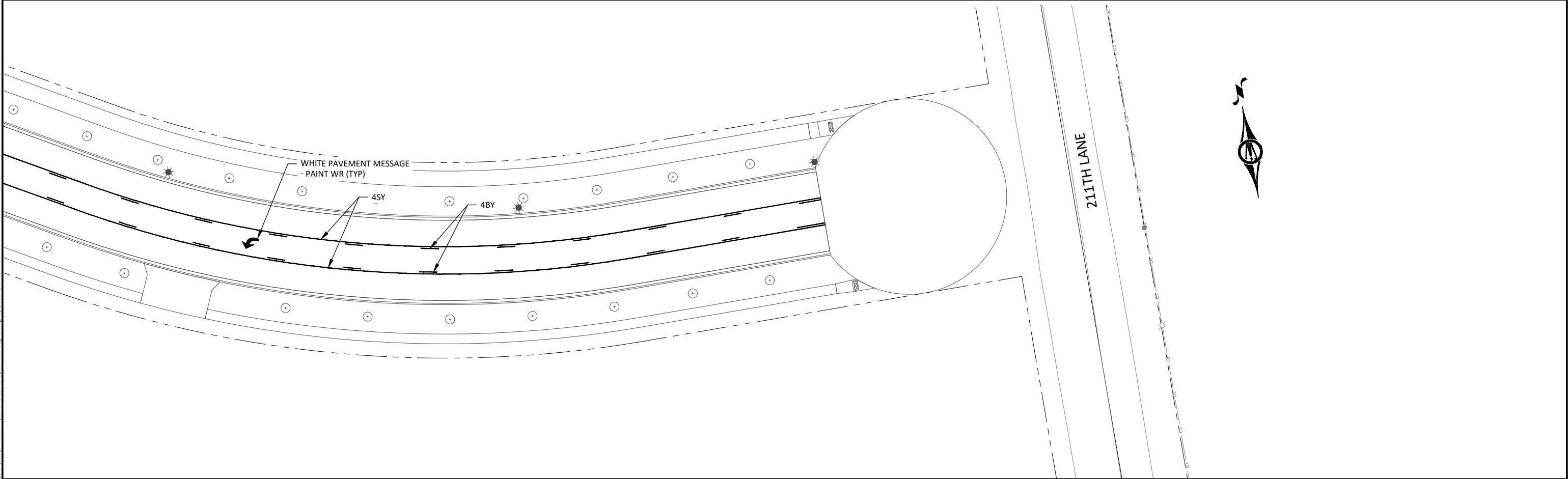
MESENBRINK CONSTRUCTION
HOFFMAN ROAD EXTENSION
SIGNING & STRIPING PLAN
PAVEMENT MARKING PLAN (1 OF 2)

SHEET
C7.01

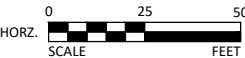


HOFFMAN ROAD

- 4SY --- 4" SOLID LINE YELLOW - PAINT (WR)
- 4BY --- 4" BROKEN LINE YELLOW (40' CYCLE) - PAINT (WR)
- 4DY --- 4" DOUBLE SOLID LINE YELLOW - PAINT(WR)
- 6SW --- 6" SOLID LINE WHITE - PAINT (WR)
- 12TW --- 12" DOTTED WHITE (3' LINE, 3" GAP) - PAINT (WR)
- 24SY --- 24" SOLID LINE YELLOW - PAINT (WR)



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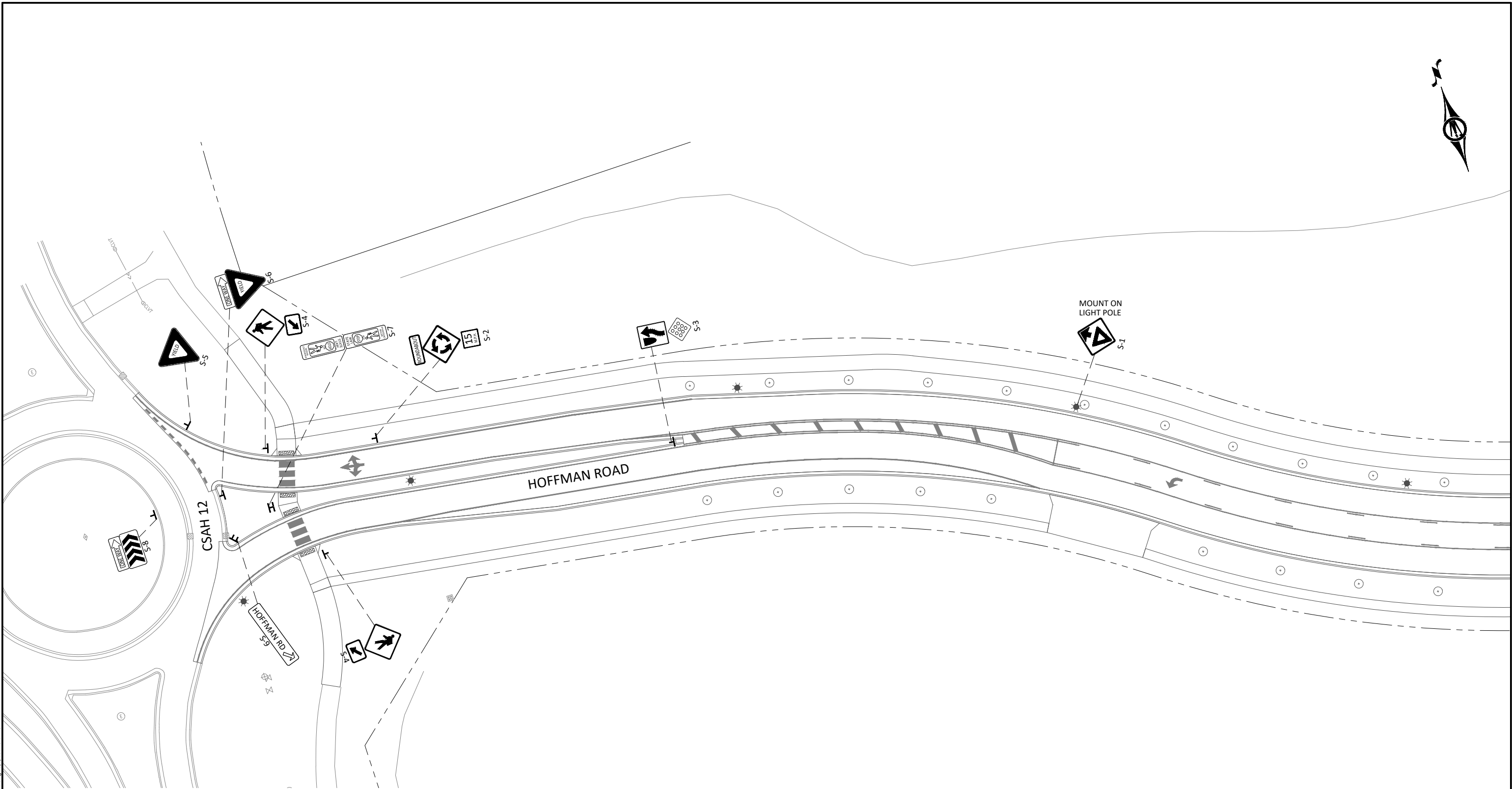


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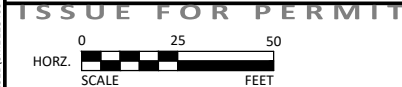
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HOFFMAN ROAD EXTENSION
SIGNING & STRIPING PLAN
PAVEMENT MARKING PLAN (2 OF 2)

SHEET
C7.02



TRAFFIC CONTROL NOTE:
CONTRACTOR TO PROVIDE TYPE III BARRICADES AT ROUNDABOUT OPENINGS AS NECESSARY
TO PREVENT TRAFFIC FROM ENTERING HOFFMAN ROAD DURING CONSTRUCTION. ALL DEVICES
SHALL CONFORM TO CURRENT MUTCD STANDARDS. CONTRACTOR SHALL COORDINATE WITH
BLUE EARTH COUNTY ON CLOSURE AND MAINTENANCE OF TRAFFIC CONTROL.

TRAFFIC CONTROL SHALL BE PAID AS 1 LUMP SUM.



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MESENBRINK CONSTRUCTION
HOFFMAN ROAD EXTENSION
SIGNING & STRIPING PLAN
SIGNAGE PLAN

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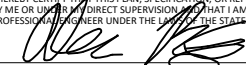
SIGN TABULATION													
SIGN ASSEMBLY NUMBER	QUANTITY	PANEL						OBJECT MARKER (EACH)	MOUNTING HEIGHT (1) (FEET)	POSTS / MOUNTING NUMBER OF POSTS	POST TYPE (2)	RISER POST SIZE (INCHES)	REMARKS
		CODE NUMBER	LEGEND	SIZE (INCHES)	AREA	SIGN PANELS TYPE C	SIGN PANELS TYPE SPECIAL						
					(SQ FT)	(SQ FT)	(EACH)						
S-1	1	W3-2	YIELD AHEAD	30 X 30	6.25	6.25			7	1	SQ	2	
S-2	1	W16-17P	ROUNDABOUT PLAQUE	36 X 12	3.00	3.00			7	1	SQ	2-1/2	
		W2-6	ROUNDABOUT	30 X 30	6.25	6.25							
S-3	1	W13-1P	15 MPH PLAQUE	18 X 18	2.25	2.25			4	1	SQ	2	
		R4-7	KEEP RIGHT	24 X 30	5.00	5.00							
		OM1-2	TYPE 1 OBJECT MARKER	18 X 18				1					
S-4	2	W11-2	PEDESTRIAN CROSSING	30 X 30	6.25	12.50			7	1	SQ	2	
		W16-7PL	DOWN ARROW LEFT PLAQUE	24 X 12	2.00	4.00							
S-5	1	R1-2	YIELD	36 X 36 X 36	3.90	3.90			7	1	SQ	2	
S-6	1	R1-2	YIELD	36 X 36 X 36	3.90	3.90			7	1	SQ	2-1/2	
		R6-1R	ONE WAY RIGHT	12 X 36	3.00	3.00							
S-7	1	R1-6a	STATE LAW STOP FOR PED W/I X-WALK	12 X 44	3.67	3.67			1	1	SQ	2	(3)
		R1-6a	STATE LAW STOP FOR PED W/I X-WALK	13 X 44	4.67	4.67							
S-8	1	R6-4b	ROUNDABOUT DIRECTIONAL (4 ARROWS)	60 X 24	10.00	10.00			7	1	SQ	2	
		R6-1R	ONE WAY RIGHT	12 X 36	3.00	3.00							
S-9	1	D1-1d	HOFFMAN RD RIGHT	SUBMITTAL			1		7	2	SQ	2-1/2	
					TOTALS	71.39	1	1					

NUMBERED NOTES:
(1) MOUNTING HEIGHT IS MINIMUM (WITH A +6 INCH TOLERANCE). SEE DETAILS FOR TYPICAL MOUNTING.
(2) POST TYPE ABBREVIATION "SQ" = SQUARE TUBE.
(3) SIGN ASSEMBLIES ARE MOUNTED BACK-TO-BACK. SEE PLANS FOR ORIENTATION.

- GENERAL NOTES:
- SEE THE CURRENT MnDOT STANDARD SIGNS AND MARKINGS MANUAL FOR STANDARD SIGN DESIGNS, SPLICE PLATES, STRINGERS, AND PUNCHING CODES.
 - SEE SQUARE TUBE SIGN MOUNTING DETAIL FOR ATTACHMENT.
 - SEE STANDARD PLAN 5-297-701 FOR PLACEMENT.
 - SEE SQUARE TUBE FIN BASE DETAIL FOR 2-INCH RISER POST IN SOIL.
 - SEE STANDARD PLAN 5-297-730 FOR SIGN MOUNTING TO ROUND POST.

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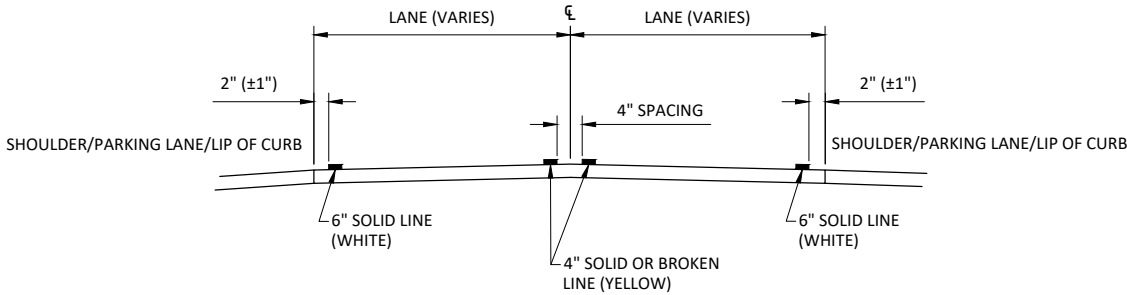
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MESENBRINK CONSTRUCTION
HOFFMAN ROAD EXTENSION
SIGNING & STRIPING PLAN
SIGNAGE TABULATION

SHEET

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STRIPING DETAIL

PAVEMENT MARKING NOTES & GUIDELINES:

- (1) EDGE LINES AND LANE LINES ARE TO BE BROKEN ONLY AT INTERSECTIONS WITH PUBLIC ROADS AND AT PRIVATE ENTRANCES IF THEY ARE CONTROLLED BY A YIELD SIGN, STOP SIGN, OR TRAFFIC SIGNAL (UNLESS SPECIFIED OTHERWISE IN THE PLANS). THE BREAK POINT IS TO BE AT THE START OF THE RADIUS FOR THE INTERSECTION OR AT MARKED STOP LINES OR CROSSWALKS.
- (2) GLASS BEADS SHALL BE APPLIED AT A RATE OF AT LEAST 8 LBS/GAL IMMEDIATELY AFTER APPLICATION OF THE PAINT LINE.
- (3) THE ENGINEER'S INVOLVEMENT IN THE APPLICATION OF THE MATERIAL SHALL BE LIMITED TO FIELD CONSULTATION AND INSPECTION. THE CONTRACTOR WILL PLACE NECESSARY "SPOTTING" AT APPROPRIATE POINTS TO PROVIDE HORIZONTAL CONTROL FOR STRIPING AND TO DETERMINE NECESSARY STARTING AND CUTOFF POINTS. LONGITUDINAL JOINTS, PAVEMENT EDGES AND EXISTING MARKINGS MAY SERVE AS HORIZONTAL CONTROL WHEN SO DIRECTED.
- (4) A TOLERANCE OF 1/4" UNDER OR 1/4" OVER THE SPECIFIED WIDTH WILL BE ALLOWED FOR STRIPING PROVIDED THE VARIATION IS GRADUAL AND DOES NOT DETRACT FROM THE GENERAL APPEARANCE. ALIGNMENT DEVIATION FOR THE CONTROL GUIDE SHALL NOT EXCEED 1". MATERIAL SHALL NOT BE APPLIED OVER LONGITUDINAL JOINTS. ESTABLISHMENT OF APPLICATION TOLERANCES SHALL NOT RELIEVE THE CONTRACTOR OF THEIR RESPONSIBILITY TO COMPLY AS CLOSELY AS PRACTICABLE WITH THE PLANNED DIMENSIONS.
- (5) JUST PRIOR TO THE PLACEMENT OF PAVEMENT MARKINGS THE BITUMINOUS ROAD SURFACE SHALL BE CLEANED AND FREE OF CONTAMINATION AS RECOMMENDED BY THE MATERIAL MANUFACTURED AND ACCEPTABLE TO THE ENGINEER. CONCRETE SURFACES SHALL BE SANDBLAST-CLEANED TO REMOVE ANY SURFACE TREATMENTS AND/OR LAITANCE.
- (6) APPLY ALL PAVEMENT MARKINGS AS RECOMMENDED BY THE MATERIAL MANUFACTURER.
- (7) PERMANENT PAVEMENT MARKINGS SHALL NOT BE PLACED OVER TEMPORARY TAPE MARKINGS.
- (8) THE FILLING OF TANKS, POURING OF MATERIALS OR CLEANING OF EQUIPMENT SHALL NOT BE PERFORMED ON UNPROTECTED PAVEMENT SURFACES UNLESS ADEQUATE PROVISIONS ARE MADE TO PREVENT SPILLAGE OF MATERIAL.
- (9) PAVEMENT MARKINGS SHALL ONLY BE APPLIED IN SEASONABLE WEATHER WHEN AIR AND PAVEMENT SURFACE TEMPERATURES IS 50°F OR HIGHER AND SHALL NOT BE APPLIED WHEN THE WIND OR OTHER CONDITIONS CAUSE A FILM OF DUST TO BE DEPOSITED ON THE PAVEMENT SURFACE AFTER CLEANING AND BEFORE THE MARKING MATERIAL CAN BE APPLIED.
- (10) REFER TO THE MnDOT TRAFFIC ENGINEERING MANUAL.

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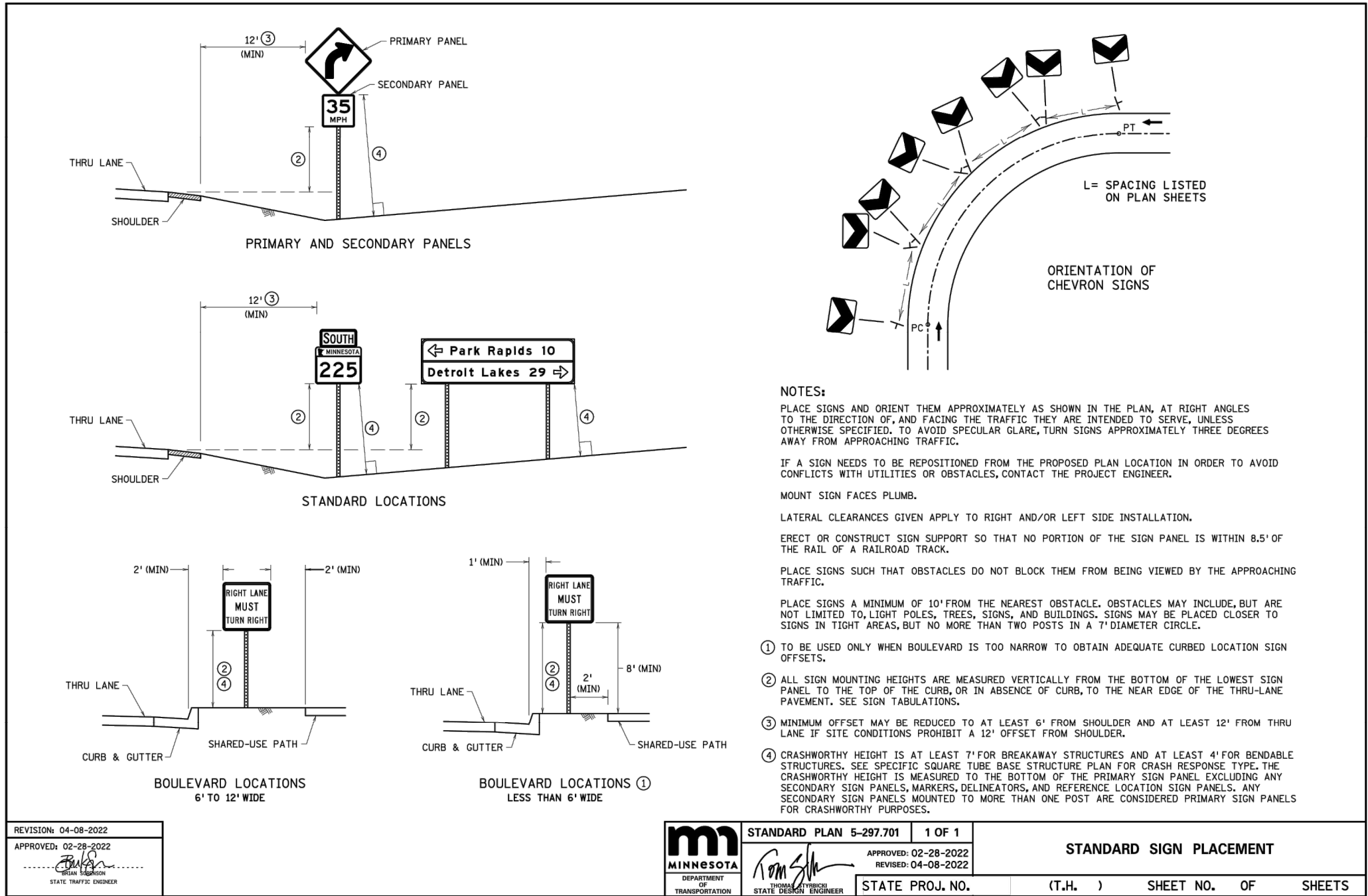
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HOFFMAN ROAD EXTENSION
SIGNING & STRIPING PLAN
DETAILS

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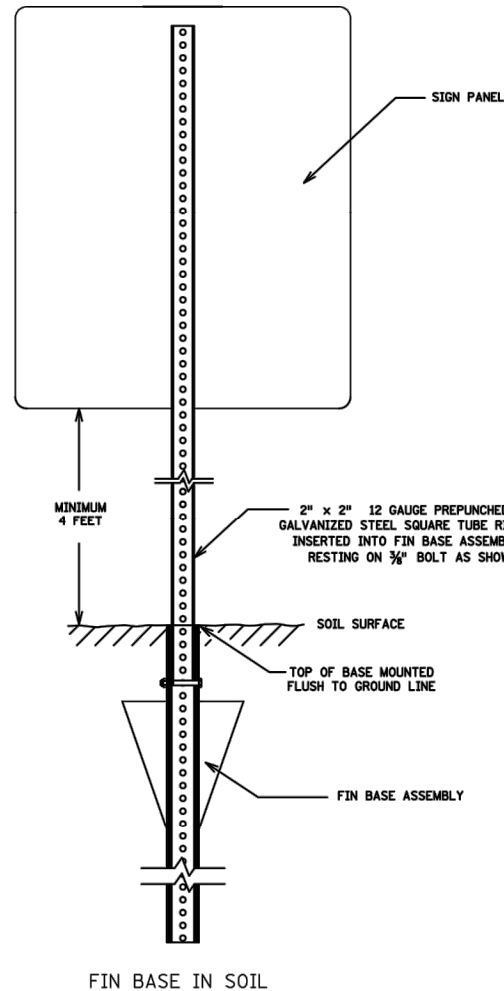
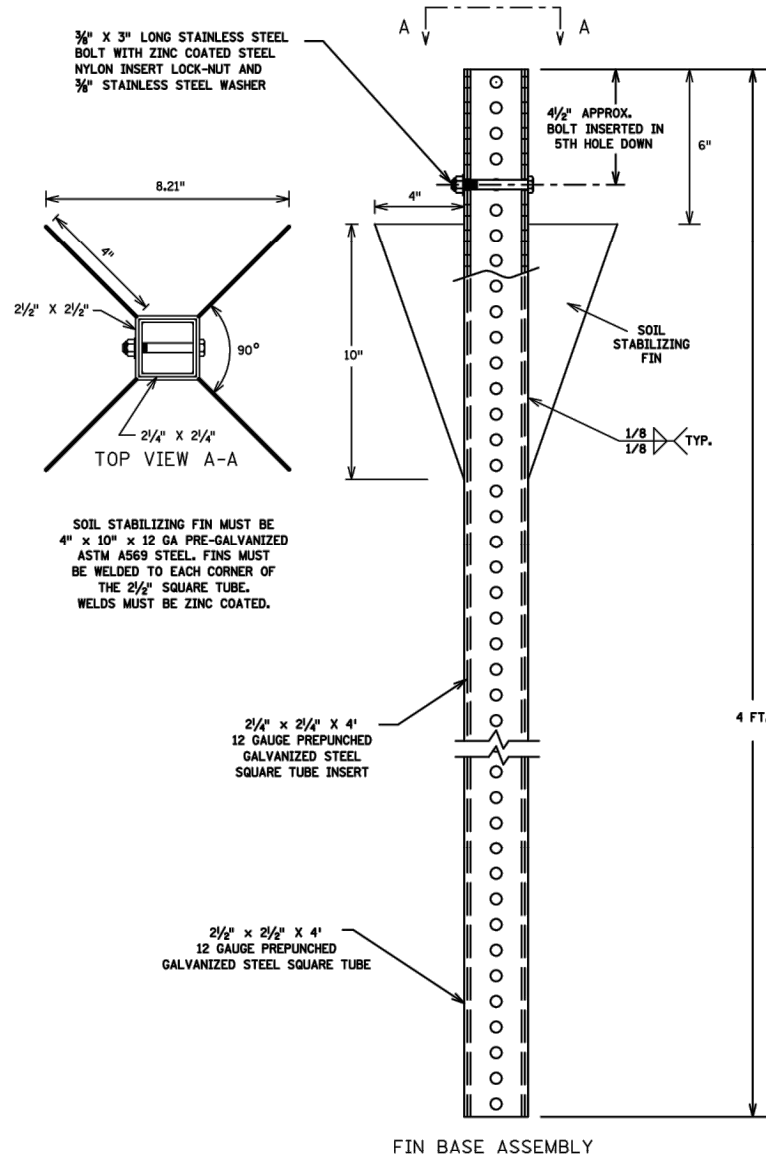


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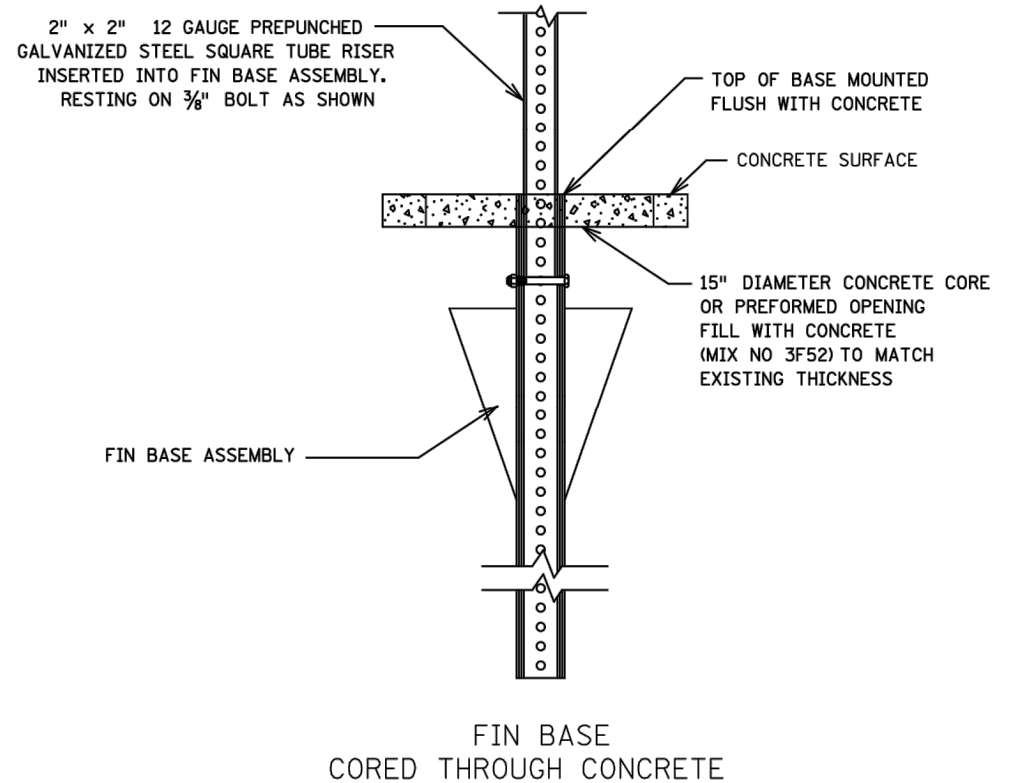
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HOFFMAN ROAD EXTENSION
SIGNING & STRIPING PLAN
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- NOTES:
1. THE CRASH RESPONSE TYPE FOR THIS STRUCTURE IS BENDABLE.
 2. TO MEET CRASHWORTHY REQUIREMENTS THE DISTANCE BETWEEN THE BOTTOM OF THE SIGN PANEL AND THE GROUND SURFACE BELOW ANY PORTION OF THE SIGN PANEL MUST BE A MINIMUM OF 4 FEET. SEE TABULATIONS FOR MOUNTING HEIGHT.
 3. FOR SIGN PANEL MOUNTING DETAILS SEE SQUARE TUBE SIGN MOUNTING DETAILS.
 4. SQUARE TUBE SIGN POSTS PER MnDOT SPEC. 3402.



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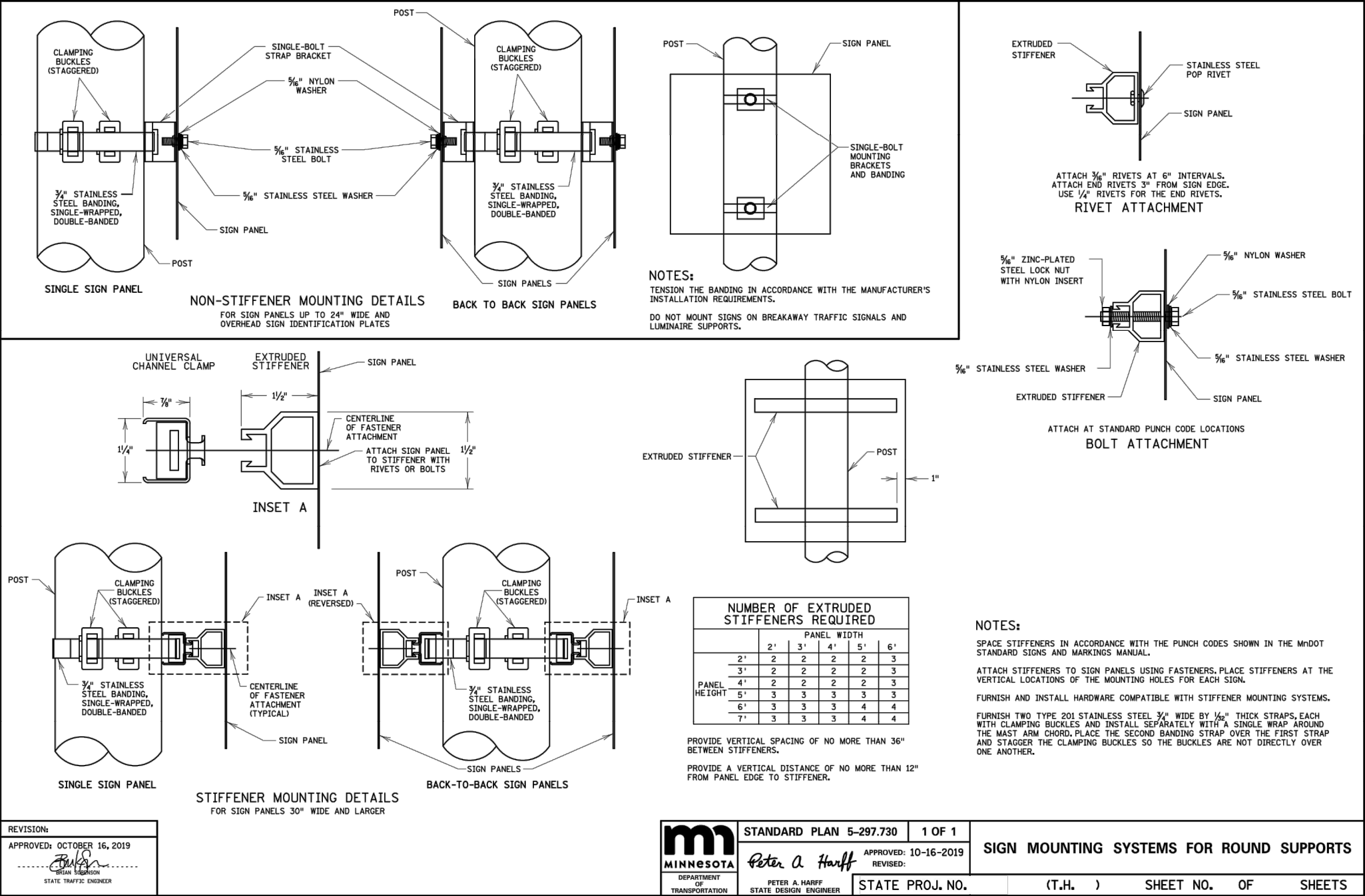
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SIGNING & STRIPING PLAN
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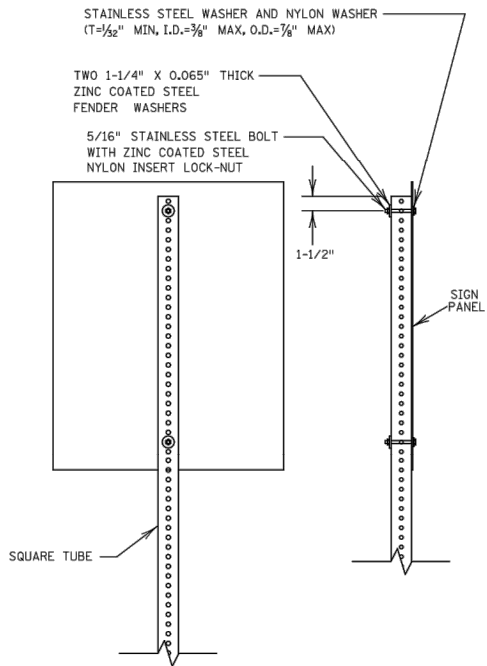
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SHEET

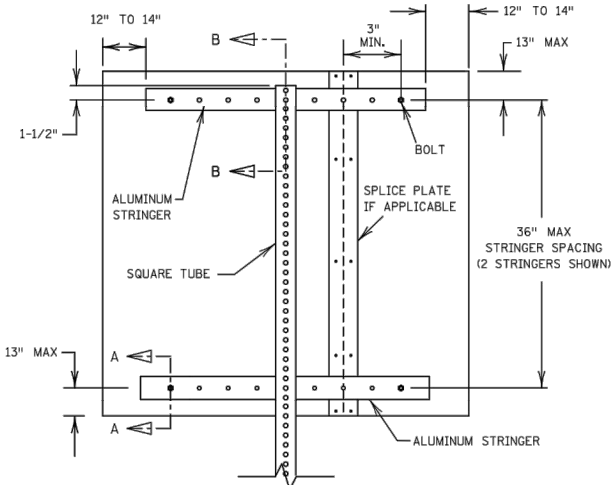
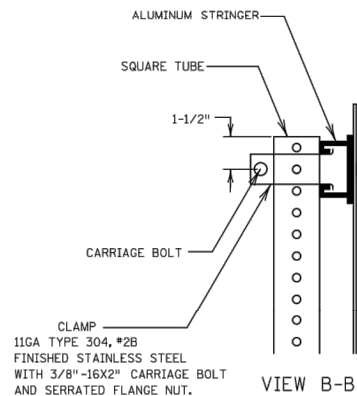
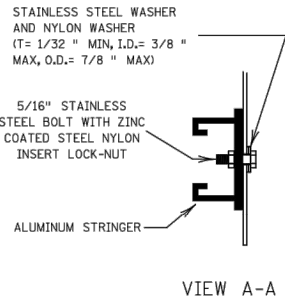
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PLOTTED/REVISED: 29-DEC-2021

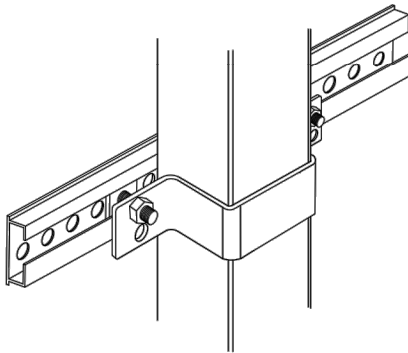
PLOT NAME: SQUARE TUBE SIGN MOUNTING DETAIL
PATH & FILENAME: 01ST\Sigling\Typicals\Standard Plans\DETAIL Versions\SQUARE TUBE SIGN MOUNTING DETAILS.dgn



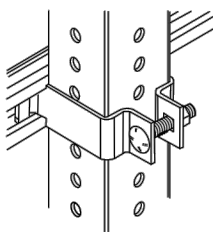
FOR SIGN PANELS UP TO 30" WIDE



FOR SIGN PANELS 36" WIDE
OR GREATER ON ONE POST



CLAMP DETAIL
4" SQUARE TUBE

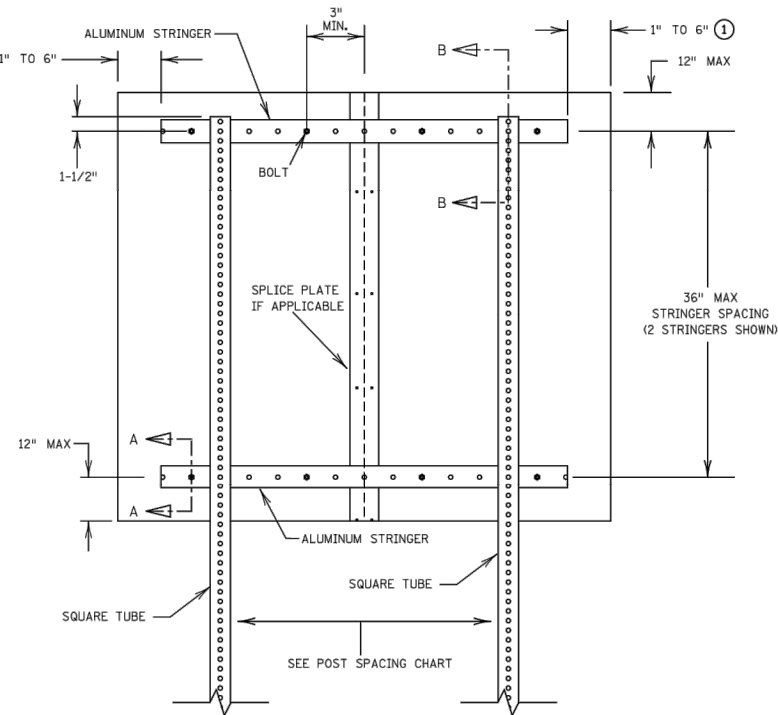


CLAMP DETAIL
2" AND 2 1/2" SQUARE TUBE

NOTES:

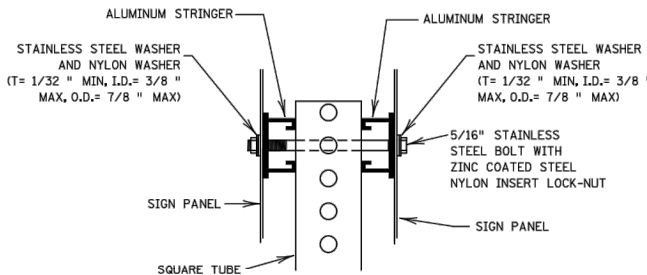
1. BOLT SIGN PANELS TO STRINGERS OR RISER POSTS AT NO GREATER THAN 24 INCH SPACING OR ACCORDING TO THE MNDOT STANDARD SIGNS AND MARKINGS MANUAL FOR MOUNTING HOLES (PUNCH CODES) INFORMATION.
2. STRINGERS SHALL BE CENTERED ON SIGN PANEL.

REV 7/01/21



FOR SIGN PANELS ON TWO OR MORE POSTS

- ① IF POST SPACING REQUIRES PLACEMENT OF A POST WITHIN THIS AREA, EXTEND STRINGERS AS NEEDED TO ACCOMMODATE THE STRINGER TO POST CLAMP.



BACK TO BACK
SIGN MOUNTING WITH STRINGERS

**SQUARE TUBE
SIGN MOUNTING DETAILS**

1 OF 3

DRAWN BY:

CHECKED BY:

CERTIFIED BY

LICENSED PROFESSIONAL ENGINEER

LIC. NO.

DATE

STATE PROJ. NO.

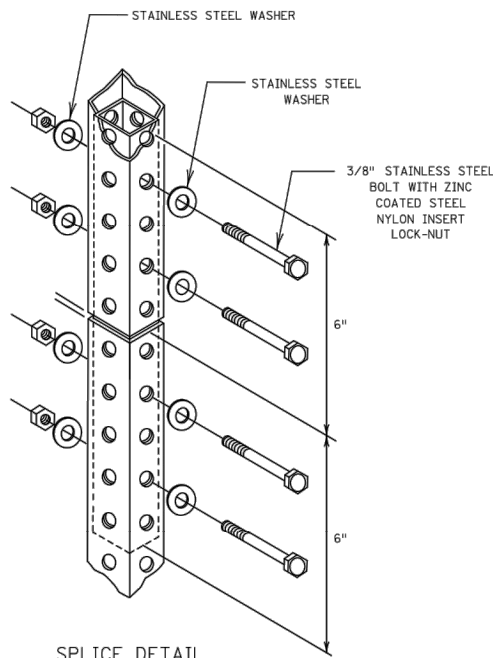
(T.H.)

SHEET NO.

OF

SHEETS

ISSUE FOR PERMIT



NO MORE THAN ONE SPLICE PER POST.

WHEN USED MUST BE PLACED AT LEAST 8 FEET ABOVE GROUND. THE PREFERRED PLACEMENT LOCATION IS BEHIND THE SIGN PANEL.

INTERIOR POST STUD SHALL BE ONE SIZE SMALLER FOR A TIGHT FIT. IF RISER POST IS 2-1/2", INTERIOR POST IS 2-3/16". IF RISER POST IS 2", INTERIOR POST IS 1-3/4".

PANEL WIDTH	SQUARE TUBE POST SPACING							
	2 POSTS	3 POSTS	4 POSTS	5 POSTS	6 POSTS	7 POSTS	8 POSTS	
	(IN)	(IN)	(IN)	(IN)	(IN)	(IN)	(IN)	
42	15							
48	21							
54	30							
60	36							
66	36							
72	42							
78	42							
84	48							
90	48	42						
96	48	42						
102	54	42						
108	54	42						
114	60	42						
120	60	48						
126	66	48						
132	66	48	42					
138	72	48	42					
144	72	48	42					
150	78	54	42					
156	78	54	42					
162	84	54	42					
168	84	60	48					
174	90	60	48	42				
180	90	60	48	42				
186	96	66	48	42				
192	96	66	48	42				
198	102	66	54	42				
204	102	72	54	42				
210	108	72	54	42				
216	108	72	54	48	42			
222	114	78	60	48	42			
228	114	78	60	48	42			
234	120	78	60	48	42			
240	120	84	60	48	42			
246	84	66	54	42				
252	84	66	54	42				
258	90	66	54	42		42		
264	90	66	54	48	42	42		
270	90	72	54	48	42	42		
276	96	72	60	48	42	42		
282	96	72	60	48	42	42		
288	96	72	60	48	42	42		
294	102	78	60	54	42			
300	102	78	60	54	42	42	42	
306	102	78	66	54	42	42	42	
312	108	78	66	54	48	42		
318	108	84	66	54	48	42		
324	108	84	66	54	48	42		
330	114	84	66	60	48	42		
336	114	84	72	60	48	42		

DISTANCES ARE CENTER-TO-CENTER OF POSTS

[illegible]

NUMBER OF ALUMINUM STRINGERS FOR 2-1/2 INCH OR SMALLER POSTS

PANEL WIDTH (INCHES)

PANEL HEIGHT (INCHES)

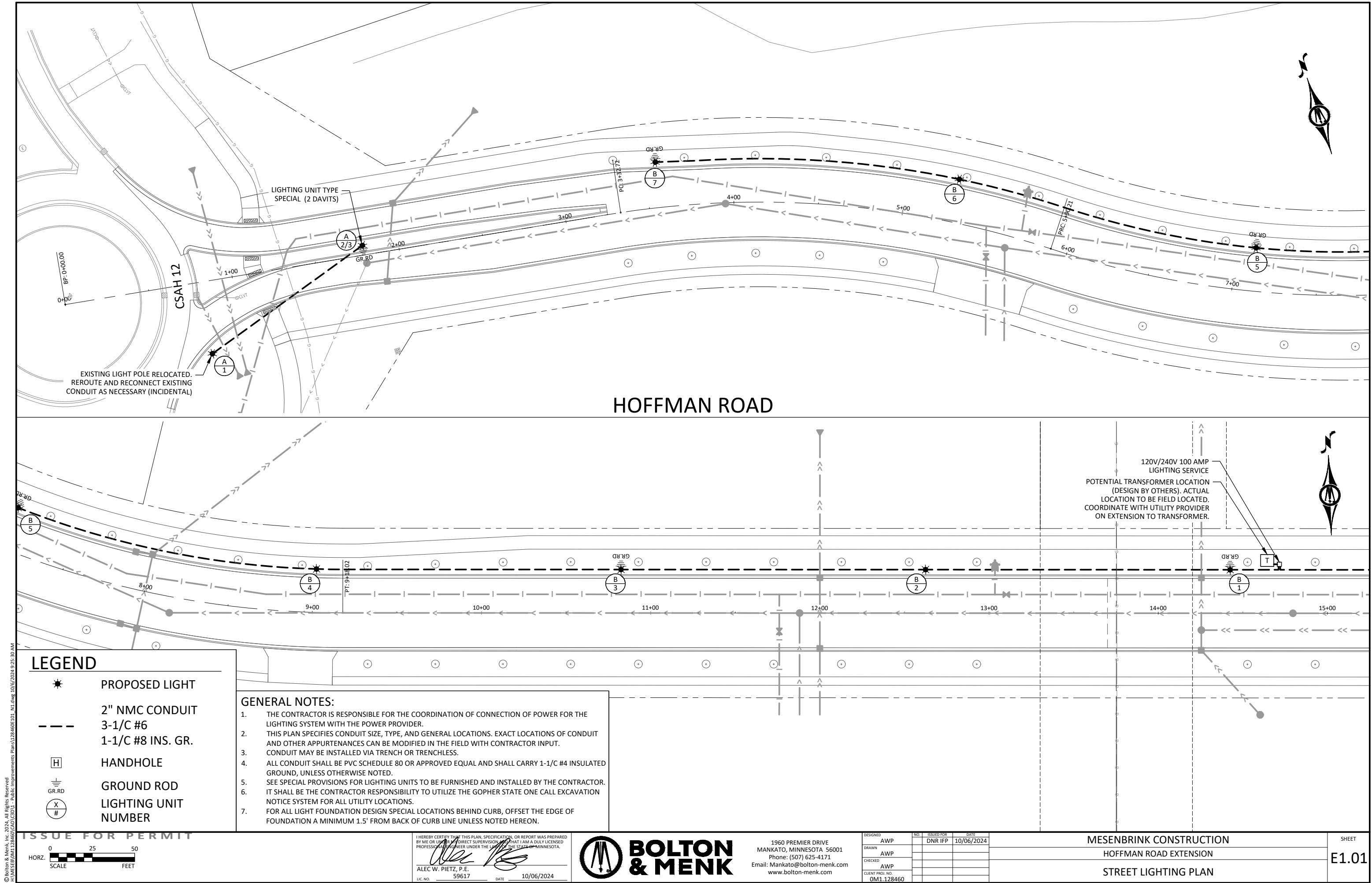


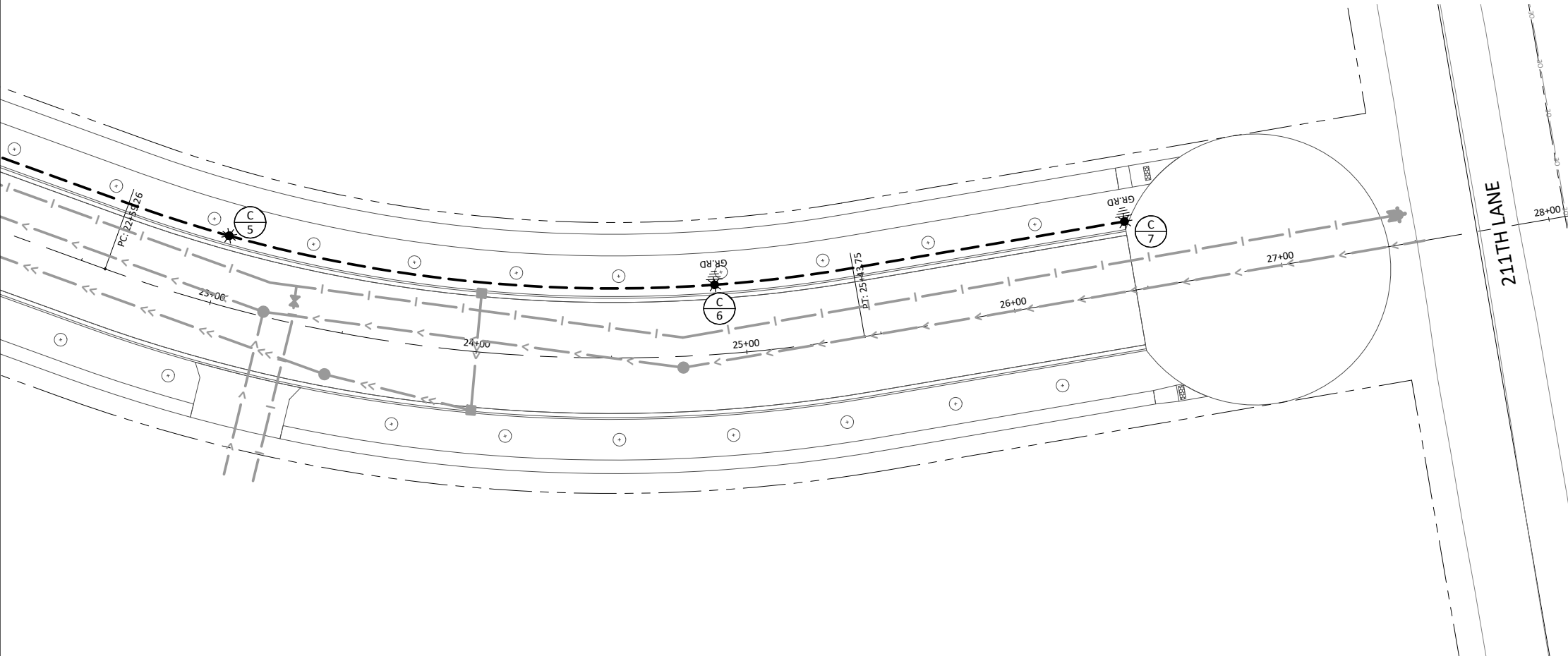
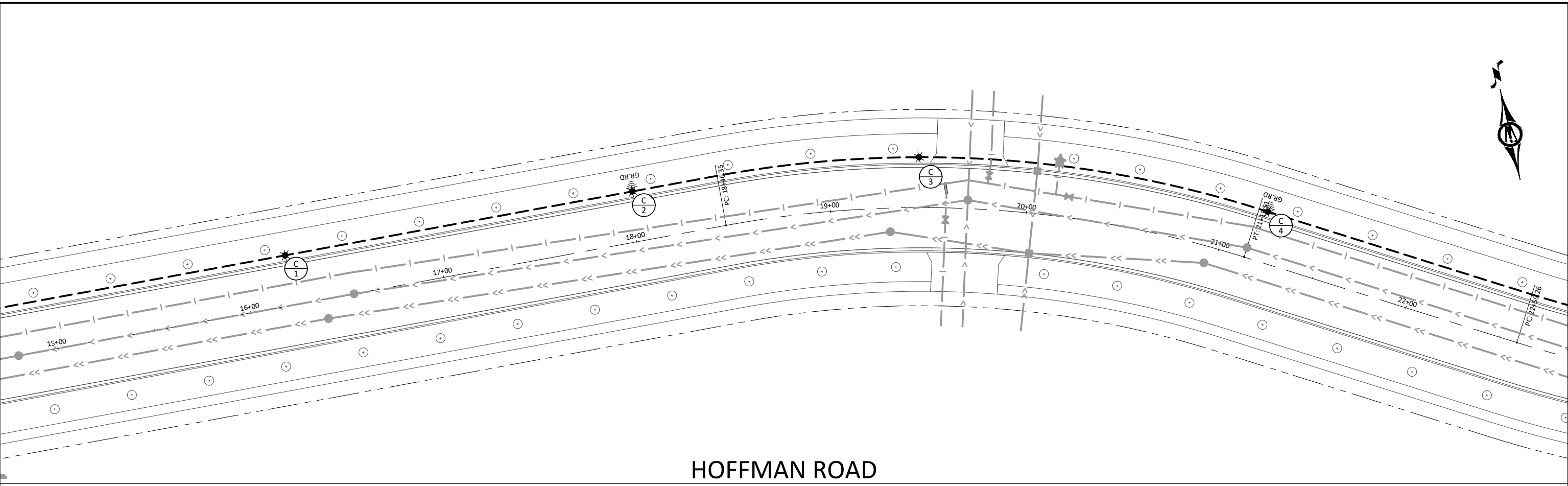
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Phone: (507) 625-4171
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AWP			
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AWP			
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0M1.128460			

MESENBRINK CONSTRUCTION
HOFFMAN ROAD EXTENSION
SIGNING & STRIPING PLAN
DETAILS





LEGEND

PROPOSED LIGHT

2" NMC CONDUIT
3-1/C #6
1-1/C #8 INS. GR.

HANDHOLE

GROUND ROD

LIGHTING UNIT
NUMBER

- GENERAL NOTES:
1.

THE CONTRACTOR IS RESPONSIBLE FOR THE COORDINATION OF CONNECTION OF POWER FOR THE LIGHTING SYSTEM WITH THE POWER PROVIDER.
2.
- THIS PLAN SPECIFIES CONDUIT SIZE, TYPE, AND GENERAL LOCATIONS. EXACT LOCATIONS OF CONDUIT AND OTHER APPURTENANCES CAN BE MODIFIED IN THE FIELD WITH CONTRACTOR INPUT.

3.

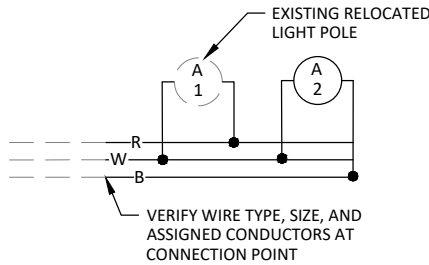
4.

5.

6.

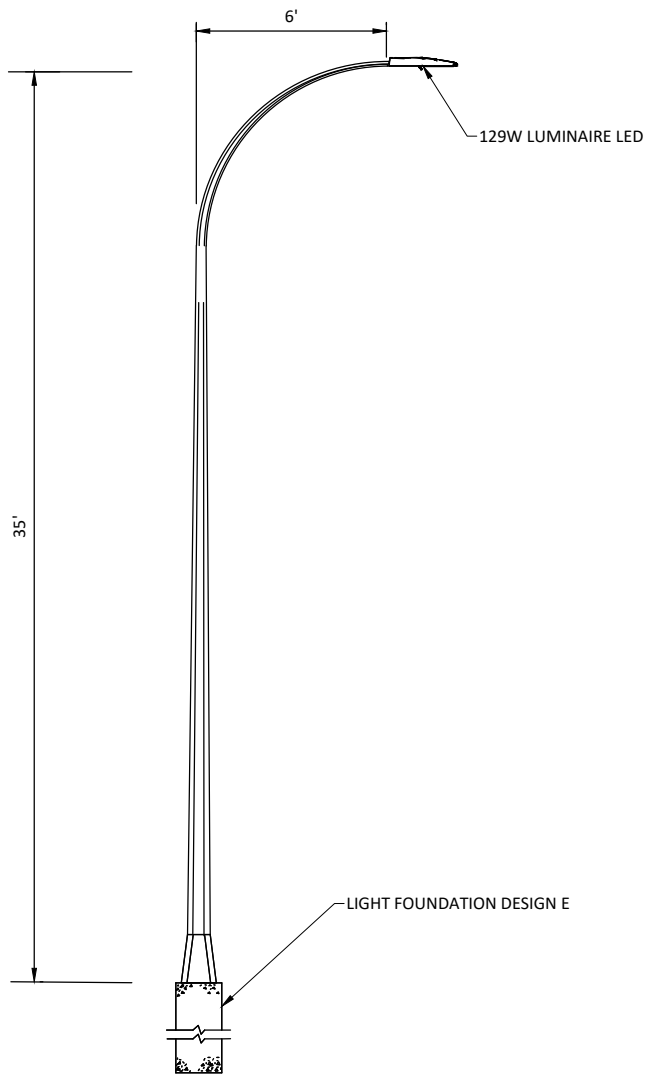
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11/15/24/2024 12:28:46 PM 11/15/24/2024 12:28:46 PM 11/15/24/2024 12:28:46 PM 11/15/24/2024 12:28:46 PM

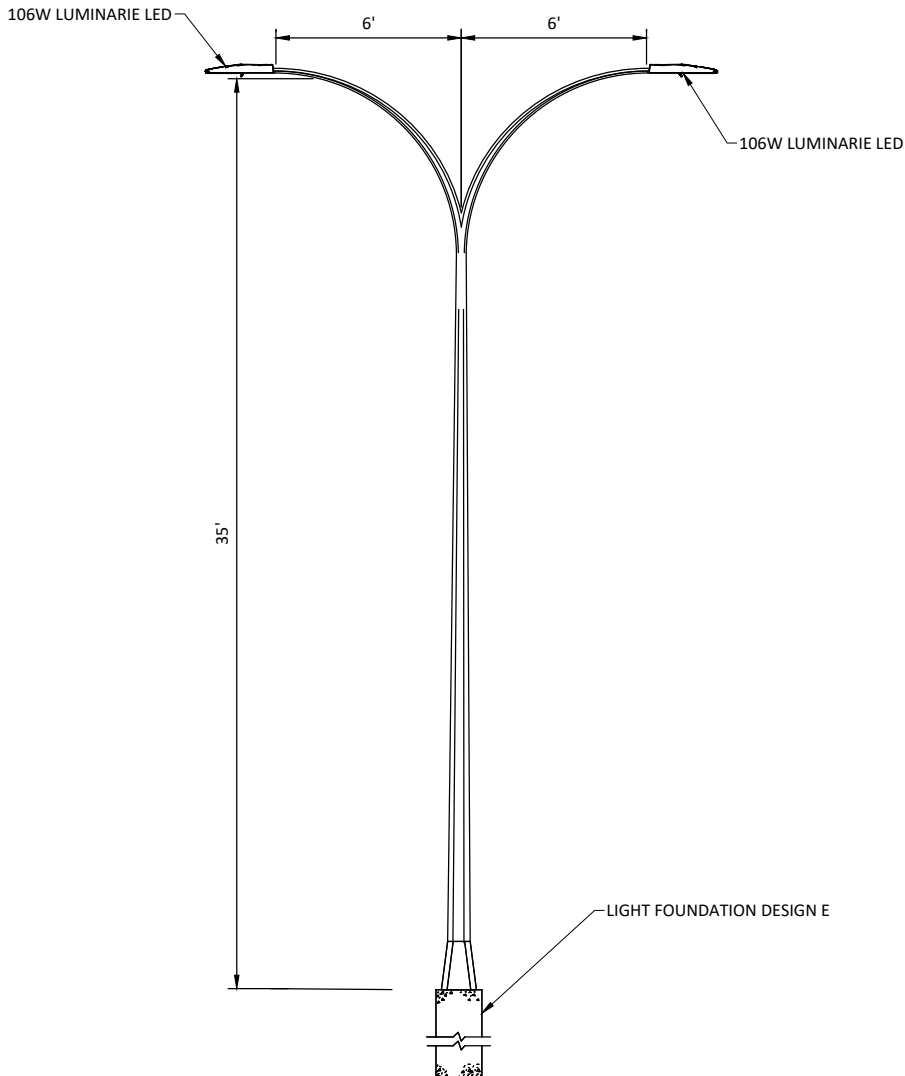


B AND R DENOTE CURRENT CARRYING CONDUCTORS
W DENOTES NEUTRAL CONDUCTOR

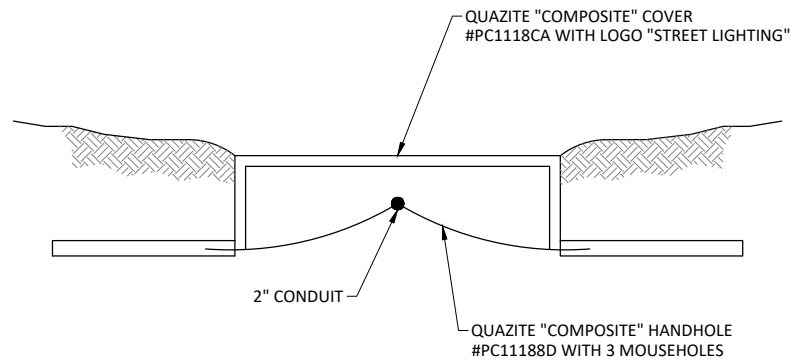
WIRING DIAGRAM A



LIGHTING UNIT TYPE E
NOT TO SCALE

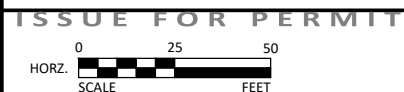


LIGHTING UNIT TYPE SPECIAL
NOT TO SCALE



HANDHOLE
NOT TO SCALE

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LIC. NO. 59617 DATE 10/06/2024

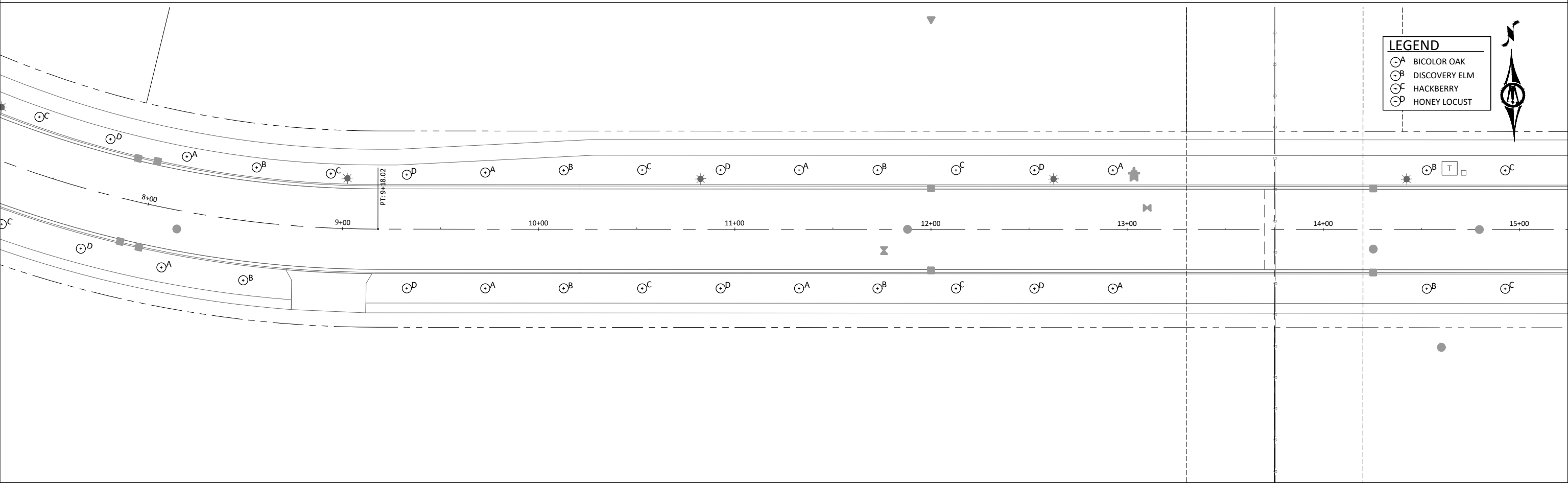
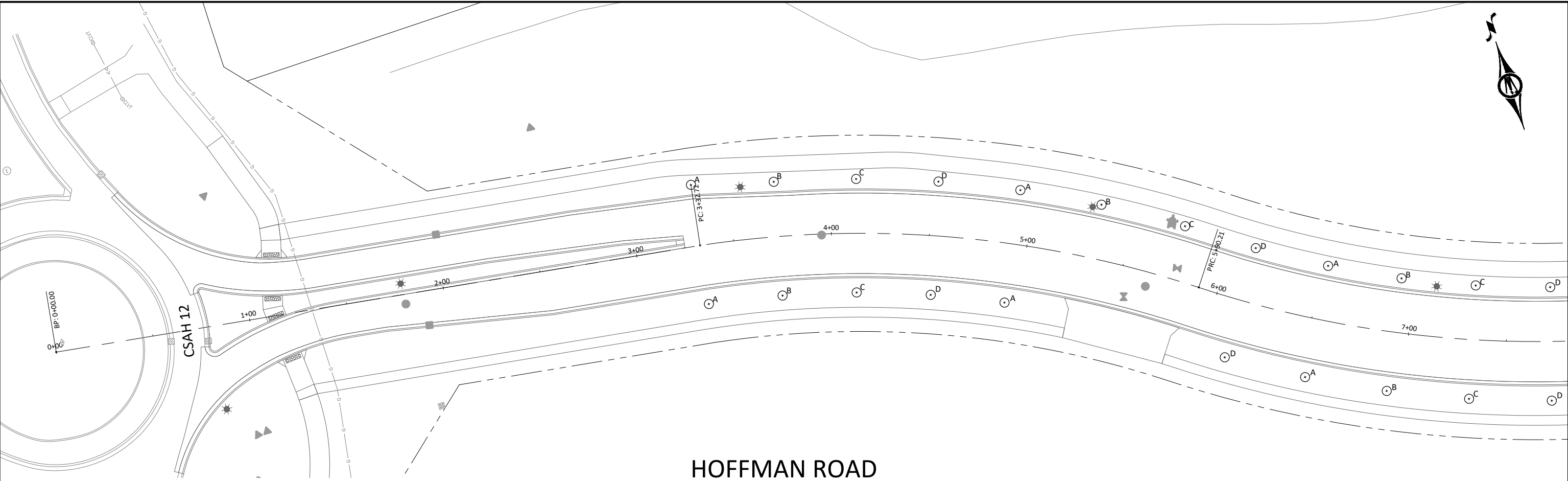


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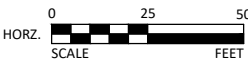
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MESENBRINK CONSTRUCTION
HOFFMAN ROAD EXTENSION
LIGHTING DETAILS & WIRING DIAGRAMS

SHEET
E1.03



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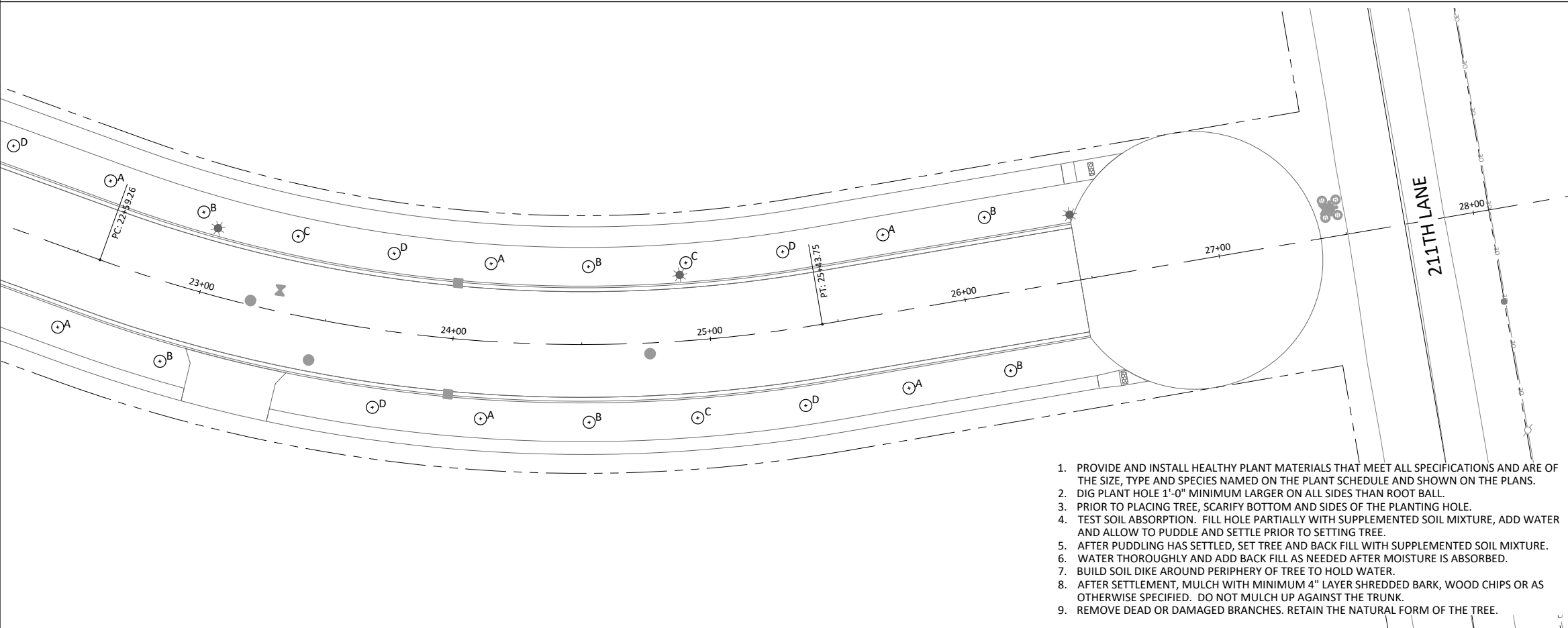
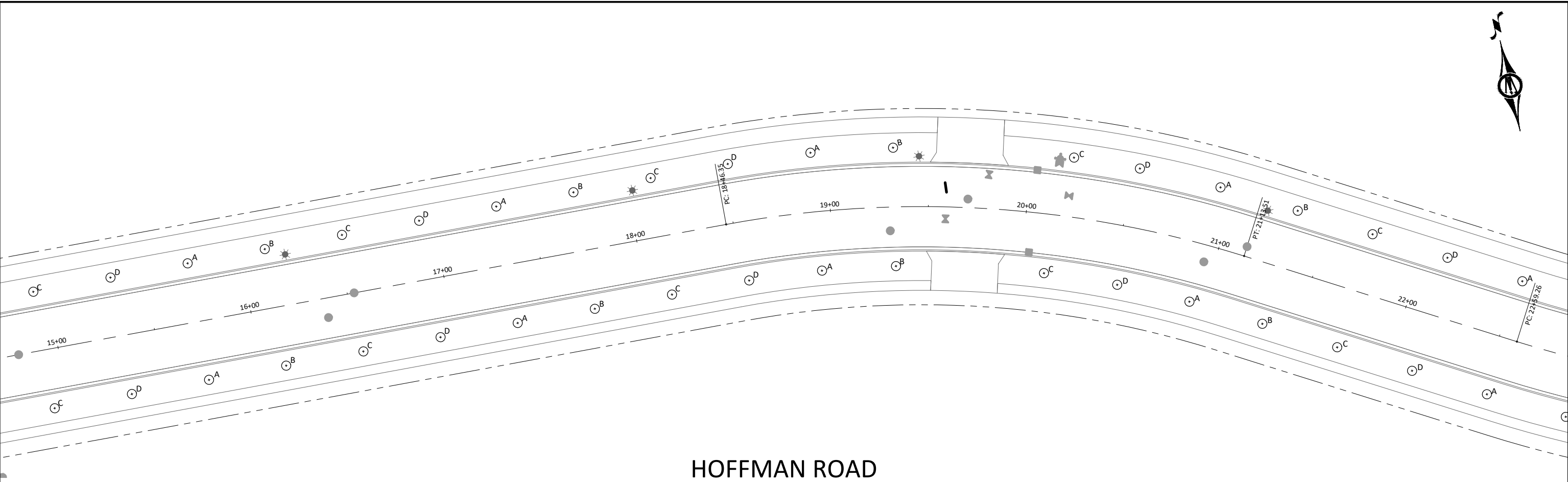
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MESENBRINK CONSTRUCTION
HOFFMAN ROAD EXTENSION
TREE PLANTING PLAN

SHEET
L1.01

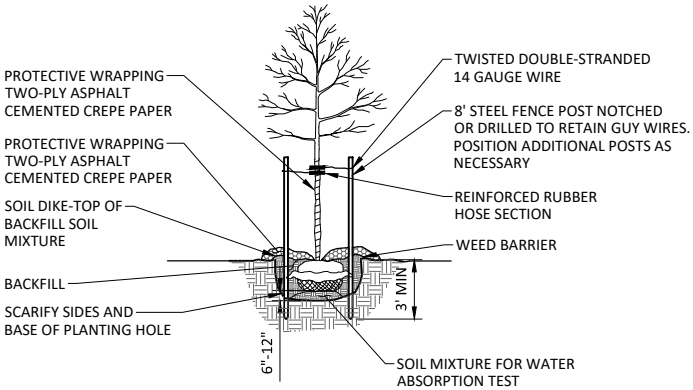
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- LEGEND**
- ⊙A BICOLOR OAK
 - ⊙B DISCOVERY ELM
 - ⊙C HACKBERRY
 - ⊙D HONEY LOCUST

- BAG & BALL PLANTING NOTE:**
1. REMOVE WRAPPING AND ALL TIES OR STRAPS. IF ROOT BALL IS WRAPPED IN BURLAP THE LOWER 1/2 PORTION OF THE FABRIC MAY BE LEFT AT THE BOTTOM OF THE HOLE. SYNTHETIC WRAP MUST BE REMOVED AND PROPERLY DISPOSED.
 2. LOOSEN ROOTS TO ENSURE THEY ARE NOT GIRDLING THE ROOT BALL.
 3. SALVAGE AND REUSE ALL SOIL THAT CAME WITH THE ROOT BALL.
 4. IF ROOT BALL IS EXTREMELY DRY WATER IT PRIOR TO PLACING IT IN THE HOLE.
 5. IF TREE IS CONTAINER GROWN, SALVAGE ALL SOIL AND MIX WITH SUPPLEMENTED SOIL FOR BACK FILL.

1. PROVIDE AND INSTALL HEALTHY PLANT MATERIALS THAT MEET ALL SPECIFICATIONS AND ARE OF THE SIZE, TYPE AND SPECIES NAMED ON THE PLANT SCHEDULE AND SHOWN ON THE PLANS.
2. DIG PLANT HOLE 1'-0" MINIMUM LARGER ON ALL SIDES THAN ROOT BALL.
3. PRIOR TO PLACING TREE, SCARIFY BOTTOM AND SIDES OF THE PLANTING HOLE.
4. TEST SOIL ABSORPTION. FILL HOLE PARTIALLY WITH SUPPLEMENTED SOIL MIXTURE, ADD WATER AND ALLOW TO PUDDLE AND SETTLE PRIOR TO SETTING TREE.
5. AFTER PUDDLING HAS SETTLED, SET TREE AND BACK FILL WITH SUPPLEMENTED SOIL MIXTURE.
6. WATER THOROUGHLY AND ADD BACK FILL AS NEEDED AFTER MOISTURE IS ABSORBED.
7. BUILD SOIL DIKE AROUND PERIPHERY OF TREE TO HOLD WATER.
8. AFTER SETTLEMENT, MULCH WITH MINIMUM 4" LAYER SHREDDED BARK, WOOD CHIPS OR AS OTHERWISE SPECIFIED. DO NOT MULCH UP AGAINST THE TRUNK.
9. REMOVE DEAD OR DAMAGED BRANCHES. RETAIN THE NATURAL FORM OF THE TREE.



DECIDUOUS TREE PLANTING

NOT TO SCALE



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Alec W. Pietz
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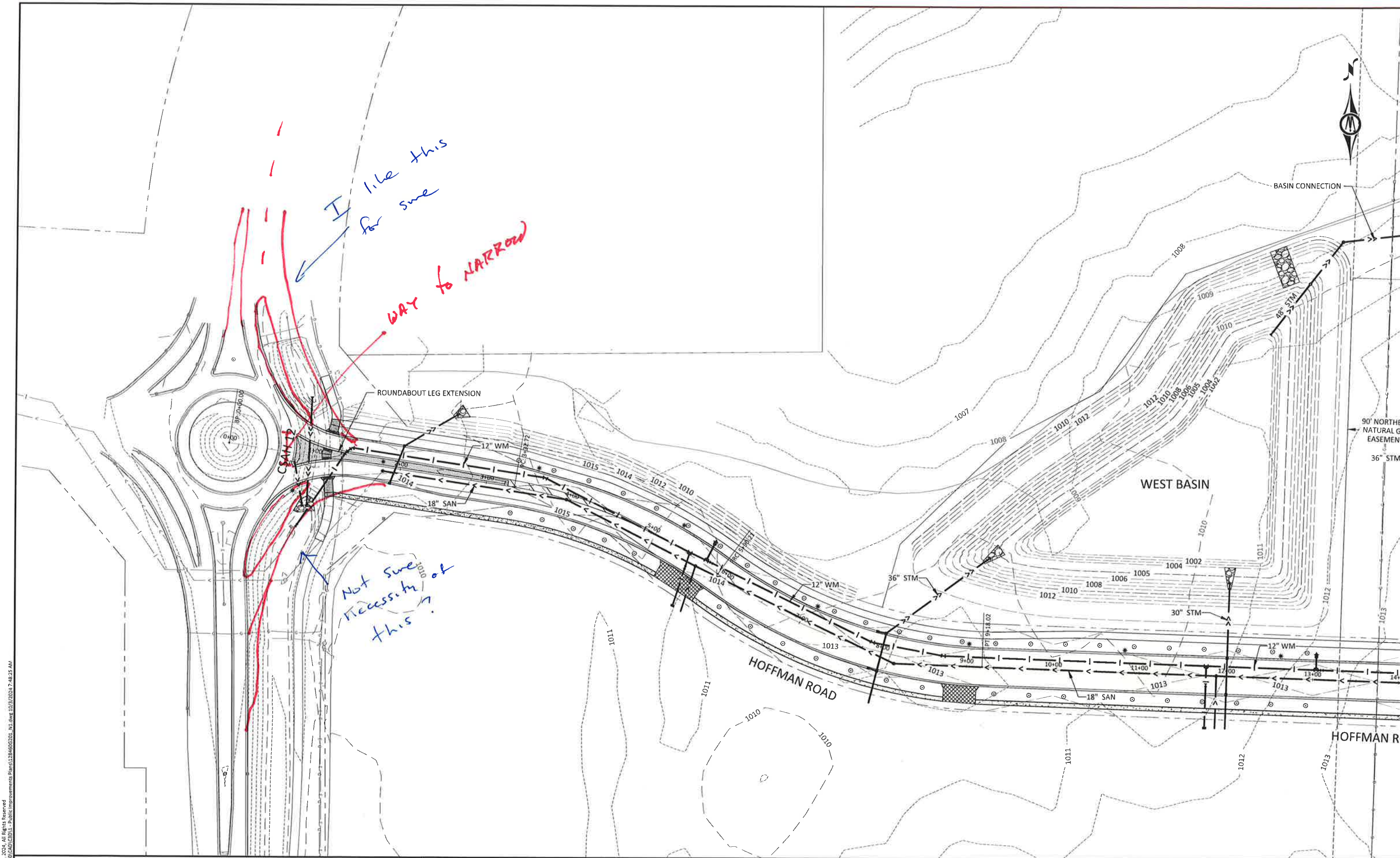
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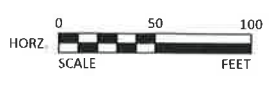
MESENBRINK CONSTRUCTION
HOFFMAN ROAD EXTENSION
TREE PLANTING PLAN

SHEET

L1.02



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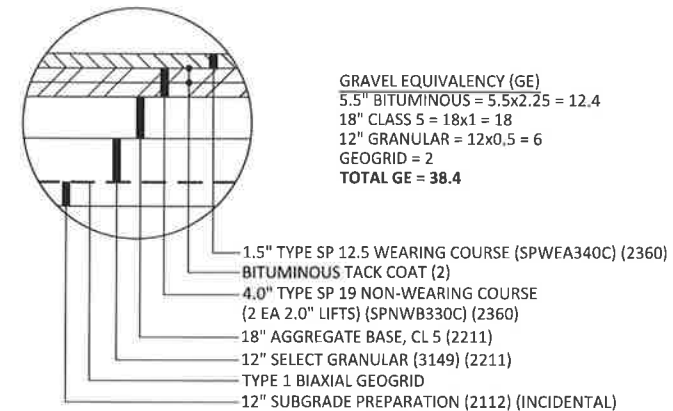
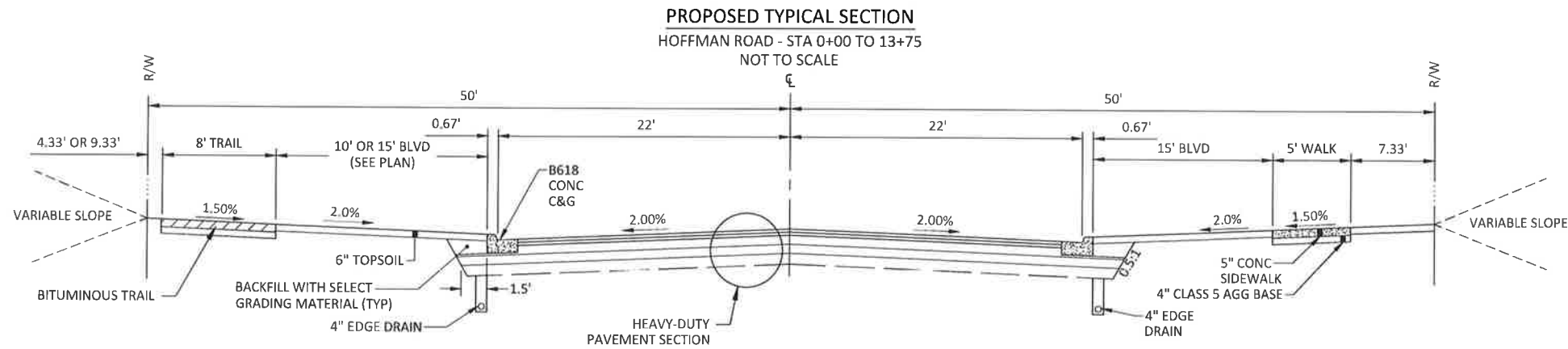
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AWP	AWP	NPM	0M1.128460

MESENBRINK CONSTRUCTION
HOFFMAN ROAD EXTENSION
PROJECT OVERVIEW

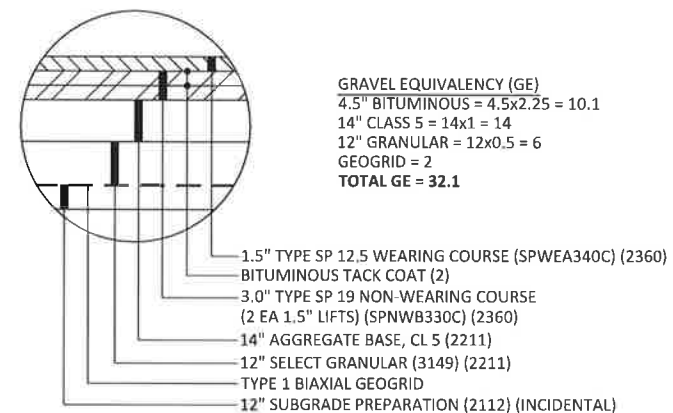
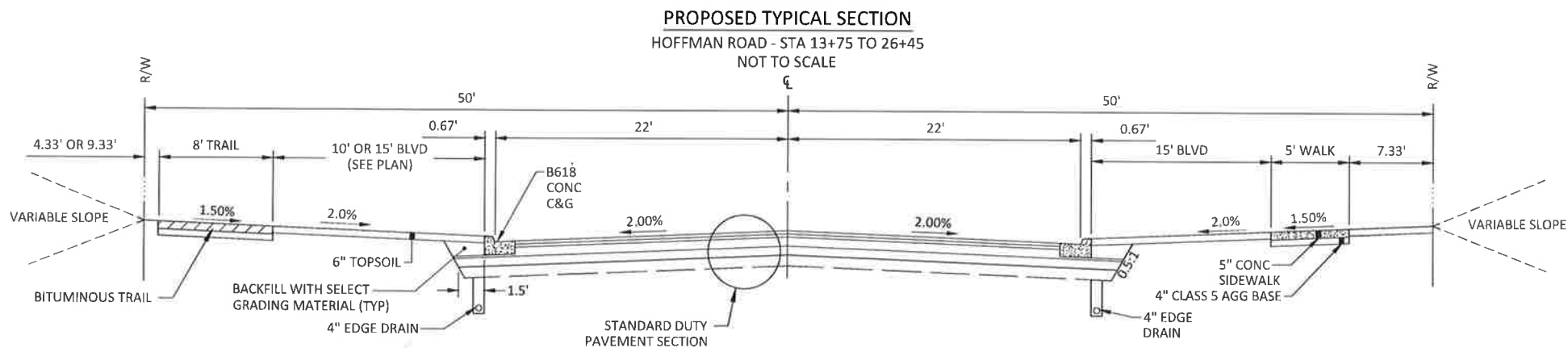
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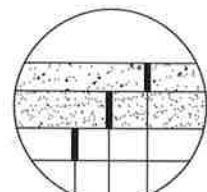
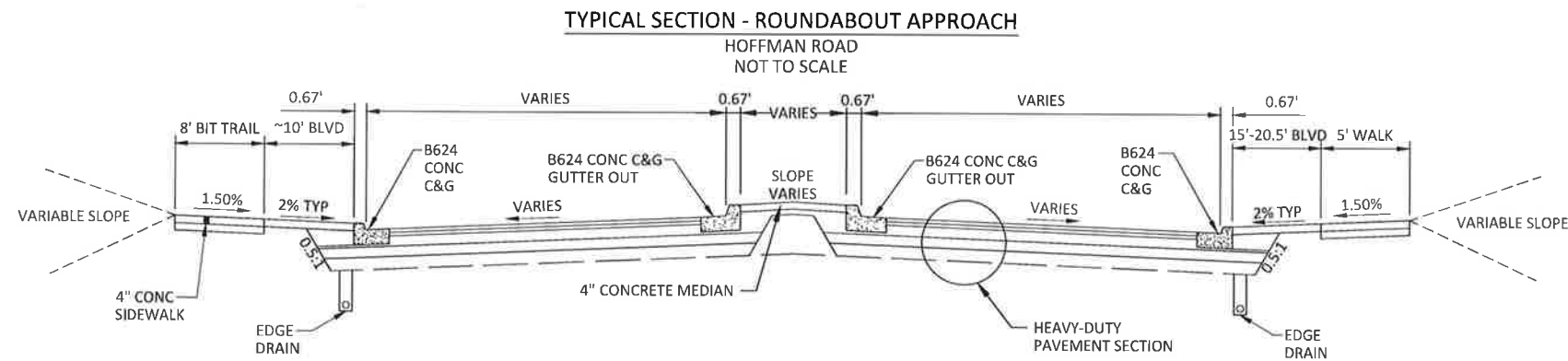
GENERAL NOTE:
SEE ROUNDABOUT GRADING &
CONSTRUCTION SHEETS FOR CURB
AND GUTTER ELEVATIONS/TYPES,
SIDEWALK, AND VARIOUS SLOPES



HEAVY-DUTY PAVEMENT SECTION
NOT TO SCALE

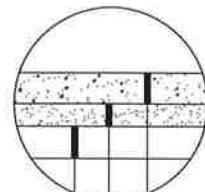


STANDARD DUTY PAVEMENT SECTION
NOT TO SCALE



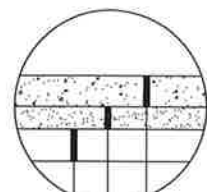
4" CONCRETE MEDIAN
NOT TO SCALE

4" CONCRETE MEDIAN PAVEMENT (2531)
6" AGGREGATE BASE, CL 5 (2211) (INCIDENTAL)
SUBGRADE PREPARATION (2112) (INCIDENTAL)



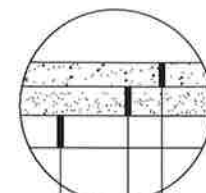
4" CONCRETE SIDEWALK
NOT TO SCALE

4" CONCRETE SIDEWALK (2531)
3" AGGREGATE BASE, CL 5 (2211) (INCIDENTAL)
SUBGRADE PREPARATION (2112) (INCIDENTAL)



6" CONCRETE SIDEWALK
NOT TO SCALE

6" CONCRETE SIDEWALK (2531)
4" AGGREGATE BASE, CL 5 (2211) (INCIDENTAL)
SUBGRADE PREPARATION (2112) (INCIDENTAL)



BITUMINOUS TRAIL
NOT TO SCALE
NOTE: QUANTITY INCLUDED UNDER '3" BITUMINOUS WALK' (MNDOT SPEC. NO. 2521)

3.0" TYPE SP 12.5 WEARING COURSE MIXTURE (SPWEB240C) (2360) (INCIDENTAL)
8" AGGREGATE BASE, CL 5 (2211) (INCIDENTAL)
SUBGRADE PREPARATION (INCIDENTAL)

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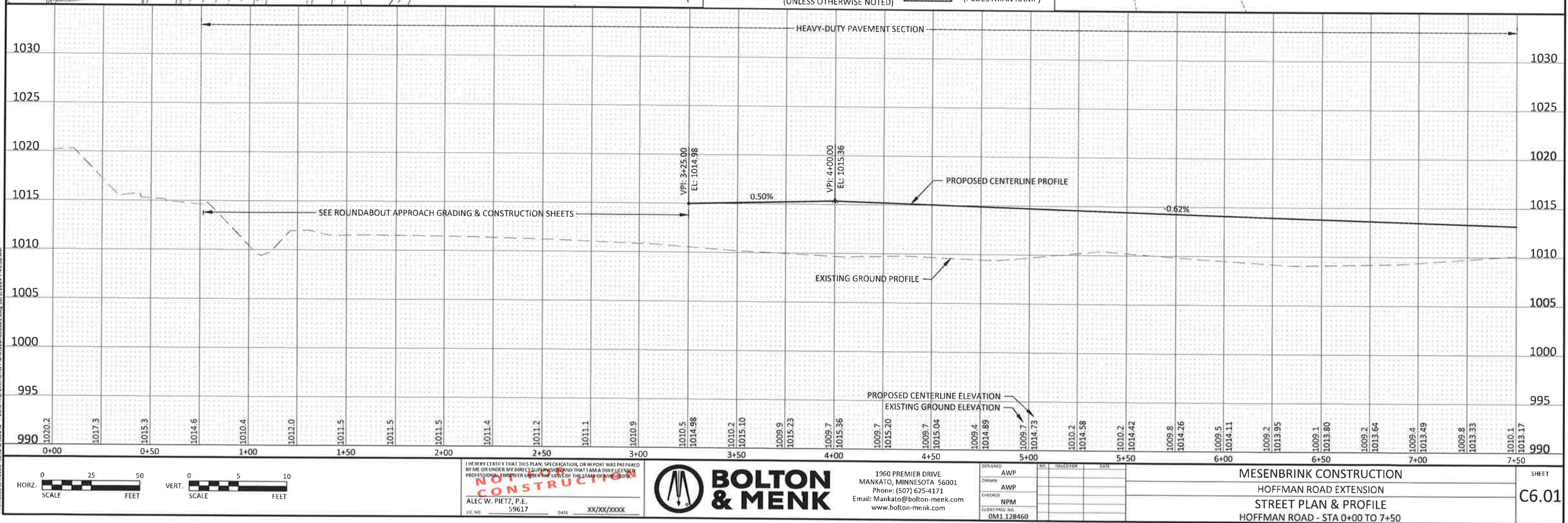
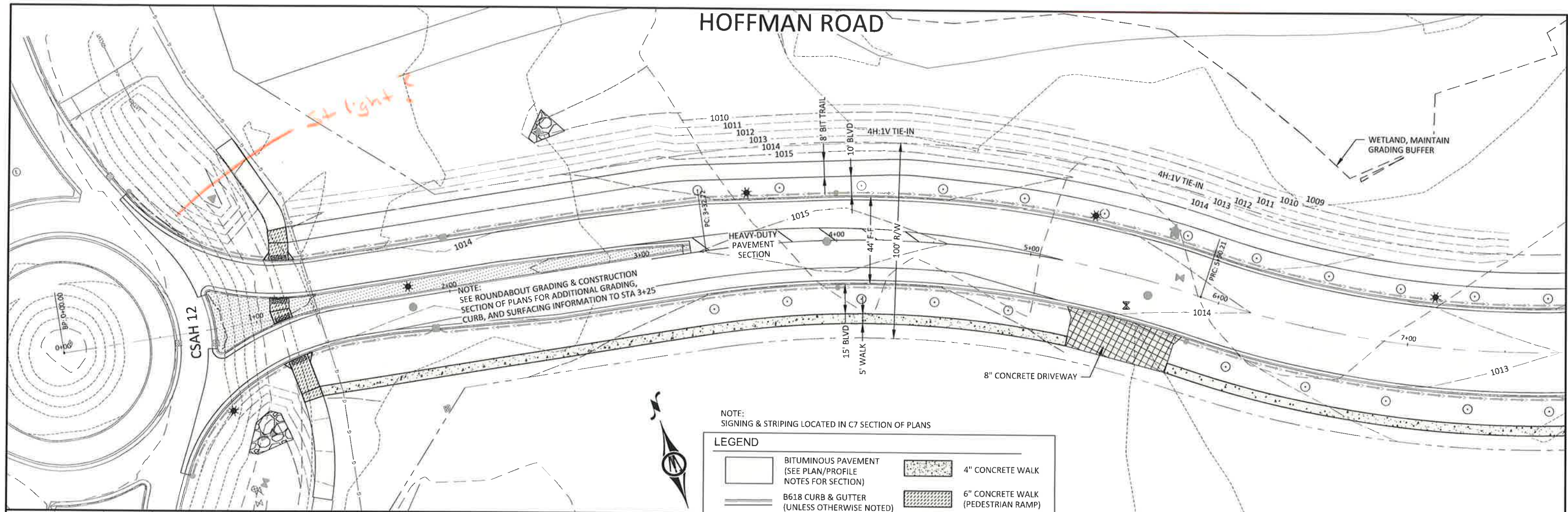
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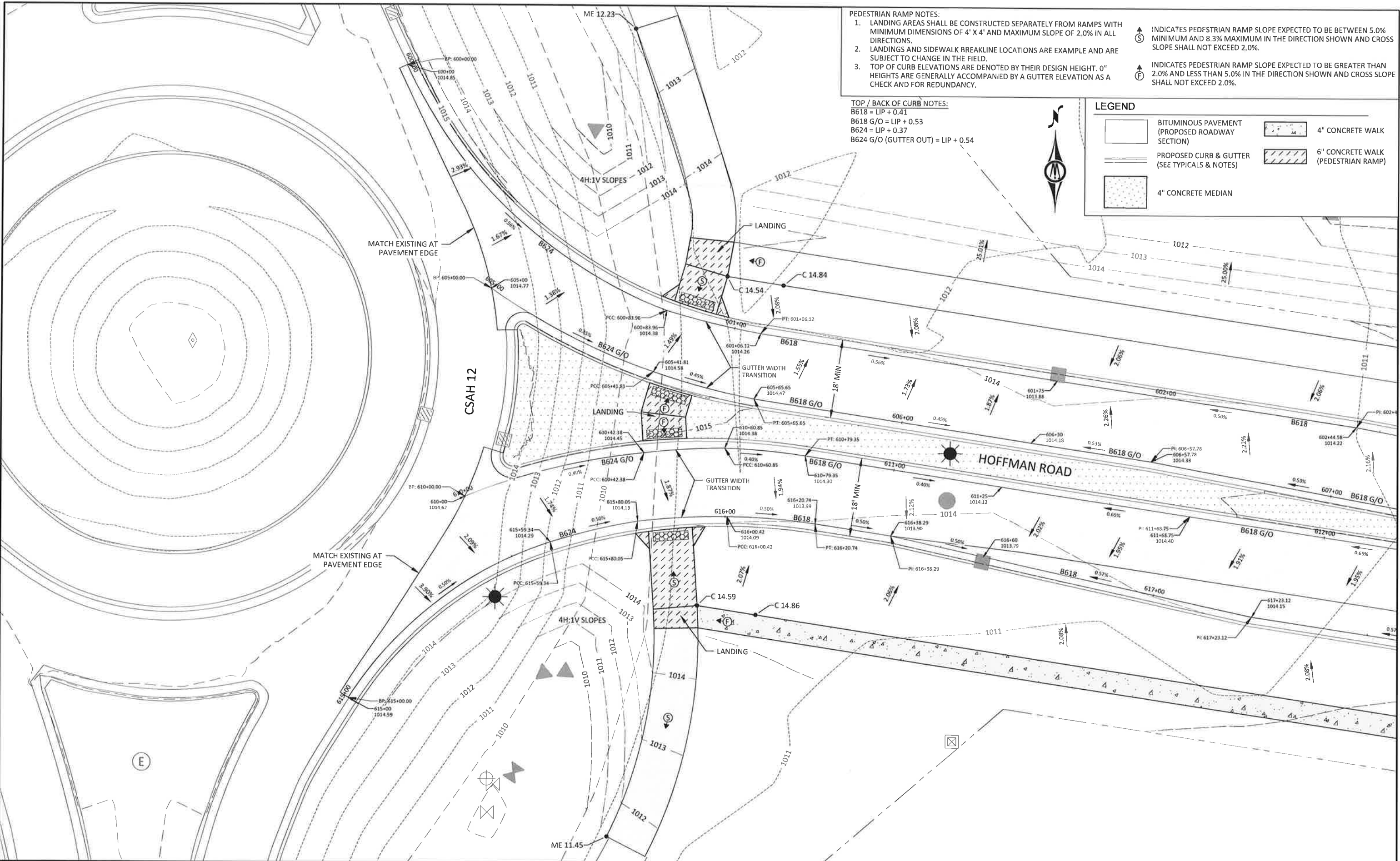
MESENBRINK CONSTRUCTION
HOFFMAN ROAD EXTENSION
TYPICAL SECTIONS

SHEET
C1.01

HOFFMAN ROAD



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11/13/2024 11:11:11 AM



PEDESTRIAN RAMP NOTES:
1. LANDING AREAS SHALL BE CONSTRUCTED SEPARATELY FROM RAMP WITH MINIMUM DIMENSIONS OF 4' X 4' AND MAXIMUM SLOPE OF 2.0% IN ALL DIRECTIONS.
2. LANDINGS AND SIDEWALK BREAKLINE LOCATIONS ARE EXAMPLE AND ARE SUBJECT TO CHANGE IN THE FIELD.
3. TOP OF CURB ELEVATIONS ARE DENOTED BY THEIR DESIGN HEIGHT. 0" HEIGHTS ARE GENERALLY ACCOMPANIED BY A GUTTER ELEVATION AS A CHECK AND FOR REDUNDANCY.

INDICATES PEDESTRIAN RAMP SLOPE EXPECTED TO BE BETWEEN 5.0% MINIMUM AND 8.3% MAXIMUM IN THE DIRECTION SHOWN AND CROSS SLOPE SHALL NOT EXCEED 2.0%.

INDICATES PEDESTRIAN RAMP SLOPE EXPECTED TO BE GREATER THAN 2.0% AND LESS THAN 5.0% IN THE DIRECTION SHOWN AND CROSS SLOPE SHALL NOT EXCEED 2.0%.

TOP / BACK OF CURB NOTES:
B618 = LIP + 0.41
B618 G/O = LIP + 0.53
B624 = LIP + 0.37
B624 G/O (GUTTER OUT) = LIP + 0.54

LEGEND

BITUMINOUS PAVEMENT (PROPOSED ROADWAY SECTION)	4" CONCRETE WALK
PROPOSED CURB & GUTTER (SEE TYPICALS & NOTES)	6" CONCRETE WALK (PEDESTRIAN RAMP)
4" CONCRETE MEDIAN	



Drainage Report

Mesenbrink Subdivison

Mesenbrink Construction

October 2024

Submitted by:

Bolton & Menk, Inc.
1960 Premier Drive
Mankato, MN 56001-5900
P: 507-625-4171
F: 507-625-4177
BMI No. 0M1.128460



**BOLTON
& MENK**

Real People. Real Solutions.

Certification

Drainage Report

For

Mesenbrink Development

Mesenbrink Construction
OM1.128460

October 2024

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.

By:



Alec Pietz, P.E.
License No. 59617

Date: 10-15-2024

Table of Contents

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II.	ANALYSIS.....	1
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I. INTRODUCTION

Mesenbrink Construction is set to develop the Mesenbrink Subdivision property in Mankato. This project includes an extension of Hoffman Road and will consist of a mixture of residential densities and some retail area. Bolton & Menk has designed the Hoffman Road/public improvements as well as what is being referred to as the “North and South Single-Family PUD”—which are residential areas on either side of Hoffman. The mixed land has been designed as needed for stormwater applications, with design of those locations to be finalized when acquisition of those parcels occurs. This report serves to detail the proposed stormwater management design of all of those areas, the entire Mesenbrink Subdivision.

Boundaries of the project consist of: County Highway 12/586th Avenue to the west, 211th Lane to the south and east, and Unnamed Lake ID #07007100 to the north.

II. ANALYSIS

To understand the drainage conditions of the project area and guide the proposed stormwater management design, a hydrologic and hydraulic model was developed using Autodesk’s Storm & Sanitary Analysis (SSA). SSA uses the Soil Conservation Service (SCS) Technical Release (TR-20) methodology to route watershed runoff through the system using a rainfall hydrograph. NOAA Atlas 14 rainfall depths were used along with the NRCS’s MSE 3, 24-hour rainfall distribution. The rainfall depths used for the 2, 10, and 100-Year rainfall events were 2.87”, 4.28” and 7.20”, respectively. Time of concentrations were calculated using the NRCS’s TR-55 methodology. Drainage areas were delineated using a combination of LiDAR data and survey data where available. Soil types within the project area are dominated by clay loams characterized by the hydrological soil group type D.

III. EXISTING CONDITIONS

Currently, land use in the project area is all straight-row cropland. During smaller rainfall events, much of the runoff within the project area sits in low points in the cropland. During large rainfall events, runoff from the site flows primarily to the north into the Unnamed Lake—with a small percentage flowing to the west and south into the ditch on the east side of County Highway 12/586th Avenue. There is also runoff towards the two homestead properties southeast of the site, that runoff eventually crosses under 211th Lane via an existing culvert. See *Existing Drainage Area Map* in Appendix A for more detail, including the drainage areas and flow directions. As part of the project, a Hydraulic Analysis was completed and submitted to the MNDNR. A copy of that report can be found in Appendix C.

IV. PROPOSED DESIGN

Mesenbrink Subdivision’s proposed stormwater management system has been designed to meet the MPCA’s NPDES Construction Stormwater Permit requirements and the City of Mankato Grading Manual design standards. Along with the necessary catch basins and storm sewer, the proposed stormwater management system will also include two wet sedimentation basins connected via a submerged pipe—allowing them to function hydraulically as a single basin. An existing gas line runs through the project area and is the reason for two smaller basins as opposed to a single, larger basin. Those two basins are labeled as “Pond A” and “Pond B”. The proposed project has one primary outfall: a 30” outlet from Pond B. See *Proposed Drainage Area Map* in Appendix A for more site detail.

A. Water Quality Requirements

The proposed project has been designed to meet the more stringent water quality requirements of the City of Mankato Grading Manual Sec. 3.2.4.2.B., which states a permanent stormwater treatment basin is required for treatment of 1.1" of runoff over the new impervious surfaces. This exceeds the 1" requirement of the MPCA NPDES Construction Stormwater Permit. This requirement will be met through the construction of two wet sedimentation basins with a combined water quality volume (WQv) sufficient to meet this standard.

Table 1 shows the change in impervious surfaces for the proposed project.

Table 1 – Impervious Calculation			
	Existing Area (ac)	Proposed Area (ac)	Difference (ac)
Public Improvements	0.0	3.6	+3.6
North Single-Family PUD	0.0	5.0	+5.0
South Single-Family PUD	0.0	2.2	+7.9
Future Concept Area	0.0	14.8	+15.8
TOTAL Impervious	0.0	32.3	+32.3

Based on these values, the project will be required to treat 2.96 ac-ft (~128,950 cf) of runoff. This treatment volume accounts for the total treatment required by each section of the development.

B. Storm Sewer & Catch Basin Design

Storm sewer and catch basins were designed based on the guidance provided in the City of Mankato Grading Manual. Storm sewer has been sized based on two different design storm events. For the residential streets, the 5-Year rainfall event was selected—while storm sewer along Hoffman Road was designed for the 10-Year rainfall event per the manual's guidance. All inlets have been designed per Grading Manual Sec. 3.2.3.2.a, in which a single 12-foot driving lane must be maintained free from inundation for every two driving lanes on a roadway for the 10-year rainfall event. Additionally, the 2-Year 24-hour storm with frozen ground was analyzed to be sure the design still provided adequate performance during spring snowmelt conditions.

C. Wet Sedimentation Basins

Two wet sedimentation basins have been designed as part of the project. The first, denoted as "Pond A" within the plans, serves approximately the western half of the Hoffman Road extension and the future mixed-use areas. Its drainage area is approximately 28.3 acres.

Denoted as "Pond B" within the plans, the second basin will serve both of the residential areas, along with the remainder of Hoffman Road that is not served by Pond A. All runoff generated to Pond A will also route through Pond B. Both basins are designed per the MPCA NPDES Construction Stormwater Permit and the City of Mankato Grading Manual. The pond outlet control structure was designed to be skimming so that floatables such as oil and trash will be trapped within the pond, and contains orifices for rate control. The proposed basins have been designed to provide enough storage and rate control as to not cause an increase in high-water levels (HWLs) to the Unnamed Lake.

D. Water Quality Provided

Table 2 below shows the designed water quality volume provided for each Pond. The combined water quality worksheet can be found in Appendix B.

Table 2 – Water Quality Summary				
BASIN	BOTTOM (ft)	NWL (ft)	WQ ELEVATION (ft)	WQv AVAILABLE (ac-ft)
Pond A	1001.0	1005.5	1006.81	11.41
Pond B	999.0	1005.5	1006.81	7.07
TOTAL WQv Avail.				18.48
TOTAL WQv Req.				2.96

The WQv available far exceeds the required amount because the basins also must meet stringent requirements for minimum overtopping into the Unnamed Lake event via the emergency overflows (EOFs).

V. MODEL RESULTS

Table 3 below shows the pre- and post-construction discharge rates to the Unnamed Lake.

Table 3 – Discharge Rates (CFS) to Unnamed Lake #07007100			
	2-YEAR (2.87")	10-YEAR (4.28")	100-YEAR (7.20")
Existing	35.1	61.7	128.6
Proposed	6.8	9.2	22.6
Difference	-28.3	-52.5	-106.0

Table 4 below shows the proposed design reduces total discharge rates leaving the site for all rainfall events.

Table 4 – Total Project Discharge Rates (CFS)			
	2-YEAR (2.87")	10-YEAR (4.28")	100-YEAR (7.20")*
Existing	45.7	83.8	175.6
Proposed	38.4	66.3	142.4
Difference	-7.3	-17.5	-33.2

Table 5 below shows the HWL results for the proposed basins.

Table 5 – HWLs of Proposed Basins			
Basin	2-YEAR (2.87")	10-YEAR (4.28")	100-YEAR (7.20")
	HWL (ft)	HWL (ft)	HWL (ft)
Pond A	1007.8	1009.4	1011.7
Pond B	1007.8	1009.4	1011.6

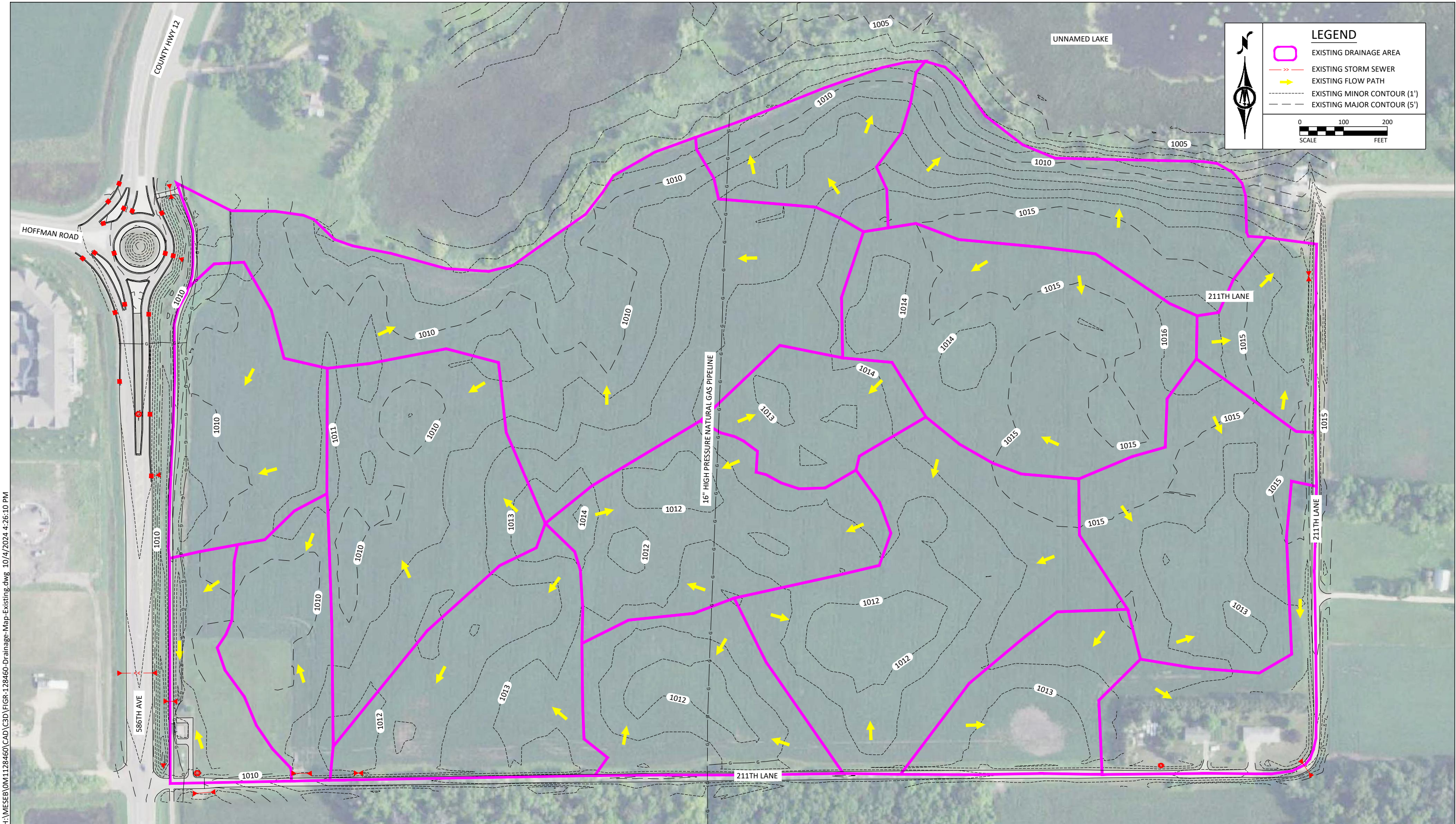
VI. SUMMARY

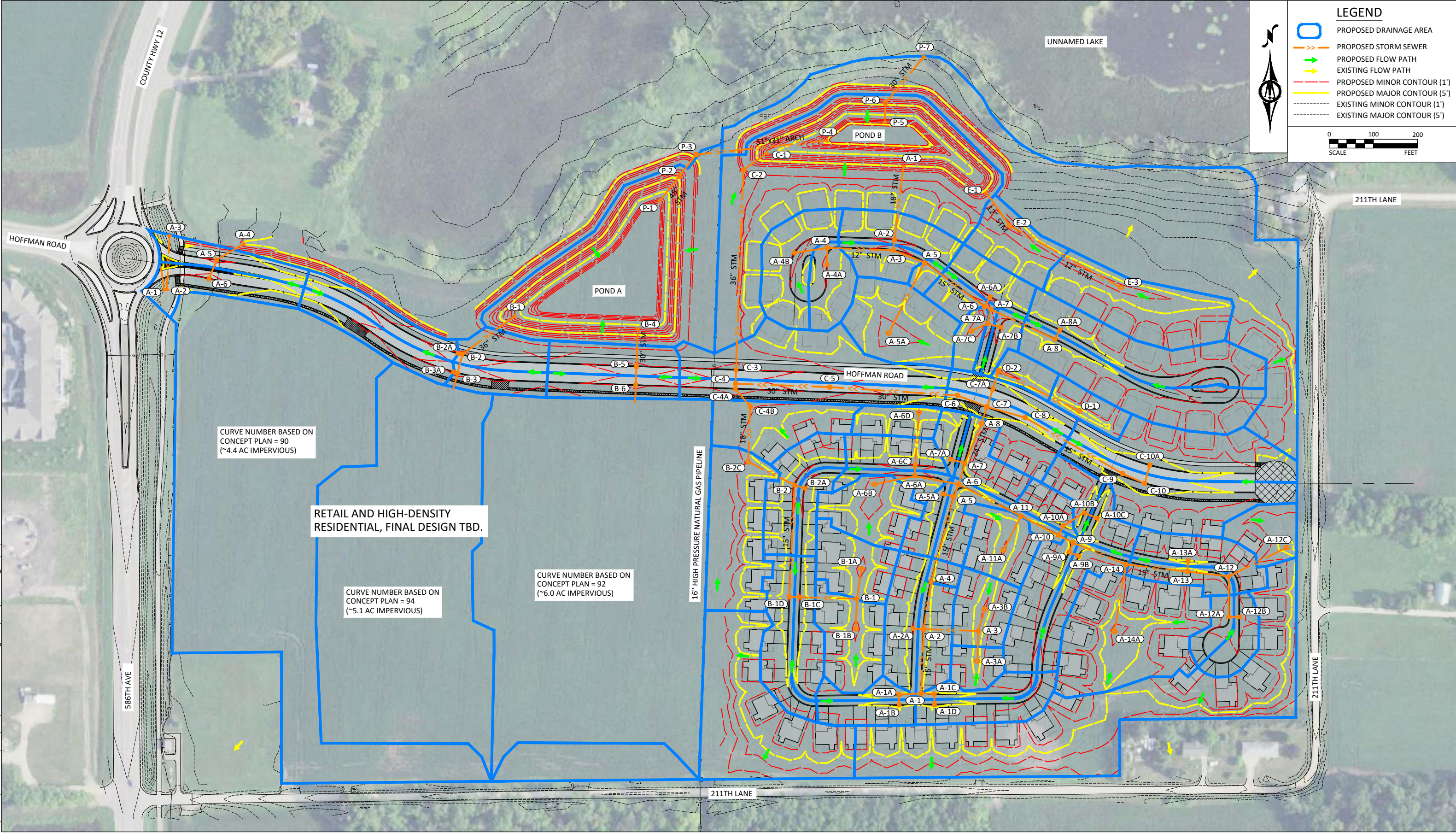
The goal of the Mesenbrink Subdivision is to continue to provide growth in the City of Mankato through various types of needs, thus includes opportunities for multiple types of housing as well as business. As has been discussed in this report, its storm sewer system has been designed to properly manage the stormwater runoff that the subdivision will produce, which includes minimizing the effects on the DNR managed area that the water will ultimately outlet to. Drainage patterns overall will remain relatively unchanged while also providing drainage capacity once the project is completed. The proposed design meets the MPCA NPDES Construction Stormwater Permit and the Mankato Grading manual requirements and all impacted wetlands will be mitigated for.

This report is being provided along with the proposed construction plans for the project. Please refer to the plan for additional design details.

Please feel free to contact me with any questions or comments about this report at Alec.Pietz@Bolton-Menk.com or by phone at (507) 766-3283.

Appendix A: Figures





Appendix B: Water Quality Spreadsheet & Subbasin Table



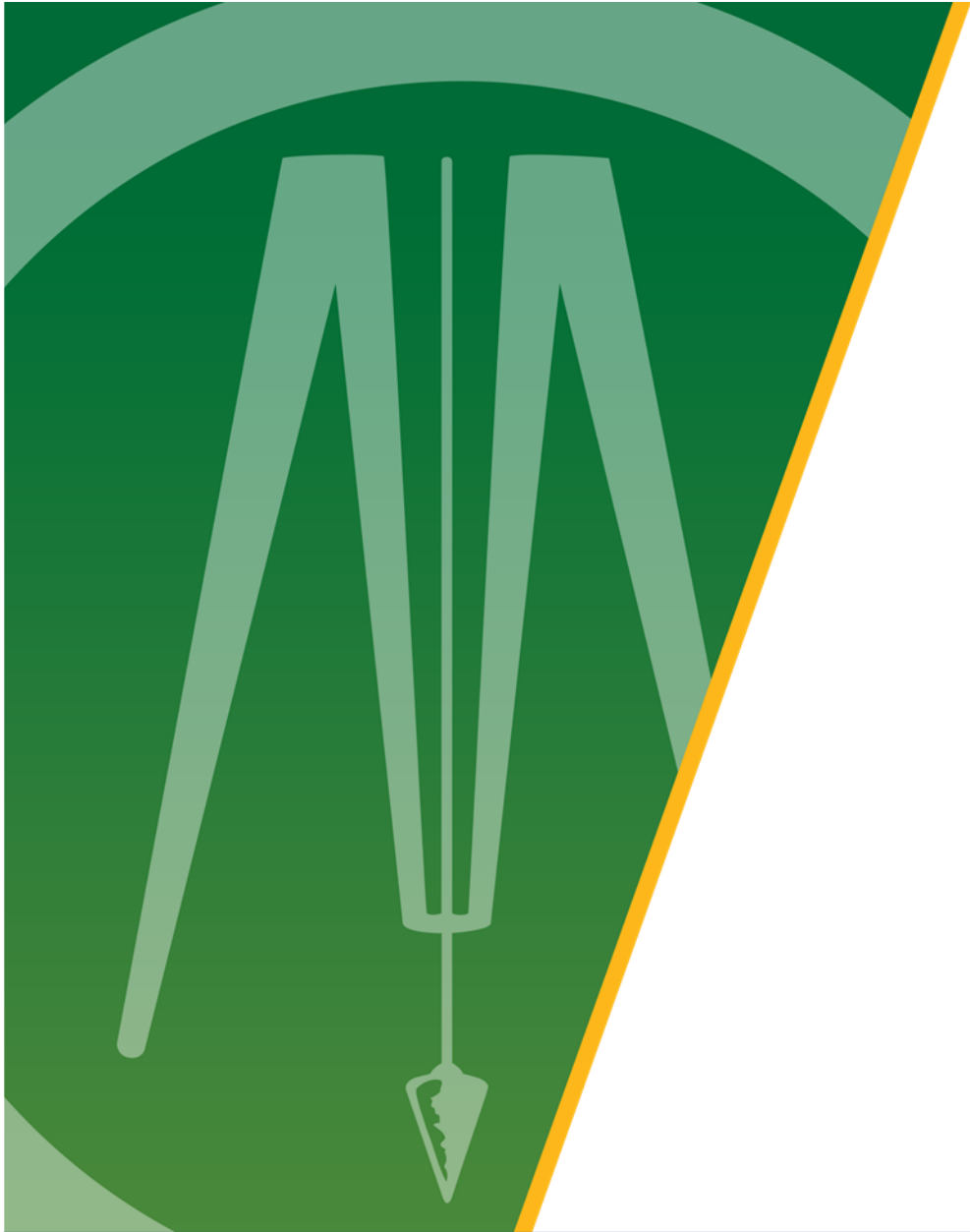
POND A & B COMBINED

Area Flowing to Proposed Basin	74.86 ac
Newly constructed impervious area =	32.30 ac
Required Water Quality Volume (WQV)= (1.1" over new impervious area)	2.96 ac-ft
Designed WQV =	18.48 ac-ft
Water surface elevation at WQV bounce =	1006.81 ft
Surface area at WQV bounce =	2.41 ac
Allowable Water Quality Release Rate =	13.65 cfs
Designed Water Quality Release Rate = (From hydraulic modeling)	5.10 cfs
Required Volume Below Outlet (dead storage) = (1800 CF Per Acre of Drainage Area)	3.09 ac-ft
Designed Volume Below Outlet (dead storage) =	6.74 ac-ft

	ELEV. (FT)	AREA (AC)	VOLUME (AC-FT)	AREA (SQ-FT)
	1013.5	0.00	0.00	
	1013.0	3.87	29.37	168363
	1012.0	3.61	25.64	157327
	1011.0	3.37	22.15	146623
	1010.0	3.13	18.90	136211
	1009.0	2.89	15.89	126103
	1008.0	2.67	13.11	116282
	1007.0	2.45	10.55	106761
	1006.0	2.24	8.20	97538
NWL	1005.50	1.96	7.15	85549
SAFETY BENCH	1005.0	1.87	6.19	81445
	1004.0	1.42	4.55	61723
	1003.0	1.29	3.19	56356
	1002.0	1.18	1.96	51305
	1001.0	1.07	0.84	46564
	1000.0	0.21	0.19	9258
	999.0	0.18	0.00	7716

Mesenbrink Construction Mesenbrink Subdivision BMI Project No. 0M1.128460.000			
Subbasin Details			
INLET	AREA (AC)	CURVE NUMBER	TIME OF CONCENTRATION (MIN.)
A-10 (SOUTH)	0.08	89.41	07
A-10A (SOUTH)	0.23	89.44	08
A-10B (SOUTH)	0.26	89.12	13
A-10C (SOUTH)	0.25	90.49	13
A-12A (SOUTH)	0.20	91.92	08
A-12B (SOUTH)	0.30	90.31	08
A-13 (SOUTH)	0.26	90.41	08
A-13A (SOUTH)	0.51	88.73	13
A-1A (SOUTH)	0.16	89.28	08
A-1B (SOUTH)	0.29	89.30	13
A-1C (SOUTH)	0.21	88.45	08
A-1D (SOUTH)	0.43	89.33	13
A-2 (NORTH)	0.46	88.91	13
A-2 (SOUTH)	0.41	89.14	13
A-2A (SOUTH)	0.53	88.87	13
A-3 (NORTH)	0.28	89.77	13
A-4 (SOUTH)	0.09	89.47	13
A-4A (NORTH)	0.40	89.78	16
A-4B (NORTH)	0.71	89.03	15
A-5	0.39	90.51	07
A-5 (NORTH)	0.09	89.55	07
A-5 (SOUTH)	0.33	90.33	08
A-5A (SOUTH)	0.21	90.07	08
A-6	0.52	88.96	07
A-6 (NORTH)	0.20	89.74	08
A-6A (NORTH)	0.36	88.83	13
A-6A (SOUTH)	0.19	91.01	07
A-6C (SOUTH)	0.38	89.02	13
A-7 (SOUTH)	0.40	89.46	13
A-7A (NORTH)	0.06	94.47	07
A-7A (SOUTH)	0.17	90.20	07
A-7B (NORTH)	0.18	91.40	08
A-8 (NORTH)	1.12	89.26	13
A-8A (NORTH)	1.06	89.40	13
A-9A (SOUTH)	0.58	88.91	13
A-9B (SOUTH)	0.41	90.49	13
B-1C (SOUTH)	0.42	89.89	13
B-1D (SOUTH)	0.55	89.18	13
B-2	0.37	87.28	07
B-2 (SOUTH)	0.56	88.75	13
B-2A	0.38	92.78	07
B-2A (SOUTH)	0.24	90.67	07
B-3	0.28	90.36	07
B-3A	0.46	90.89	07
B-5	0.48	88.33	07
B-6	0.36	89.40	07
C-11	1.08	91.07	13
C-11A	1.10	90.80	13
C-4	1.21	90.49	21
C-5A	0.65	90.21	09
C-8	0.55	90.98	13
C-8A	0.33	92.50	07

Appendix C: Supporting Documents



Hydraulic Analysis for Unnamed Lake ID #07007100

Mesenbrink Development

City of Mankato, Minnesota
May 2024

Submitted by:
Bolton & Menk, Inc.
1960 Premier Drive
Mankato, MN 56001-5900
P: (507) 625-4171



Certification

Hydraulic Analysis

For

Unnamed Lake #07007100

Mesenbrink Development
City of Mankato, MN
Blue Earth County

OM1.128460

~~December 2023~~
May 2024

PROFESSIONAL ENGINEER

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

Signature: 
Typed or Printed Name: Roberta Cronquist
Date: 5/29/2024 License Number: 52570

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I. Project Background

The proposed Mesenbrink development is located directly east of County State Aid Highway No. 12/586th Ave and north & west of 211th Lane. The project is proposing to convert approximately 105 acres of agricultural land to mixed residential/retail, high density residential, and medium density residential land uses. The development will include the construction of new roadways and full utilities including sanitary sewer, watermain, and storm sewer. The newly platted parcels are being developed in conformance with City of Mankato zoning codes and will be annexed into the City of Mankato.

The Mesenbrink development project is proposing an increase of 29.7 acres of impervious area. Two large wet ponds are proposed to meet water quality and rate control requirements set by the City of Mankato and the NPDES Stormwater Construction Permit. This memo serves to provide a hydraulic analysis of the Unnamed Lake #07007100, referred to as Unnamed Lake in this report, which serves as the stormwater outlet for both ponds in this development.

Unnamed Lake is approximately 100 acres in size and is recognized as a Minnesota Public Water by the MNDNR. Unnamed Lake discharges south through Blue Earth County Ditch No. 12 and meanders south and west through the City of Mankato and eventually discharges to the Le Sueur River. The SCS TR-20 hydrology method was utilized in XPSWMM Version 2020.1 (x64) for the following analysis. XPSWMM models were developed for the historic, existing, and proposed conditions to analyze the cumulative impacts of development. NOAA Atlas 14 rainfalls for Mankato, Minnesota were used to develop rainfall events.

II. Vicinity Map

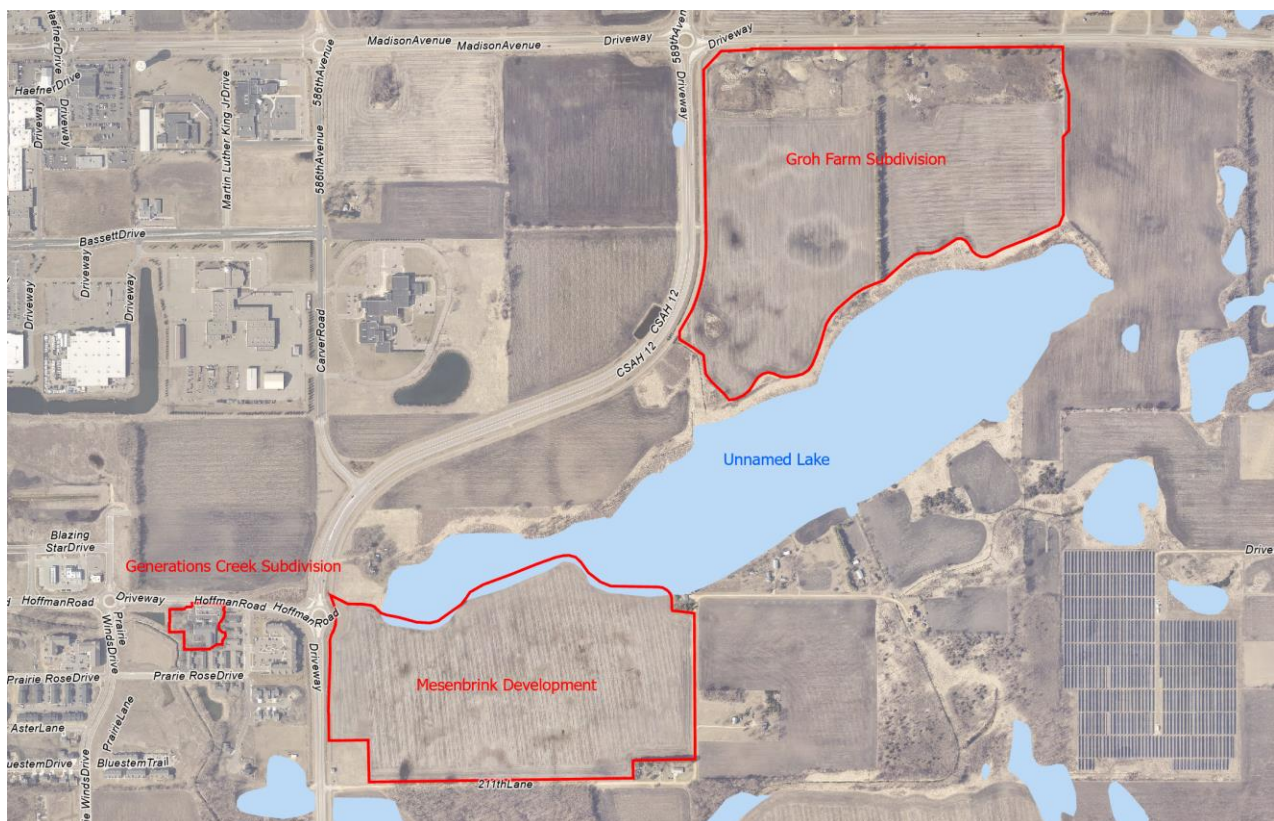


Figure 1: Vicinity Map
(not to scale)

III. Historical Model

Unnamed Lake has a drainage areas of approximately 1.7 square miles, or 1,090 acres. This drainage area consists of row crops, rural housing, a solar farm, and undeveloped space. The historical model reflects surface water conveyance and landuse types entering Unnamed Lake from prior to 2020. The entire drainage area to Unnamed Lake was included in the model to fully identify proposed impacts to Unnamed Lake.

Existing conditions models for each of the development area were used to build the historical XPSWMM model. These have all been previously submitted to and approved by the MNDNR. See Appendix D for the existing models that were utilized for this study.

Unnamed Lake was surveyed by the MNDNR in 2013 and an additional western node was added to the PWI. This location was included in the modeling as storage capacity underneath the OHWL elevation of 1004.6 feet. Unnamed Lake, its watershed outside of the three project boundaries, and County Ditch No. 12 remained unchanged throughout the models.

The main outlet for Unnamed Lake is County Ditch No. 12. The upstream section from Unnamed Lake to Highway 22 was included in the model to effectively model tailwater impacts. Several culvert crossings were included in the model from the Mankato GIS database, Bolton & Menk surveys, various as built plans, and published MNDNR reports online. All data links and references are attached in Appendix C.

For each model a 5, 10, 25, 50, 100, and 500-year storm event was modeled for 24, 48, and 72-hour rainfall events. A Huff Distribution was utilized to determine rainfall distributions for each of the previously listed events (Huff, 1990). See Appendix A for water surface elevations at Unnamed Lake and at road crossings along County Ditch No. 12 from Unnamed Lake to Highway 22. The Atlas 14 Rainfall Precipitation Depth estimates used for the storms can be seen in Table 1.

Table 1: Atlas 14 Precipitation Depths

Precipitation Depths for Mankato, MN (IN)						
Frequency	5-YR	10-YR	25-YR	50-YR	100-YR	500-YR
24-HR	3.61	4.29	5.34	6.24	7.21	9.79
48-HR	3.94	4.61	5.67	6.60	7.62	10.40
72-HR	4.24	4.92	6.00	6.93	7.96	10.70

IV. Existing Model

The existing XPSWMM model reflects landuse conditions as of December 2023. Full-buildout conditions of the Groh Farm and Generations Creek Subdivisions located northeast and due west, respectively, of Unnamed Lake were included in place of their existing models. Both models were left intact as they have gone through previous permitting applications with the MNDNR. Outfall conveyances were slightly edited to establish logical connections to Unnamed Lake. The Groh Farm and Generations Creek Subdivision altered land uses from primarily row crops to single family residential, multi-residential, and commercial land uses. As expected, the high water surface elevation in Unnamed Lake rose slightly with the impervious increases.

V. Proposed Modeling

The proposed model reflects the full buildout plans of the Mesenbrink Development southwest of Unnamed Lake. The Mesenbrink Development will alter 105 acres of land from row crops to single family residential, multi-residential, and commercial land uses.

Two proposed wet ponds will provide water quality treatment and rate control on the north side of the development and discharge to Unnamed Lake. The two ponds will provide adequate storage and rate control for the City of Mankato and NPDES rules. The pond outlets are designed to have a minimal grading impact to Unnamed Lake by discharging near the OHWL elevation and boundary.

VI. Model Results

The model results indicated a general increase in the bounce of Unnamed Lake from the historical model to the existing and proposed model. In the 24-hour, 100-year storm the water surface elevation goes from 1007.16 in the historical model to 1007.29 in the existing and 1007.53 in the proposed. The raised water surface elevations are consistent with impervious area increases. The models are increasingly varied with larger storm events.

Table 2: Unnamed Lake Water Level Changes

Unnamed Lake Water Level Changes									
Frequency	5-yr			10-yr			100-yr		
Condition	Existing	Proposed	Change	Existing	Proposed	Change	Existing	Proposed	Change
24-HR	1005.80	1005.93	0.13	1006.09	1006.24	0.15	1007.29	1007.53	0.24
48-HR	1005.90	1006.04	0.14	1006.15	1006.32	0.16	1007.31	1007.56	0.25
72-HR	1005.90	1006.33	0.44	1006.14	1006.65	0.51	1007.23	1008.03	0.79

See Appendix A for an expanded table of water level impacts and storm events listed in the Unnamed Lake Water Surface Elevation Comparison Table.

VII. Summary

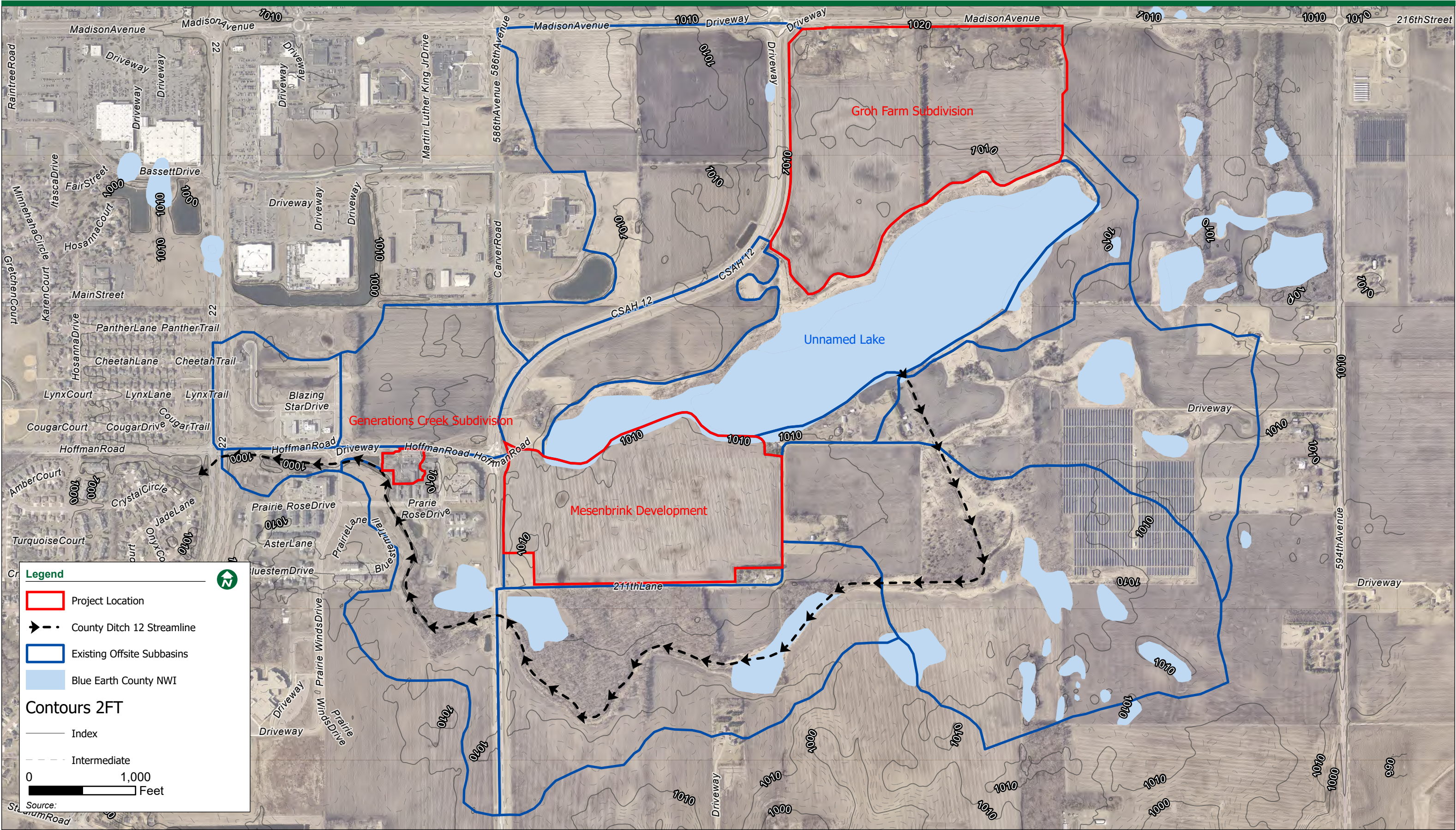
The Mesenbrink Development will increase the 24-hour, 100-year rainfall event high water level of Unnamed Lake by 0.24 feet. This is an expected impact from an addition of 29.7 acres of impervious surface. This impact is expected to be negligible on the overall system given the size and capacity of the lake and outlet channel. The City of Mankato Construction Storm Water Rules and the NPDES Construction Storm Water Permit rules for water quality treatment and rate control are being met through the use of two well designed wet ponds on the north side of the property.

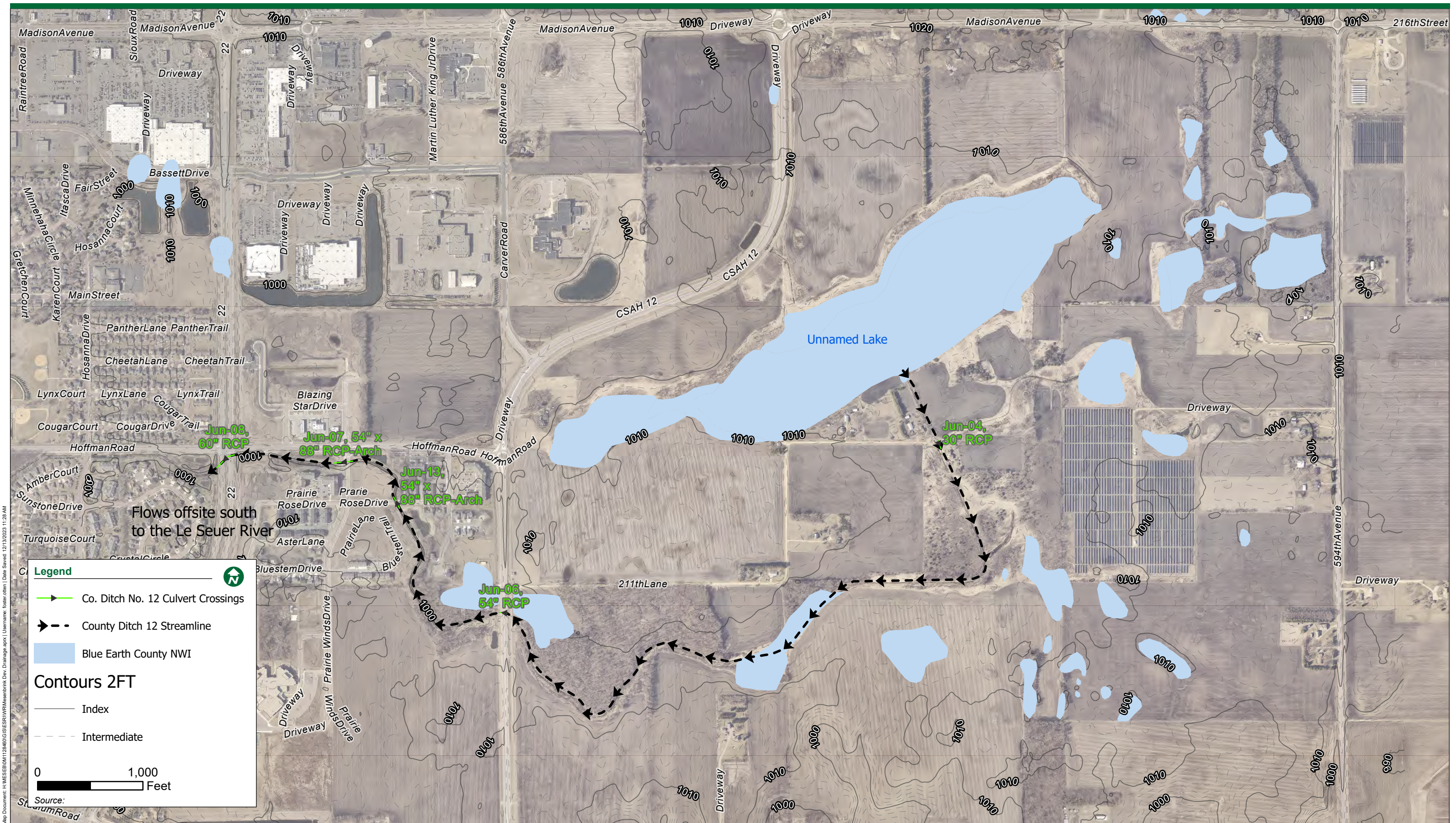
Additional benefits to Unnamed Lake by the Mesenbrink Development include reduction in sediment and fertilizer loading. Fish and waterfowl habitat will not be negatively impacted through the increased water level bounce.

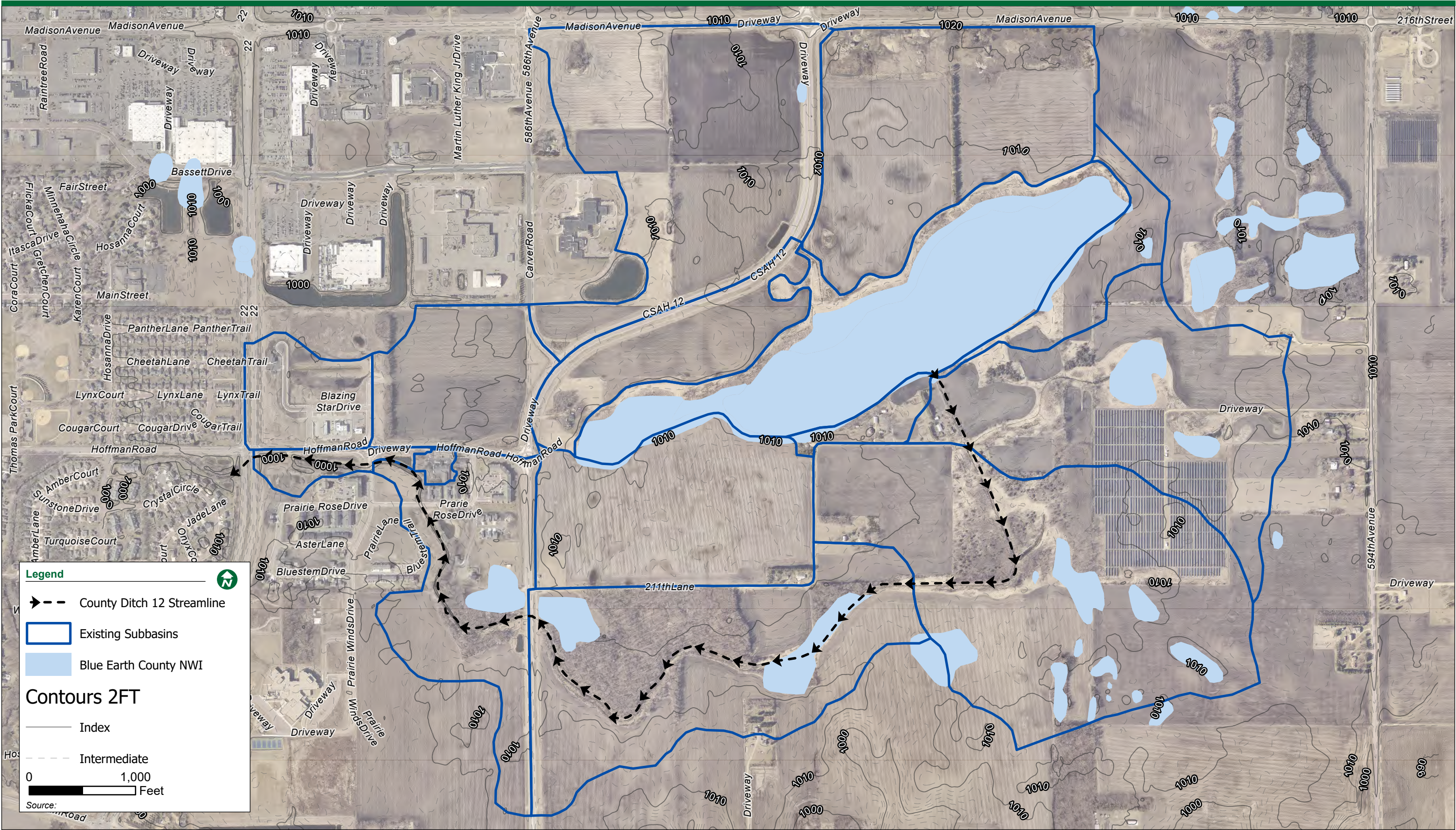
Appendix A: Water Surface Elevation Table

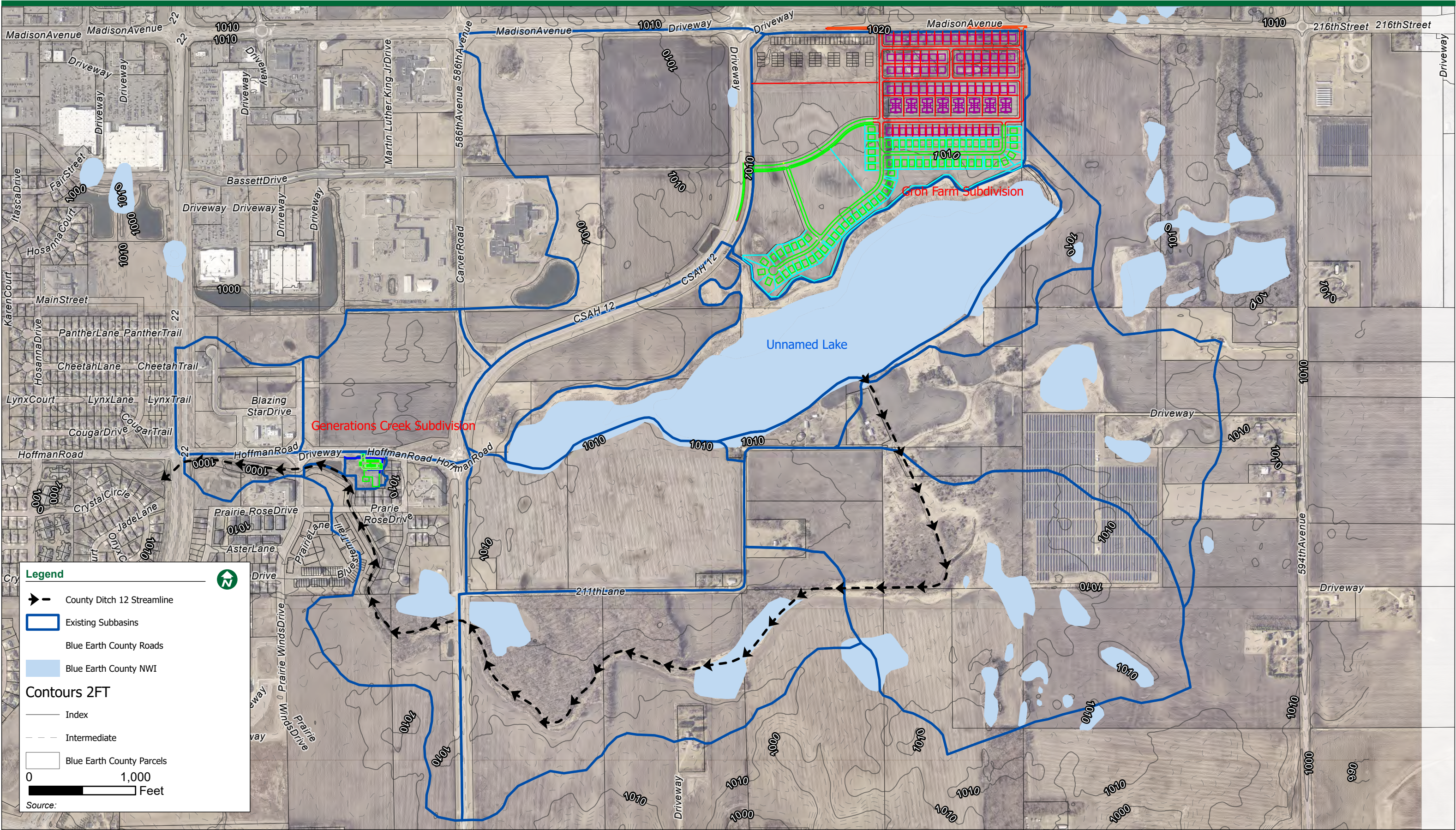
Unnamed Lake Water Surface Elevation Comparison								
Model	Return Frequency	Node	Stor-19	Jun-04	Jun-06	Jun-13	Jun-07	Jun-08
		Location / Crossing	Unnamed Wetland	Field Entrance	CSAH 12	Prairie Rose Drive	Prairie Wing Drive	Highway 22
Historical Model (Pre-2022 Conditions)	24-HR	5-yr	1005.72	1005.57	1002.47	1001.38	1001.00	999.58
		10-yr	1006.00	1005.97	1003.49	1002.02	1001.51	999.91
		25-yr	1006.42	1006.83	1005.01	1002.97	1002.26	1000.34
		50-yr	1006.78	1007.56	1006.21	1003.72	1002.85	1000.63
		100-yr	1007.16	1008.34	1007.41	1004.55	1003.48	1000.91
		500-yr	1008.15	1011.25	1010.33	1006.43	1004.97	1001.54
	48-HR	5-yr	1005.81	1005.67	1002.38	1001.33	1000.96	999.55
		10-yr	1006.05	1005.94	1003.17	1001.81	1001.34	999.81
		25-yr	1006.45	1006.55	1004.40	1002.58	1001.96	1000.17
		50-yr	1006.79	1007.12	1005.42	1003.22	1002.47	1000.45
		100-yr	1007.17	1007.74	1006.50	1003.90	1002.99	1000.71
		500-yr	1008.18	1010.06	1009.09	1005.65	1004.38	1001.32
	72-HR	5-yr	1005.81	1005.51	1001.78	1000.98	1000.68	999.37
		10-yr	1006.05	1005.83	1002.43	1001.39	1001.02	999.62
		25-yr	1006.42	1006.27	1003.43	1002.03	1001.53	999.95
		50-yr	1006.75	1006.61	1004.26	1002.55	1001.96	1000.20
		100-yr	1007.11	1007.02	1005.16	1003.12	1002.41	1000.44
		500-yr	1008.04	1008.42	1007.40	1004.60	1003.56	1000.98
Existing Model (Includes Groh Farm & Generations Creek Subdivisions)	24-HR	5-yr	1005.80	1005.63	1002.48	1001.39	1001.00	999.59
		10-yr	1006.09	1006.02	1003.50	1002.03	1001.51	999.91
		25-yr	1006.52	1006.87	1005.02	1002.97	1002.25	1000.33
		50-yr	1006.89	1007.53	1006.22	1003.72	1002.84	1000.62
		100-yr	1007.29	1008.37	1007.42	1004.55	1003.47	1000.90
		500-yr	1008.31	1011.28	1010.32	1006.42	1004.95	1001.52
	48-HR	5-yr	1005.90	1005.76	1002.41	1001.35	1000.97	999.56
		10-yr	1006.15	1006.04	1003.19	1001.82	1001.34	999.81
		25-yr	1006.56	1006.61	1004.42	1002.59	1001.96	1000.17
		50-yr	1006.92	1007.17	1005.44	1003.23	1002.46	1000.44
		100-yr	1007.31	1007.79	1006.52	1003.90	1002.99	1000.70
		500-yr	1008.35	1010.13	1009.10	1005.65	1004.36	1001.30
	72-HR	5-yr	1005.90	1005.59	1001.81	1000.99	1000.70	999.38
		10-yr	1006.14	1005.91	1002.46	1001.40	1001.03	999.63
		25-yr	1006.53	1006.37	1003.46	1002.04	1001.54	999.96
		50-yr	1006.86	1006.73	1004.30	1002.57	1001.96	1000.20
		100-yr	1007.23	1007.12	1005.19	1003.13	1002.41	1000.44
		500-yr	1008.19	1008.51	1007.43	1004.61	1003.56	1000.98
Proposed Model (Mesenbrink Development)	24-HR	5-yr	1005.93	1005.73	1002.36	1001.31	1000.94	999.54
		10-yr	1006.24	1006.08	1003.36	1001.91	1001.42	999.86
		25-yr	1006.71	1006.90	1004.83	1002.82	1002.14	1000.27
		50-yr	1007.11	1007.55	1006.01	1003.53	1002.70	1000.55
		100-yr	1007.53	1008.34	1007.19	1004.31	1003.29	1000.83
		500-yr	1008.63	1011.20	1009.94	1006.06	1004.70	1001.43
	48-HR	5-yr	1006.04	1005.86	1002.31	1001.27	1000.91	999.51
		10-yr	1006.32	1006.17	1003.07	1001.72	1001.26	999.76
		25-yr	1006.76	1006.68	1004.27	1002.46	1001.85	1000.11
		50-yr	1007.14	1007.23	1005.26	1003.06	1002.34	1000.38
		100-yr	1007.56	1007.83	1006.31	1003.69	1002.84	1000.63
		500-yr	1008.67	1010.09	1008.79	1005.34	1004.14	1001.22
	72-HR	5-yr	1006.33	1009.45	1006.30	1003.40	1002.42	1000.34
		10-yr	1006.65	1011.33	1007.61	1004.23	1003.03	1000.62
		25-yr	1007.16	1014.08	1009.43	1005.32	1003.88	1000.97
		50-yr	1007.58	1015.28	1010.84	1006.13	1004.60	1001.25
		100-yr	1008.03	1016.03	1011.87	1006.81	1005.38	1001.53
		500-yr	1009.14	1017.06	1013.39	1008.37	1007.28	1002.66

Appendix B: GIS Workmaps

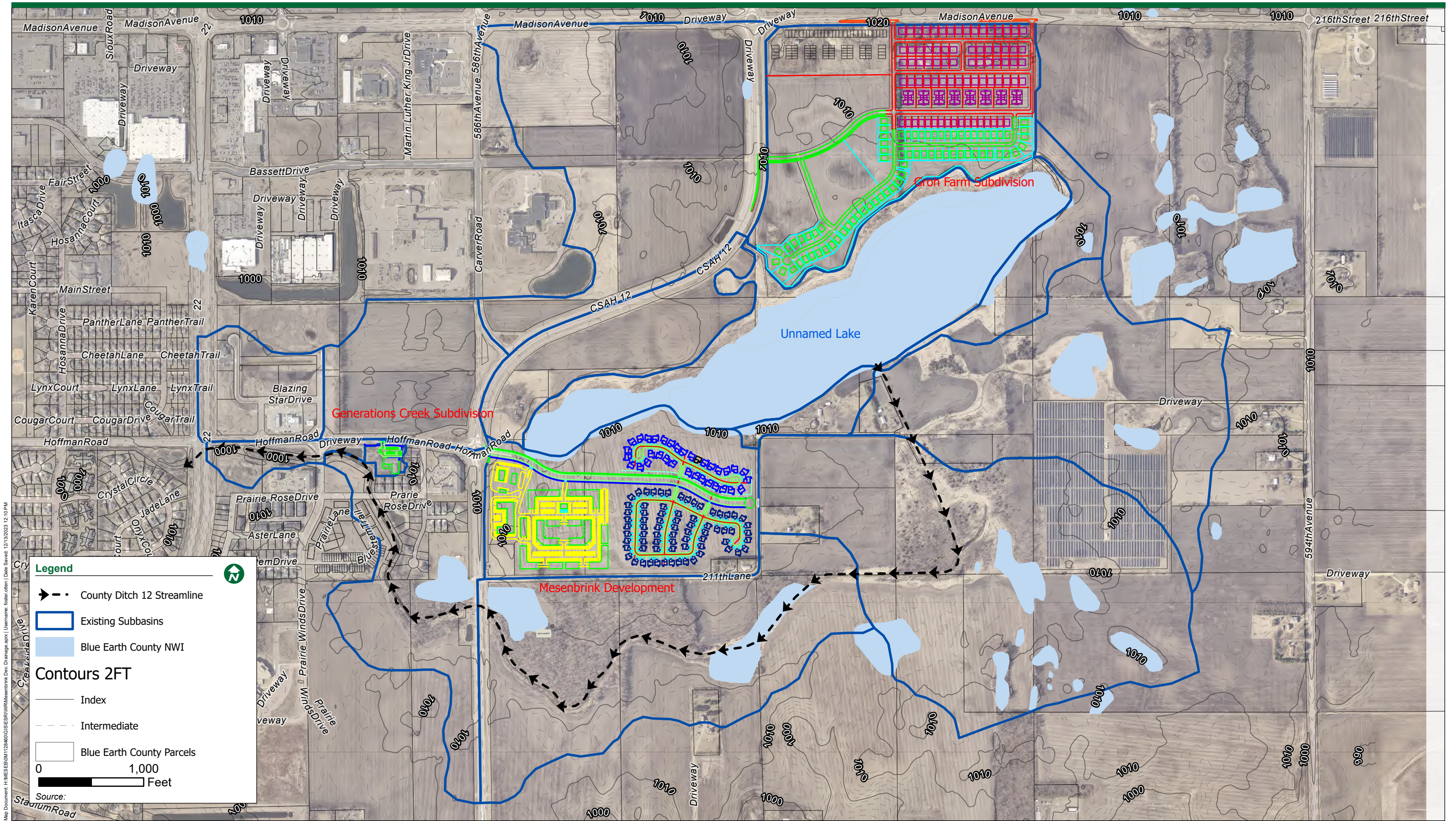






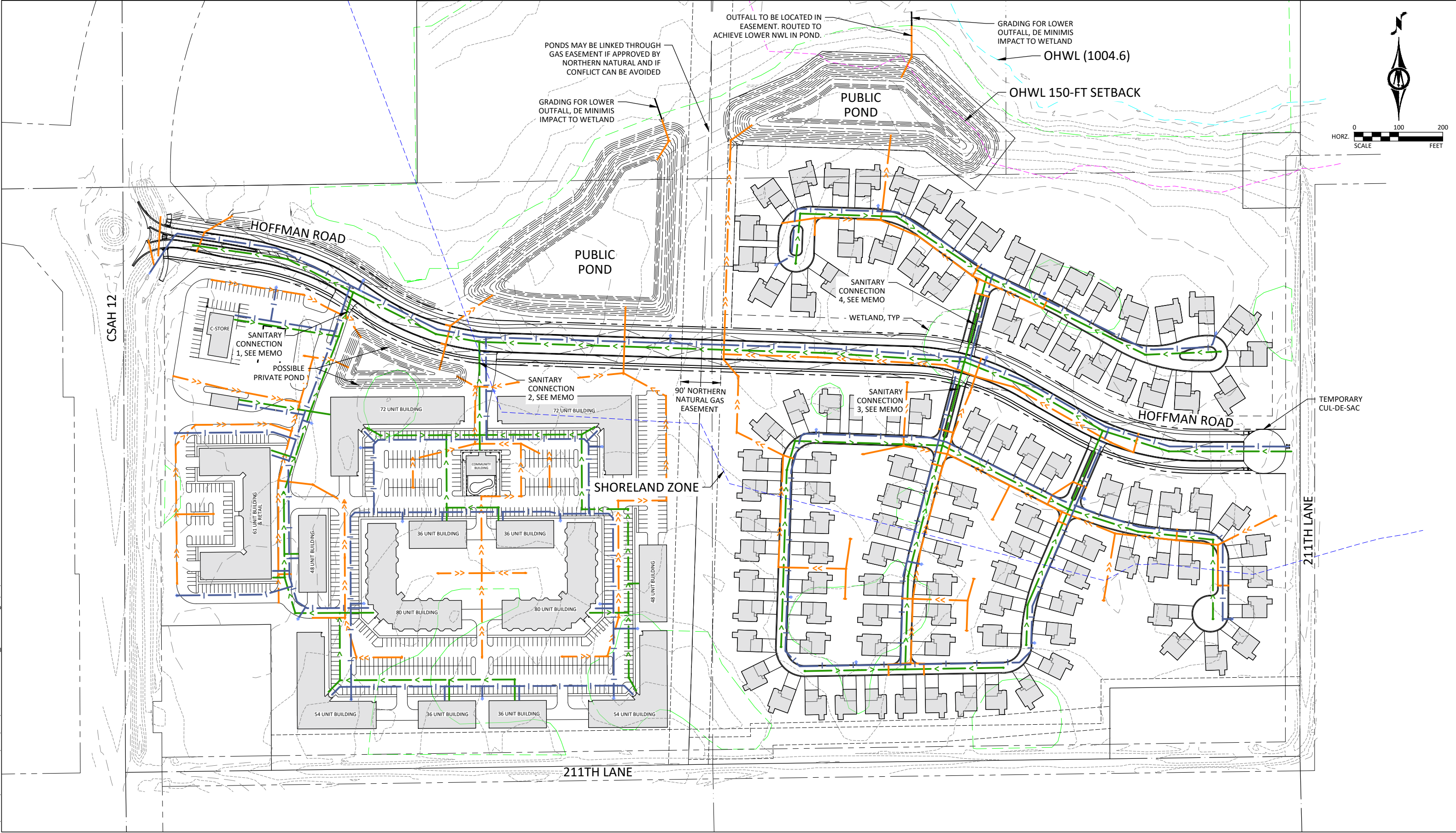


Map Document: H:\MES\EB\01128460\GIS\ESR\W\Mesenbrink Dev. Drainage.aprx | Date Saved: 12/13/2023 11:58 AM | Username: foster.cotton



Map Document: H:\MESBRINK\128460\GIS\SSR\WPR\Mesenbrink Dev. Drainage.aprx | Username: fester.cullen | Date Saved: 12/13/2023 12:10 PM

Appendix C: Supporting Documentation



Appendix D: Digital XPSWMM Modeling Files

October 15, 2024

Mark Konz
City of Mankato Associate Director – Planning and Development Services
10 Civic Center Plaza
PO Box 3368
Mankato, MN 56002

RE: Mesenbrink Subdivision Final Plat Review

Dear Mr. Konz,

Thank you for your cooperation throughout the review process. Currently, DNR does not have any further comments on the submitted plat. At this time, a Public Waters Work Permit (PWWP) application has been submitted to DNR regarding the impact to Unnamed Basin #07-71W and DNR is continuing to work with the permittee during the review process.

The preliminary plat for the Mesenbrink subdivision was approved by the Mankato City Council on March 27, 2024 with a number of conditions including the following:

“Prior to submission of a final plat or a planned unit development, the applicant shall have applied for and obtained all necessary Public Waters Work Permit(s) from the Department of Natural Resources, DNR, for the proposed project.”

Currently, a PWWP application has been submitted to DNR and is under review – no PWWP has presently been issued. Given the requirements and timeline of the PWWP application review process, it may be appropriate for the City of Mankato to consider the final plat before the City Council at this time prior to the issuance of a Public Waters Work Permit as there have been no additional changes made to the final plat plan since the last DNR review.

It is important to note that approval of the final plat does not preclude or replace the required issuance of a PWWP and work on the project may not commence until a PWWP is received.

Thank you for your consideration and please let me know if any additional questions arise.

Sincerely,



Erynn Jenzen
Area Hydrologist
507-389-8809

EC: Todd Kolander, DNR District Manager
 Katie Wigen, DNR Area Hydrologist
 Dan Petrik, DNR Lake & River Shoreland Program Manager
 Molly Westman, City of Mankato Planning Coordinator
 Dan Donayre, Bolton & Menk Natural Resource Project Manager
 Nate Myhra, Bolton & Menk Survey Project Manager

Flexible Pavement Design, R-Value Method

Ver. 1.2

For Bituminous Pavement With Aggregate Base

Inputs

20 Yr Design Lane BESALs =

2,266,000

Design R-value =

10.0

Project Number

Hoffman Road - Heavy-Duty Pavement

Designer

Alec W. Pietz, P.E.

Date

5/25/2023

GE Values from R-Value Chart

Minimum Bit (GE) = 12.07

Min. Agg. Base (GE) = 6.00

Total Required GE = 36.90



Calculated Pavement Thickness to Meet GE Requirement				
		Thickness (in)	GE	Layer GE
(2360) Wearing Course		4.00	2.25	9.00
(2360) Non-wearing Course		1.36	2.25	3.07
Bituminous Total		5.36	2.25	12.07
		Thickness (in)	GE	Layer GE
Aggregate Base	Class 5, 5Q or 6	6.00	1.00	6.00
Sub Base	Class 3 or 4	12.00	0.75	9.00
Select Granular		19.67	0.50	9.83
	Total	43.03	Total	36.90
	Required*	30.00	Required	36.90

Proposed Pavement Thickness				
New Bituminous		Thickness (in)	GE	Layer GE
Wearing Course	Superpave HMA [2360]	▼ 1.5	2.25	3.38
Non-wearing Course	Superpave HMA [2360]	▼ 4.0	2.25	9.00
New Bituminous Total		5.5		12.38
Left In-place Bituminous *1		Thickness (in)	GE	Layer GE
In-Place Bituminous	Plant Mix HMA [2350(HV & MV)]	▼	2.00	0.00
Condition *2	Good	▼		
	Class	Thickness (in)	GE	Layer GE
Aggregate Layer 1	Aggregate Base (Cl. 5,5Q & 6)	▼ 18.0	1.00	18.00
Aggregate Layer 2	Select Granular	▼ 12.0	0.50	6.00
Aggregate Layer 3	Multiaxial Geogrid *8	▼ 1.0	2.00	2.00
Select Granular			0.50	0.00
Aggregate Total		31.0		26.00
	Total	36.50	Total	38.38
			Required	36.90
Messages				
Total GE: GOOD				
Bituminous Thickness: GOOD				
Total Aggregate Base Thickness: GOOD				

Last Edited 6/5/19

State Aid 10 Ton ESAL Traffic Forecast Calculator

This ESAL calculator is for use with **default Heavy Commercial Traffic values**; click "User Defined Traffic Values" sheet below if you wish to enter your own Heavy Commercial Traffic values.

Instructions: All yellow boxes require an input value.

Dropdown choices are provided for Base Year (C18), Number of Lanes (C19), and Urban or Rural (C21).

You must click on cells C18, C19, and C21 to access the dropdown choices.

General Information

Date

Forecast Performed by

Name of County or City

Project Number

Project Description

Route Number

Base Year (i.e. opening to traffic)

Number of Lanes (total both directions)

Current AADT

Urban or Rural

Historical AADT (enter a minimum of two years)

Enter oldest traffic data here

Enter second oldest traffic data here

Enter third oldest traffic data here

Enter fourth oldest traffic data here

Base Year AADT

20-Year AADT

35-Year AADT

Growth Rate

Hoffman Road - Heavy-Duty Pavement

2024	
1 = single lane	
9,000	
Urban	
Year	AADT
2022	9,000
2023	9,000

2024	9,000
2044	9,000
2059	9,000
	0.00%

Vehicle Type	Vehicle Class %	ESAL Factors	
		Flexible	Rigid
2AX-6TIRE SU	1.45%	0.25	0.24
3AX+SU	0.09%	0.58	0.85
3AX TST	0.12%	0.39	0.37
4AX TST	0.24%	0.51	0.53
5AX+TST	1.76%	1.13	1.89
TR TR, BUSES	0.64%	0.57	0.74
TWIN TRAILERS	0.00%	2.40	2.33
Total	4.29%	NA	NA

20-Year Flexible Forecast (10 Ton) =	2,266,000
20-Year Rigid Forecast (10 Ton) =	3,392,000
35-Year Flexible Forecast (10 Ton) =	3,885,000
35-Year Rigid Forecast (10 Ton) =	5,815,000

Note: This ESAL Calculator provides reasonable estimation of ESAL's based on accurate AADT values. It is limited to an AADT value of 20,000. For roadways exceeding an AADT of 20,000, it is recommended to use the MnDOT ESAL Forecasting Tool found on MnDOT's Pavement Design web page at:

<http://www.dot.state.mn.us/materials/pvmtdesign/software.html>

Flexible Pavement Design, R-Value Method

Ver. 1.2

For Bituminous Pavement With Aggregate Base

Inputs

20 Yr Design Lane BESALs =

937,000

Design R-value =

10.0

Project Number

Hoffman Road - Standard Duty Pavement

Designer

Alec W. Pietz, P.E.

Date

8/26/2024

GE Values from R-Value Chart

Minimum Bit (GE) = 9.30

Min. Agg. Base (GE) = 6.00

Total Required GE = 32.60



Calculated Pavement Thickness to Meet GE Requirement				
		Thickness (in)	GE	Layer GE
(2360) Wearing Course		4.00	2.25	9.00
(2360) Non-wearing Course		0.13	2.25	0.30
Bituminous Total		4.13	2.25	9.30
		Thickness (in)	GE	Layer GE
Aggregate Base	Class 5, 5Q or 6	6.00	1.00	6.00
Sub Base	Class 3 or 4	12.00	0.75	9.00
Select Granular		16.61	0.50	8.31
	Total	38.74	Total	32.60
	Required*	13.13	Required	32.60

Proposed Pavement Thickness				
New Bituminous		Thickness (in)	GE	Layer GE
Wearing Course	Superpave HMA [2360]	▼ 1.5	2.25	3.38
Non-wearing Course	Superpave HMA [2360]	▼ 3.0	2.25	6.75
New Bituminous Total		4.5		10.13
Left In-place Bituminous *1		Thickness (in)	GE	Layer GE
In-Place Bituminous	Plant Mix HMA [2350(HV & MV)]	▼	2.00	0.00
Condition *2	Good	▼		
	Class	Thickness (in)	GE	Layer GE
Aggregate Layer 1	Aggregate Base (Cl. 5,5Q & 6)	▼ 14.0	1.00	14.00
Aggregate Layer 2	Select Granular	▼ 12.0	0.50	6.00
Aggregate Layer 3	Multiaxial Geogrid *8	▼ 1.0	2.00	2.00
Select Granular			0.50	0.00
Aggregate Total		27.0		22.00
	Total	31.50	Total	32.13
			Required	32.60
Messages				
Total GE: GOOD				
Bituminous Thickness: GOOD				
Total Aggregate Base Thickness: GOOD				

Last Edited 6/5/19

State Aid 10 Ton ESAL Traffic Forecast Calculator

This ESAL calculator is for use with **default Heavy Commercial Traffic values**; click "User Defined Traffic Values" sheet below if you wish to enter your own Heavy Commercial Traffic values.

Instructions: All yellow boxes require an input value.

Dropdown choices are provided for Base Year (C18), Number of Lanes (C19), and Urban or Rural (C21).

You must click on cells C18, C19, and C21 to access the dropdown choices.

General Information

Date

Forecast Performed by

Name of County or City

Project Number

Project Description

Route Number

Base Year (i.e. opening to traffic)

Number of Lanes (total both directions)

Current AADT

Urban or Rural

Historical AADT (enter a minimum of two years)

Enter oldest traffic data here

Enter second oldest traffic data here

Enter third oldest traffic data here

Enter fourth oldest traffic data here

Base Year AADT

20-Year AADT

35-Year AADT

Growth Rate

Hoffman Road - Standard Duty Pavement

2024	
1 = single lane	
4,850	
Urban	
Year	AADT
2022	4,850
2023	4,850

2024	4,850
2044	4,850
2059	4,850
	0.00%

Vehicle Type	Vehicle Class %	ESAL Factors	
		Flexible	Rigid
2AX-6TIRE SU	1.10%	0.25	0.24
3AX+SU	0.07%	0.58	0.85
3AX TST	0.11%	0.39	0.37
4AX TST	0.21%	0.51	0.53
5AX+TST	1.25%	1.13	1.89
TR TR, BUSES	0.65%	0.57	0.74
TWIN TRAILERS	0.00%	2.40	2.33
Total	3.39%	NA	NA

20-Year Flexible Forecast (10 Ton) =	937,000
20-Year Rigid Forecast (10 Ton) =	1,384,000
35-Year Flexible Forecast (10 Ton) =	1,607,000
35-Year Rigid Forecast (10 Ton) =	2,372,000

Note: This ESAL Calculator provides reasonable estimation of ESAL's based on accurate AADT values. It is limited to an AADT value of 20,000. For roadways exceeding an AADT of 20,000, it is recommended to use the MnDOT ESAL Forecasting Tool found on MnDOT's Pavement Design web page at:

<http://www.dot.state.mn.us/materials/pvmtdesign/software.html>

		Luminaires		
		Wattage		Amps
		129		1.08
FPA - 120/240V		Max Voltage Drop		3.6
120	Volts	Current Voltage Drop		1.74316625
Conductor Resistance		0.41	Conductor Size	#6
Conduit Segment	Distance	Resistance	Current (amps)	Voltage Drop
SERVICE TO B1	25	0.01025	7.53	0.07713125
B1 TO B2	180	0.0738	6.45	0.47601
B2 TO B3	180	0.0738	5.38	0.396675
B3 TO B4	180	0.0738	4.30	0.31734
B4 TO B5	180	0.0738	3.23	0.238005
B5 TO B6	180	0.0738	2.15	0.15867
B6 TO B7	180	0.0738	1.08	0.079335

Conductor Size	Resistance
#12	1.62
#10	1.018
#8	0.6404
#6	0.41
#4	0.259
#2	0.162
#0	0.102
#00	0.0811

ATTENTION

To add more Conduit Segments,
Fill in the green & drag down the white table

		Luminaires		
		Wattage		Amps
		129		1.08
FPA - 120/240V		Max Voltage Drop		3.6
120	Volts	Current Voltage Drop		2.159675
Conductor Resistance		0.41	Conductor Size	#6
Conduit Segment	Distance	Resistance	Current (amps)	Voltage Drop
SERVICE TO C1	160	0.0656	7.53	0.49364
C1 TO C2	180	0.0738	6.45	0.47601
C2 TO C3	180	0.0738	5.38	0.396675
C3 TO C4	180	0.0738	4.30	0.31734
C4 TO C5	180	0.0738	3.23	0.238005
C5 TO C6	180	0.0738	2.15	0.15867
C6 TO C7	180	0.0738	1.08	0.079335

Conductor Size	Resistance
#12	1.62
#10	1.018
#8	0.6404
#6	0.41
#4	0.259
#2	0.162
#0	0.102
#00	0.0811

ATTENTION

To add more Conduit Segments,
Fill in the green & drag down the white table



ENGINEER'S PRELIMINARY COST ESTIMATE
MESENBRINK SUBDIVISION - MANKATO, MINNESOTA
 BMI Project No.: 0M1.128460

Item No.	MnDOT Item No.	Item	Notes	Estimated Quantity	Unit	Unit Price	Amount
1	2021.501	MOBILIZATION		1	LS	\$137,960.95	\$137,960.95
2	2104.502	REMOVE STREET FIXTURE		2	EA	\$1,000.00	\$2,000.00
3	2104.503	REMOVE SEWER PIPE (STORM)		50	LF	\$8.00	\$400.00
4	2104.503	SAWING BITUMINOUS PAVEMENT (FULL DEPTH)		500	LF	\$4.00	\$2,000.00
5	2104.503	REMOVE CURB AND GUTTER		350	LF	\$4.00	\$1,400.00
6	2104.504	REMOVE BITUMINOUS PAVEMENT		500	SY	\$6.00	\$3,000.00
7	2105.507	POND EXCAVATION (P)	(1) (5)	25300	CY	\$3.00	\$75,900.00
8	2105.507	TOPSOIL STRIP (EV) (P)	(2)	20000	CY	\$3.00	\$60,000.00
9	2105.507	COMMON EXCAVATION (EV) (P)	(3) (5)	2150	CY	\$3.00	\$6,450.00
10	2105.507	SELECT GRANULAR BORROW (CV) (P)		5150	CY	\$25.00	\$128,750.00
11	2105.604	GEOGRID		17200	SY	\$2.25	\$38,700.00
12	2106.507	COMMON EMBANKMENT (CV) (P)	(4)	23000	CY	\$3.00	\$69,000.00
13	2211.509	AGGREGATE BASE, CLASS 5 (CV) (P)		7500	CY	\$32.00	\$240,000.00
14	2360.504	TYPE SP 12.5 WEAR CRS MIX (3,C) 3.0" THICK (TEMPORARY CUL-DE-SAC)		875	SY	\$17.25	\$15,093.75
15	2360.504	TYPE SP 12.5 WEAR CRS MIX (3,C) 1.5" THICK (STREET WEAR COURSE)		12800	SY	\$10.25	\$131,200.00
16	2360.504	TYPE SP 12.5 NON WEAR CRS MIX (3,C) 1.5" THICK (2 LIFTS) (STANDARD DUTY SECTION)		11650	SY	\$9.25	\$107,762.50
17	2360.504	TYPE SP 12.5 NON WEAR CRS MIX (3,C) 2.0" THICK (2 LIFTS) (HEAVY DUTY SECTION)		13925	SY	\$11.75	\$163,618.75
18	2501.502	15" RC PIPE APRON		1	EA	\$1,750.00	\$1,750.00
19	2501.502	24" RC PIPE APRON		4	EA	\$2,750.00	\$11,000.00
20	2501.502	30" RC PIPE APRON		4	EA	\$3,500.00	\$14,000.00
21	2501.502	36" RC PIPE APRON		2	EA	\$4,500.00	\$9,000.00
22	2501.502	48" RC PIPE APRON		1	EA	\$6,000.00	\$6,000.00
23	2501.502	51" X 31" RC ARCH PIPE APRON		1	EA	\$6,500.00	\$6,500.00
24	2502.503	6" PERF PVC PIPE DRAIN, SDR 35		5800	LF	\$14.50	\$84,100.00
25	2502.602	6" PVC PIPE DRAIN CLEAN-OUT		22	EA	\$350.00	\$7,700.00
26	2503.503	15" RC PIPE SEWER DESIGN 3006		425	LF	\$70.00	\$29,750.00
27	2503.503	18" RC PIPE SEWER DESIGN 3006		15	LF	\$80.00	\$1,200.00
28	2503.503	24" RC PIPE SEWER DESIGN 3006		250	LF	\$115.00	\$28,750.00
29	2503.503	30" RC PIPE SEWER DESIGN 3006		950	LF	\$175.00	\$166,250.00
30	2503.503	36" RC PIPE SEWER DESIGN 3006		292	LF	\$225.00	\$65,700.00
31	2503.503	48" RC PIPE SEWER DESIGN 3006		136	LF	\$325.00	\$44,200.00
32	2503.503	51" X 31" RC ARCH PIPE		299	LF	\$400.00	\$119,600.00
33	2503.602	CONNECT TO EXISTING STORM SEWER		4	EA	\$1,000.00	\$4,000.00
34	2503.603	12" PIPE SEWER (STORM)		101	LF	\$50.00	\$5,050.00
35	2503.603	15" PIPE SEWER (STORM)		144	LF	\$60.00	\$8,640.00
36	2503.603	18" PIPE SEWER (STORM)		52	LF	\$70.00	\$3,640.00
37	2503.603	24" PIPE SEWER (STORM)		40	LF	\$90.00	\$3,600.00
38	2503.603	30" PIPE SEWER (STORM)		77	LF	\$125.00	\$9,625.00
39	2503.603	36" PIPE SEWER (STORM)		453	LF	\$175.00	\$79,275.00
40	2506.602	STORM SEWER CASTING ASSEMBLY		30	EA	\$850.00	\$25,500.00
41	2506.503	CONSTRUCT DRAINAGE STRUCTURE DESIGN 48-4020		25.0	LF	\$600.00	\$15,000.00
42	2506.503	CONSTRUCT DRAINAGE STRUCTURE DESIGN 60-4020		20.0	LF	\$850.00	\$17,000.00
43	2506.503	CONSTRUCT DRAINAGE STRUCTURE DESIGN 72-4020		23.0	LF	\$1,200.00	\$27,600.00
44	2506.503	CONSTRUCT DRAINAGE STRUCTURE DESIGN 84-4020		14.7	LF	\$1,750.00	\$25,725.00
45	2506.503	CONSTRUCT DRAINAGE STRUCTURE DESIGN 48-4022		15.0	LF	\$600.00	\$9,000.00
46	2506.503	CONSTRUCT DRAINAGE STRUCTURE DESIGN 60-4022		35.0	LF	\$850.00	\$29,750.00
47	2506.503	CONSTRUCT DRAINAGE STRUCTURE DESIGN 72-4022		6.2	LF	\$1,200.00	\$7,440.00
48	2506.602	CONSTRUCT DRAINAGE STRUCTURE MANKATO STD. 3		6	EA	\$3,000.00	\$18,000.00
49	2506.602	CONSTRUCT DRAINAGE STRUCTURE SPECIAL 1		1	EA	\$13,500.00	\$13,500.00
50	2511.507	RANDOM RIPRAP CLASS III/A		378	CY	\$80.00	\$30,240.00
51	2521.518	3" BITUMINOUS WALK		21300	SF	\$2.75	\$58,575.00
52	2521.518	4" CONCRETE WALK		12200	SF	\$7.50	\$91,500.00
53	2521.518	6" CONCRETE WALK		2250	SF	\$16.00	\$36,000.00
54	2531.503	CONCRETE CURB & GUTTER DESIGN B418		690	LF	\$18.00	\$12,420.00
55	2531.503	CONCRETE CURB & GUTTER DESIGN B424		925	LF	\$22.00	\$20,350.00
56	2531.503	CONCRETE CURB & GUTTER DESIGN B618		4850	LF	\$18.00	\$87,300.00
57	2531.504	4" CONCRETE MEDIAN		715	SY	\$55.00	\$39,325.00
58	2531.504	8" CONCRETE DRIVEWAY		455	SY	\$80.00	\$36,400.00
59	2531.618	TRUNCATED DOMES		256	SF	\$55.00	\$14,080.00
60	2545.502	LIGHTING UNIT TYPE E		14	EA	\$3,000.00	\$42,000.00
61	2545.502	LIGHTING UNIT TYPE SPECIAL		3	EA	\$3,750.00	\$11,250.00
62	2545.502	LUMINAIRE (LED)		20	EA	\$500.00	\$10,000.00
63	2545.502	LIGHT FOUNDATION DESIGN STEEL E		17	EA	\$1,015.00	\$17,255.00
64	2545.502	INSTALL LIGHTING SERVICE CABINET (MANKATO 100 AMP)		1	EA	\$3,500.00	\$3,500.00
65	2545.502	EQUIPMENT PAD		1	EA	\$3,000.00	\$3,000.00
66	2545.503	2" NON-METALLIC CONDUIT		2750	LF	\$9.00	\$24,750.00
67	2545.503	UNDERGROUND WIRE 1/C #6 AWG		8250	LF	\$3.00	\$24,750.00
68	2545.503	GROUNDWIRE 1/C #8 INS. GR.		2750	LF	\$1.40	\$3,850.00
69	2557.502	ELECTRICAL GROUND		11	EA	\$225.00	\$2,475.00
70	2563.601	TRAFFIC CONTROL		1	LS	\$15,000.00	\$15,000.00
71	2564.502	OBJECT MARKER		1	EA	\$150.00	\$150.00
72	2564.518	SIGN PANELS TYPE C		150.00	SF	\$125.00	\$18,750.00
73	2564.518	SIGN PANELS TYPE SPECIAL		1	EA	\$2,000.00	\$2,000.00
74	2565.602	TRANSFORMER AND SERVICE EQUIPMENT (DESIGN BY OTHERS)		1	EA	\$5,000.00	\$5,000.00
75	2571.524	DECIDUOUS TREE 2" CAL B&B - BICOLOR OAK		28	TREE	\$750.00	\$21,000.00
76	2571.524	DECIDUOUS TREE 2" CAL B&B - DISCOVERY ELM		27	TREE	\$750.00	\$20,250.00
77	2571.524	DECIDUOUS TREE 2" CAL B&B - HACKBERRY		23	TREE	\$750.00	\$17,250.00
78	2571.524	DECIDUOUS TREE 2" CAL B&B - HONEY LOCUST		26	TREE	\$750.00	\$19,500.00
79	2573.501	STORM DRAIN INLET PROTECTION		30	EA	\$250.00	\$7,500.00
80	2573.501	STABILIZED CONSTRUCTION EXIT		1	EA	\$2,500.00	\$2,500.00
81	2573.503	SILT FENCE, TYPE MS		3100	LF	\$3.25	\$10,075.00



ENGINEER'S PRELIMINARY COST ESTIMATE
MESENBRINK SUBDIVISION - MANKATO, MINNESOTA
 BMI Project No.: 0M1.128460

Item No.	MnDOT Item No.	Item	Notes	Estimated Quantity	Unit	Unit Price	Amount
82	2574.508	FERTILIZER TYPE 3		2700	LB	\$2.50	\$6,750.00
83	2575.504	ROLLED EROSION PREVENTION CATEGORY 20		15000	SY	\$2.50	\$37,500.00
84	2575.505	SEEDING		9.0	AC	\$1,000.00	\$9,000.00
85	2575.508	SEED MIXTURE 25-141		200	LB	\$4.00	\$800.00
86	2575.508	SEED MIXTURE 33-261		100	LB	\$4.00	\$400.00
87	2575.508	SEED MIXTURE 35-221		265	LB	\$4.00	\$1,060.00
88	2575.508	HYDRAULIC MULCH MATRIX		19500	LB	\$1.00	\$19,500.00
89	2582.503	4" SOLID LINE PAINT (WR)		4750	LF	\$1.60	\$7,600.00
90	2582.503	6" SOLID LINE PAINT (WR)		1765	LF	\$2.00	\$3,530.00
91	2582.503	24" SOLID LINE PAINT (WR)		75	LF	\$22.00	\$1,650.00
92	2582.503	4" BROKEN LINE PAINT (WR)		1150	LF	\$1.60	\$1,840.00
93	2582.503	6" BROKEN LINE PAINT (WR)		50	LF	\$1.60	\$80.00
94	2582.503	4" DOUBLE SOLID LINE PAINT (WR)		400	LF	\$3.20	\$1,280.00
95	2582.503	12" DOTTED LINE PREFORM PAINT		39	LF	\$22.00	\$858.00
96	2582.518	PAVEMENT MESSAGE PREFORM PAINT		10	EA	\$400.00	\$4,000.00
97	2582.518	CROSSWALK PREFORM PAINT		648	SF	\$22.00	\$14,256.00
TOTAL ESTIMATED CONSTRUCTION SUBTOTAL:							\$2,899,179.95
CONTINGENCIES (10%):							\$290,000.00
CONSTRUCTION ENGINEERING (CITY OF MANKATO) (4%):							\$116,000.00
TOTAL ESTIMATED PROJECT COST:							\$3,305,179.95

NOTES:

- (1) TOTAL EXCAVATED VOLUME INCLUDING TOPSOIL
- (2) ASSUMES 2-FEET OF TOPSOIL REMOVAL OVER ALL PROPOSED RIGHT-OF-WAY, EXCESS TOPSOIL TO REMAIN WITHIN THE SUBDIVIDED LOTS; LOCATION TO BE COORDINATED WITH OWNER
- (3) EXCAVATION IN THE RIGHT-OF-WAY BELOW THE ASSUMED 2-FEET OF TOPSOIL STRIPPING, DOES NOT INCLUDE PIPE AND MANHOLE SPOILS
- (4) RAW FILL VOLUME WITH THE ASSUMED 2-FEET OF TOPSOIL REMOVED, SUITABLE EXCAVATED MATERIAL CAN BE USED DEPENDENT ON APPLICATION
- (5) ALL MATERIAL TO STAY WITHIN SUBDIVISION TO BE USED FOR RIGHT-OF-WAY COMMON EMBANKMENT OR WITHIN THE SUBDIVIDED LOTS; LOCATION TO BE COORDINATED WITH OWNER