

# CITY OF HAM LAKE

15544 Central Avenue NE  
Ham Lake, Minnesota 55304  
(763) 434-9555  
Fax (763) 434-9599

## CITY OF HAM LAKE PLANNING COMMISSION AGENDA MONDAY, SEPTEMBER 23, 2024

**CALL TO ORDER:** 6:00 p.m.

**PLEDGE OF ALLEGIANCE**

**APPROVAL OF MINUTES:** September 9, 2024

**PUBLIC HEARING:** None

**NEW BUSINESS:**

1. Jeff Stalberger, MN Developments LLC, requesting Final Plat approval of the plat Swedish Chapel Estates located at 2506 Swedish Drive NE (47 Single Family Residential lots and 3 outlots) in Section 4.

**COMMISSION BUSINESS:**

1. City Council Update

CITY OF HAM LAKE  
PLANNING COMMISSION MINUTES  
MONDAY, SEPTEMBER 9, 2024

The Ham Lake Planning Commission met for its regular meeting on Monday, September 9, 2024 in the Council Chambers at Ham Lake City Hall located at 15544 Central Avenue NE in Ham Lake, Minnesota.

**MEMBERS PRESENT:** Commissioners Brian Pogalz, Kyle Lejonvarn, Dave Ringler, Jeff Entsminger, David Ross, and Erin Dixson

**MEMBERS ABSENT:** Commissioner Jonathan Fisher

**OTHERS PRESENT:** City Attorney Mark Berglund, City Engineer Dave Krugler, Building Official Mark Jones and Building and Zoning Clerk Jennifer Bohr

**CALL TO ORDER:** Chair Pogalz called the meeting to order at 6:00 p.m.

**PLEDGE OF ALLEGIANCE:**  
The pledge of allegiance was recited by all in attendance.

**APPROVAL OF MINUTES:**  
Commissioner Dixson asked that the spelling of her last name be corrected in the motion for adjournment. **Motion by Lejonvarn, seconded by Ross, to approve the minutes of the June 24, 2024 Planning Commission meeting with the correction. All present in favor, motion carried.**

**PUBLIC HEARING:**  
Roger and Sue Haugen, S & R Developers LLC, requesting Preliminary Plat approval for Enchanted Estates 4<sup>th</sup> Addition (9 Single Family Residential lots) in Section 14  
Roger and Sue Haugen were present. Jason Rud from E.G. Rud & Sons Inc. spoke on behalf of the applicant. Mr. Rud stated this plat is the final phase of the Enchanted Estates subdivision. Mr. Rud stated the preliminary plat of the overall development was approved in 2005 but due to the amount of time that has passed, a refresh of this final phase was done. Mr. Rud stated this phase of the plat will have a total of nine lots, one less than originally approved. Mr. Rud stated two of the lots, east of Austin Street NE, have existing homes on them. Chair Pogalz asked Mr. Rud and Mr. and Mrs. Hagen if they had seen the memos written by the City Engineer and Building Official. All acknowledged that they had. Mr. Haugen stated what the accessory buildings are used for and stated the block building will be taken down. Mr. Haugen expressed his appreciation for the efforts of city staff and appointed and elected officials over the years. Chair Pogalz asked the

commissioners if they had any questions. Commissioner Dixon verified that the parkland dedication fees for Lots 1-7 is \$1850 per lot. Commissioner Lejonvarn asked if all accessory buildings shown on the plans were still on the property. Engineer Krugler stated that they are. Engineer Krugler stated the road infrastructure is in place and septic certifications from 2005 are being used. Engineer Krugler stated a lot line adjustment will be done between Lots 8 and 9 and encroachment agreements are needed for Lots 2, 3 and 6, Block 1 due to septic lines crossing drainage and utilities easements. Engineer Krugler stated the accessory building noted as the *existing shop* on Lot 8 is oversized but was approved with the original plat; the accessory building (block building) south of the oversized building was to be removed as shown on the attached Enchanted Estates exhibit from 2005. Building Official Jones stated the block building will need to be demolished and the pole structure that will be on proposed Lot 9 needs to have an exterior finish that matches the color, texture and style, as closely as practical, to the surface of the dwelling unit to be compliant with City Code. Building Official Jones stated the steel roof could remain on the pole structure. Commissioner Dixon completed the inspection; a copy which is on file. Commissioner Dixon stated she drove to the site and spoke with Mr. Haugen. Commissioner Dixon stated the accessory buildings that have been mentioned are still on the property. Commissioner Dixon stated she talked with Mr. Haugen about removing one accessory building and bringing the other building into compliance to ensure he was aware of the City's requirements for the plat. Commissioner Dixon stated the street infrastructure is in place and there is a park at the end of the street so this final phase will finish off the development.

**Chair Pogalz opened the public hearing at 6:13 p.m. and asked for public comment; with there being none, Chair Pogalz closed the public hearing at 6:14 p.m.**

**Motion by Dixon, seconded by Entsminger, to recommend approval of the Preliminary Plat of Enchanted Estates 4<sup>th</sup> Addition in Section 14 as presented by Roger and Sue Haugen of S & R Developers LLC, subject to updating the survey to show all existing accessory building sizes before submission of the Final Plat for approval and updating the survey to show that the southerly building on proposed Lot 8 will be demolished, updating the exterior finish of the accessory building on 16207 Austin Street NE to match the color, texture and style of the like surfaces on the existing dwelling unit, meeting all requirements of the City Engineer and Building Official and meeting all City, County, and State requirements. All present in favor, motion carried. *This application will be placed on the City Council's Monday, September 16, 2024 agenda.***

**NEW BUSINESS:**

Joseph Radach of Contour Development LLC, requesting Sketch Plan approval for Elwell Farms (107 Single Family Residential lots and 4 outlots) in Section 36

Mr. Joseph Radach was present. Mr. Radach stated Jesse Neumann from Design Earth Contracting and Steve Jones with Keller Williams were attending on behalf of the project as well. Mr. Radach stated Elwell Farms residential development will have 107 single family lots that range in size from one to 19 acres. Mr. Radach stated access to the development is going to be from the west via 137th Lane NE or the north via Opal Street NE through the Hidden Forest East subdivision. Mr. Radach stated four outlots are

proposed. Mr. Radach stated one outlot is land for a park that he envisions will include some walking trails with benches, scenic overlooks, a playground and some parking along the street. Mr. Radach stated two of the other outlots are for wetland restoration and preservation. Mr. Radach stated they intend to restore the sod fields into native wetland habitat and create a wetland bank with which wetland credits can be offered for other projects in the area that may have wetland impacts that need those credits. Mr. Radach stated many septic borings have been taken and they have confirmed each lot has adequate space for a primary and secondary septic system; livability has been proven on every lot as well. Mr. Radach stated a wetland delineation and threatened and endangered species survey have been completed. Mr. Radach stated the hope is to break ground in the spring. Chair Pogalz asked Engineer Krugler to comment on the development. Engineer Krugler stated the proposed 107 lot development is located on just over 500 acres in section 36. Engineer Krugler stated the sketch plan does not include names for all streets; the unnamed streets will need to follow the naming model of the Anoka County grid system and proposed cul-de-sacs within the development may need to be modified as they cannot exceed 1,100-feet in length. Engineer Krugler stated access to the development will be via a connection to 137<sup>th</sup> Lane NE in the Red Fox Hollow 2<sup>nd</sup> Addition development and via a connection to Opal Street NE in the Hidden Forest East development. The plan includes extending 138<sup>th</sup> Avenue NE from Ghia Street NE to connect lots 75 and 76. Engineer Krugler commented on the outlots stating Outlot B will be conveyed to the adjacent 4611 139<sup>th</sup> Lane NE parcel which will then require the parcel to be addressed from Opal Street NE, Outlot C is a proposed park and Outlots A and D are proposed wetland banks which Attorney Berglund will comment on. Engineer Krugler stated access to Lexington Avenue NE for Lots 75 & 76 is via gravel roads in the Elwell Heights subdivision; it is required that the portions of 138<sup>th</sup> Avenue NE, Fraizer Street NE and 139<sup>th</sup> Lane NE between these lots and Lexington Avenue NE be upgraded. Engineer Krugler stated there is a 66-foot wide ingress/egress easement traversing from 138<sup>th</sup> Avenue NE thru parcels 67, 68, 69, 75 and 76 to the 4611 139<sup>th</sup> Lane NE that will need to be rescinded and the driveway for 4611 139<sup>th</sup> Avenue NE will need to be relocated to Opal Street NE. Engineer Krugler stated 138<sup>th</sup> Avenue NE is currently a private easement, not a city street, so it will have to be dedicated as part of the plat. Engineer Krugler stated the Park Committee met to discuss parkland dedication for the proposed Elwell Farms development; the Park Committee determined parkland dedication fees will be collected rather than requiring dedication of land or trail easements as residents of the Elwell Farms development will have street access to the nearby parks within the Hidden Forest East Park Addition and Red Fox Hollow 2<sup>nd</sup> Addition subdivisions. Engineer Krugler stated a 20-foot wide Flint Hills Resources easement (Minnesota Pipeline) traverses through the northerly portion of the sketch plan; written approval from Flint Hills Resources must be provided for streets, driveways and grading within the easement. Engineer Krugler stated there are existing buildings, accessory buildings, farm buildings, wells and septic systems located within the proposed sketch plan and future submittals will need to show that the buildings will be removed. Engineer Krugler stated demolition permits will be required to remove the buildings and documentation will need to be provided to prove the wells have been sealed and the septic systems abandoned. Engineer Krugler stated an FAA recognized flying field for radio-controlled aircraft is located on parcel 36-32-23-14-0001. Engineer Krugler stated research will need to be done to determine if the FAA has any rules related to discontinuing use of the area.

Engineer Krugler stated Trail #84A of the Rice Creek Snowmobile Trail Association traverses thru the easterly portion of the proposed plat. Engineer Krugler stated Coon Creek Watershed approval is required. Engineer Krugler stated the northerly portion of the proposed development is identified as a FEMA Zone A designation; a FEMA Letter of Map Amendment will be required for lots located within Zone A. Engineer Krugler stated a Natural Heritage Information System data review has been completed and a habitat assessment/survey is required. Chair Pogalz stated he likes what he sees in the development in relation to providing additional access points to a few other subdivisions in the area. Chair Pogalz asked if an extension of Bunker Lake Boulevard NE could be considered with the plat. Mr. Radach stated the northwestern corner of the proposed development does not extend far enough west to create an extension of Bunker Lake Boulevard NE and the composition of the land is peat and wetland. There was discussion about improving and extending 138<sup>th</sup> Avenue NE east to connect with what is currently labeled as Street A on the plans and improving 137<sup>th</sup> Lane NE from Ghia Street NE east and other potential access points to Lexington Avenue NE. Chair Pogalz stated that another access point out to Lexington Avenue NE should be considered so that residents occupying 107 new homes in the development don't have only two ingress/egress points. Chair Pogalz stated he disagrees with the Park Committee's recommendation to accept monies in lieu of parkland. Chair Pogalz stated this is a large development. Chair Pogalz stated there are ball fields in the central part of the city and several parks with playground equipment throughout the city, but no ball or soccer fields in the eastern side of Ham Lake. Mr. Radach stated they are planning for a park and obtaining credit toward parkland dedication. Engineer Krugler explained parkland dedication options in respect to paying \$2,500 per lot dependent on the ratio of upland vs wetland, dedicating land or a combination of both. Commissioner Lejonvarn asked Mr. Radach if he was working with the Rice Creek Snowmobile Trail Association. Mr. Radach stated he received a call from Mr. Ken Anderson (Mr. Anderson was present.) today but had not had a chance to speak with him. Mr. Radach stated he wasn't familiar with where the trail was within the proposed development but was willing to talk with Mr. Anderson. Chair Pogalz stated if the trail system through the development isn't possible, snowmobilers will have no trail access from the north to the south side of the city and vice versa. There was discussion about a permanent trail being dedicated within the development to be a recreational trail in the summer and a snowmobile trail in the winter. Chair Pogalz asked Mr. Radach to comment on the St. Paul Modelers Radio Controllers Club (SPMRC) use of the airfield. Mr. Radach stated their lease will be terminated. Chair Pogalz asked if the SPMRC was aware that the lease will be terminated. Mr. Radach stated the Elwell's have notified the club that the lease will be terminated. Attorney Berglund stated the City Council supports having wetland banks in Ham Lake and work is being done to codify an ordinance related to wetland banks. Attorney Berglund stated he has been exploring conditions the city will have for developers interested in wetland banking such as requiring a Conditional Use Permit, requiring the dedication of a trail through the wetland bank area, have a fee paid to the city that is a percentage of each wetland bank credit sold as the city anticipates that developers will abandon the land once all credits have been sold and the city will then be responsible for maintaining the land. Mr. Radach questioned if a trail would be possible in a wetland area as creating an upland trail could impact the wetlands and would create additional expense. There was discussion about the process of gaining approval from the Board of Soil and Water Resources and the Army Corp of Engineers for a

wetland bank, initial restrictions on the sale of credits, oversight of the location, vegetation requirements, etc. Mr. Radach stated he has created wetland bank prospectus to submit to various regulatory agencies for review. Mr. Radach stated he should know in three months whether or not the plan is acceptable. Chair Pogalz reviewed the list of items noted in the September 5, 2024 memo from the City Engineer that need to be addressed. Mr. Radach stated he has noted the items he needs to address. There was additional discussion about these items. Building Official Jones stated that, currently, the City Code does allow wetland banks under a Conditional Use Permit and that the city should update City Code to allow for wetland banks before approving the sketch plan for this development as it could potentially include a wetland bank area. Commissioner Lejonvarn asked if the sketch plan could be approved to allow the developer to continue to address the comments from the City Engineer while the City created the code related to wetland banks. Attorney Berglund stated the City Council supports the creation of wetland banks within the city. Attorney Berglund stated this concept has been studied for the past several months and the plan is to create an ordinance to allow wetland banks. Attorney Berglund stated the ordinance has not been created yet so wetland banks are currently not a permitted use. Attorney Berglund stated once an ordinance is created, it will take some time to hold a public hearing, obtain approval of the ordinance and adhere to statutory timelines for acceptance of the ordinance. Chair Pogalz suggested the application be tabled until the wetland bank ordinance has been approved. Mr. Radach asked if the sketch plan could be approved so they could begin work on a preliminary plat. Attorney Berglund stated his recommendation is to table the application for now. Mr. Radach stated the development team would like to know if the commission is in favor of the project. Attorney Berglund asked Mr. Radach if going forward with the development is contingent on getting approval to have a wetland bank. Mr. Radach stated it was. Attorney Berglund stated his recommendation is to table the application. Commissioner Lejonvarn asked how many acres would be dedicated to the wetland bank in the development. Mr. Radach stated approximately 70 acres. Mr. Radach asked the commissioners if they were generally in favor of the project. All commissioners were of the opinion that they were in favor of the development. **Motion by Lejonvarn, seconded by Pogalz, to table Sketch Plan Approval for the plat of Elwell Farms as submitted by Joseph Radach of Contour Development LLC. All present in favor, motion carried.**

#### **OLD BUSINESS:**

Gary Magnuson requesting Sketch Plan approval for the minor Plat of Magnuson Estates (2 lots) in Section 9

Mr. Magnuson was not present. Chair Pogalz asked Building Official Jones to comment on the plat. Building Official Jones stated he has talked with Mr. Magnuson several times about the corn crib that was converted to a garage. Building Official Jones stated he went to Mr. Magnuson's property to measure the distance between the building and the property line and found that the structure is within the front yard setback. Building Official Jones stated the garage must be removed to come into compliance with City Code. Building Official Jones stated a permit was issued to Mr. Magnuson for an accessory building several years ago under the agreement that the garage would be removed and that did not happen. Building Official Jones stated anytime a resident requests a lot split, their property must be brought into compliance with City Code if something is found to be

non-compliant. Commissioner Lejonvarn asked Building Official Jones what Mr. Magnuson has said about removal of the building. Building Official Jones stated each time he has spoken with Mr. Magnuson he has said the building has been there for years and he is not removing it. **Motion by Pogalz, seconded by Dixon, to recommend denial of Gary Magnuson's Sketch Plan approval request for the minor Plat of Magnuson Estates (2 lots) in Section 9, due to the owner not willing to remove the building located in the front yard set-back. All present in favor, motion carried.** *This application will be placed on the City Council's Monday, September 16, 2024 agenda.*

**COMMISSION BUSINESS:**

City Council Update

Chair Pogalz stated the City Council concurred with the Planning Commission's recommendations to approve the Conditional Use Permit for A Class Sounds and the minor plat Sketch Plan submitted by Entsminger Enterprises, LLC. Chair Pogalz will attend the September 16, 2024 City Council meeting.

**ADJOURNMENT:**

**Motion by Dixon, seconded by Lejonvarn, to adjourn the Planning Commission meeting at 7:20 p.m. All present in favor, motion carried.**

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Jennifer Bohr  
Building and Zoning Clerk



# CITY OF HAM LAKE

## PLANNING REQUEST

15544 Central Avenue NE

Ham Lake, MN 55304

Phone (763) 434-9555 Fax (763) 235-1697

Date of Application 8/16/24 Date of Receipt \_\_\_\_\_

Receipt # \_\_\_\_\_ Amount \$ \_\_\_\_\_

Meeting Appearance Dates:  
Planning Commission 9-23-2024 City Council \_\_\_\_\_

Please check request(s):

- Metes & Bounds Conveyance
- Sketch Plan
- Preliminary Plat Approval\*
- Final Plat Approval
- Rezoning\*
- Multiple Dog License\*
- Commercial Building Permit
- Certificate of Occupancy
- Home Occupation Permit
- Conditional Use Permit (New)\*
- Conditional Use Permit (Renewal)
- Other \_\_\_\_\_

*\*NOTE: Advisory Signage is required for land use alterations and future road connections. This application also requires a Public Hearing. Such fees shall be deducted from deposit.*

Development/Business Name: MN Developments LLC - Swedish Chapel Estate

Address/Location of property: Swedish Drive and Xylite

Legal Description of property: \_\_\_\_\_

PIN # 04-32-23-14-0001 Current Zoning RA Proposed Zoning R1

Notes: 47 single family lots and three cottages

Applicant's Name: Jeff Stalberger

Business Name: MN Developments LLC

Address 17404 Ward Lake Drive NW

City Andover State MN Zip Code 55304

Phone 6127991471 Cell Phone 6127991471 Fax \_\_\_\_\_

Email address stally68@msn.com

*You are advised that the 60-day review period required by Minnesota Statutes Chapter 15.99 does not begin to run until all of the required items have been received by the City of Ham Lake.*

SIGNATURE [Signature] DATE 8/16/24

\*\*\*\*\*

- FOR STAFF USE ONLY -

ACTION BY: Planning Commission \_\_\_\_\_  
City Council \_\_\_\_\_

PROPERTY TAXES CURRENT YES NO



## Memorandum

Date: September 19, 2024  
To: Planning Commissioners  
From: David A. Krugler, City Engineer  
Subject: Swedish Chapel Estates



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### Introduction:

The Final Plat was received on August 28<sup>th</sup>, the Title Sheet, Preliminary Plat, Grading, Erosion Control and Tree Protection Plan, Livability Plan, Livability Chart, Removals plan, Street & Storm Sewer Plan & Profile, Intersection & C-D-S Details, Stormwater Pollution Prevention Plan, Detail, Turn Lane Plans and Geotechnical Report were received July 29<sup>th</sup>, the Livability Chart was received August 8<sup>th</sup>, and the Storm Sewer Sizing Calculations was received July 2<sup>nd</sup> for the proposed 47 lot residential development located on the 111.42 acre parcel 04-32-23-14-0001. The parcel is currently zoned Rural Single Family Residential (R-A), per the attached, and the new lots will be zoned Single Family Residential (R-1). The three outlots will remain R-A. All of the prior review comments have been addressed.

### Discussion:

The Final Plat generally conforms with the Preliminary Plat that was approved at the June 17<sup>th</sup> City Council meeting. Anoka County Highway Department approval of the plans on July 8<sup>th</sup> is attached. The Coon Creek Watershed District (CCWD) conditionally approved the development at the May 13<sup>th</sup> Board of Managers meeting. The attached amended CCWD Permit was issued on August 8<sup>th</sup>. The project conforms to the Upper Rum River Watershed Management Organization rules for storm runoff and wetland buffer requirements.

The CCWD review for potential impacts to state-listed species and other rare features found that several state endangered plants have been found and Blanding's turtles have been reported in the vicinity of the proposed project and may be encountered on site. If during construction Blanding's turtles are encountered the contractor is to move them by hand out of harm's way. Otherwise, the turtles are to be left undisturbed. The plants that are within the parcel are not shown to be disturbed and will not require a taking permit. There is an inactive eagle nest located on Lot 4 Block 1. The US Fish and Wildlife recommends that a permit be requested for any disturbance within 100-feet of the nest. A letter discussing the project and the recommendations made by the US Fish and Wildlife agency is attached.

Swedish Drive was shown to be relocated north of the current alignment by approximately 140 feet. An exhibit for vacation of the existing Swedish Drive roadway easement is attached. All utilities within the existing right-of-way have been removed and new utilities will be installed during the project. The Swedish Drive roadway easement vacation public hearing will occur on the October 7<sup>th</sup> Council meeting.

The septic certification has been received by Tradewell that each of the proposed lots will support two standard septic systems in accordance with Minnesota Rules 7080. The Lot 3 Block 3 septic area was disturbed during construction and has been recertified to supporting two standard septic systems to the satisfaction of the Building Official. The Braun Geotechnical Exploration Report, dated July 25<sup>th</sup>, adequately addressed prior review comments.

A 15-foot-wide trail easement, per the attached will be required on Lots 1, 3, 4, 5, 6, 7, 8 and 9 of Block 1 and Lots 1, 3 and 4 of Block 3. The June 17<sup>th</sup> City Council approval required a 20-foot-wide easement. After further discussion with the Developer, it is recommended to reduce the 20-foot requirement to a 15-foot trail easement to match other developments along County Roadways. The Developer is to record the trail easement deeds with Anoka County immediately after recording the Plat. The Development Agreement will stipulate that no building permits will be issued on any lots until proof of recording the trail deeds is received. In addition, parkland dedication fees will be collected rather than parkland dedication. The trail easement will be a credit toward those fees.

Outlots A, B and C will be required to be conveyed to adjacent properties within the Development Agreement. The Development Agreement will stipulate that no building permits will be issued on any lots until proof of outlot conveyance is received.

FEMA Letters of Map Amendments (LOMA) are required for Lots 8 and 9 of Block 1; Lots 4 thru 13 of Block 2; and Lots 7, 8, 9, 10, 13, 14, 15, 20 and 21 of Block 3. The Development Agreement will stipulate that that no building permits will be issued until the LOMAs is approved by FEMA. An Encroachment Agreement will be required due to the Lot 6, Block 3 septic sewer pipe that will cross the drainage and utility easement.

**Recommendations:**

It is recommended that the Final Plat of Swedish Chapel Estates be recommended for approval, contingent on the vacation of the Swedish Drive roadway easement.

PRELIMINARY COPY  
UNRECORDED AS OF 08-27-24

KNOW ALL PERSONS BY THESE PRESENTS: That MN Developments LLC, a Minnesota limited liability company, owner of the following described property:

The Northeast Quarter of Section 4, Township 32, Range 23, excepting the following described tracts of land:

- 1. The West 15 acres of the said Northeast Quarter of Section 4, Township 32, Range 23, heretofore sold and deeded to the Swedish Lutheran Society.
2. A plot of ground, commencing at a point 23.49 chains South and 5.15 chains East (Variation 8 degrees 51 minutes in 1887) of Quarter corner on North side of Section 4, Township 32, Range 23; thence South 29 degrees East (Variation 8 degrees 51 minutes in 1887) 9 1/2 rods, to a tamarac stake; thence North 64 degrees East, 14 1/2 rods; thence North 29 degrees West, 10 1/2 rods; thence South 60 1/2 degrees West, 14 1/2 rods to point of commencement, containing 1 acre, more or less, being a part of the Southwest Quarter of Northeast Quarter of Section 4, Township 32, Range 23.
3. Commencing at the Northeast corner of Section 4, Township 32, Range 23 and running thence West on and along town line between Towns of Bethel and Ham Lake a distance of 37 1/2 rods to East boundary line of Bethel and Minneapolis Road so called; thence in a Southerly direction on and along East road limit of said Bethel and Minneapolis Road as now located a distance of about 43 rods; thence in an Easterly direction a distance of about 24 1/2 rods to intersect the Section line running North and South between Sections 3 and 4 in said Township 32 and Range 23 at a point on said Section line a distance South from said Northeast corner of said Section 4, 34 rods; thence North on and along said Section line to place of commencement being a part of the Northeast Quarter of Northeast Quarter of Section 4, Township 32, Range 23, containing about 7 acres.
4. That part of the Northeast Quarter of Section 4, Township 32, Range 23, described as follows: Commencing at a point 289 feet East and 732 feet North of the Southwest corner of said Northeast Quarter; thence Northeasterly along the center of the road 424 feet; thence Northwesterly 701 feet to the point, which is 289 feet East of the West line of the said Northeast Quarter; thence South to the point of beginning.
5. Commencing at a point 1550.34 feet (23.49 chains) South and 339.9 feet (5.15 chains) East of the Quarter corner on the North side of Section 4; thence South 29 degrees East for 156.75 feet; thence South 64 degrees West for 187.4 feet; thence North, parallel with and 247.5 feet East of the Quarter Section line for 142.15 feet to the Southerly line of a public road; thence North 50 degrees 10 minutes East along said Southerly road line to the point of beginning, also all right of title in said adjacent public road to the center line thereof, Anoka County, Minnesota.

Has caused the same to be surveyed and platted as SWEDISH CHAPEL ESTATES and does hereby dedicate to the public for public use the public ways and the drainage and utility easements as shown on this plat. Also dedicating to the County of Anoka the right of access onto County Road No. 68 as shown on this plat.

In witness whereof said MN Developments LLC, a Minnesota limited liability company, has caused these presents to be signed by its proper officer this \_\_\_ day of \_\_\_, 20\_\_.

MN DEVELOPMENTS LLC

Jeffrey A. Stalberger, Co-Administrator

STATE OF \_\_\_\_\_
COUNTY OF \_\_\_\_\_

This instrument was acknowledged before me this \_\_\_ day of \_\_\_, 20\_\_ by Jeffrey A. Stalberger, Co-Administrator of MN Developments LLC, a Minnesota limited liability company.

(Signature)

(Print Name)

Notary Public, \_\_\_\_\_ County, Minnesota

My Commission Expires \_\_\_\_\_

I Jason E. Rud 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 \_\_\_, 20\_\_.

Jason E. Rud, Licensed Land Surveyor
Minnesota License No. 41578

STATE OF MINNESOTA
COUNTY OF \_\_\_\_\_

This instrument was acknowledged before me this \_\_\_ day of \_\_\_, 20\_\_ by Jason E. Rud.

(Signature)

(Print Name)

Notary Public, \_\_\_\_\_ County, Minnesota

My Commission Expires \_\_\_\_\_

CITY COUNCIL, CITY OF HAM LAKE, MINNESOTA

This plat of SWEDISH CHAPEL ESTATES was approved and accepted by the City Council of the City of Ham Lake, Minnesota at a regular meeting thereof held this \_\_\_ day of \_\_\_, 20\_\_, and said plat is in compliance with the provisions of Minnesota Statutes, Section 505.03, Subd. 2.

City Council, City of Ham Lake, Minnesota

By \_\_\_\_\_ Mayor By \_\_\_\_\_ Clerk

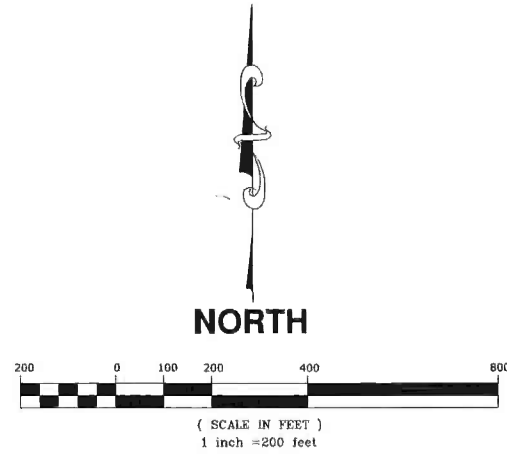
COUNTY SURVEYOR

I hereby certify that in accordance with Minnesota Statutes, Section 505.021, Subd. 11, this plat has been reviewed and approved this \_\_\_ day of \_\_\_, 20\_\_.

David M. Ziegmeier
Anoka County Surveyor

SWEDISH CHAPEL ESTATES

CITY OF HAM LAKE
COUNTY OF ANOKA
SEC. 4, T32N, R23W



LEGEND

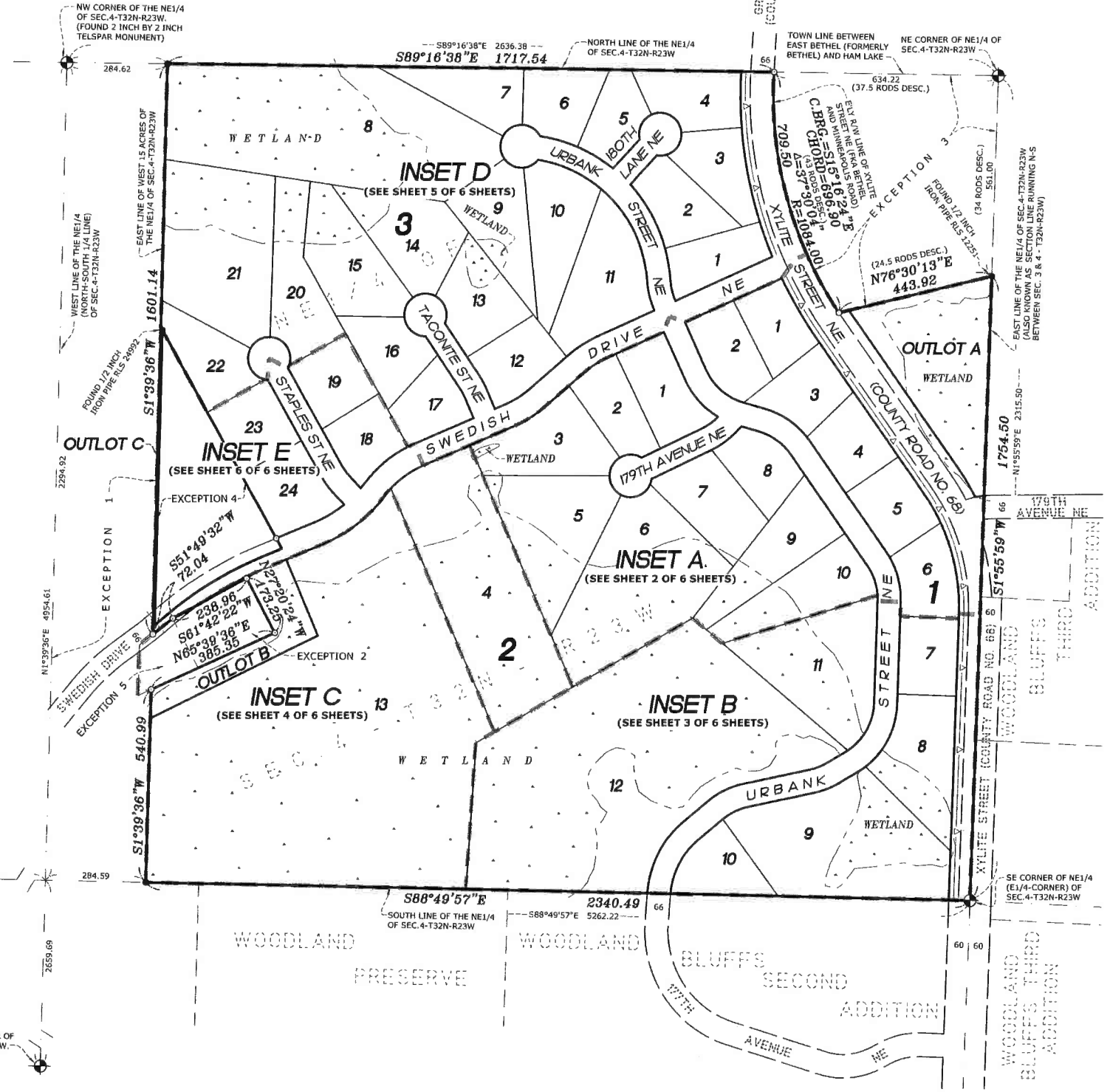
- DENOTES 1/2 INCH OPEN IRON PIPE MONUMENT FOUND, UNLESS OTHERWISE SHOWN
○ DENOTES 1/2 INCH BY 14 INCH IRON PIPE SET, MARKED RLS NO. 41578
⊕ DENOTES ANOKA COUNTY CAST IRON MONUMENT, UNLESS OTHERWISE SHOWN
—△— DENOTES RIGHT OF ACCESS DEDICATED TO THE COUNTY OF ANOKA.
[---] DENOTES WETLAND EDGE AS DELINEATED BY KJOLHAUG ENVIRONMENTAL SERVICE COMPANY IN AUGUST 2023.

FOR THE PURPOSES OF THIS PLAT, THE NORTH LINE OF THE NORTHEAST QUARTER OF SECTION 04, TOWNSHIP 32 NORTH, RANGE 23 WEST IS ASSUMED TO HAVE A BEARING OF SOUTH 89 DEGREES 16 MINUTES 38 SECONDS EAST.

FOR ADDITIONAL BOUNDARY INFORMATION ON EXCEPTION NUMBERS 2, 4 AND 5, SEE INSERTS ON SHEETS 4 AND 6 OF 6 SHEETS.

W1/4 OF CORNER OF SEC. 4-T32N-R23W. (FOUND 2 INCH BY 2 INCH TELSPAR MONUMENT)

S1/4 OF CORNER OF SEC. 4-T32N-R23W.



COUNTY AUDITOR/TREASURER

Pursuant to Minnesota Statutes, Section 505.021, Subd. 9, taxes payable in the year 20\_\_ on the land hereinbefore described have been paid. Also, pursuant to Minnesota Statutes, Section 272.12, there are no delinquent taxes and transfer entered this \_\_\_ day of \_\_\_, 20\_\_.

Property Tax Administrator

By \_\_\_\_\_, Deputy

COUNTY RECORDER/REGISTRAR OF TITLES
COUNTY OF ANOKA, STATE OF MINNESOTA

I hereby certify that this plat of SWEDISH CHAPEL ESTATES was filed in the office of the County Recorder/Registrar of Titles for public record on this \_\_\_ day of \_\_\_, 20\_\_, at \_\_\_ o'clock \_\_\_, M., and was duly recorded as Document Number \_\_\_\_\_.

County Recorder/Registrar of Titles

By \_\_\_\_\_, Deputy

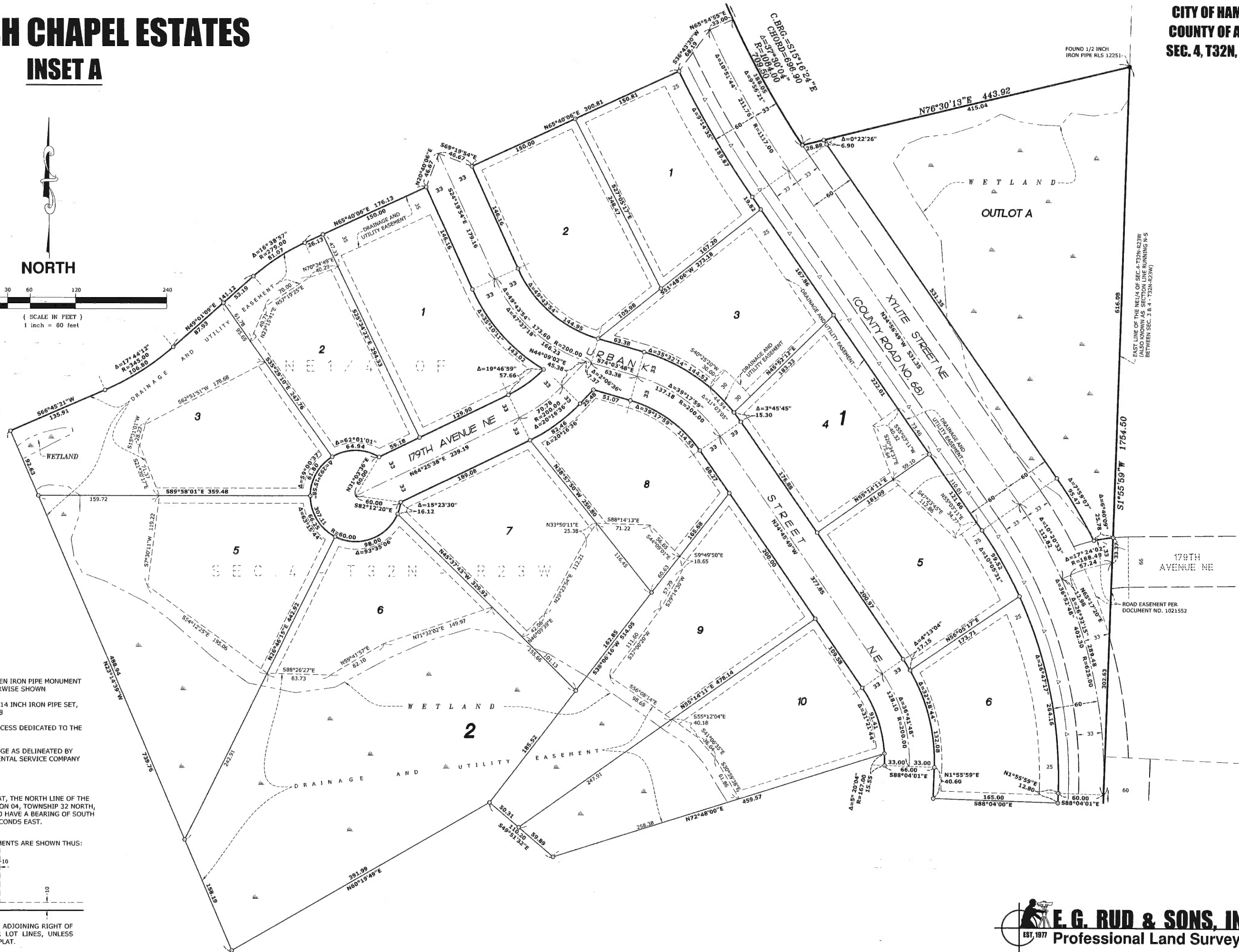
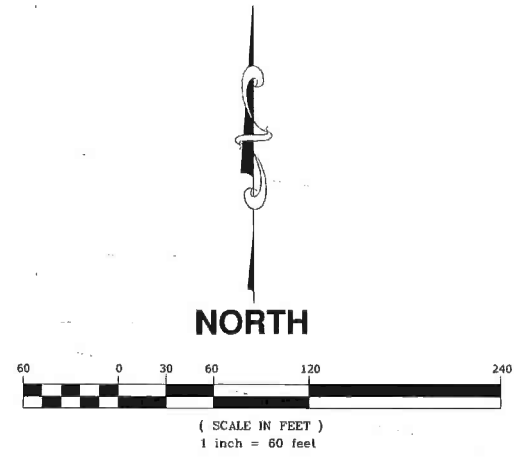


PRELIMINARY COPY  
UNRECORDED AS OF 08-27-24

# SWEDISH CHAPEL ESTATES

## INSET A

CITY OF HAM LAKE  
COUNTY OF ANOKA  
SEC. 4, T32N, R23W



FOUND 1/2 INCH IRON PIPE RLS 12251

EAST LINE OF THE NE 1/4 OF SEC. 4, T32N, R23W (ALSO KNOWN AS SECTION LINE RUNNING N-S BETWEEN SEC. 3 & 4 - T32N, R23W)

ROAD EASEMENT PER DOCUMENT NO. 1021552

### LEGEND

- DENOTES 1/2 INCH OPEN IRON PIPE MONUMENT FOUND, UNLESS OTHERWISE SHOWN
- DENOTES 1/2 INCH BY 14 INCH IRON PIPE SET, MARKED RLS NO. 41578
- △ DENOTES RIGHT OF ACCESS DEDICATED TO THE COUNTY OF ANOKA.
- ▭ DENOTES WETLAND EDGE AS DELINEATED BY KJOLHAUG ENVIRONMENTAL SERVICE COMPANY IN AUGUST 2023.

FOR THE PURPOSES OF THIS PLAT, THE NORTH LINE OF THE NORTHEAST QUARTER OF SECTION 04, TOWNSHIP 32 NORTH, RANGE 23 WEST IS ASSUMED TO HAVE A BEARING OF SOUTH 89 DEGREES 16 MINUTES 38 SECONDS EAST.

DRAINAGE AND UTILITY EASEMENTS ARE SHOWN THUS:



BEING 10 FEET IN WIDTH AND ADJOINING RIGHT OF WAY LINES, SIDE AND REAR LOT LINES, UNLESS OTHERWISE SHOWN ON THIS PLAT.

**E. G. RUD & SONS, INC.**  
EST. 1977  
Professional Land Surveyors

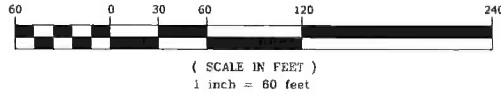
# SWEDISH CHAPEL ESTATES INSET B

### LEGEND

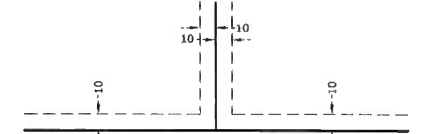
- DENOTES 1/2 INCH OPEN IRON PIPE MONUMENT FOUND, UNLESS OTHERWISE SHOWN
- DENOTES 1/2 INCH BY 14 INCH IRON PIPE SET, MARKED RLS NO. 41578
- ⊕ DENOTES ANOKA COUNTY CAST IRON MONUMENT, UNLESS OTHERWISE SHOWN
- △ DENOTES RIGHT OF ACCESS DEDICATED TO THE COUNTY OF ANOKA.
- ▭ DENOTES WETLAND EDGE AS DELINEATED BY KJOLHAUG ENVIRONMENTAL SERVICE COMPANY IN AUGUST 2023.

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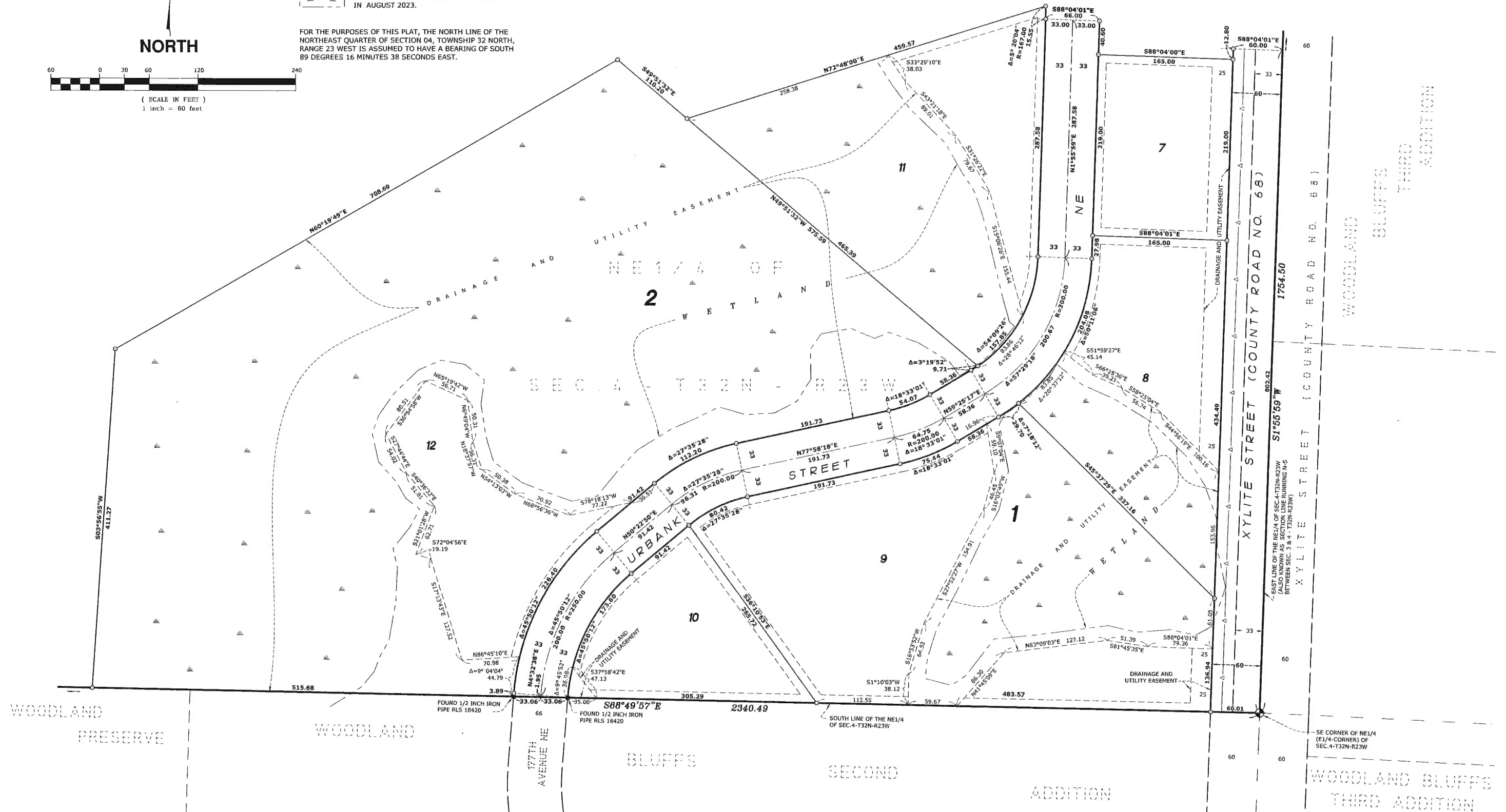
NORTH



DRAINAGE AND UTILITY EASEMENTS ARE SHOWN THUS:



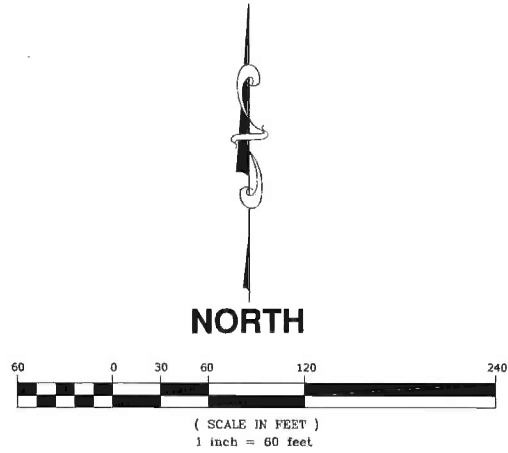
BEING 10 FEET IN WIDTH AND ADJOINING RIGHT OF WAY LINES, SIDE AND REAR LOT LINES, UNLESS OTHERWISE SHOWN ON THIS PLAT.



# SWEDISH CHAPEL ESTATES

## INSET C

CITY OF HAM LAKE  
COUNTY OF ANOKA  
SEC. 4, T32N, R23W

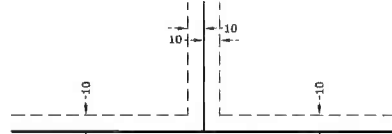


### LEGEND

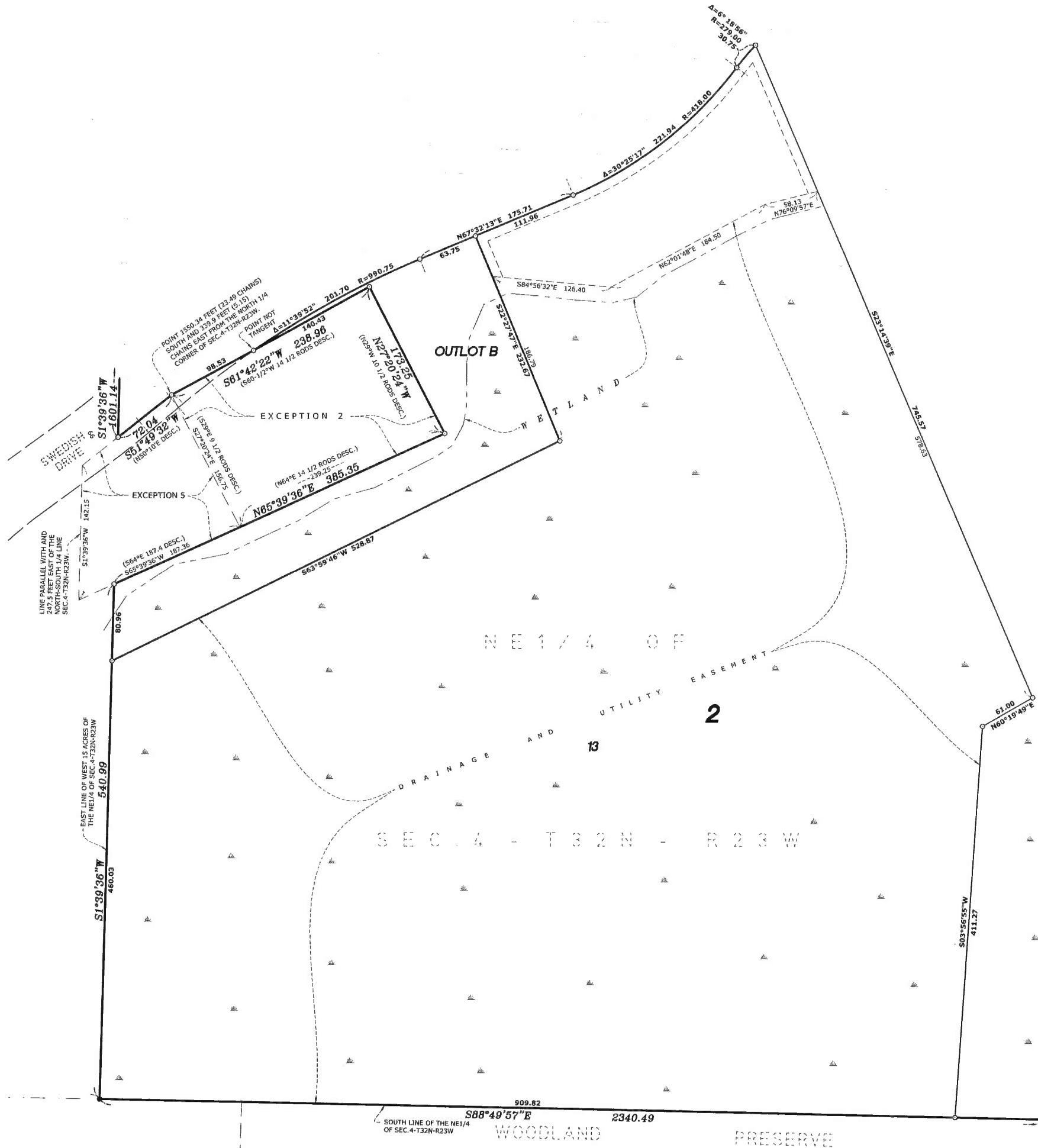
- DENOTES 1/2 INCH OPEN IRON PIPE MONUMENT FOUND, UNLESS OTHERWISE SHOWN
- DENOTES 1/2 INCH BY 14 INCH IRON PIPE SET, MARKED RLS NO. 41578
- DENOTES WETLAND EDGE AS DELINEATED BY KJOLHAUG ENVIRONMENTAL SERVICE COMPANY IN AUGUST 2023.

FOR THE PURPOSES OF THIS PLAT, THE NORTH LINE OF THE NORTHEAST QUARTER OF SECTION 04, TOWNSHIP 32 NORTH, RANGE 23 WEST IS ASSUMED TO HAVE A BEARING OF SOUTH 89 DEGREES 16 MINUTES 38 SECONDS EAST.

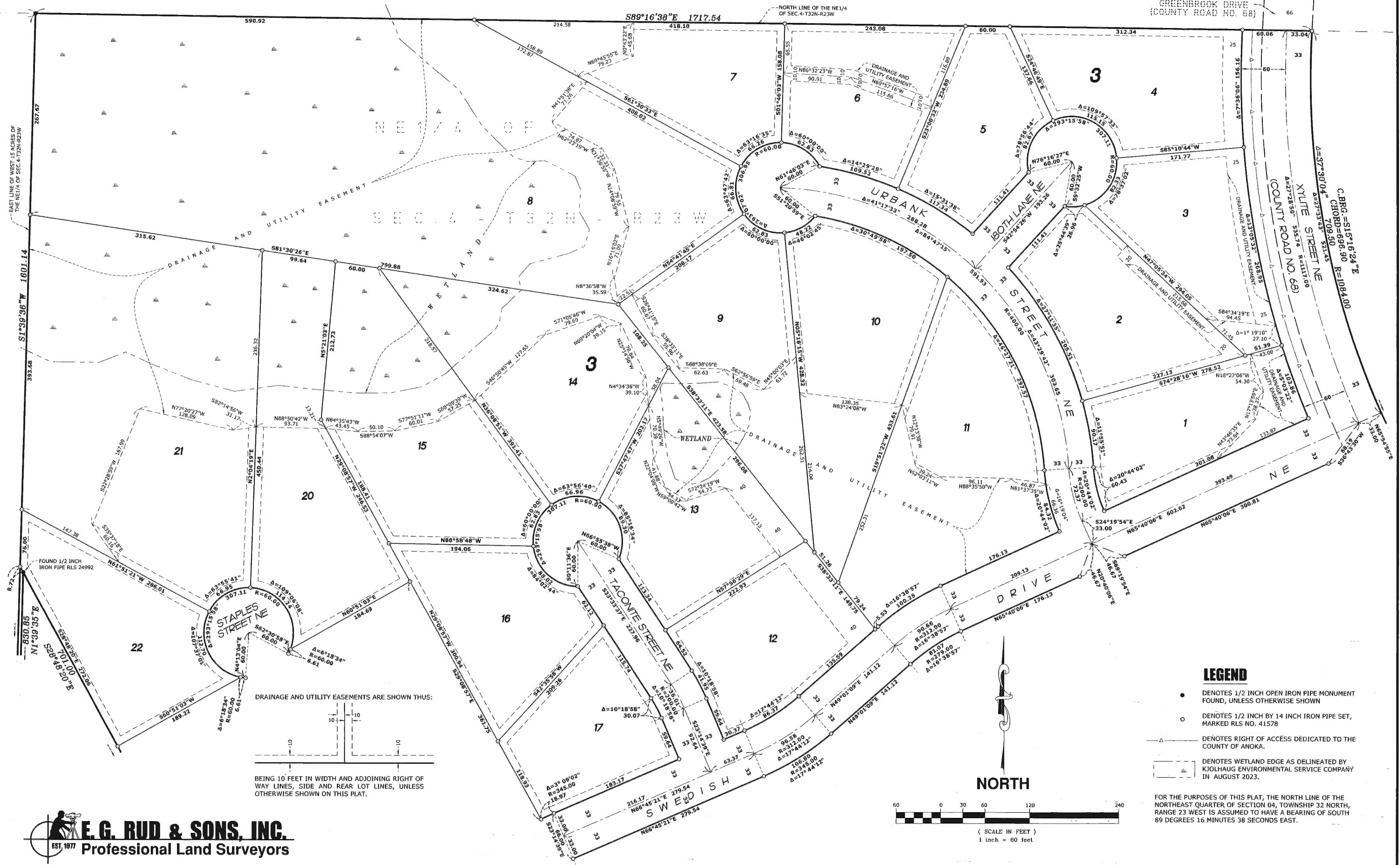
DRAINAGE AND UTILITY EASEMENTS ARE SHOWN THUS:



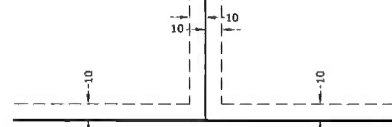
BEING 10 FEET IN WIDTH AND ADJOINING RIGHT OF WAY LINES, SIDE AND REAR LOT LINES, UNLESS OTHERWISE SHOWN ON THIS PLAT.



# SWEDISH CHAPEL ESTATES

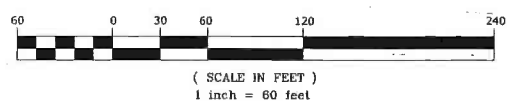
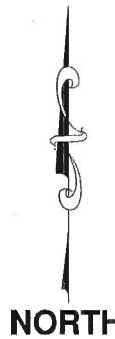


DRAINAGE AND UTILITY EASEMENTS ARE SHOWN THUS:



BEING 10 FEET IN WIDTH AND ADJOINING RIGHT OF WAY LINES, SIDE AND REAR LOT LINES, UNLESS OTHERWISE SHOWN ON THIS PLAT.

- LEGEND**
- DENOTES 1/2 INCH OPEN IRON PIPE MONUMENT FOUND, UNLESS OTHERWISE SHOWN
  - DENOTES 1/2 INCH BY 1/4 INCH IRON PIPE SET, MARKED RLS NO. 41578
  - ▲— DENOTES RIGHT OF ACCESS DEDICATED TO THE COUNTY OF ANOKA.
  - DENOTES WETLAND EDGE AS DELINEATED BY KJOLHAUG ENVIRONMENTAL SERVICE COMPANY IN AUGUST 2023.

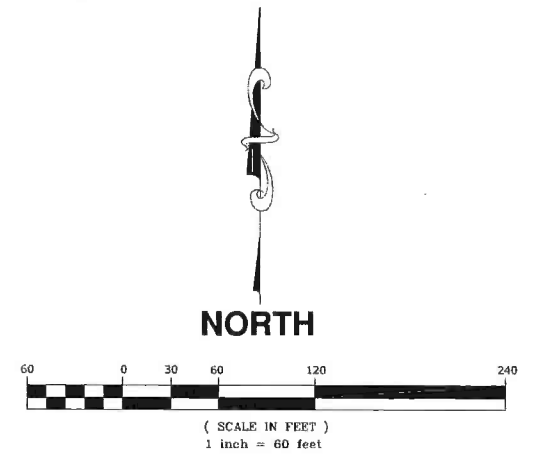
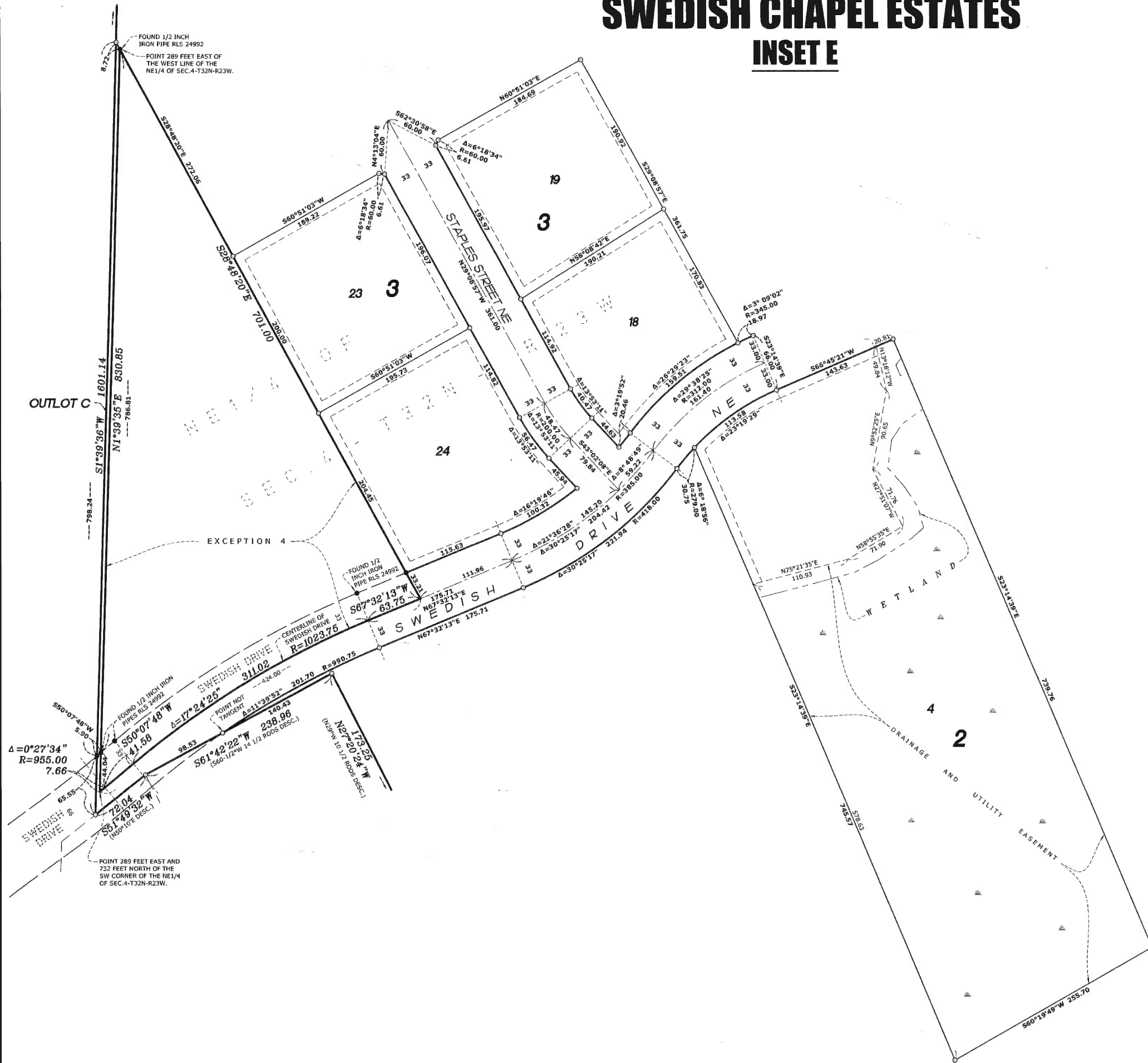


FOR THE PURPOSES OF THIS PLAT, THE NORTH LINE OF THE NORTHEAST QUARTER OF SECTION 04, TOWNSHIP 32 NORTH, RANGE 23 WEST IS ASSUMED TO HAVE A BEARING OF SOUTH 89 DEGREES 16 MINUTES 38 SECONDS EAST.

PRELIMINARY COPY  
UNRECORDED AS OF 08-27-24

# SWEDISH CHAPEL ESTATES INSET E

CITY OF HAM LAKE  
COUNTY OF ANOKA  
SEC. 4, T32N, R23W

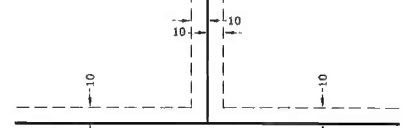


### LEGEND

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- DENOTES 1/2 INCH BY 14 INCH IRON PIPE SET, MARKED RLS NO. 41578
- DENOTES WETLAND EDGE AS DELINEATED BY KJOLHAUG ENVIRONMENTAL SERVICE COMPANY IN AUGUST 2023.

FOR THE PURPOSES OF THIS PLAT, THE NORTH LINE OF THE NORTHEAST QUARTER OF SECTION 04, TOWNSHIP 32 NORTH, RANGE 23 WEST IS ASSUMED TO HAVE A BEARING OF SOUTH 89 DEGREES 16 MINUTES 38 SECONDS EAST.

DRAINAGE AND UTILITY EASEMENTS ARE SHOWN THUS:



BEING 10 FEET IN WIDTH AND ADJOINING RIGHT OF WAY LINES, SIDE AND REAR LOT LINES, UNLESS OTHERWISE SHOWN ON THIS PLAT.



# TITLE SHEET

~of~ SWEDISH CHAPEL ESTATES  
 ~for~ MN DEVELOPMENTS, LLC.  
 17404 WARD LAKE DRIVE NW  
 ANDOVER, MN 55304  
 (612) 799-1471

## VICINITY MAP

PART OF SEC. 4, TWP. 32, RNG. 23




ANOKA COUNTY, MINNESOTA  
 (NO SCALE)

## SHEET INDEX

- T1 TITLE SHEET
- 2-3 PRELIMINARY PLAT
- 4-7 GRADING PLAN
- 8-11 LIVABILITY PLAN
- 12-14 LIVABILITY CHART
- R REMOVALS PLAN
- C1.1 - C1.8 STREET AND UTILITY PLANS
- C2.1 - C2.2 STORMWATER POLLUTION PREVENTION PLAN
- C3.1 - C3.3 DETAILS
- C4.1 - C4.3 TURN LANE PLAN

PONDING CALCULATIONS AND STORM SEWER DESIGN BY  
 PLOWE ENGINEERING, INC.

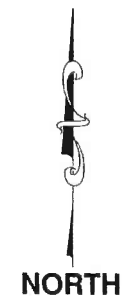
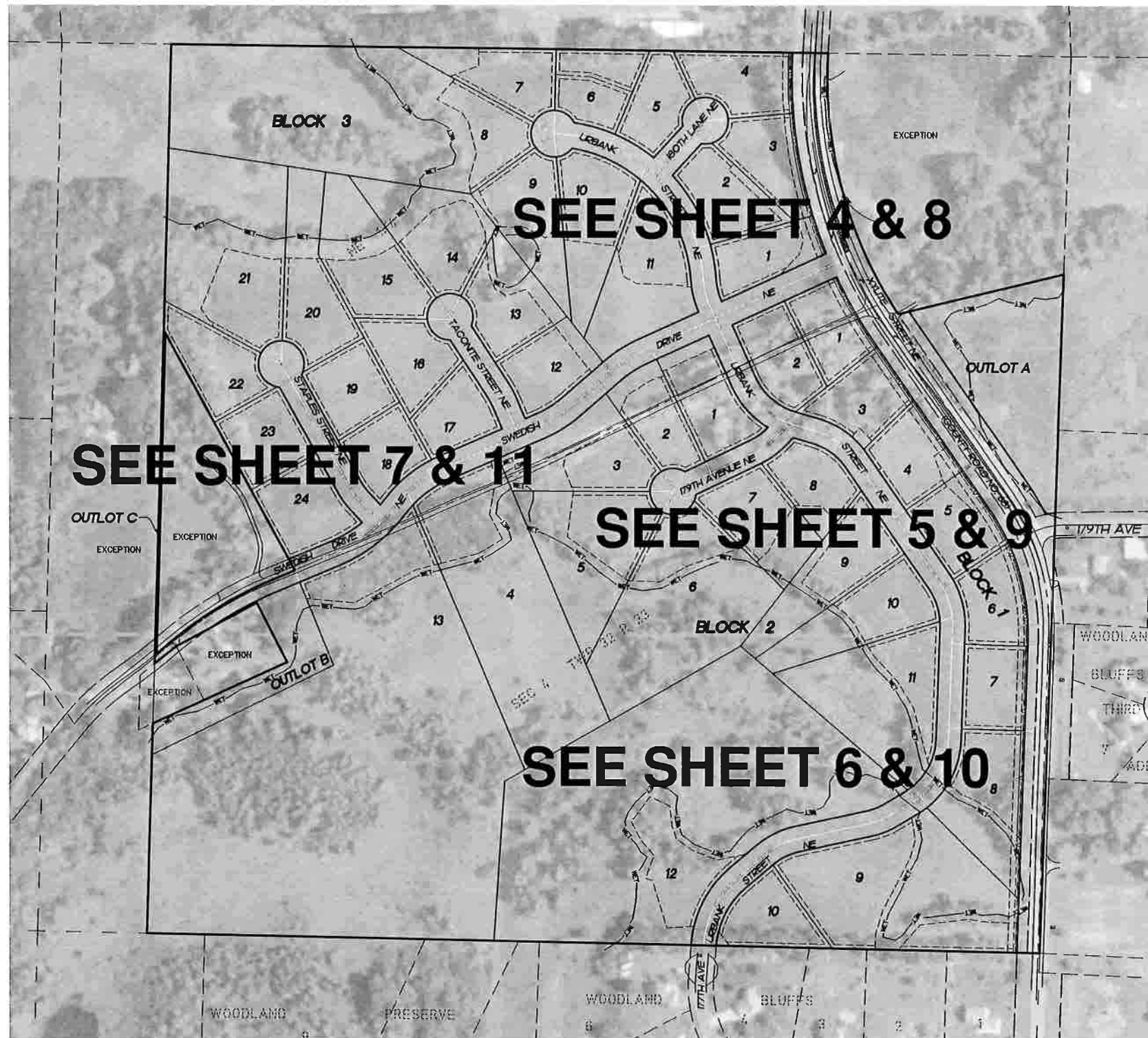


**PLOWE ENGINEERING, INC.**  
 6776 LAKE DRIVE SUITE 110  
 LINO LAKES, MN 55014

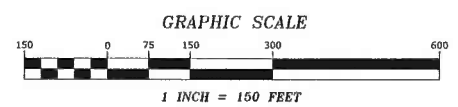
SITE PLANNING & ENGINEERING PHONE: (651) 361-8210  
 FAX: (651) 361-8701

I HEREBY CERTIFY THAT THE STORMWATER MANAGEMENT AND DRAINAGE REPORT FOR THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

*Adam Ginkel*  
 ADAM GINKEL  
 DATE: 07.29.2024 LIC. NO. 43963



**E. G. RUD & SONS, INC.**  
 Professional Land Surveyors  
 6776 Lake Drive NE, Suite 110  
 Lino Lakes, MN 55014  
 Tel. (651) 361-8200 Fax (651) 361-8701



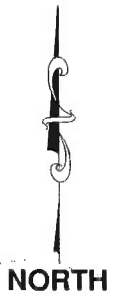
I hereby certify that this survey, plan or report was prepared by me or under my direct supervision and that I am a duly Registered Land Surveyor under the laws of the State of Minnesota.

*Jason S. Rud*  
 JASON S. RUD  
 Date: 07/29/2024 License No. 41578

NO.	DATE	DESCRIPTION	BY
1	04/08/24	VICINITY MAP	MMD
2	04/17/24	CITY COMMENTS	MMD
3	05/22/24	CITY COMMENTS	MMD
4	06/25/24	TRAIL EASEMENT / XYLITE LOTS	MMD
5	07/29/24	GEO. REPORT / FLOORS	MMD

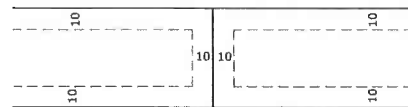
# PRELIMINARY PLAT

~of~ SWEDISH CHAPEL ESTATES  
 ~for~ MN DEVELOPMENTS, LLC.  
 17404 WARD LAKE DRIVE NW  
 ANDOVER, MN 55304  
 (612) 799-1471



## TYPICAL EASEMENTS

(NOT TO SCALE)



BEING 10 FEET IN WIDTH ADJOINING RIGHT OF WAY LINES AND 10 FEET IN WIDTH ADJOINING LOT LINES UNLESS OTHERWISE SHOWN.

## NOTES

- Bearings shown are on Anoka County datum.
- Parcel ID Number: 04-32-23-14-0001
- Site Address: 2506 Swedish Drive NE
- OWNER: JOAN A DOSEDEL
- Legal description per title commitment prepared by Chicago Title Insurance dated 9/7/2023 Commitment No. 230943680.

## DEVELOPMENT DATA

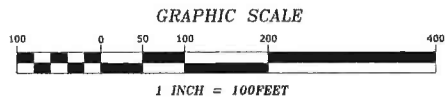
TOTAL SITE AREA = 111.42± ACRES  
 OUTLOT AREA = 5.01± ACRES  
 47 PROPOSED SINGLE FAMILY LOTS  
 AVERAGE LOT SIZE = 2.26 ACRES  
 MINIMUM STREET FRONTAGE = 200 FEET  
 MINIMUM LOT SIZE = 1.00 ACRES (INCLUDING HALF OF STREET ROW)  
 PROPOSED ZONING = R-1  
 BUILDING SETBACKS  
 FRONT = 30 FEET  
 SIDE = 10 FEET  
 REAR = 50 FEET  
 COUNTY ROAD = 50 FEET

## LEGEND

- DENOTES ANOKA COUNTY CAST IRON MONUMENT
- DENOTES IRON MONUMENT FOUND
- DENOTES EXISTING CONTOURS (2' INTERVAL)
- DENOTES DRAINAGE AND UTILITY EASEMENT
- DENOTES BUILDING SETBACK LINE
- DENOTES RESTRICTED ACCESS
- DENOTES WETLAND LINE DELINEATED BY KJOLHAUG ENVIRONMENTAL SERVICES INC.
- DENOTES WETLAND BUFFER LINE
- DENOTES APPROXIMATE FEMA FLOOD ZONE A LINE FROM FEMA FLOOD INSURANCE RATE MAP NO. 27003C0215E PANEL NO. 0215 SUFFIX E, EFFECTIVE DATE DECEMBER 16TH, 2015.
- DENOTES WETLAND FILL
- DENOTES EXISTING AREA 1' ABOVE MOTTLING
- DENOTES ADJACENT PARCEL OWNER INFORMATION (PER ANOKA COUNTY TAX INFORMATION)

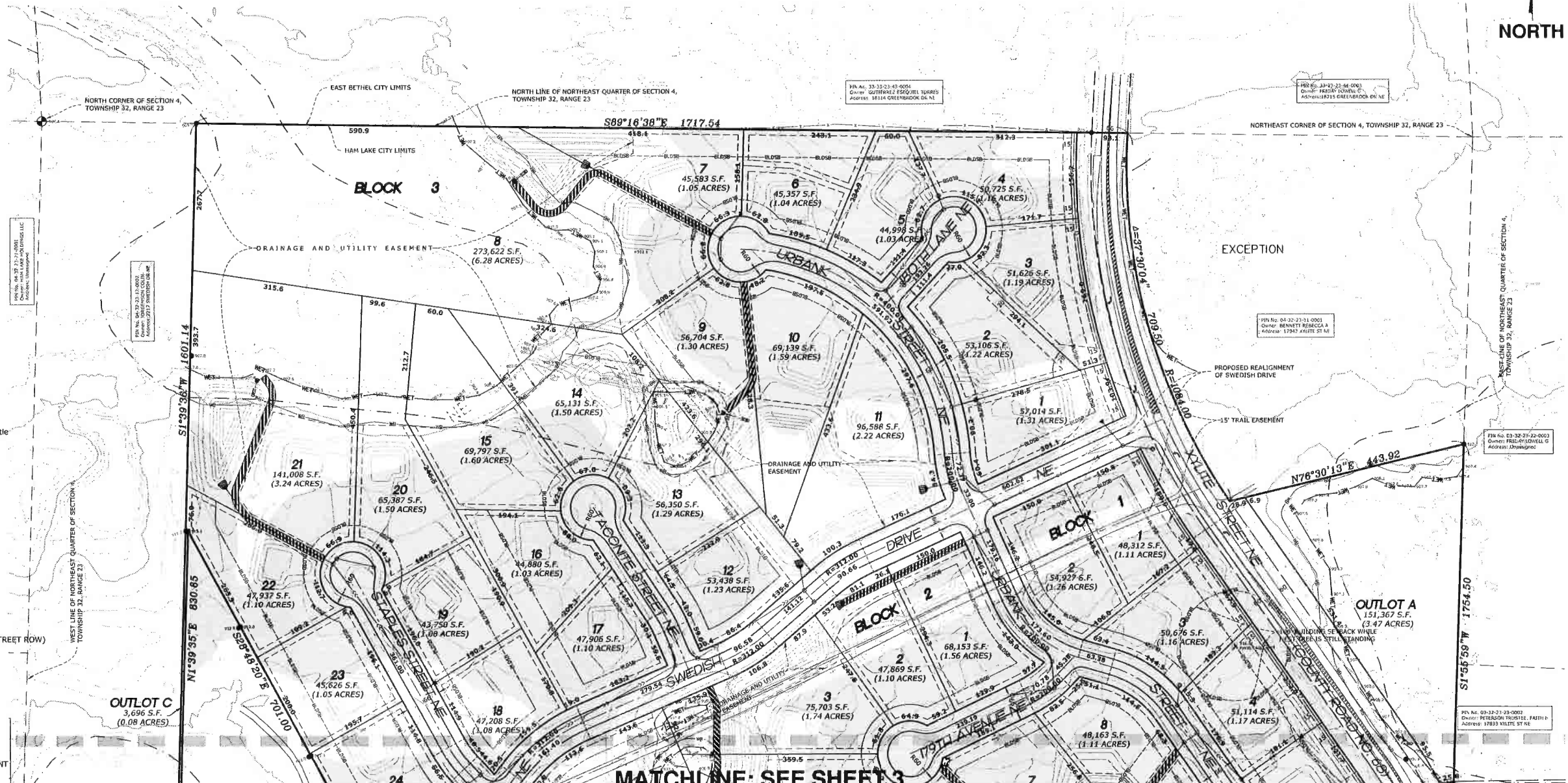
PN No. 17-119-22-14-0008  
 Owner: City of Andover  
 Address: Unsubdivided

**E.G. RUD & SONS, INC.**  
 Professional Land Surveyors  
 6776 Lake Drive NE, Suite 110  
 Lino Lakes, MN 55114  
 Tel. (651) 361-8200 Fax (651) 361-8701



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

JASON E. RUD  
 Date: 07/29/2024 License No. 41578



## MATCHLINE: SEE SHEET 3

## PROPERTY DESCRIPTION

The Northeast Quarter of Section 4, Township 32, Range 23, excepting the following described tracts of land:

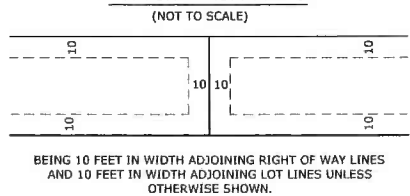
- The West 15 acres of the said Northeast Quarter of Section 4, Township 32, Range 23, heretofore sold and deeded to the Swedish Lutheran Society.
- A plot of ground, commencing at a point 23.49 chains South and 5.15 chains East (Variation 8 degrees 51 minutes in 1887) of Quarter corner on North side of Section 4, Township 32, Range 23; thence South 29 degrees East (Variation 8 degrees 51 minutes in 1887) 9 1/2 rods, to a tamarac stake; thence North 64 degrees East, 14 1/2 rods; thence North 29 degrees West, 10 1/2 rods; thence South 60 1/2 degrees West, 14 1/2 rods to point of commencement, containing 1 acre, more or less, being a part of the Southwest Quarter of Northeast Quarter of Section 4, Township 32, Range 23.
- Commencing at the Northeast corner of Section 4, Township 32, Range 23 and running thence West on and along town line between Towns of Bethel and Ham Lake a distance of 37 1/2 rods to East boundary line of Bethel and Minneapolis Road so called; thence in a Southerly direction on and along East road limit of said Bethel and Minneapolis Road as now located a distance of about 43 rods; thence in an Easterly direction a distance of about 24 1/2 rods to intersect the Section line running North and South between Sections 3 and 4 in said Township 32 and Range 23 at a point on said Section line a distance South from said Northeast corner of said Section 4, 34 rods; thence North on and along said Section line to place of commencement being a part of the Northeast Quarter of Northeast Quarter of Section 4, Township 32, Range 23, containing about 7 acres.
- That part of the Northeast Quarter of Section 4, Township 32, Range 23, described as follows: Commencing at a point 289 feet East and 732 feet North of the Southwest corner of said Northeast Quarter; thence Northeasterly along the center of the road 424 feet; thence Northwesterly 701 feet to the point, which is 289 feet East of the West line of the said Northeast Quarter; thence South to the point of beginning.
- Commencing at a point 1550.34 feet (23.49 chains) South and 339.9 feet (5.15 chains) East of the Quarter corner on the North side of Section 4; thence South 29 degrees East for 156.75 feet; thence South 64 degrees West for 187.4 feet; thence North, parallel with and 247.5 feet East of the Quarter Section line for 142.15 feet to a public road; thence North 50 degrees 10 minutes East along said Southerly road line to the point of beginning, also all right of title in said adjacent public road to the center line thereof, Anoka County, Minnesota.

DRAWN BY: MMD	JOB NO: 230743	DATE: 03/20/24
CHECK BY: JER	FIELD CREW: DT/CT	
1 04/17/24	CITY COMMENTS	MMD
2 05/22/24	CITY COMMENTS	MMD
3 06/25/24	TRAIL EASEMENT / XYLITE LOTS	MMD
4 07/29/24	GEO. REPORT / FLOORS	MMD
NO. DATE	DESCRIPTION	BY

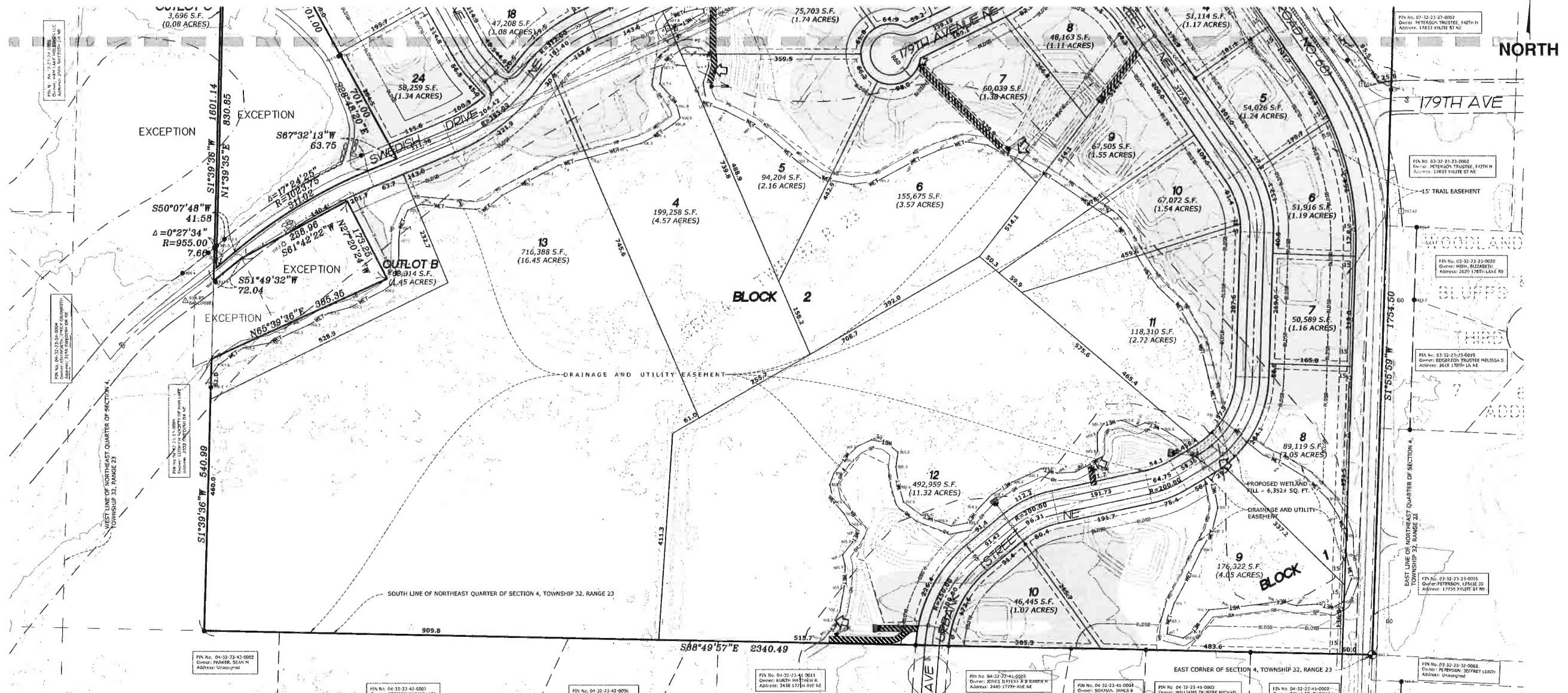
# PRELIMINARY PLAT

~of~ SWEDISH CHAPEL ESTATES  
 ~for~ MN DEVELOPMENTS, LLC.  
 17404 WARD LAKE DRIVE NW  
 ANDOVER, MN 55304  
 (612) 799-1471

## TYPICAL EASEMENTS

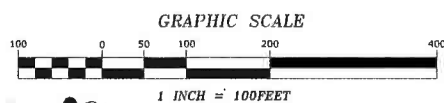


MATCHLINE: SEE SHEET 2



## DEVELOPMENT DATA

- TOTAL SITE AREA = 111.42± ACRES
- OUTLOT AREA = 5.01± ACRES
- 47 PROPOSED SINGLE FAMILY LOTS
- AVERAGE LOT SIZE = 2.26 ACRES
- MINIMUM STREET FRONTAGE = 200 FEET
- MINIMUM LOT SIZE = 1.00 ACRES (INCLUDING HALF OF STREET ROW)
- PROPOSED ZONING = R-1
- BUILDING SETBACKS: FRONT = 30 FEET, SIDE = 10 FEET, REAR = 50 FEET, COUNTY ROAD = 50 FEET



**E. G. RUD & SONS, INC.**  
 EST. 1977  
 Professional Land Surveyors  
 6776 Lake Drive NE, Suite 110  
 Lino Lakes, MN 55014  
 Tel. (651) 361-8200 Fax (651) 361-8701

## LEGEND

- CAST IRON MONUMENT DENOTES ANOKA COUNTY CAST IRON MONUMENT
- IRON MONUMENT FOUND DENOTES IRON MONUMENT FOUND
- SOLID LINE DENOTES EXISTING CONTOURS (2' INTERVAL)
- DASHED LINE DENOTES DRAINAGE AND UTILITY EASEMENT
- DOTTED LINE DENOTES BUILDING SETBACK LINE
- DASHED LINE WITH 'A' DENOTES RESTRICTED ACCESS
- DOTTED LINE WITH 'W' DENOTES WETLAND LINE DELINEATED BY KJOLHAUG ENVIRONMENTAL SERVICES INC.
- DOTTED LINE WITH 'B' DENOTES WETLAND BUFFER LINE
- DOTTED LINE WITH 'F' DENOTES APPROXIMATE FEMA FLOOD ZONE A LINE FROM FEMA FLOOD INSURANCE RATE MAP NO. 27003C0215E PANEL NO. 0215 SUFFIX E, EFFECTIVE DATE DECEMBER 16TH, 2015.
- HATCHED AREA DENOTES WETLAND FILL
- SOLID LINE WITH '1' DENOTES EXISTING AREA 1' ABOVE MOTTLING
- DOTTED LINE WITH 'O' DENOTES ADJACENT PARCEL OWNER INFORMATION (PER ANOKA COUNTY TAX INFORMATION)

## NOTES

- Bearings shown are on Anoka County datum.
- Parcel ID Number: 04-32-23-14-0001
- Site Address: 2506 Swedish Drive NE
- OWNER: JOAN A DOSEDEL
- Legal description per title commitment prepared by Chicago Title Insurance dated 9/7/2023 Commitment No. 230943680.

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

JASON E. RUD  
 Date: 07/29/2024 License No. 41578

## PROPERTY DESCRIPTION

The Northeast Quarter of Section 4, Township 32, Range 23, excepting the following described tracts of land:

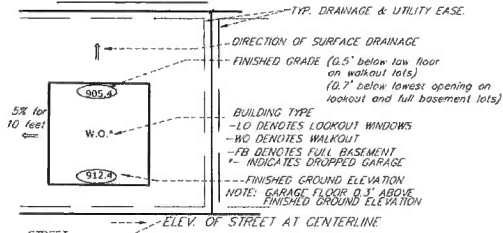
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- Commencing at the Northeast corner of Section 4, Township 32, Range 23 and running thence West on and along town line between Towns of Bethel and Harn Lake a distance of 37 1/2 rods to East boundary line of Bethel and Minneapolis Road so called; thence in a Southerly direction on and along East road limit of said Bethel and Minneapolis Road as now located a distance of about 43 rods; thence in an Easterly direction a distance of about 24 1/2 rods to intersect the Section line running North and South between Sections 3 and 4 in said Township 32 and Range 23 at a point on said Section line a distance South from said Northeast corner of said Section 4, 34 rods; thence North on and along said Section line to place of commencement being a part of the Northeast Quarter of Northeast Quarter of Section 4, Township 32, Range 23, containing about 7 acres.
- That part of the Northeast Quarter of Section 4, Township 32, Range 23, described as follows: Commencing at a point 289 feet East and 732 feet North of the Southwest corner of said Northeast Quarter; thence Northwesterly along the center of the road 424 feet; thence Northwesterly 701 feet to the point, which is 289 feet East of the West line of the said Northeast Quarter; thence South to the point of beginning.
- Commencing at a point 1550.34 feet (23.49 chains) South and 339.9 feet (5.15 chains) East of the Quarter corner on the North side of Section 4; thence South 29 degrees East for 156.75 feet; thence South 64 degrees West for 187.4 feet; thence North, parallel with and 247.5 feet East of the Quarter Section line for 142.15 feet to the Southerly line of a public road; thence North 50 degrees 10 minutes East along said Southerly road line to the point of beginning, also all right of title in said adjacent public road to the center line thereof, Anoka County, Minnesota.

NO.	DATE	DESCRIPTION	BY
1	04/17/24	CITY COMMENTS	HMD
2	05/22/24	CITY COMMENTS	HMD
3	06/25/24	TRAIL EASEMENT / XYLYTE LOTS	HMD
4	07/29/24	GEO. REPORT / FLOORS	HMD
			BY

# GRADING, EROSION CONTROL AND TREE PROTECTION PLAN

~of~ SWEDISH CHAPEL ESTATES  
 ~for~ MN DEVELOPMENTS, LLC.  
 17404 WARD LAKE DRIVE NW  
 ANDOVER, MN 55304  
 (612) 799-1471

## TYPICAL LOT



## LEGEND

- DENOTES SOIL BORING BY TRADEWELL SOIL TESTING
- DENOTES PIEZOMETER OR PENETRATION BORING BY BRAUN INTEREC, INC.
- DENOTES EMERGENCY OVERFLOW ELEVATION
- DENOTES EXISTING SPOT ELEVATION
- DENOTES WET LAND
- DENOTES EXISTING 2 FOOT CONTOUR
- DENOTES PROPOSED 2 FOOT CONTOURS
- DENOTES WETLAND DELINEATED BY KJOLHAUG ENVIRONMENTAL SERVICES COMPANY.
- DENOTES EASEMENT LINE
- DENOTES SETBACK LINE
- DENOTES PROPOSED STORM SEWER
- DENOTES PROPOSED SILT / TREE PROTECTION FENCE
- DENOTES BIO ROLL TO BE INSTALLED INSIDE SILT FENCE ADJACENT TO WETLAND
- DENOTES DIRECTION OF DRAINAGE
- DENOTES PROPOSED SPOT ELEVATION
- DENOTES PROPOSED CENTERLINE ELEVATION
- DENOTES PROPOSED WELL LOCATION
- DENOTES AREA 1' ABOVE MOTTLER
- DENOTES WETLAND / VEGETATIVE BUFFER
- DENOTES WETLAND / VEGETATIVE BUFFER SIGN
- DENOTES RIPRAP (RIPRAP TO BE VEGETATED IN WETLAND BUFFER)
- DENOTES PROPOSED STORM SEWER INLET PROTECTION
- DENOTES APPROXIMATE FEMA FLOOD ZONE A LINE FROM FEMA FLOOD INSURANCE RATE MAP NO. 270903C0303E PANEL NO. 0355 SUFFIX E, EFFECTIVE DATE DECEMBER 16TH, 2015.
- DENOTES FLOOD ZONE LINE PER TOPOGRAPHY
- DENOTES TREE PRESERVATION AREA
- DENOTES 12' POND ACCESS
- DENOTES WETLAND FILL
- DENOTES FLOODPLAIN FILL
- DENOTES COMPENSATORY STORAGE AREA

PONDING CALCULATIONS AND STORM SEWER DESIGN BY PLOWE ENGINEERING, INC.

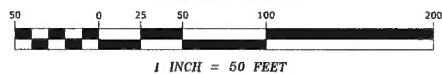
**PLOWE ENGINEERING, INC.**  
 6776 LAKE DRIVE  
 SUITE 110  
 LINO LAKES, MN 55014

SITE PLANNING & ENGINEERING PHONE: (651) 361-8210  
 FAX: (651) 361-8701

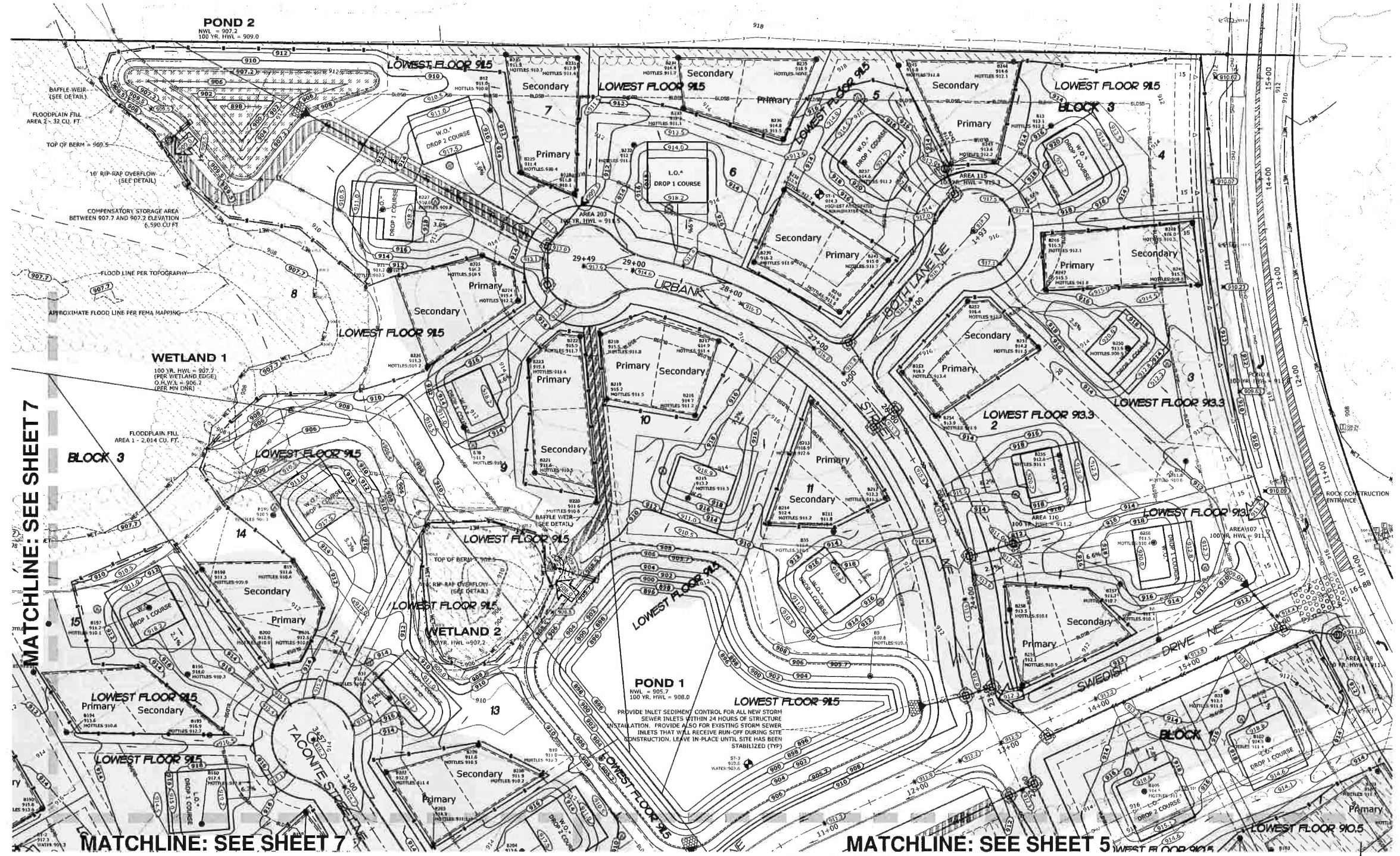
I HEREBY CERTIFY THAT THE STORMWATER MANAGEMENT AND DRAINAGE REPORT FOR THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

*Adam Ginkel*  
 ADAM GINKEL  
 DATE: 07.29.2024 LIC. NO. 43963

GRAPHIC SCALE



**E. G. RUD & SONS, INC.**  
 187, 1977 Professional Land Surveyors  
 6776 Lake Drive NE, Suite 110  
 Lino Lakes, MN 55014  
 Tel. (651) 361-8200 Fax (651) 361-8701



## LOT GRADING NOTES

## FLOODPLAIN FILL NOTES

## WETLAND FILL NOTES

## NOTES

## EROSION CONTROL / REVEGETATION SPECS.

1. PRIOR TO ROUGH GRADING, INSTALL SILT STOP FENCE IN LOCATIONS SHOWN. ADDITIONAL SILT STOP FENCE WILL BE REQUIRED WHERE LOCAL CONDITIONS REQUIRE. INSTALL TREE PROTECTION AS DEEMED NECESSARY BY THE CITY FORESTER PRIOR TO ANY GRADING.
2. ANY GRADING SHALL PROCEED ON AN AREA BY AREA BASIS TO MINIMIZE UNCOMPLETED AREAS.
3. AS EACH AREA OUTSIDE THE STREET IS GRADED, PROVIDE NATIVE TOPSOIL, SEED, AND MULCH ANCHORED WITH A STRAIGHT SET DISC WITHIN SEVEN DAYS AFTER ROUGH GRADING.
4. MAINTAIN AND REPAIR SILT STOP FENCES (INCLUDING REMOVAL OF ACCUMULATED SILT) UNTIL VEGETATION IS ESTABLISHED.
5. SEE "STORM WATER POLLUTION PREVENTION PLAN" FOR ADDITIONAL EROSION CONTROL NOTES AND SITE SEQUENCING.

## TREE PROTECTION NOTES

- TREE PROTECTION LIMITS TO BE MARKED IN FIELD PRIOR TO ANY TREE CLEARING ACTIVITY.
- SILT / TREE PROTECTION FENCE TO BE INSTALLED AT CONSTRUCTION LIMIT LINE.
- CARE IS TO BE TAKEN TO AVOID CONSTRUCTION ACTIVITY OR CONSTRUCTION VEHICLE TRAFFIC WITHIN THE DRIP LINE OF TREES IN THE TREE PROTECTION ZONE.
- FIELD DECISIONS WILL BE MADE ON LOCATION OF TREE PROTECTION LIMITS TO PRESERVE SIGNIFICANT TREES.
- SOME TREES AND DEAD FALL ARE TO BE CLEARED. THIS MAY BE DONE PRIOR TO INSTALLATION OF SILT / TREE PROTECTION FENCE. GRUBBING OF STUMPS WILL OCCUR AFTER EROSION CONTROL MEASURES ARE INSTALLED.

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

*Jason E. Rud*  
 JASON E. RUD

Date: 07/29/2024 License No. 41578

**NORTH**

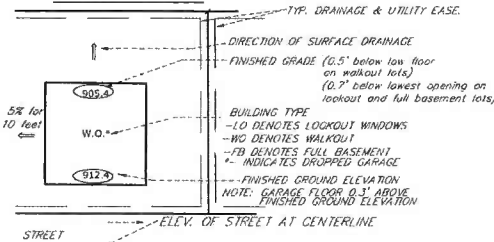
NO.	DATE	DESCRIPTION	BY
1	04/17/24	CITY COMMENTS	MMD
2	05/22/24	CITY COMMENTS	MMD
3	05/28/24	CITY COMMENTS	MMD
4	06/25/24	TRAIL EASEMENT / XLTILE LOTS	MMD
5	07/02/24	CITY COMMENTS	MMD
6	07/29/24	GEO. REPORT / FLOORS	MMD

# GRADING, EROSION CONTROL AND TREE PROTECTION PLAN

MATCHLINE: SEE SHEET 4

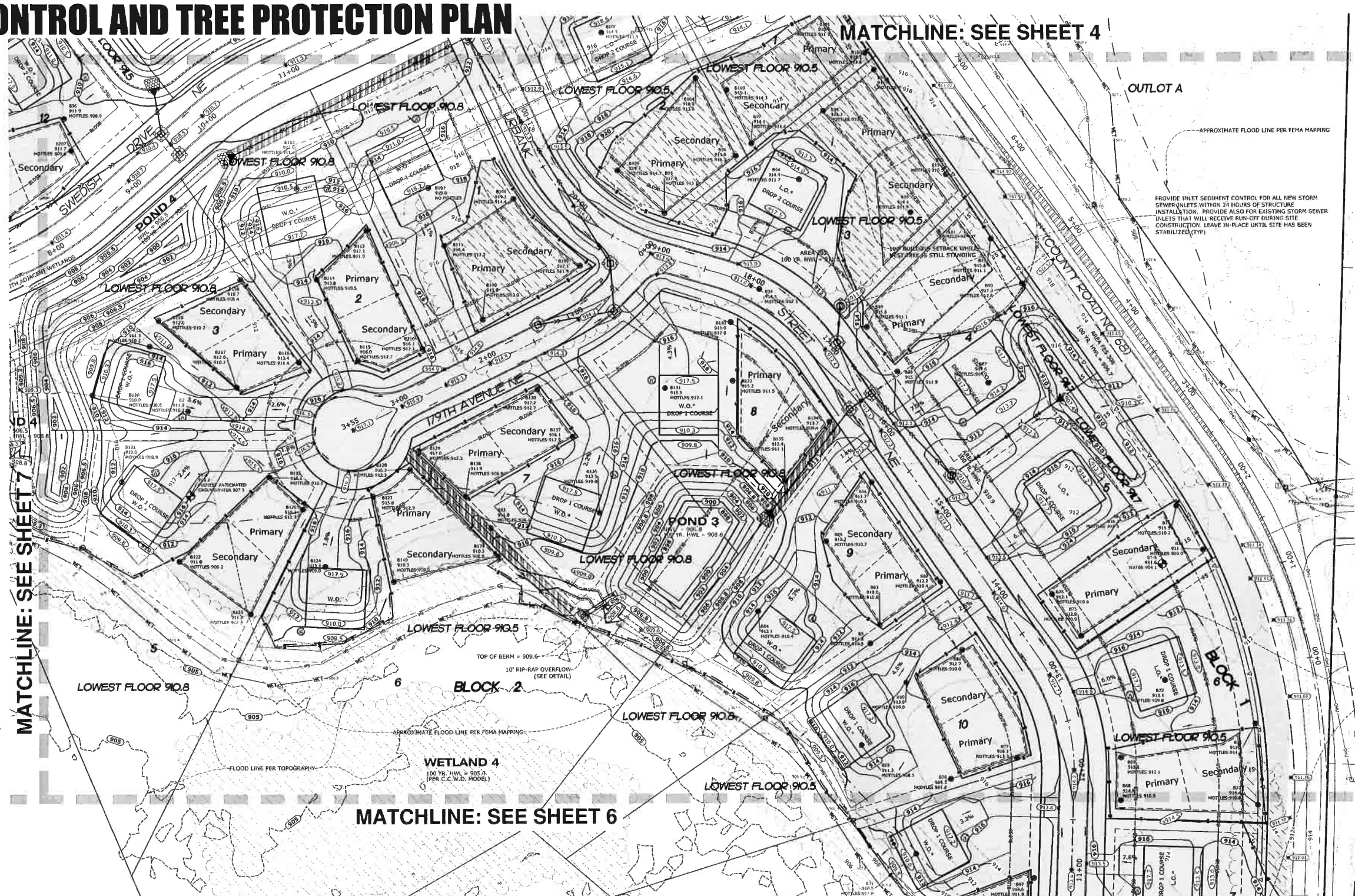
~of~ SWEDISH CHAPEL ESTATES  
 ~for~ MN DEVELOPMENTS, LLC.  
 17404 WARD LAKE DRIVE NW  
 ANDOVER, MN 55304  
 (612) 799-1471

## TYPICAL LOT



## LEGEND

- DENOTES SOIL BORING BY TRADEWELL SOIL TESTING
- DENOTES PIEZOMETER OR PENETRATION BORING BY BRAUN INTERTEC, INC.
- DENOTES EMERGENCY OVERFLOW ELEVATION
- DENOTES EXISTING SPOT ELEVATION
- DENOTES WET LAND
- DENOTES EXISTING 2 FOOT CONTOUR
- DENOTES PROPOSED 2 FOOT CONTOURS
- DENOTES WETLAND DELINEATED BY KJOLHAUG ENVIRONMENTAL SERVICES COMPANY.
- DENOTES EASEMENT LINE
- DENOTES SETBACK LINE
- DENOTES PROPOSED STORM SEWER
- DENOTES PROPOSED SILT / TREE PROTECTION FENCE
- DENOTES BIG ROLL TO BE INSTALLED INSIDE SILT FENCE ADJACENT TO WETLAND
- DENOTES DIRECTION OF DRAINAGE
- DENOTES PROPOSED SPOT ELEVATION
- DENOTES PROPOSED CENTERLINE ELEVATION
- DENOTES PROPOSED WELL LOCATION
- DENOTES AREA 1' ABOVE HOTELS
- DENOTES WETLAND / VEGETATIVE BUFFER
- DENOTES WETLAND / VEGETATIVE BUFFER SIGN
- DENOTES RIPRAP (RIPRAP TO BE VEGETATED IN WETLAND BUFFER)
- DENOTES PROPOSED STORM SEWER INLET PROTECTION
- DENOTES APPROXIMATE FEMA FLOOD ZONE A LINE FROM FEMA FLOOD INSURANCE RATE MAP NO. 2700020325E, PANEL NO. 0355 SUFFIX E, EFFECTIVE DATE DECEMBER 16TH, 2015.
- DENOTES FLOOD ZONE LINE PER TOPOGRAPHY
- DENOTES TREE PRESERVATION AREA
- DENOTES 12' POND ACCESS
- DENOTES WETLAND FILL
- DENOTES FLOODPLAIN FILL
- DENOTES COMPENSATORY STORAGE AREA



OUTLOT A

APPROXIMATE FLOOD LINE PER FEMA MAPPING

PROVIDE INLET SEDIMENT CONTROL FOR ALL NEW STORM SEWER INLETS WITHIN 24 HOURS OF STRUCTURE INSTALLATION. PROVIDE ALSO FOR EXISTING STORM SEWER INLETS THAT WILL RECEIVE RUN-OFF DURING SITE CONSTRUCTION. LEAVE IN-PLACE UNTIL SITE HAS BEEN STABILIZED (TYP)

MATCHLINE: SEE SHEET 7

MATCHLINE: SEE SHEET 6

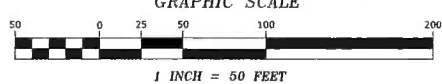
PONDING CALCULATIONS AND STORM SEWER DESIGN BY PLOWE ENGINEERING, INC.

**PLOWE ENGINEERING, INC.**  
 6776 LAKE DRIVE SUITE 110 LINO LAKES, MN 55014

SITE PLANNING & ENGINEERING PHONE: (651) 361-8210  
 FAX: (651) 361-8701

I HEREBY CERTIFY THAT THE STORMWATER MANAGEMENT AND DRAINAGE REPORT FOR THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

*Adam Gankel*  
 ADAM GANKEL  
 DATE: 07.29.2024 LIC. NO. 43983



**E. G. RUD & SONS, INC.**  
 EST. 1977 Professional Land Surveyors  
 6776 Lake Drive NE, Suite 110 Lino Lakes, MN 55014  
 Tel. (651) 361-8200 Fax (651) 361-8701  
 www.egrud.com

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

*JASON E. RUD*  
 JASON E. RUD  
 Date: 07/29/2024 License No. 41578

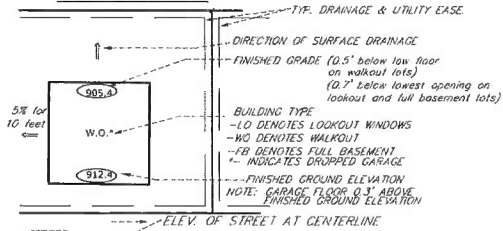
NORTH			
CHECK BY:	JER	FIELD CREW: DT/CT	DATE: 03/20/24
1	04/17/24	CITY COMMENTS	HMD
2	05/22/24	CITY COMMENTS	HMD
3	06/25/24	TRAIL EASEMENT / XLYTE LOTS	HMD
4	07/02/24	CITY COMMENTS	HMD
5	07/29/24	GEO. REPORT / FLOORS	HMD
NO.	DATE	DESCRIPTION	BY

# GRADING, EROSION CONTROL AND TREE PROTECTION PLAN

MATCHLINE: SEE SHEET 5

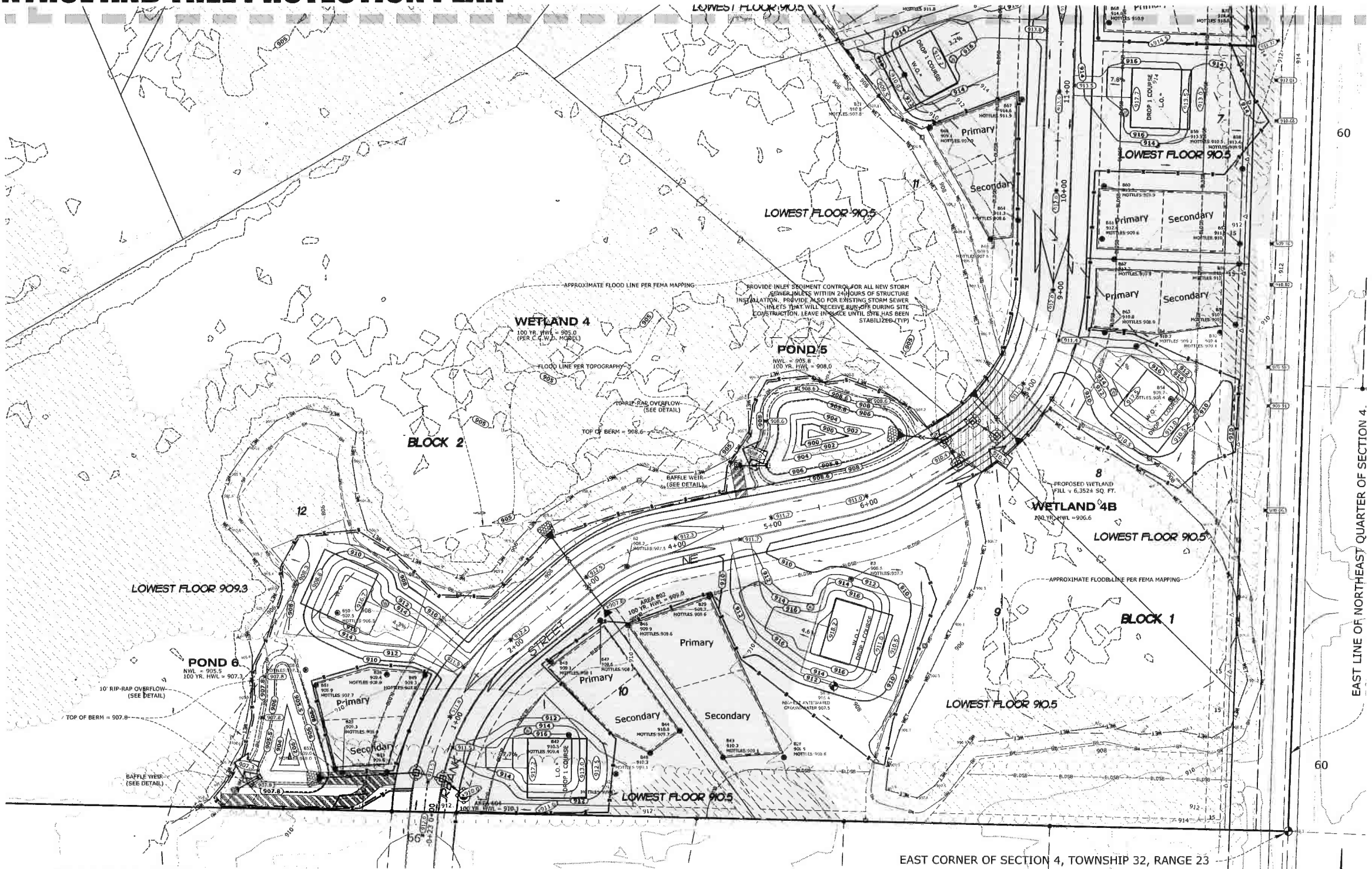
~of~ SWEDISH CHAPEL ESTATES  
 ~for~ MN DEVELOPMENTS, LLC.  
 17404 WARD LAKE DRIVE NW  
 ANDOVER, MN 55304  
 (612) 799-1471

## TYPICAL LOT



## LEGEND

- DENOTES SOIL BORING BY TRADEWELL SOIL TESTING
- DENOTES PIEZOMETER OR PENETRATION BORING BY BRAUN INTEREC, INC.
- DENOTES EMERGENCY OVERFLOW ELEVATION
- DENOTES EXISTING SPOT ELEVATION
- DENOTES WET LAND
- DENOTES EXISTING 2 FOOT CONTOUR
- DENOTES PROPOSED 2 FOOT CONTOURS
- WET DENOTES WETLAND DELINEATED BY KJOLHAUG ENVIRONMENTAL SERVICES COMPANY.
- - - DENOTES EASEMENT LINE
- DENOTES SETBACK LINE
- DENOTES PROPOSED STORM SEWER
- DENOTES PROPOSED SILT / TREE PROTECTION FENCE
- DENOTES BIG ROLL TO BE INSTALLED INSIDE SILT FENCE ADJACENT TO WETLAND
- DENOTES DIRECTION OF DRAINAGE
- DENOTES PROPOSED SPOT ELEVATION
- DENOTES PROPOSED CENTERLINE ELEVATION
- DENOTES PROPOSED WELL LOCATION
- DENOTES AREA 1' ABOVE MOTTLES
- DENOTES WETLAND / VEGETATIVE BUFFER
- DENOTES WETLAND / VEGETATIVE BUFFER SIGN
- DENOTES RIPRAP (RIPRAP TO BE VEGETATED IN WETLAND BUFFER)
- DENOTES PROPOSED STORM SEWER INLET PROTECTION
- - - DENOTES APPROXIMATE FEMA FLOOD ZONE A LINE FROM FEMA FLOOD INSURANCE RATE MAP NO. 270803033E PANEL NO. 0355 SUFFIX E, EFFECTIVE DATE DECEMBER 16TH, 2015.
- - - DENOTES FLOOD ZONE LINE PER TOPOGRAPHY
- DENOTES TREE PRESERVATION AREA
- DENOTES 12' POND ACCESS
- DENOTES WETLAND FILL
- DENOTES FLOODPLAIN FILL
- DENOTES COMPENSATORY STORAGE AREA



60

EAST LINE OF NORTHEAST QUARTER OF SECTION 4.

60

PONDING CALCULATIONS AND STORM SEWER DESIGN BY PLOWE ENGINEERING, INC.

**PLOWE ENGINEERING, INC.**  
 6776 LAKE DRIVE  
 SUITE 110  
 LINO LAKES, MN 55014

SITE PLANNING & ENGINEERING PHONE: (651) 361-8210 FAX: (651) 361-8701

I HEREBY CERTIFY THAT THE STORMWATER MANAGEMENT AND DRAINAGE REPORT FOR THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

*Adam Ginkel*  
**ADAM GINKEL**  
 DATE: 07.29.2024 LIC. NO. 43963

### LOT GRADING NOTES

- PAD CONTOURS SHOWN ARE FOR DEMONSTRATION PURPOSES.
- HOUSE TYPES AND GRADING THAT VARY FROM WHAT IS PROPOSED ON THE GRADING PLAN REQUIRE A PLAN REVIEW BY THE CITY OF HAM LAKE.
- SILT FENCE TO BE INSTALLED BY BUILDER PRIOR TO HOUSE CONSTRUCTION.
- THERE IS TO BE NO GRADING WITHIN 15% AREAS.

### EROSION CONTROL / REVEGETATION SPECS.

- PRIOR TO ROUGH GRADING, INSTALL SILT STOP FENCE IN LOCATIONS SHOWN. ADDITIONAL SILT STOP FENCE WILL BE REQUIRED WHERE LOCAL CONDITIONS REQUIRE. INSTALL TREE PROTECTION AS DEEMED NECESSARY BY THE CITY FORESTER PRIOR TO ANY GRADING.
- ANY GRADING SHALL PROCEED ON AN AREA BY AREA BASIS TO MINIMIZE UNCOMPLETED AREAS.
- AS EACH AREA OUTSIDE THE STREET IS GRADED, PROVIDE NATIVE TOPSOIL, SEED, AND MULCH ANCHORED WITH A STRAIGHT SET DISC WITHIN SEVEN DAYS AFTER ROUGH GRADING.
- MAINTAIN AND REPAIR SILT STOP FENCES (INCLUDING REMOVAL OF ACCUMULATED SILT) UNTIL VEGETATION IS ESTABLISHED.
- SEE "STORM WATER POLLUTION PREVENTION PLAN" FOR ADDITIONAL EROSION CONTROL NOTES AND SITE SEQUENCING.

### FLOODPLAIN FILL NOTES

- (FLOODPLAIN FILL)
- FLOODPLAIN FILL WETLAND 1 BASIN=2,046 CU/FT COMPENSATORY STORAGE = 6,590 CU/FT (COMPENSATORY STORAGE PROVIDED IN POND 2 BETWEEN 907.7 AND 907.2 ELEVATION)

### TREE PROTECTION NOTES

- TREE PROTECTION LIMITS TO BE MARKED IN FIELD PRIOR TO ANY TREE CLEARING ACTIVITY.
- SILT / TREE PROTECTION FENCE TO BE INSTALLED AT CONSTRUCTION LIMIT LINE.
- CARE IS TO BE TAKEN TO AVOID CONSTRUCTION ACTIVITY OR CONSTRUCTION VEHICLE TRAFFIC WITHIN THE DRIP LINE OF TREES IN THE TREE PROTECTION ZONE.
- FIELD DECISIONS WILL BE MADE ON LOCATION OF TREE PROTECTION LIMITS TO PRESERVE SIGNIFICANT TREES.
- SOME TREES AND DEAD FELL ARE TO BE CLEARED. THIS MAY BE DONE PRIOR TO INSTALLATION OF SILT / TREE PROTECTION FENCE. GRUBBING OF STUMPS WILL OCCUR AFTER EROSION CONTROL MEASURES ARE INSTALLED.

### WETLAND FILL NOTES

- WETLAND FILL AREA = 6,3524 SQ. FT.

### NOTES

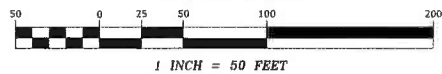
- BEARINGS SHOWN ARE ON ANOKA COUNTY DATUM.
- TOTAL LOT AREAS ARE CALCULATED TO STREET CENTERLINE PER ORDINANCE.
- 2 FOOT CONTOUR INTERVAL (NAVD 88)
- CONTOURS SHOWN ARE PER RINGEO LIDAR DISTRIBUTION AND FIELD VERIFICATION
- ALL MATCH POINTS AND PAVEMENT PATCHES TO BE SAWCUT AT FULL DEPTH.
- TURF AREA TO BE SEEDDED WITHIN 7 DAYS AFTER COMPLETION OF ROUGH GRADING OR INACTIVITY.
- SEE PRELIMINARY PLAN / PROFILE SHEETS FOR STORM SEWER RIMS, INVERTS, AND SIZES.
- TRADEWELL SOIL TESTING COMPLETED SEPTIC SOIL BORINGS.
- BRAUN INTEREC IS MONITORING SITE GROUND WATER ELEVATIONS WITH PIEZOMETERS, ANTICIPATED GROUNDWATER ELEVATIONS ARE BASED ON PRELIMINARY INFORMATION AND ARE SUBJECT TO REVISION.
- ALL PIPE AREAS UNDER 48" PROVIDED WITH TRASH GUARDS
- PROVIDE CLASS III RIPRAP WITH FILTER FABRIC FOR ALL PIPE OUTLETS. INSTALL 6" OF TOPSOIL ON RIPRAP IN WETLAND BUFFERS AND SEED WITH SEED MIX MINDOT 33-261.
- IF DEWATERING IS REQUIRED, THE CONTRACTOR SHALL APPLY FOR A MIN DNR DEWATERING PERMIT AND WILL PROVIDE WELL-FIELD LOCATIONS, RATES, DISCHARGE LOCATION, SCHEDULE AND QUANTITIES TO CWR 7 DAYS PRIOR TO ANY DEWATERING OPERATIONS
- CONTRACTORS MUST BE PROVIDED WITH DNR FLYERS/ FACT SHEETS ON BLANDING'S TURTLES.
- DISTURBED SOILS AND STOCKPILES WILL BE TEMPORARILY OR PERMANENTLY STABILIZED WITHIN 24 HOURS AFTER CONSTRUCTION ACTIVITY IN THAT AREA HAS TEMPORARILY OR PERMANENTLY CEASED

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

*Jason E. Rue*  
 JASON E. RUE  
 Date: 07/29/2024 License No. 41578

NORTH

NO.	DATE	DESCRIPTION	BY
1	04/17/24	CITY COMMENTS	MMD
2	05/22/24	CITY COMMENTS	MMD
3	06/25/24	TRAIL EASEMENT / XYLITE LOTS	MMD
4	07/02/24	CITY COMMENTS	MMD
5	07/29/24	GEO. REPORT / FLOORS	MMD
NO.			



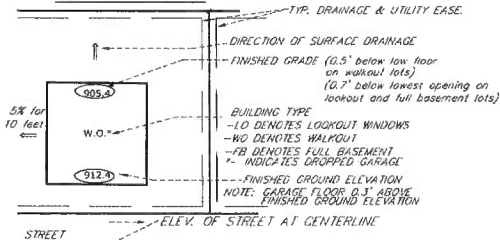
**E. G. RUD & SONS, INC.**  
 EST. 1977  
 Professional Land Surveyors  
 6776 Lake Drive NE, Suite 110  
 Lino Lakes, MN 55014  
 Tel. (651) 361-8200 Fax (651) 361-8701

www.egrud.com

# GRADING, EROSION CONTROL AND TREE PROTECTION PLAN

~of~ SWEDISH CHAPEL ESTATES  
 ~for~ MN DEVELOPMENTS, LLC.  
 17404 WARD LAKE DRIVE NW  
 ANDOVER, MN 55304  
 (612) 799-1471

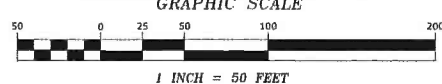
## TYPICAL LOT



## LEGEND

- DENOTES SOIL BORING BY TRADEWELL SOIL TESTING
- DENOTES PIEZOMETER OR PENETRATION BORING BY BRAUN INTERTEC, INC.
- DENOTES EMERGENCY OVERFLOW ELEVATION
- DENOTES EXISTING SPOT ELEVATION
- DENOTES WET LAND
- DENOTES EXISTING 2 FOOT CONTOUR
- DENOTES PROPOSED 2 FOOT CONTOURS
- DENOTES WETLAND DELINEATED BY KJOLHAUG ENVIRONMENTAL SERVICES COMPANY.
- DENOTES EASEMENT LINE
- DENOTES SETBACK LINE
- DENOTES PROPOSED STORM SEWER
- DENOTES PROPOSED SILT / TREE PROTECTION FENCE
- DENOTES BIG ROLL TO BE INSTALLED INSIDE SILT FENCE ADJACENT TO WETLAND
- DENOTES DIRECTION OF DRAINAGE
- DENOTES PROPOSED SPOT ELEVATION
- DENOTES PROPOSED CENTERLINE ELEVATION
- DENOTES PROPOSED WELL LOCATION
- DENOTES AREA 1' ABOVE MOTTLES
- DENOTES WETLAND / VEGETATIVE BUFFER
- DENOTES WETLAND / VEGETATIVE BUFFER SIGN
- DENOTES RIPRAP (RIPRAP TO BE VEGETATED IN WETLAND BUFFER)
- DENOTES PROPOSED STORM SEWER INLET PROTECTION
- DENOTES APPROXIMATE FEMA FLOOD ZONE A LINE FROM FEMA FLOOD INSURANCE RATE MAP NO. 21083C035E PANEL NO. 0355 SUFFIX E, EFFECTIVE DATE DECEMBER 16TH, 2015.
- DENOTES FLOOD ZONE LINE PER TOPOGRAPHY
- DENOTES TREE PRESERVATION AREA
- DENOTES 12' POND ACCESS
- DENOTES WETLAND FILL
- DENOTES FLOODPLAIN FILL
- DENOTES COMPENSATORY STORAGE AREA

PONDING CALCULATIONS AND STORM SEWER DESIGN BY  
**PLOWE ENGINEERING, INC.**  
 6776 LAKE DRIVE SUITE 110 LINO LAKES, MN 55014  
 PHONE: (651) 361-8210 FAX: (651) 361-8701  
 I HEREBY CERTIFY THAT THE STORMWATER MANAGEMENT AND DRAINAGE REPORT FOR THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.  
 ADAM GINKEL  
 DATE: 07/29/2024 LIC. NO. 43963



**E. G. RUD & SONS, INC.**  
 EST. 1877 Professional Land Surveyors  
 6776 Lake Drive NE, Suite 110 Lino Lakes, MN 55014  
 Tel. (651) 361-8200 Fax (651) 361-8701  
 www.egrud.com



## EROSION CONTROL / REVEGETATION SPECS.

1. PRIOR TO ROUGH GRADING, INSTALL SILT STOP FENCE IN LOCATIONS SHOWN. ADDITIONAL SILT STOP FENCE WILL BE REQUIRED WHERE LOCAL CONDITIONS REQUIRE. INSTALL TREE PROTECTION AS DEEMED NECESSARY BY THE CITY FORESTER PRIOR TO ANY GRADING.
2. ANY GRADING SHALL PROCEED ON AN AREA BY AREA BASIS TO MINIMIZE UNCOMPLETED AREAS.
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5. SEE "STORM WATER POLLUTION PREVENTION PLAN" FOR ADDITIONAL EROSION CONTROL NOTES AND SITE SEQUENCING.

## LOT GRADING NOTES

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- HOUSE TYPES AND GRADING THAT VARY FROM WHAT IS PROPOSED ON THE GRADING PLAN REQUIRE A PLAN REVIEW BY THE CITY OF HAM LAKE.
- SILT FENCE TO BE INSTALLED BY BUILDER PRIOR TO HOUSE CONSTRUCTION.
- THERE IS TO BE NO GRADING WITHIN ISTIS AREAS

## WETLAND FILL NOTES

- WETLAND FILL AREA = 6,3524 SQ. FT.

## NOTES

- BEARINGS SHOWN ARE ON ANOKA COUNTY DATUM.
- TOTAL LOT AREAS ARE CALCULATED TO STREET CENTERLINE PER ORDINANCE.
- 2 FOOT CONTOUR INTERVAL (HARD R/L)
- CONTOURS SHOWN ARE PER MINGO LIDAR DISTRIBUTION AND FIELD VERIFICATION.
- ALL MATCH POINTS AND PAVEMENT PATCHES TO BE SAWCUT AT FULL DEPTH.
- TURF AREA TO BE SEED WITHIN 7 DAYS AFTER COMPLETION OF ROUGH GRADING OR INACTIVITY.
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- TRADEWELL SOIL TESTING COMPLETED SEPTIC SOIL BORINGS.
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- CONTRACTORS MUST BE PROVIDED WITH DNR FLYERS/ FACT SHEETS ON BLANDING'S TURTLES.
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## FLOODPLAIN FILL NOTES

(FLOODPLAIN FILL)

- FLOODPLAIN FILL WETLAND 1 BASIN=2,046 CU/FT
- COMPENSATORY STORAGE =6,590 CU/FT
- (COMPENSATORY STORAGE PROVIDED IN POND 2 BETWEEN 907.7 AND 907.2 ELEVATION)

## TREE PROTECTION NOTES

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- FIELD DECISIONS WILL BE MADE ON LOCATION OF TREE PROTECTION LIMITS TO PRESERVE SIGNIFICANT TREES.
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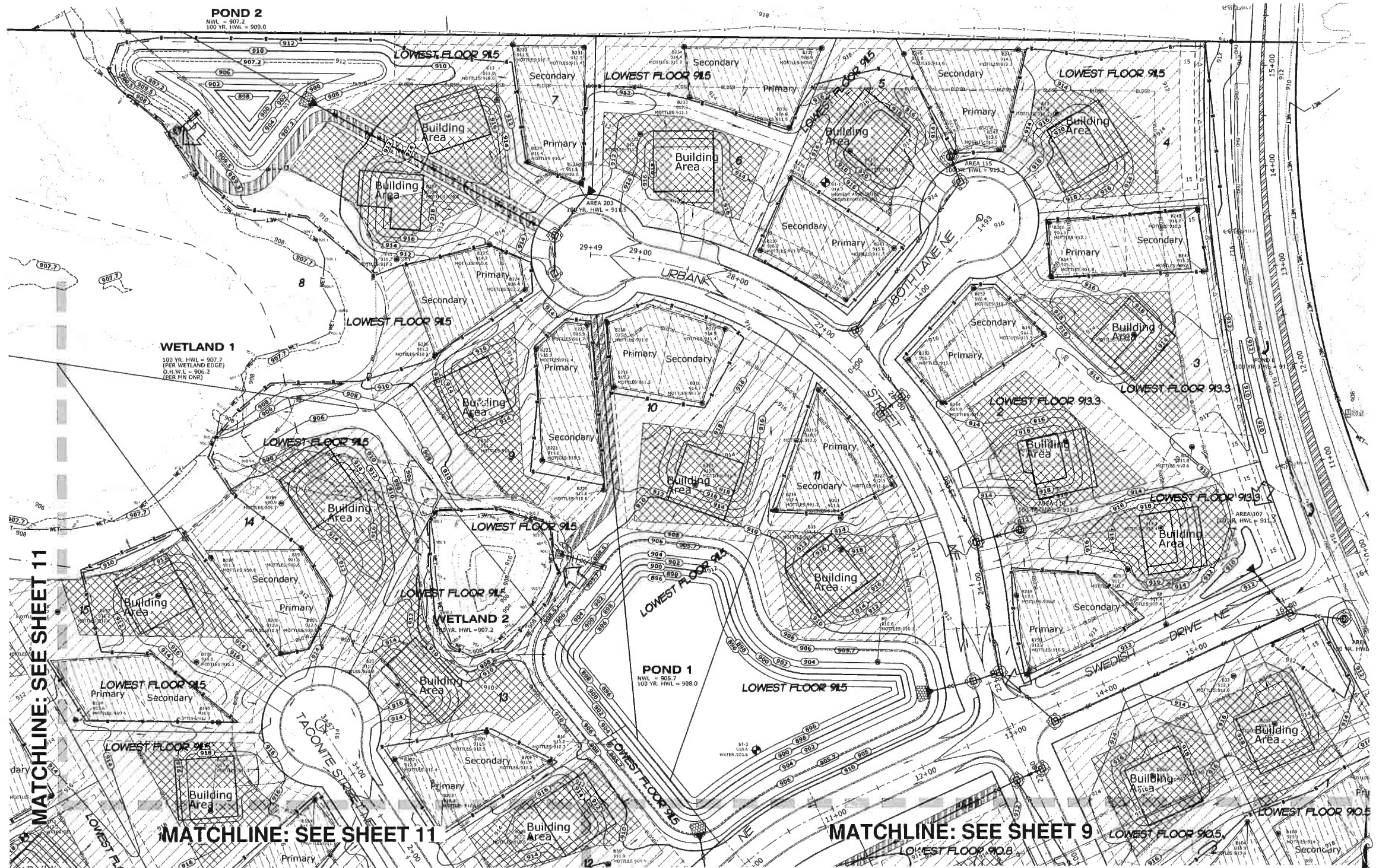
JASON E. RUD  
 Date: 07/29/2024 License No. 41578

NO.	DATE	DESCRIPTION	BY
1	04/17/24	CITY COMMENTS	MMD
2	05/22/24	CITY COMMENTS	MMD
3	06/25/24	TRAIL EASEMENT / XYLITE LOTS	MMD
4	07/02/24	CITY COMMENTS	MMD
5	07/29/24	GEO. REPORT / FLOORS	MMD
NO.	DATE	DESCRIPTION	BY

MATCHLINE: SEE SHEET 6

# LIVABILITY PLAN

~of~ SWEDISH CHAPEL ESTATES  
 ~for~ MN DEVELOPMENTS, LLC.  
 17404 WARD LAKE DRIVE NW  
 ANDOVER, MN 55304  
 (612) 799-1471

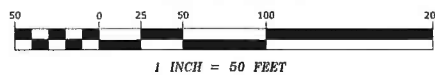


## LEGEND

- DENOTES SOIL BORING BY TRADEWELL SOIL TESTING
- DENOTES PIEZOMETER OR PENETRATION BORING BY BRAUN INTERTEC, INC.
- DENOTES EXISTING SPOT ELEVATION
- DENOTES WET LAND
- DENOTES EXISTING 2 FOOT CONTOUR
- DENOTES PROPOSED 2 FOOT CONTOURS
- DENOTES WETLAND DELINEATED BY KJOLHALL ENVIRONMENTAL SERVICES COMPANY.
- DENOTES EASEMENT LINE
- DENOTES SETBACK LINE
- DENOTES PROPOSED STORM SEWER
- DENOTES PROPOSED SILT / TRIP PROTECTION FENCE
- DENOTES DIRECTION OF DRAINAGE
- DENOTES PROPOSED WELL LOCATION
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- DENOTES PROPOSED BUILDING PAD AREA
- DENOTES PROPOSED YARD AREA
- DENOTES PROPOSED SEPTIC AREA
- DENOTES 12' POND ACCESS

PONDING CALCULATIONS AND STORM SEWER DESIGN BY  
**PLOWE ENGINEERING, INC.**  
 6776 LAKE DRIVE SUITE 110 LINO LAKES, MN 55014  
 PHONE: (651) 361-8210 FAX: (651) 361-8701  
 I HEREBY CERTIFY THAT THE STORMWATER MANAGEMENT AND DRAINAGE REPORT FOR THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.  
  
**ADAM GINKEL**  
 DATE: 07/29/2024 LIC. NO. 43963

GRAPHIC SCALE



## NOTES

- BEARINGS SHOWN ARE ON ANOKA COUNTY DATUM.
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I hereby certify that this survey, plan or report was prepared by me or under my direct supervision and that I am a duly Registered Land Surveyor under the laws of the State of Minnesota.

**JASON E. RUD**  
 Date: 07/29/2024 License No. 41578

**E.G. RUD & SONS, INC.**  
 Professional Land Surveyors  
 6776 Lake Drive NE, Suite 110  
 Lino Lakes, MN 55014  
 Tel. (651) 361-8200 Fax (651) 361-8701

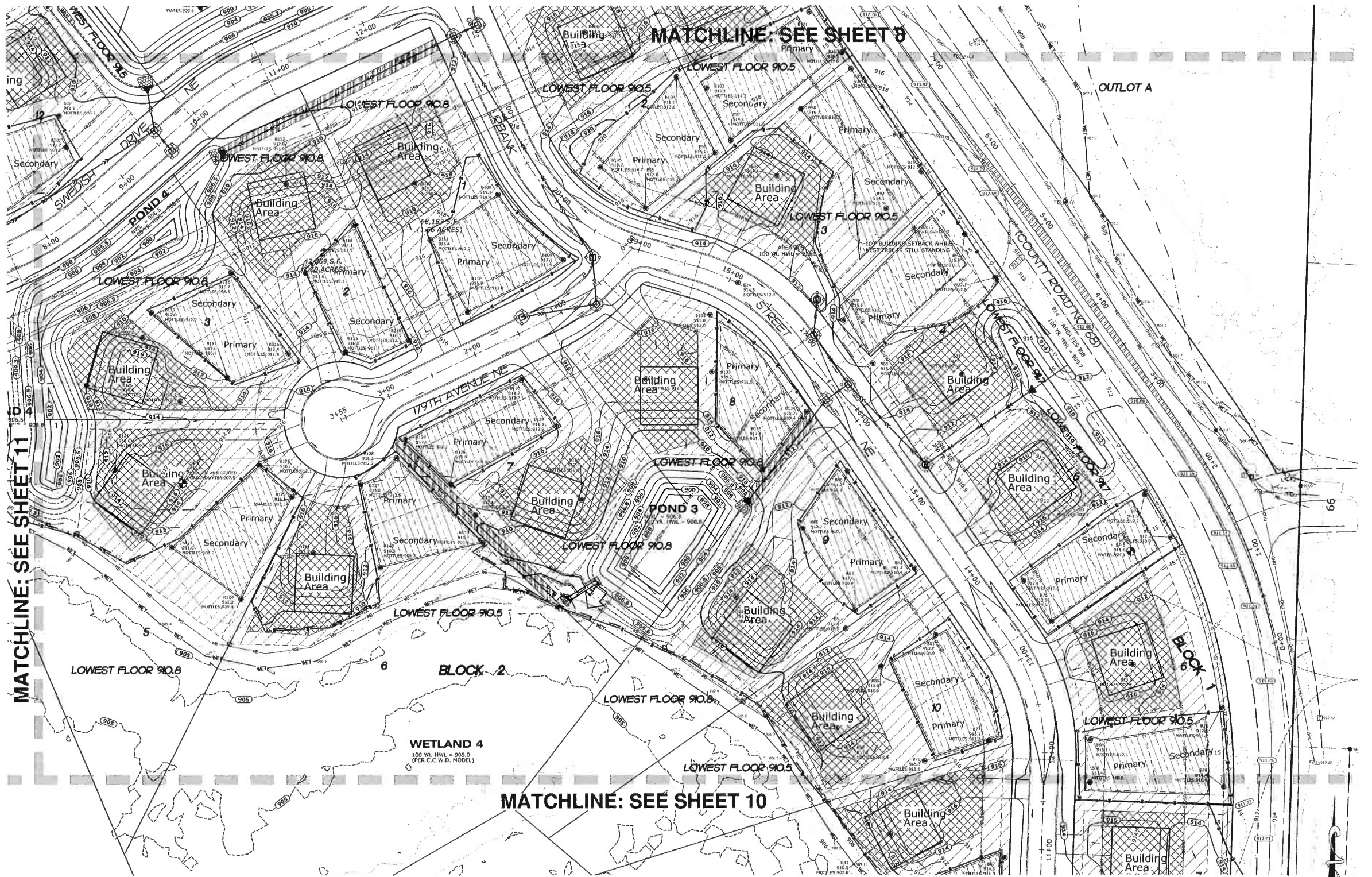
DRAWN BY: MMD		JOB NO: 230743		DATE: 03/20/24	
CHECK BY: JER	FIELD CREW: DT/CT				
1	04/17/24	CITY COMMENTS	MMD		
2	05/22/24	CITY COMMENTS	MMD		
3	05/28/24	CITY COMMENTS	MMD		
4	06/25/24	TRAIL EASEMENT / XYLITE LOTS	MMD		
5	07/02/24	CITY COMMENTS	MMD		
6	07/29/24	GEO. REPORT / FLOORS	MMD		
NO.	DATE	DESCRIPTION	BY		

**NORTH**



# LIVABILITY PLAN

~of~ SWEDISH CHAPEL ESTATES  
 ~for~ MN DEVELOPMENTS, LLC.  
 17404 WARD LAKE DRIVE NW  
 ANDOVER, MN 55304  
 (612) 799-1471



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MATCHLINE: SEE SHEET 11

MATCHLINE: SEE SHEET 10

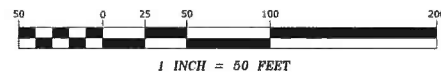
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SITE PLANNING & ENGINEERING  
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*Adam Gunkel*  
 ADAM GUNKEL  
 DATE: 07.29.2024 LIC. NO. 43963

GRAPHIC SCALE



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*Jason E. Rud*  
 JASON E. RUD  
 Date: 07/29/2024 License No. 41578

DRAWN BY:	MMD	JOB NO:	230743	DATE:	03/20/24
CHECK BY:	JER	FIELD CREW:	DT/CT		
NO.	DATE	DESCRIPTION	BY		
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 www.egrud.com

NORTH

# LIVABILITY PLAN

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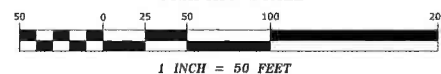
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*Adam Ginkel*  
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 DATE: 07.29.2024 LIC. NO. 43963

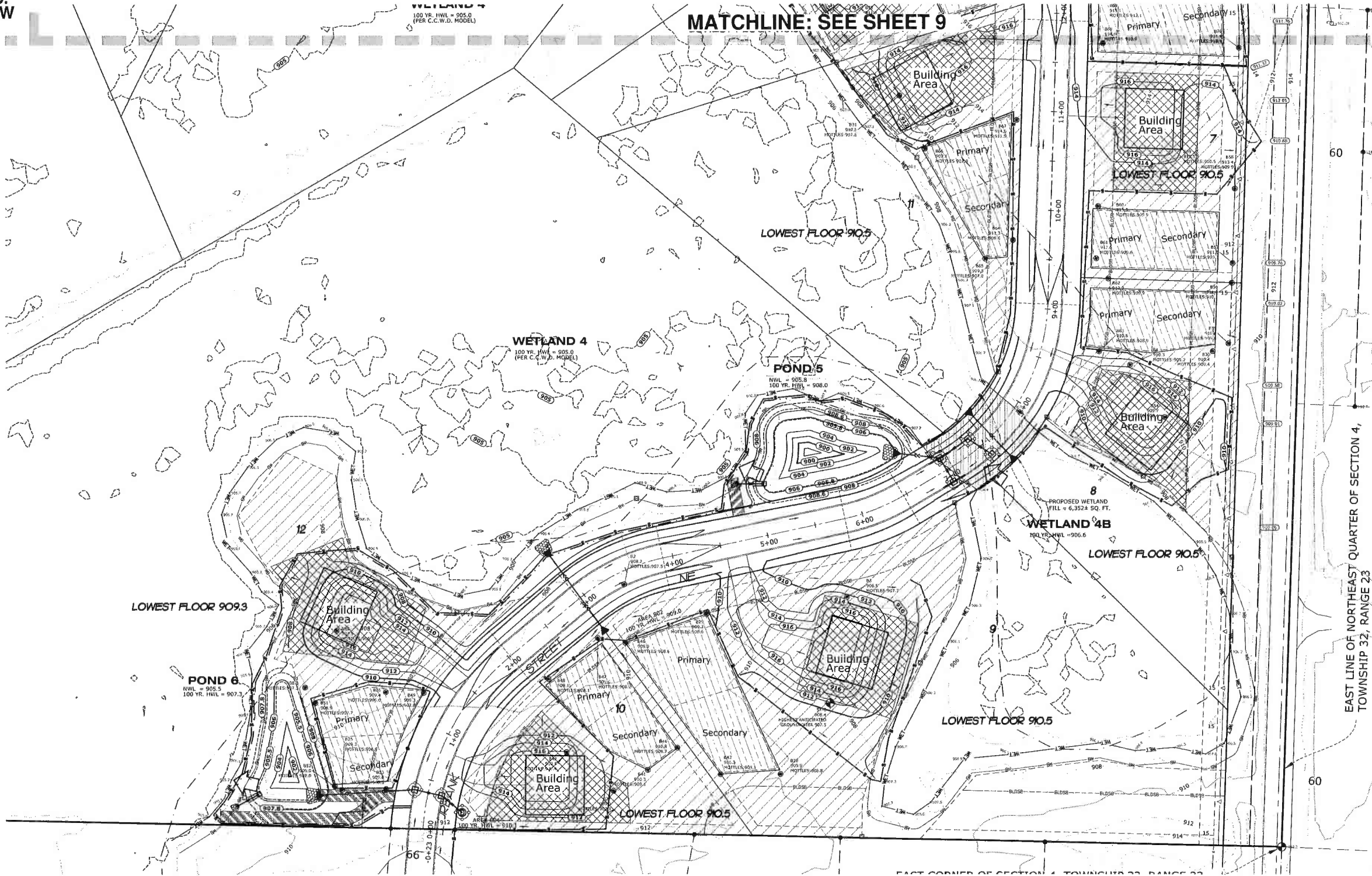
GRAPHIC SCALE



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MATCHLINE: SEE SHEET 9



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

*Jason E. Rud*  
 JASON E. RUD  
 Date: 07/29/2024 License No. 41578

EAST LINE OF NORTHEAST QUARTER OF SECTION 4,  
 TOWNSHIP 32, RANGE 23

NORTH

DRAWN BY: HMD	JOB NO: 230743	DATE: 03/20/24	
CHECK BY: JER	FIELD CREW: DT/CT		
1	04/17/24	CITY COMMENTS	HMD
2	05/22/24	CITY COMMENTS	HMD
3	06/25/24	TRAIL EASEMENT / XLYLITE LOTS	HMD
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5	07/29/24	GEO. REPORT / FLOORS	HMD
NO.	DATE	DESCRIPTION	BY

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 Professional Land Surveyors  
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# LIVABILITY PLAN

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 (612) 799-1471

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## NOTES

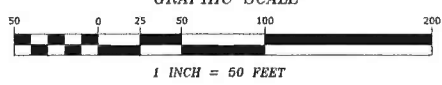
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JASON S. RUD  
 Date: 07/29/2024 License No. 41578

PONDING CALCULATIONS AND STORM SEWER DESIGN BY  
**PLOWE ENGINEERING, INC.**  
 6776 LAKE DRIVE SUITE 110 LINO LAKES, MN 55014  
 SITE PLANNING & ENGINEERING PHONE: (651) 361-8210 FAX: (651) 361-8701  
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 ADAM GUNKEL  
 DATE: 07.29.2024 LIC. NO. 43983



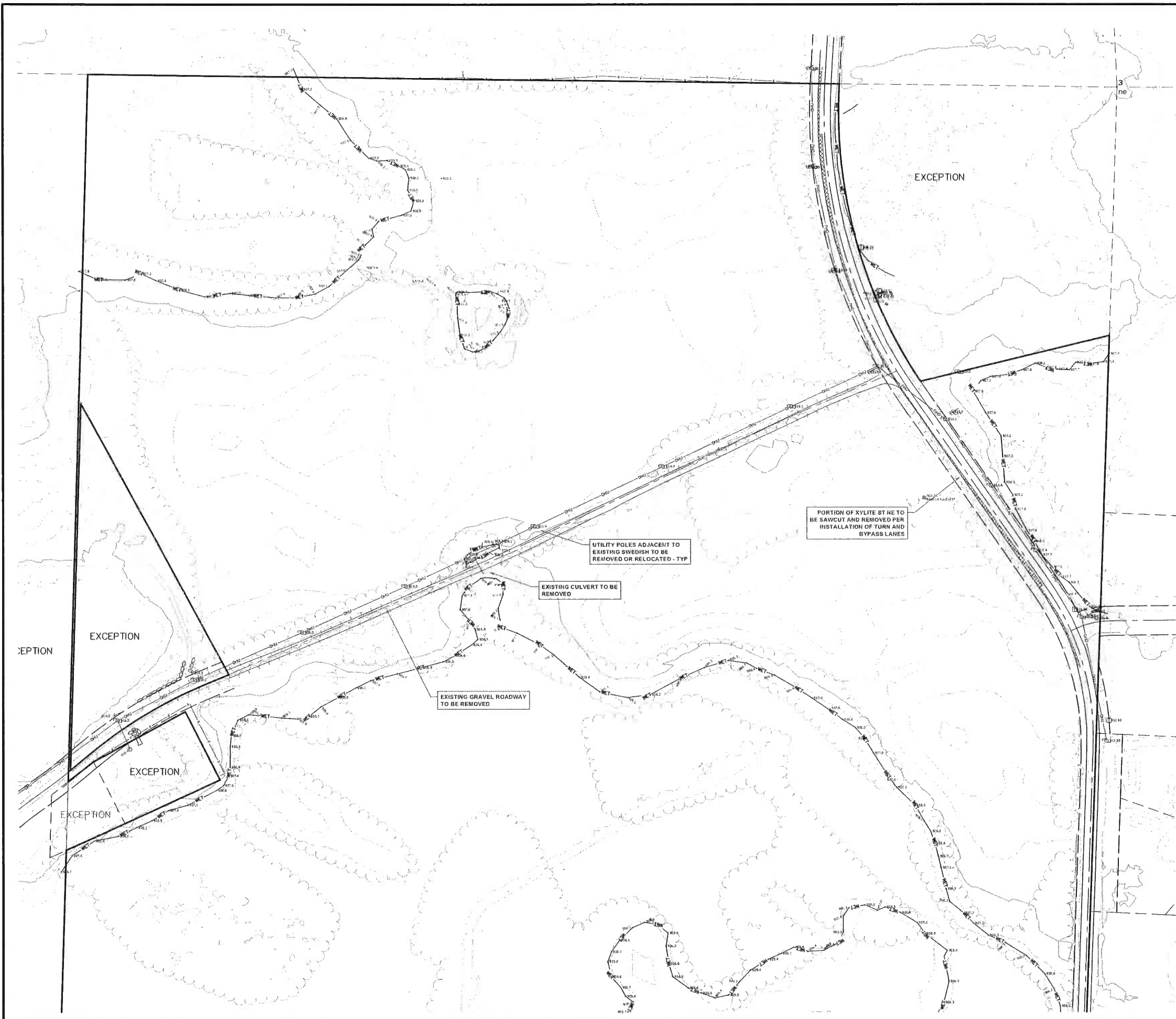
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NO.	DATE	DESCRIPTION	BY
1	04/17/24	CITY COMMENTS	MMD
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3	06/25/24	TRAIL EASEMENT / XYLITE LOTS	MMD
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**GENERAL NOTES**

1. THE INFORMATION SHOWN ON THESE DRAWINGS CONCERNING TYPE AND LOCATION OF EXISTING UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATION AS TO TYPE AND LOCATION OF UTILITIES AS NECESSARY TO AVOID DAMAGE TO THESE UTILITIES.
2. CALL "811" FOR EXISTING UTILITIES LOCATIONS PRIOR TO ANY EXCAVATIONS.
3. THE CONTRACTOR SHALL FIELD VERIFY SIZE, ELEVATION, AND LOCATION OF EXISTING UTILITIES AND NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO THE START OF INSTALLATIONS. INSTALLATIONS SHALL CONFORM TO THE CITY STANDARD SPECIFICATIONS AND DETAIL PLATES.
4. STORAGE OF MATERIALS OR EQUIPMENT SHALL NOT BE ALLOWED ON PUBLIC STREETS OR WITHIN PUBLIC RIGHT-OF-WAY.
5. NOTIFY CITY AND COON CREEK WATERSHED DISTRICT (CCWD) A MINIMUM OF 48 HOURS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
6. ALL ELECTRIC, TELEPHONE, AND GAS EXTENSIONS INCLUDING SERVICE LINES SHALL BE CONSTRUCTED TO THE APPROPRIATE UTILITY COMPANY SPECIFICATIONS. ALL UTILITY DISCONNECTIONS SHALL BE COORDINATED WITH THE APPROPRIATE UTILITY COMPANY.

**STORM SEWER NOTES**

1. FIELD VERIFY SIZE, ELEVATION, AND LOCATION OF EXISTING STORM SEWER AND NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO ANY INSTALLATIONS.
2. STORM SEWER SHALL BE:
  - (A) REINFORCED CONCRETE PIPE (RCP) ANSI C76 WITH R-4 GASKETS
  - (B) HDPE PIPE SHALL MEET THE REQUIREMENTS OF AASHTO M254, TYPE S WITH WATERTIGHT CONNECTIONS. USE SAND/GRAVULAR MATERIAL FOR BACKFILLING AND COMPACTION OF HDPE/PVC PIPE IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM 2321.
3. DO NOT BACKFILL CATCH BASINS UNTIL FABRIC WRAP IS INSPECTED BY CITY.
4. TRASH GUARDS ARE REQUIRED FOR ALL FLARED-END SECTIONS LESS THAN 48" DIAMETER.
5. PROVIDE CLASS III RIP-RAP W/ FILTER FABRIC AT ALL PIPE OUTLETS.
6. THE LAST THREE SECTIONS OF CONCRETE PIPE, INCLUDING APPROX. FOR CONCRETE PIPES LESS THAN 48" DIAMETER.
7. STORM SEWER LENGTHS INCLUDE THE LAYING LENGTH OF THE FLARED-END SECTION. LAYING LENGTH OF FLARED-END SECTION TO BE DEDUCTED FROM PAYMENT LENGTH OF PIPE.
8. ARCH PIPE JOINTS MUST BE WRAPPED WITH FABRIC OR OTHER PROTECTION TO PREVENT SEDIMENT FROM ENTERING PIPE.
9. SEE SHEET C3.1 FOR STRUCTURE SCHEDULE.

**LEGEND**

- EXISTING STORM SEWER
- ⊙ EXISTING STORM MANHOLE
- EXISTING CATCH BASIN
- ▲ EXISTING FLARED-END SECTION
- EXISTING DELINEATED WETLAND EDGE
- WETLAND BUFFER
- WETLAND BUFFER SIGNAGE
- PROPOSED STORM SEWER PIPE
- ⊙ PROPOSED STORM MANHOLE
- PROPOSED CATCH BASIN
- PROPOSED FLARED-END SECTION
- PROPOSED RIP-RAP

**PLOWE ENGINEERING, INC.**  
 ENGINEERING  
 1100 LINDSEY DRIVE  
 SUITE 110  
 LINO LAKE, MN 55014  
 PHONE (855) 381-8210  
 FAX (855) 381-8701



DESIGNED BY: JAC  
 DATE: 03/21/22  
 CHECKED BY: MDA  
 DATE: 03/27/24

NO.	DATE	DESCRIPTION
1	05/27/24	SHEET ADDED TO SET
2	05/28/24	SIGNED
3	07/10/24	PROPOSED STORM STRUCTURES REMOVED
4		
5		
6		
7		
8		
9		

I hereby certify that this plan was prepared by me or under my direct supervision and that I am a duly licensed professional engineer under the laws of the State of Minnesota.  
 ADAM JENSEN  
 License No. 43983  
 Date: 07/10/2024

**SWEDISH CHAPEL ESTATES**  
 HAIN LAKE, MN  
**REMOVALS PLAN**  
 PREPARED FOR: MN DEVELOPMENTS, LLC

SHEET  
**R**

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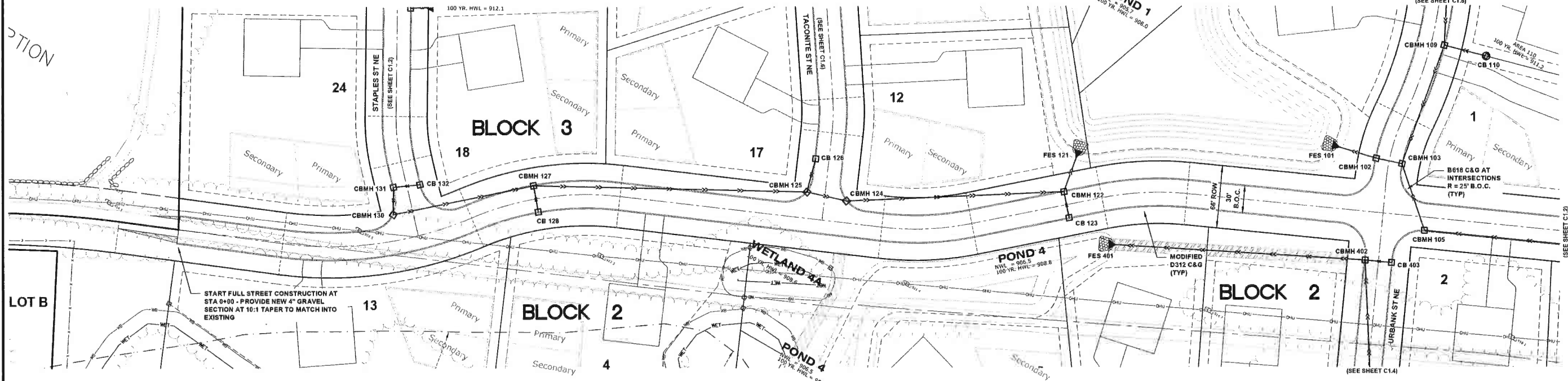
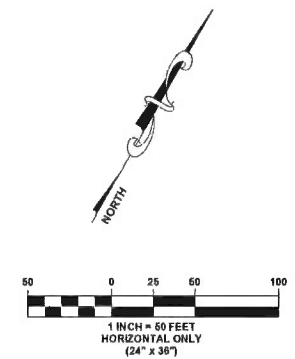
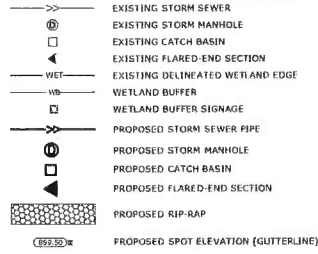
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  - (b) HDPE PIPE SHALL MEET THE REQUIREMENTS OF AASHTO M294, TYPE S WITH WATER TIGHT CONNECTIONS. USE SAND/GRANULAR MATERIAL FOR BACKFILLING AND COMPACTION OF HDPE/PVC PIPE IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM 2321
3. DO NOT BACKFILL CATCH BASINS UNTIL FABRIC WRAP IS INSPECTED BY CITY.
4. TRASH GUARDS ARE REQUIRED FOR ALL FLARED-END SECTIONS LESS THAN 48" IN DIAMETER.
5. PROVIDE CLASS III RIP-RAP WITH FILTER FABRIC AT ALL PIPE OUTLETS.
6. THE LAST THREE SECTIONS OF CONCRETE PIPE, INCLUDING APPROX. FOR CONCRETE PIPES LESS THAN 48" IN DIAMETER.
7. STORM SEWER LENGTHS INCLUDE THE LAYING LENGTH OF THE FLARED END SECTION. LAYING LENGTH OF FLARED END SECTION TO BE DEDUCTED FROM PAYMENT LENGTH OF PIPE.
8. ARCH PIPE JOINTS MUST BE WRAPPED WITH FABRIC OR OTHER PROTECTION TO PREVENT SEDIMENT FROM ENTERING PIPE.
9. SEE SHEET C31 FOR STRUCTURE SCHEDULE.

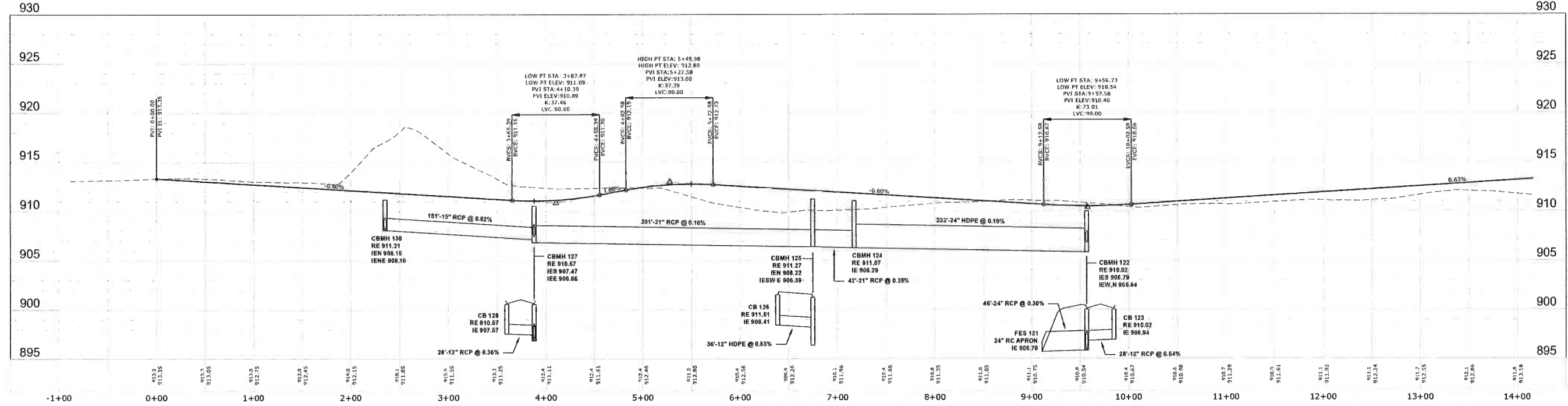
**CURB & BITUMINOUS NOTES**

1. REMOVAL AND DISPOSAL OF EXISTING STREET MATERIALS AS REQUIRED FOR CONSTRUCTION IS CONSIDERED INCIDENTAL.
2. ALL MATCH POINTS AND PAVEMENT PATCHES TO BE SAW-CUT AT FULL DEPTH.
3. RESTORE DISTURBED STREET TO EXISTING OR BETTER SECTION.
4. BACKFILLING OF CURB IS INCIDENTAL TO CURB INSTALLATION.

**LEGEND**



**SWEDISH DR NE**



**PLOWE ENGINEERING INC.**  
 8778 LAKE DRIVE  
 SUITE 110  
 LIND LAKES, MN 55014  
 PHONE (855) 361-8510  
 FAX (855) 361-8701



DRAWN BY: AG  
 JOB NO.: 23-2122  
 CHECK BY: MDA  
 DATE: 03/20/24

NO.	DATE	DESCRIPTION
1	05/25/24	PLAN / PROFILE
2		
3		
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7		

I hereby certify that this plan was prepared by me or a licensed professional engineer under the laws of the State of Minnesota.  
 ADAM WINKEL  
 License No. 38983  
 Date: 07/02/2024

**SWEDISH CHAPEL ESTATES**  
 HAW LAKE, MN  
**PLAN / PROFILE**  
**SWEDISH DR NE**  
 PREPARED FOR: JIN DEVELOPMENTS, LLC

SHEET  
**C1.1**



**GENERAL NOTES**

- THE INFORMATION SHOWN ON THESE DRAWINGS CONCERNING TYPE AND LOCATION OF EXISTING UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATION AS TO TYPE AND LOCATION OF UTILITIES AS NECESSARY TO AVOID DAMAGE TO THESE UTILITIES.
- CALL "811" FOR EXISTING UTILITIES LOCATIONS PRIOR TO ANY EXCAVATIONS.
- THE CONTRACTOR SHALL FIELD VERIFY SIZE, ELEVATION, AND LOCATION OF EXISTING UTILITIES AND NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO THE START OF INSTALLATIONS.
- INSTALLATIONS SHALL CONFORM TO THE CITY STANDARD SPECIFICATIONS AND DETAIL PLATES.
- STORAGE OF MATERIALS OR EQUIPMENT SHALL NOT BE ALLOWED ON PUBLIC STREETS OR WITHIN PUBLIC RIGHT-OF-WAY.
- NOTIFY CITY AND COON CREEK WATERSHED DISTRICT (CCWD) A MINIMUM OF 48 HOURS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
- ALL ELECTRIC, TELEPHONE, AND GAS EXTENSIONS INCLUDING SERVICE LINES SHALL BE CONSTRUCTED TO THE APPROPRIATE UTILITY COMPANY SPECIFICATIONS. ALL UTILITY DISCONNECTIONS SHALL BE COORDINATED WITH THE APPROPRIATE UTILITY COMPANY.

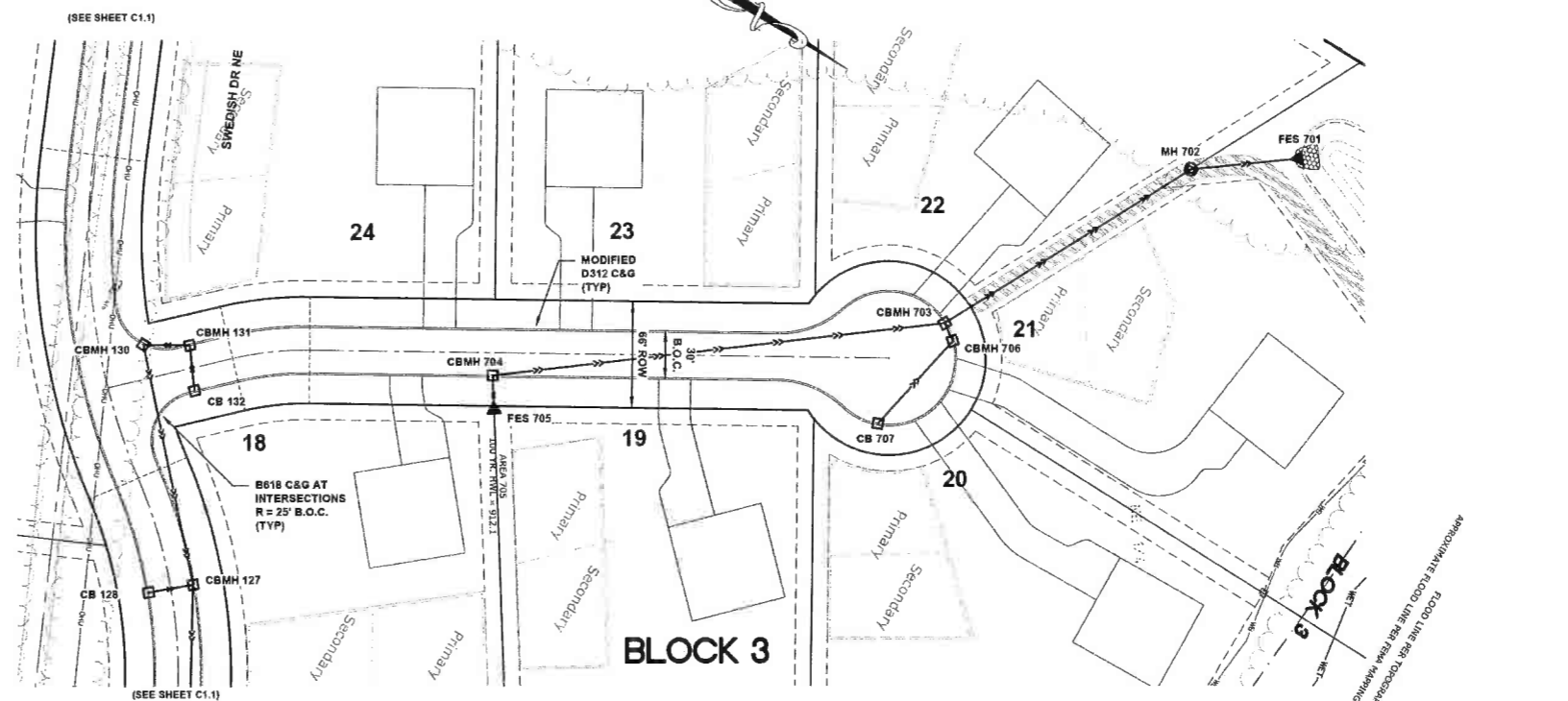
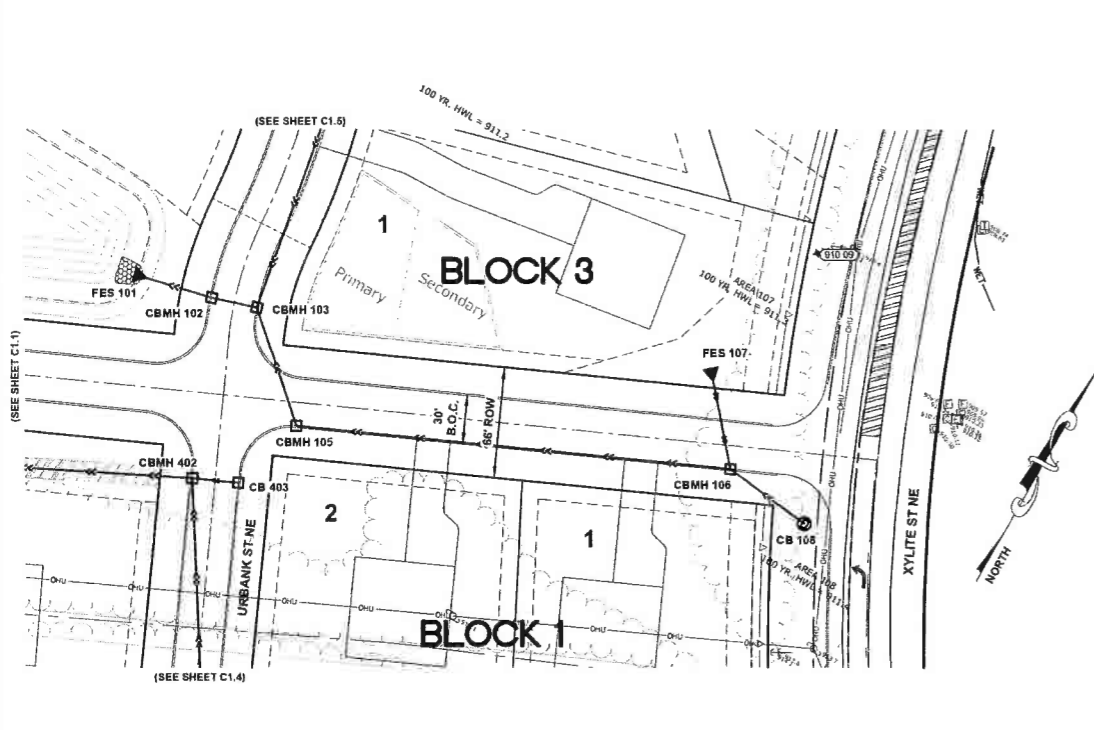
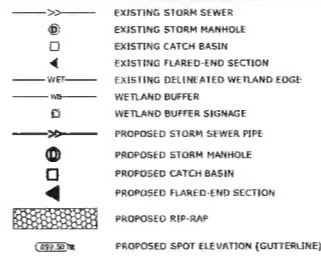
**STORM SEWER NOTES**

- FIELD VERIFY SIZE, ELEVATION, AND LOCATION OF EXISTING STORM SEWER AND NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO ANY INSTALLATIONS.
- STORM SEWER SHALL BE:
  - REINFORCED CONCRETE PIPE (RCP) ANSI C76 WITH R-4 GASSETS
  - HDPE PIPE SHALL MEET THE REQUIREMENTS OF AASHTO M294, TYPE S WITH WATERTIGHT CONNECTIONS. USE SAND/GRAVEL MATERIAL FOR BACKFILLING AND COMPACTION OF HDPE/PPVC PIPE IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM 2321.
- DO NOT BACKFILL CATCH BASINS UNTIL FABRIC WRAP IS INSPECTED BY CITY.
- TRASH GUARDS ARE REQUIRED FOR ALL FLARED-END SECTIONS LESS THAN 48" IN DIAMETER.
- PROVIDE CLASS III RIP-RAP FILTER FABRIC AT ALL PIPE OUTLETS.
- TIE LAST THREE SECTIONS OF CONCRETE PIPE, INCLUDING APRON, FOR CONCRETE PIPES LESS THAN 48" IN DIAMETER.
- STORM SEWER LENGTHS INCLUDE THE LAYING LENGTH OF THE FLARED-END SECTION. LAYING LENGTH OF FLARED-END SECTION TO BE DEDUCTED FROM PAYMENT LENGTH OF PIPE.
- ARCH PIPE JOINTS MUST BE WRAPPED WITH FABRIC OR OTHER PROTECTION TO PREVENT SEEDS FROM ENTERING PIPE.
- SEE SHEET C3.1 FOR STRUCTURE SCHEDULE.

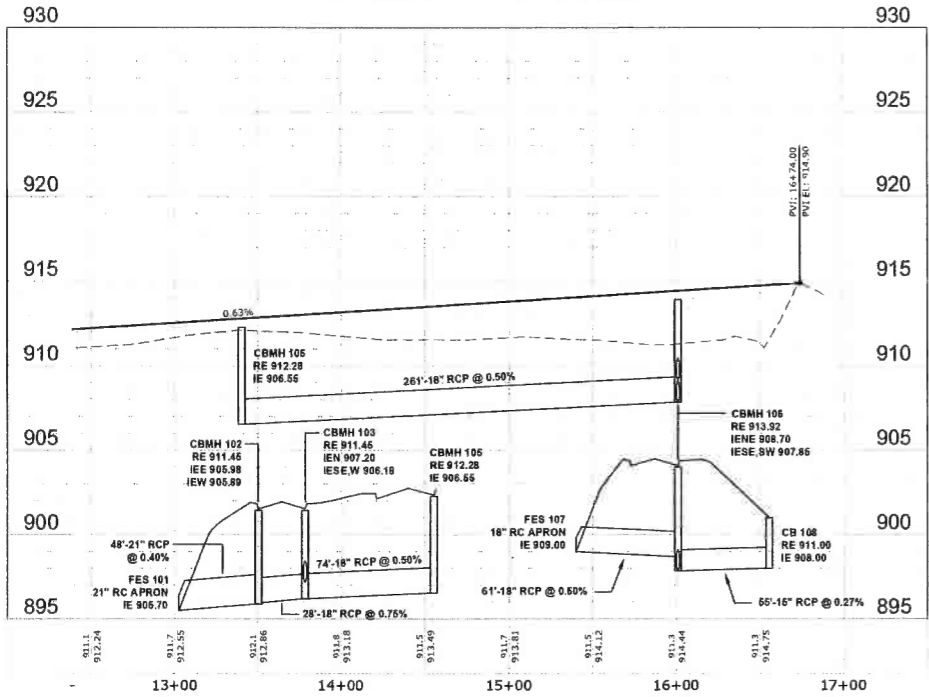
**CURB & BITUMINOUS NOTES**

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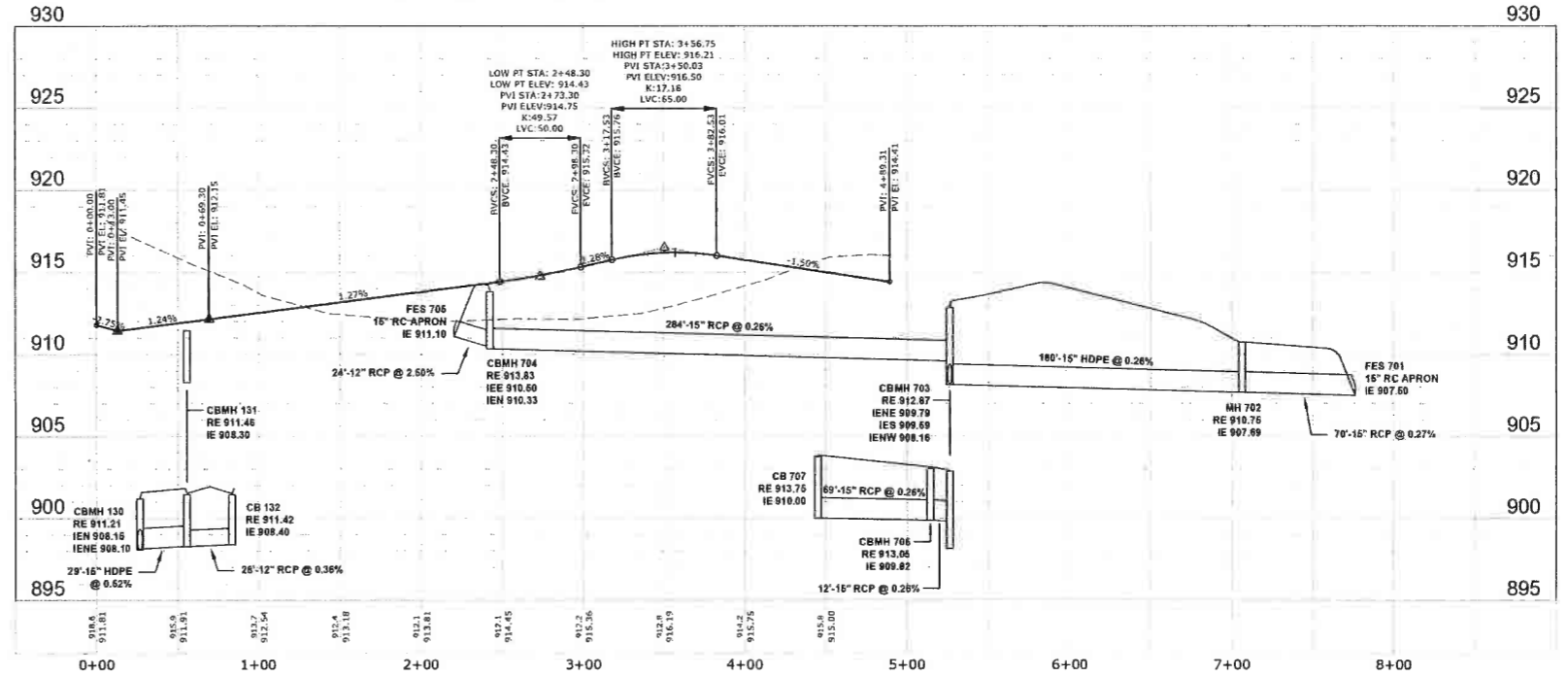
**LEGEND**



**SWEDISH DR NE**



**STAPLES ST NE**



DESIGNED BY	AC	DATE	03/20/24
CHECKED BY	MDA	DATE	03/20/24
DATE	03/20/24	DESCRIPTION	

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

*Adam J. Pank*  
ADAM PANK  
License No. 43983  
Date: 07-10-2024

**SWEDISH CHAPEL ESTATES**  
HAM LAKE, MN

**PLAN / PROFILE**  
**SWEDISH DR NE & STAPLES ST NE**  
PREPARED FOR: MN DEVELOPMENTS, LLC

SHEET  
**C1.2**

23-2122

**GENERAL NOTES**

1. THE INFORMATION SHOWN ON THESE DRAWINGS CONCERNING TYPE AND LOCATION OF EXISTING UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATION AS TO TYPE AND LOCATION OF UTILITIES AS NECESSARY TO AVOID DAMAGE TO THESE UTILITIES.
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6. NOTIFY CITY AND COON CREEK WATERSHED DISTRICT (CCWD) A MINIMUM OF 48 HOURS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
7. ALL ELECTRIC, TELEPHONE, AND GAS EXTENSIONS INCLUDING SERVICE LINES SHALL BE CONSTRUCTED TO THE APPROPRIATE UTILITY COMPANY SPECIFICATIONS. ALL UTILITY DISCONNECTIONS SHALL BE COORDINATED WITH THE APPROPRIATE UTILITY COMPANY.

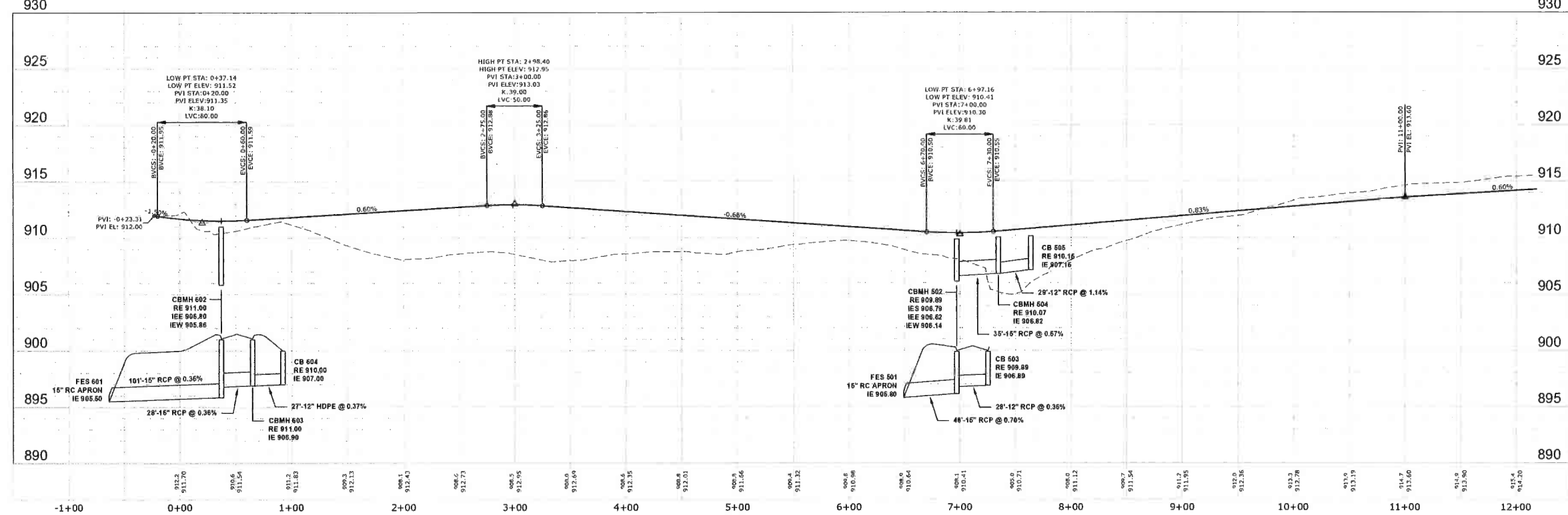
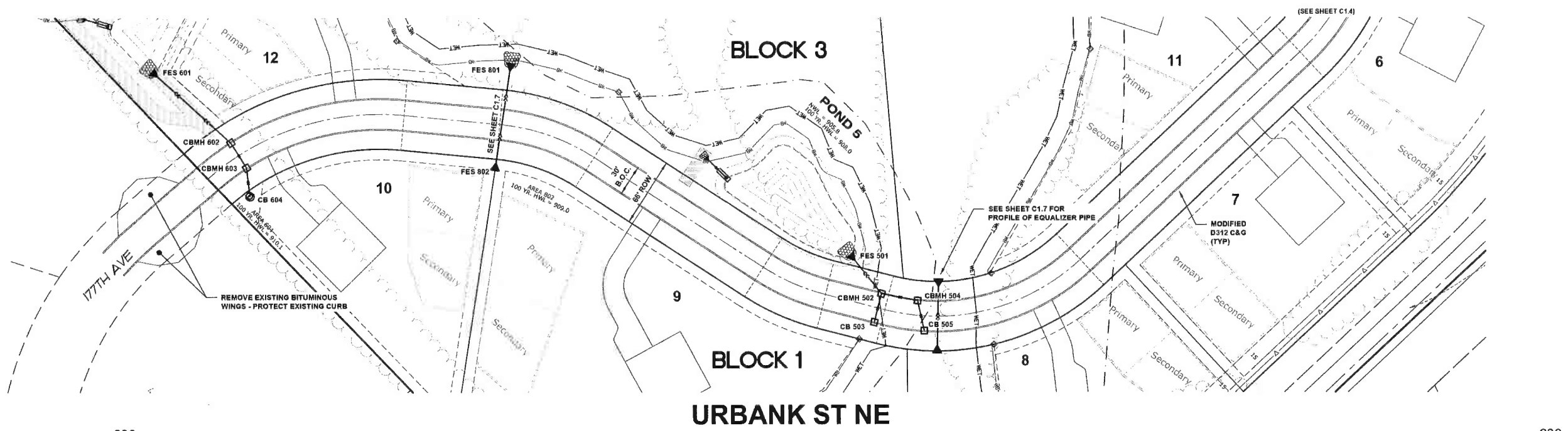
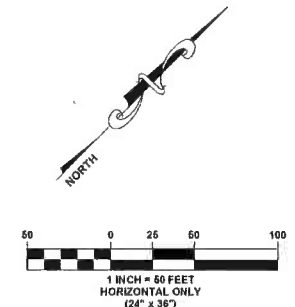
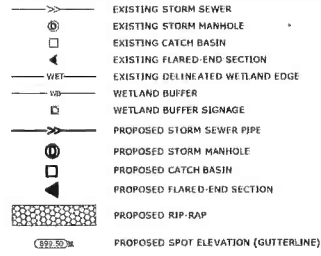
**STORM SEWER NOTES**

1. FIELD VERIFY SIZE, ELEVATION, AND LOCATION OF EXISTING STORM SEWER AND NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO ANY INSTALLATIONS.
2. STORM SEWER SHALL BE:
  - (a) REINFORCED CONCRETE PIPE (RCP) A191 C76 WITH R-4 GASKETS
  - (b) HDPE PIPE SHALL MEET THE REQUIREMENTS OF AASHTO M254, TYPE C WITH WATER-TIGHT CONNECTIONS. USE SAND/GRANULAR MATERIAL FOR BACKFILLING AND COMPACTION OF HDPE/PVC PIPE IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM 2321
3. DO NOT BACKFILL CATCH BASINS UNTIL FABRIC WRAP IS INSPECTED BY CITY.
4. TRASH GUARDS ARE REQUIRED FOR ALL FLARED-END SECTIONS LESS THAN 48" IN DIAMETER.
5. PROVIDE CLASS III RIP-RAP W/ FILTER FABRIC AT ALL PIPE OUTLETS.
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7. STORM SEWER LENGTHS INCLUDE THE LAYING LENGTH OF THE FLARED-END SECTION, LAYING LENGTH OF FLARED-END SECTION TO BE DEDUCTED FROM PAYMENT LENGTH OF PIPE.
8. ARCH PIPE JOINTS MUST BE WRAPPED WITH FABRIC OR OTHER PROTECTION TO PREVENT SEDIMENT FROM ENTERING PIPE.
9. SEE SHEET C3.1 FOR STRUCTURE SCHEDULE.

**CURB & BITUMINOUS NOTES**

1. REMOVAL AND DISPOSAL OF EXISTING STREET MATERIALS AS REQUIRED FOR CONSTRUCTION IS CONSIDERED INCIDENTAL.
2. ALL MATCH POINTS AND PAVEMENT PATCHES TO BE SAW-CUT AT FULL DEPTH.
3. RESTORE DISTURBED STREET TO EXISTING OR BETTER SECTION.
4. BACKFILLING OF CURBS IS INCIDENTAL TO CURB INSTALLATION.

**LEGEND**



**SWEDISH CHAPEL ESTATES**  
HAM LAKE, MN  
**PLAN / PROFILE**  
**URBANK ST NE**  
PREPARED FOR: MN DEVELOPMENTS, LLC

**SHEET C1.3**

**PLOWE ENGINEERING, INC.**  
8770 LAKE DRIVE  
SUITE 110  
LINO LAKE, MN 55014  
PHONE: (951) 361-8210  
FAX: (951) 361-8701

DATE: 03/20/24

NO.	DATE	DESCRIPTION
1	03/25/24	PLAN / PROFILES
2		
3		
4		
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8		
9		
10		

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

ADAM ZIMMEL  
Date: 07/02/2024 License No. 43663

DATE PLOTTED: 03/20/24 10:12:12 AM  
PLOT FILE: C:\PROJECTS\URBANK ST NE\URBANK ST NE.dwg  
SCALE: 1/8" = 1'-0"

**GENERAL NOTES**

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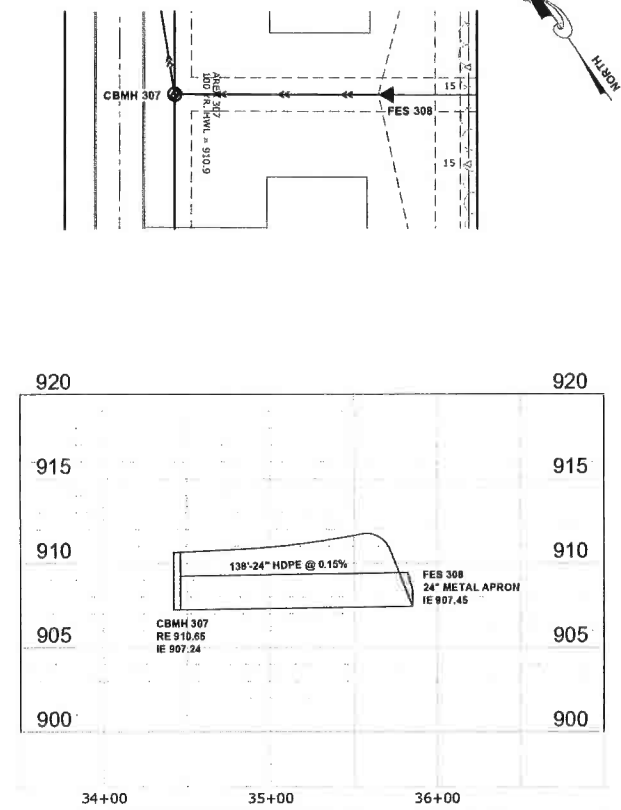
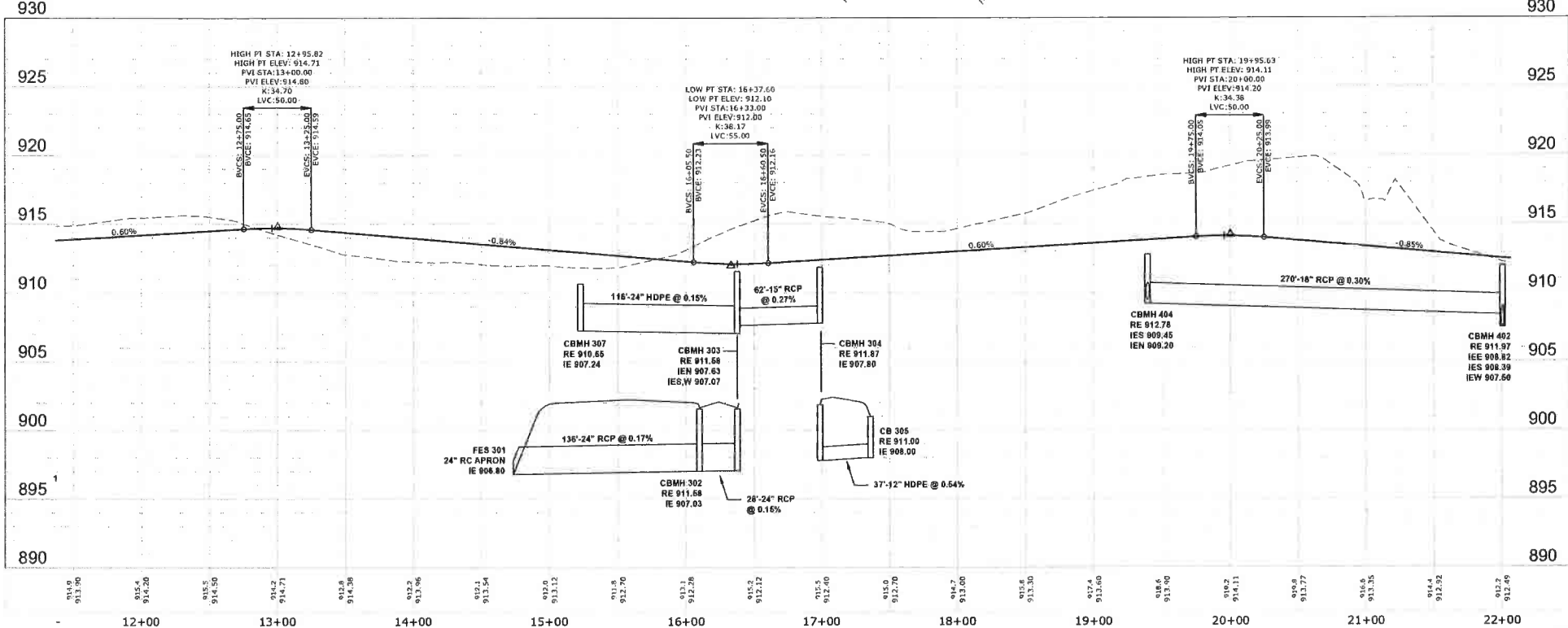
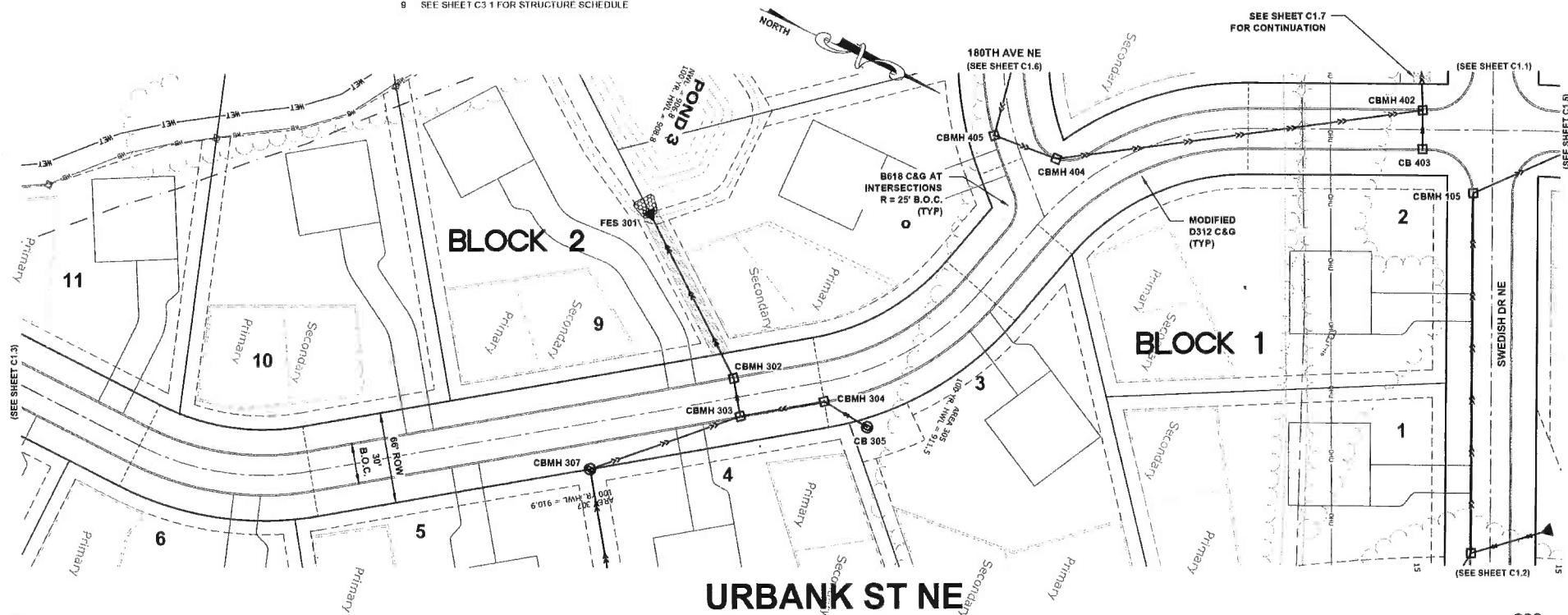
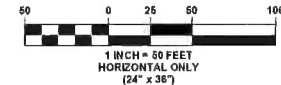
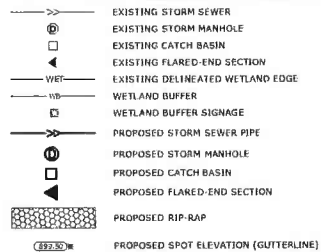
**STORM SEWER NOTES**

- FIELD VERIFY SIZE, ELEVATION, AND LOCATION OF EXISTING STORM SEWER AND NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO ANY INSTALLATIONS.
- STORM SEWER SHALL BE:
  - REINFORCED CONCRETE PIPE (RCP) ANSI C76 WITH R-4 GASKE IS
  - HDPE PIPE SHALL MEET THE REQUIREMENTS OF AASHTO M229, TYPE S WITH WATERTIGHT CONNECTIONS. USE SAND/GRANULAR MATERIAL FOR BACKFILLING AND COMPACTION OF HDPE/PVC PIPE IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM 2321
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- THE LAST THREE SECTION OF CONCRETE PIPE, INCLUDING APRON, FOR CONCRETE PIPES LESS THAN 48" IN DIAMETER, STORM SEWER LENGTHS INCLUDE THE LAYING LENGTH OF THE FLARED-END SECTION. LAYING LENGTH OF FLARED-END SECTION TO BE DEDUCTED FROM PAYMENT LENGTH OF PIPE.
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**CURB & BITUMINOUS NOTES**

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**LEGEND**



**PLOWE ENGINEERING, INC.**  
 8778 LAKE DRIVE  
 SUITE 110  
 LINO LAKE, MN 55014  
 PHONE (855) 361-8210  
 FAX (855) 361-8701



DRAWN BY: AG  
 JOB NO.: 23-2122  
 CHECK BY: MDA  
 DATE: 02/20/24

NO.	DATE	DESCRIPTION
1	06/25/24	PLAN / PROFILES
2	07/02/24	STORM RIMS ADJ.
3		
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I hereby certify that the data 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.  
 ADAM WINKEL  
 License No. 43963  
 Date: 07/02/2024

**SWEDISH CHAPEL ESTATES**  
 HAM LAKE, MN  
**PLAN / PROFILE**  
**URBANK ST NE**  
 PREPARED FOR: MN DEVELOPMENTS, LLC

SHEET  
**C1.4**

**GENERAL NOTES**

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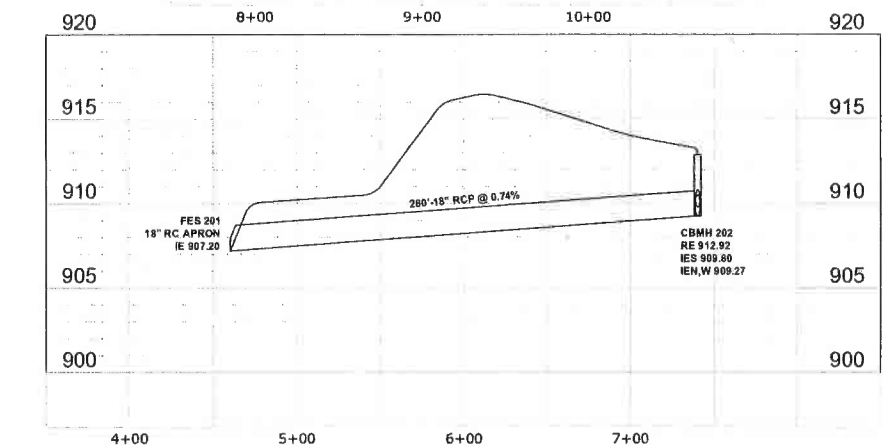
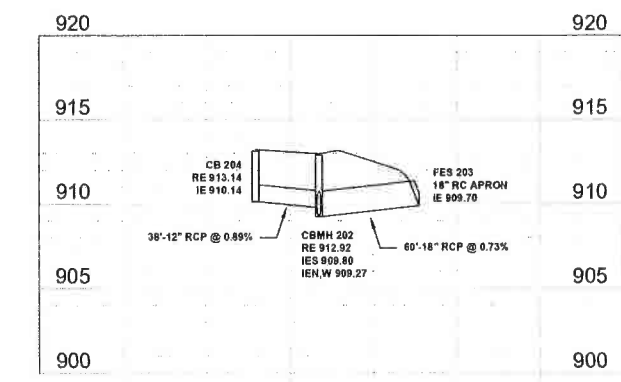
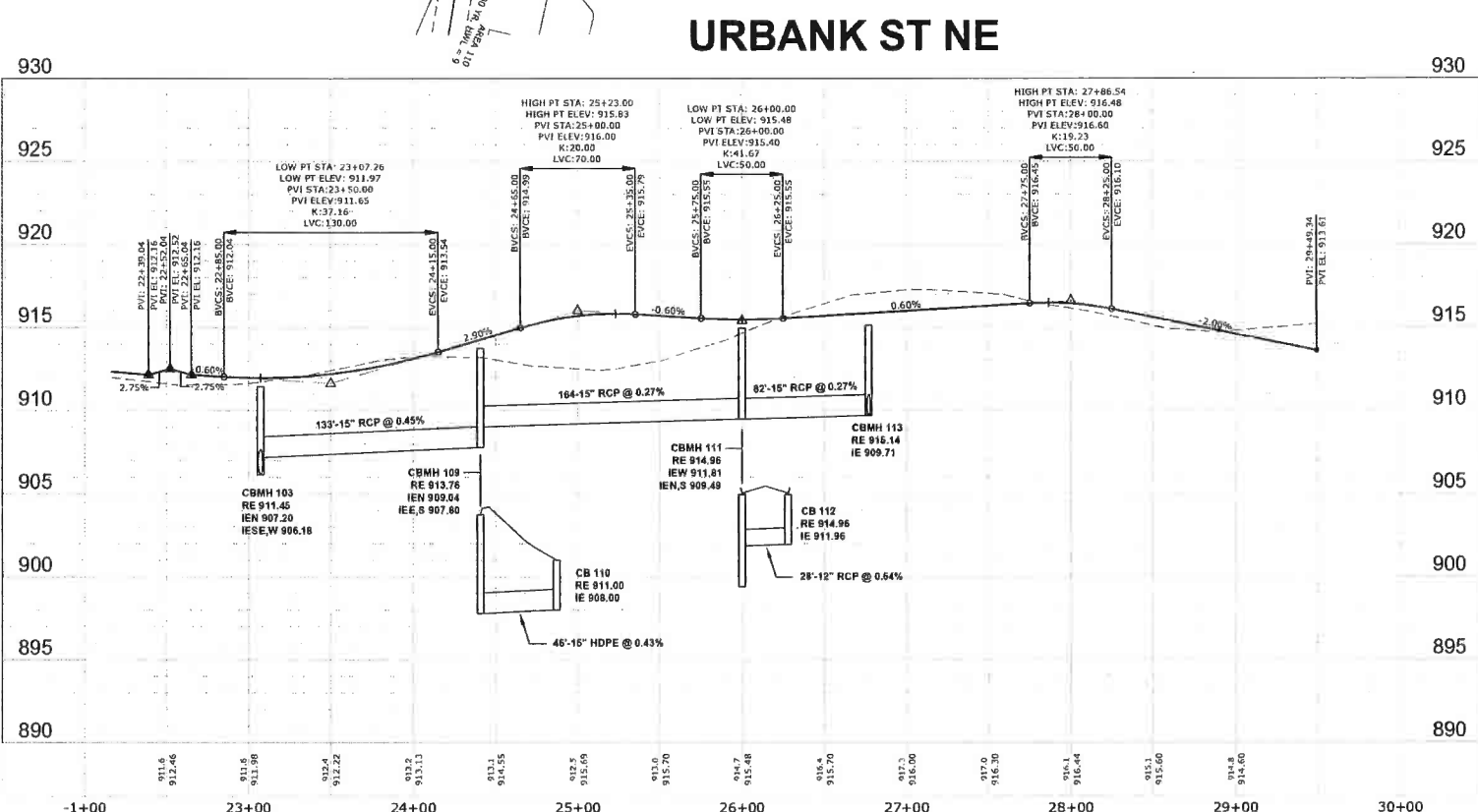
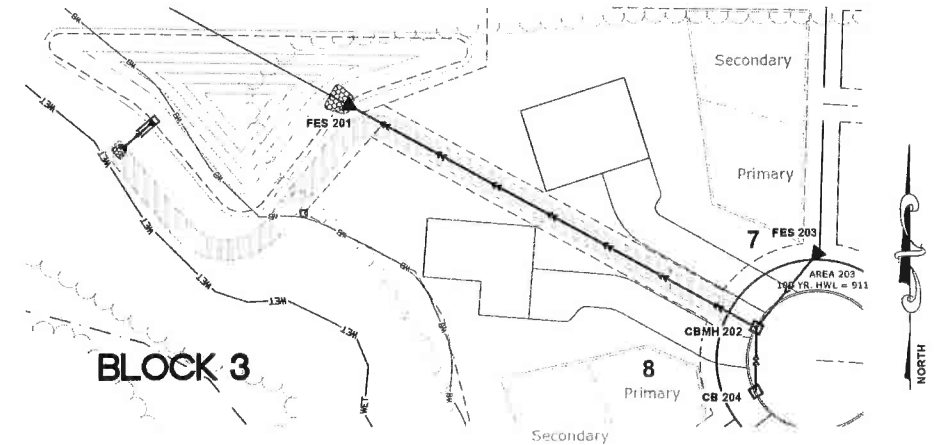
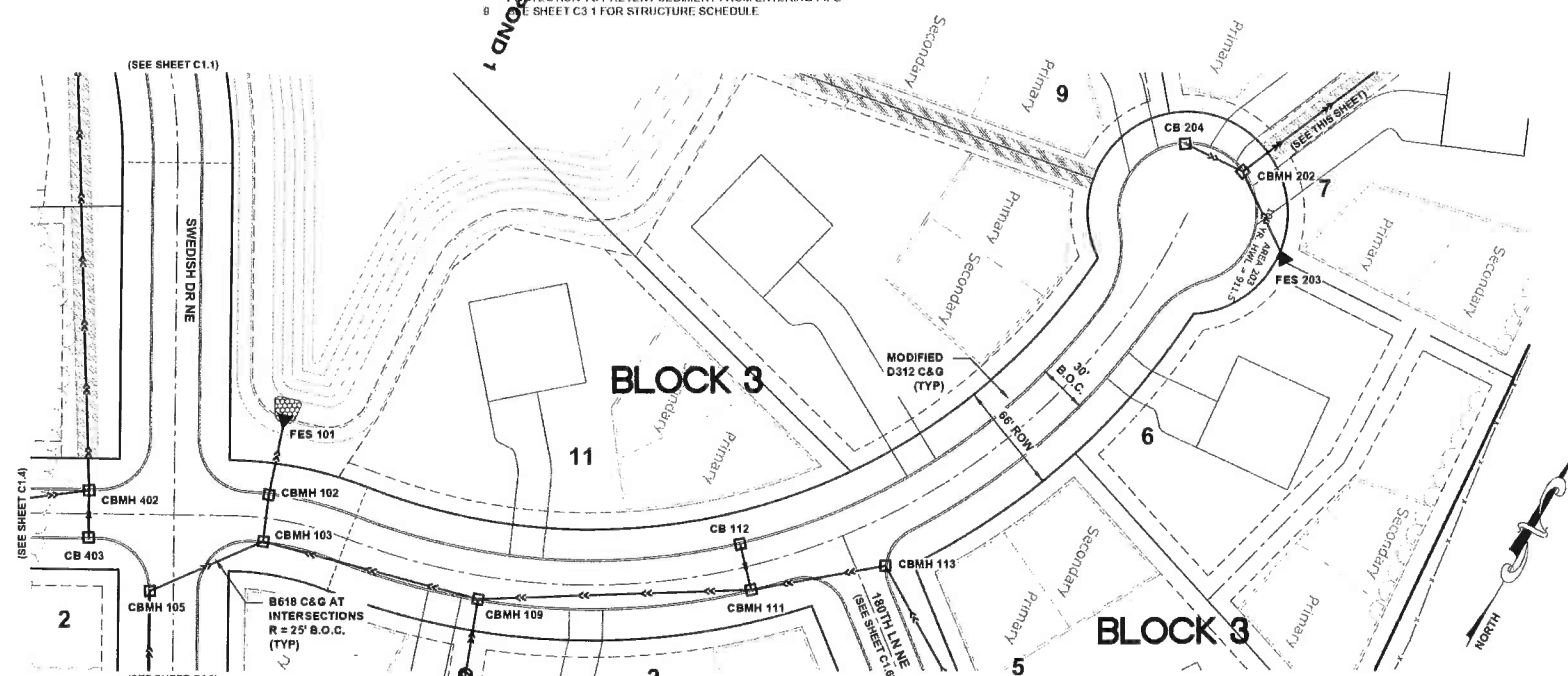
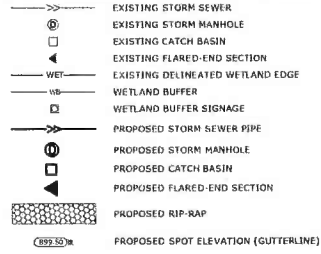
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**LEGEND**



**SWEDISH CHAPEL ESTATES**  
 HAM LAKE, MN  
**PLAN / PROFILE**  
**URBANK ST NE**  
 PREPARED FOR: MN DEVELOPMENTS, LLC

**PLOWE ENGINEERING, INC.**  
 8778 LAKE DRIVE  
 SUITE 110  
 LINDEN, MN 55134  
 PHONE: (651) 381-8210  
 FAX: (651) 381-8701

DRAWN BY: AG  
 JOB NO: 23-2122  
 CHECK BY: MDA  
 DATE: 03/20/24

1. 06/25/24 - PRELIM PROFILES  
 2. 07/02/24 - STORM RAV ADJ  
 3. 07/02/24 - STORM RAV ADJ  
 4. 07/02/24 - STORM RAV ADJ  
 5. 07/02/24 - STORM RAV ADJ  
 6. 07/02/24 - STORM RAV ADJ

1 INCH = 50 FEET HORIZONTAL ONLY (24\"/>

SHEET  
**C1.5**

### GENERAL NOTES

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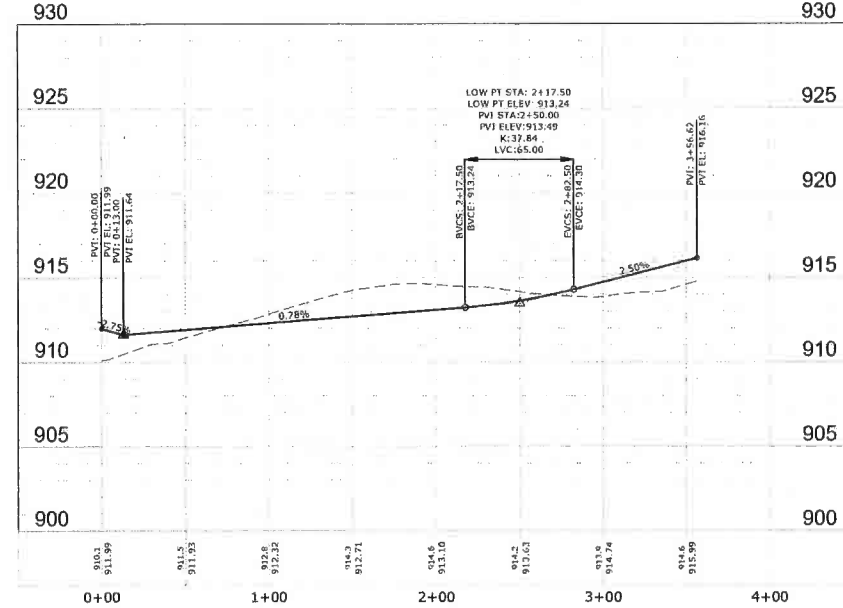
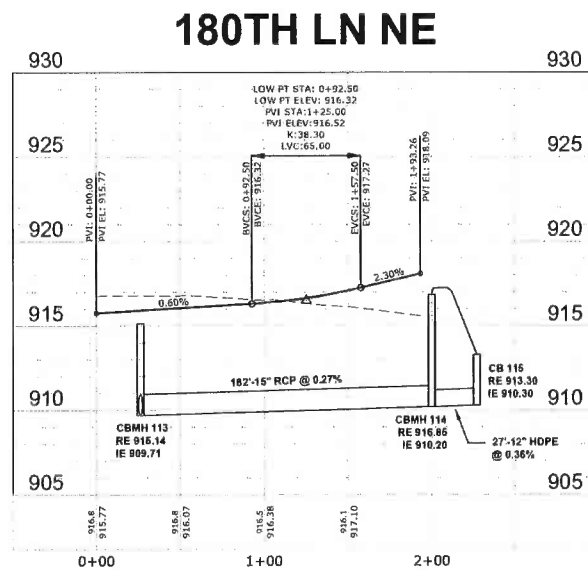
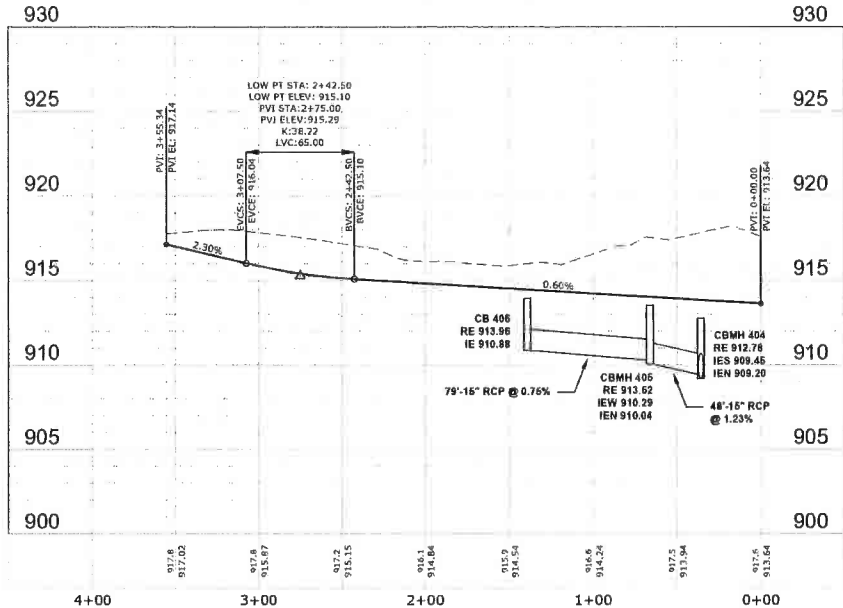
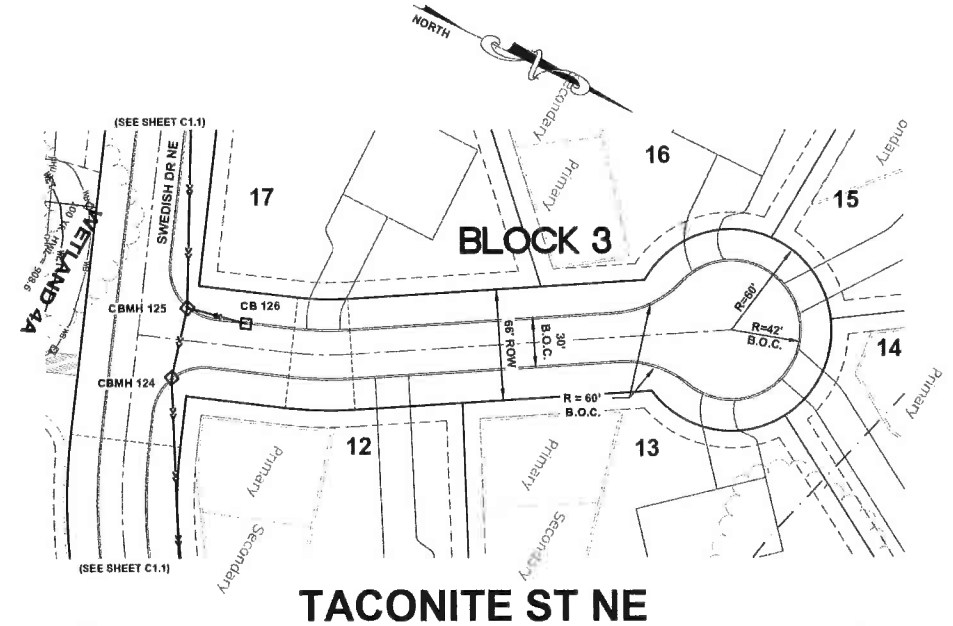
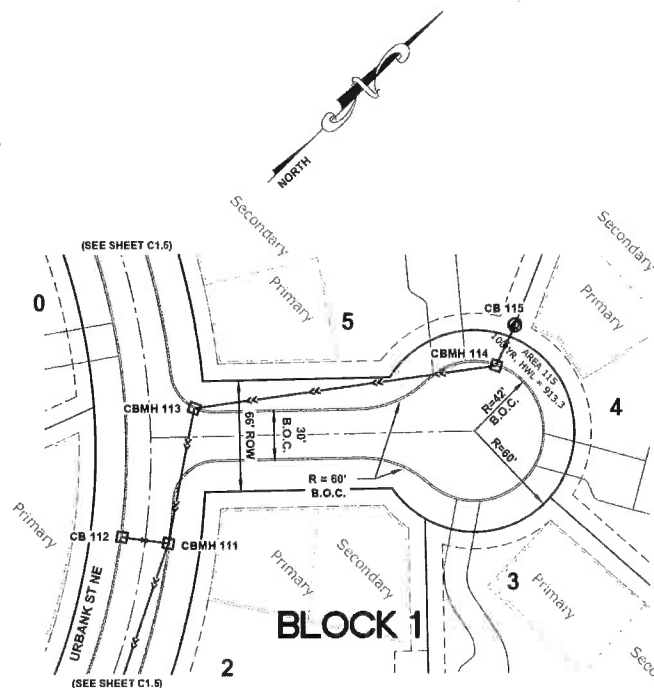
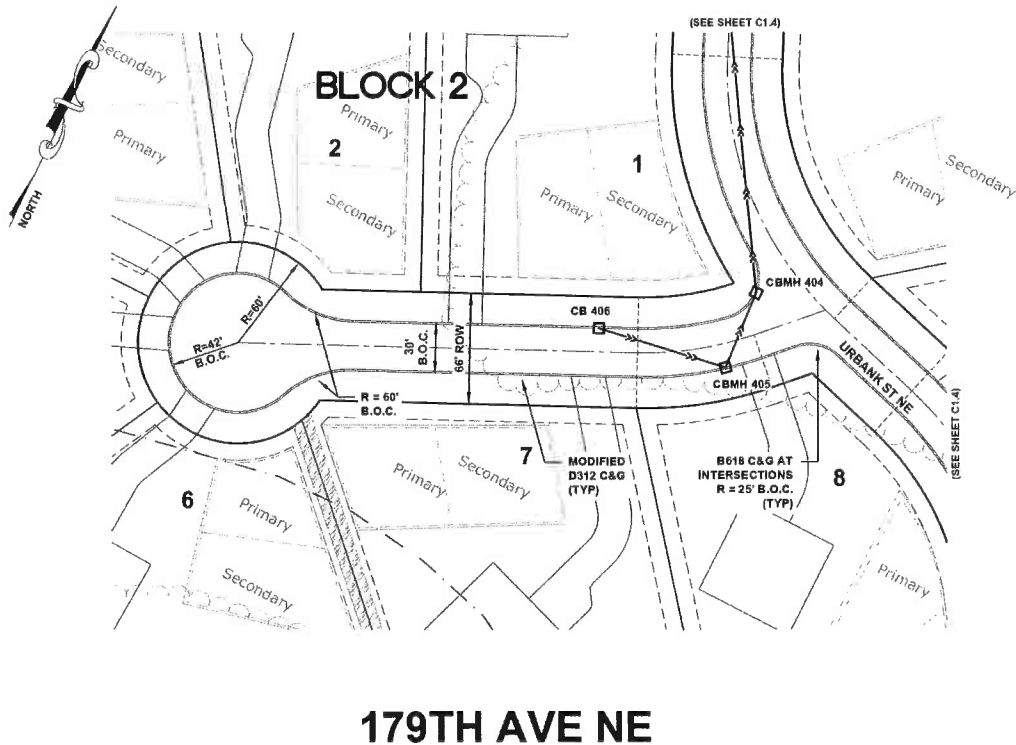
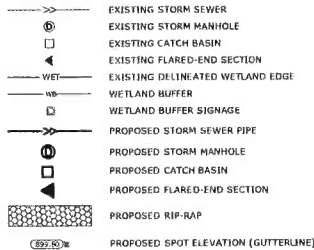
### STORM SEWER NOTES

1. FIELD VERIFY SIZE, ELEVATION, AND LOCATION OF EXISTING STORM SEWER AND NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO ANY INSTALLATIONS.
2. STORM SEWER SHALL BE:
  - (A) REINFORCED CONCRETE PIPE (RCP) ANSI C76 WITH R-4 GASKETS
  - (B) HDPE PIPE SHALL MEET THE REQUIREMENTS OF AASHTO M294, TYPE S WITH WATER-TIGHT CONNECTIONS. USE SAND/GRANULAR MATERIAL FOR BACKFILLING AND COMPACTION OF HDPE/PVC PIPE IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM 2321.
3. DO NOT BACKFILL CATCH BASINS UNTIL FABRIC WRAP IS INSPECTED BY CITY.
4. TRASH GUARDS ARE REQUIRED FOR ALL FLARED-END SECTIONS LESS THAN 48" IN DIAMETER.
5. PROVIDE GLASS III RIP-RAP W/ FILTER FABRIC AT ALL PIPE OUTLETS.
6. TIE LAST THREE SECTION OF CONCRETE PIPE, INCLUDING APRON, FOR CONCRETE PIPES LESS THAN 48" IN DIAMETER.
7. STORM SEWER LENGTHS INCLUDE THE LAYING LENGTH OF THE FLARED-END SECTION. LAYING LENGTH OF FLARED-END SECTION TO BE DEDUCTED FROM PAYMENT LENGTH OF PIPE.
8. ARCH PIPE JOINTS MUST BE WRAPPED WITH FABRIC OR OTHER PROTECTION TO PREVENT SEDIMENT FROM ENTERING PIPE.
9. SEE SHEET C3.1 FOR STRUCTURE SCHEDULE.

### CURB & BITUMINOUS NOTES

1. REMOVAL AND DISPOSAL OF EXISTING STREET MATERIALS AS REQUIRED FOR CONSTRUCTION IS CONSIDERED INCIDENTAL.
2. ALL MATCH POINTS AND PAVEMENT PATCHES TO BE SAW-CUT AT FULL DEPTH.
3. RESTORE DISTURBED SURFACE TO EXISTING OR BETTER SECTION.
4. BACKFILLING OF CURB IS INCIDENTAL TO CURB INSTALLATION.

### LEGEND



**PLOWE ENGINEERING, INC.**  
6776 LAKE DRIVE  
SUITE 110  
LINO LAKES, MN 55014  
PHONE: (651) 981-8210  
FAX: (651) 981-8701



DRAWN BY: AG  
JOB NO: 23-2122  
JOB DATE: 07/02/24  
CHECK BY: MGA  
DATE: 07/02/24

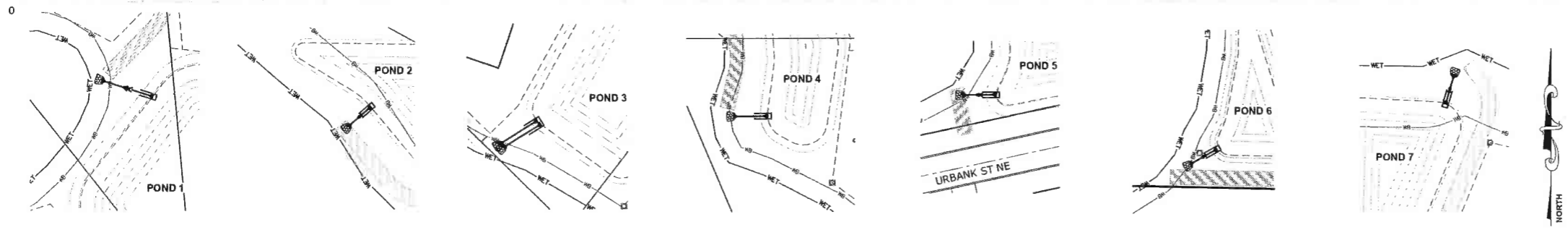
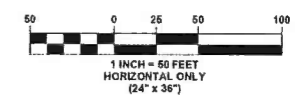
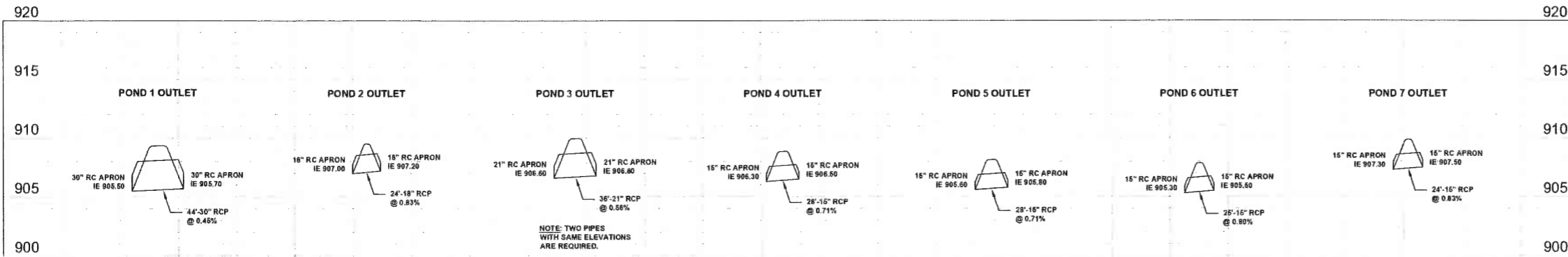
1. 06/25/24: PLANS PROFILES  
2. 07/02/24: STORM RMS ADJ.  
3.  
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7.  
8.

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

ADAM SHREVE  
ADAM SHREVE  
DATE: 07/02/2024 License No. 43863

**SWEDISH CHAPEL ESTATES**  
HAM LAKE, MN  
**PLAN / PROFILE**  
**179TH AVE, 180TH AVE, TACONITE**  
PREPARED FOR: MNI DEVELOPMENTS, LLC

SHEET  
**C1.6**



**GENERAL NOTES**

1. THE INFORMATION SHOWN ON THESE DRAWINGS CONCERNING TYPE AND LOCATION OF EXISTING UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATION AS TO TYPE AND LOCATION OF UTILITIES AS NECESSARY TO AVOID DAMAGE TO THESE UTILITIES.
2. CALL "811" FOR EXISTING UTILITIES LOCATIONS PRIOR TO ANY EXCAVATIONS.
3. THE CONTRACTOR SHALL FIELD VERIFY SIZE, ELEVATION, AND LOCATION OF EXISTING UTILITIES AND NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO THE START OF INSTALLATIONS.
4. INSTALLATIONS SHALL CONFORM TO THE CITY STANDARD SPECIFICATIONS AND DETAIL PLATES.
5. STORAGE OF MATERIALS OR EQUIPMENT SHALL NOT BE ALLOWED ON PUBLIC STREETS OR WITHIN PUBLIC RIGHT-OF-WAY.
6. NOTIFY CITY AND COON CREEK WATERSHED DISTRICT (CCWD) A MINIMUM OF 48 HOURS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
7. ALL ELECTRIC, TELEPHONE, AND GAS EXTENSIONS INCLUDING SERVICE LINES SHALL BE CONSTRUCTED TO THE APPROPRIATE UTILITY COMPANY SPECIFICATIONS. ALL UTILITY DISCONNECTIONS SHALL BE COORDINATED WITH THE APPROPRIATE UTILITY COMPANY.

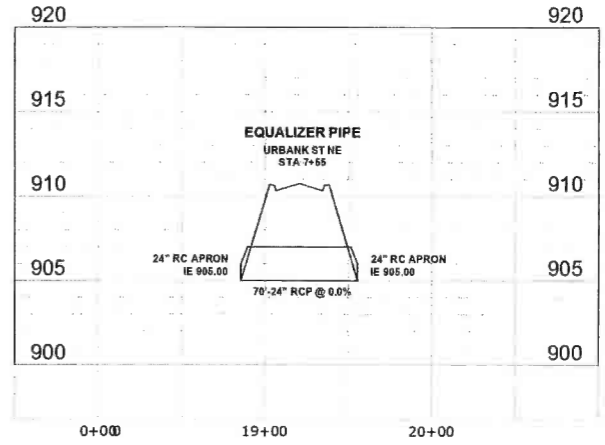
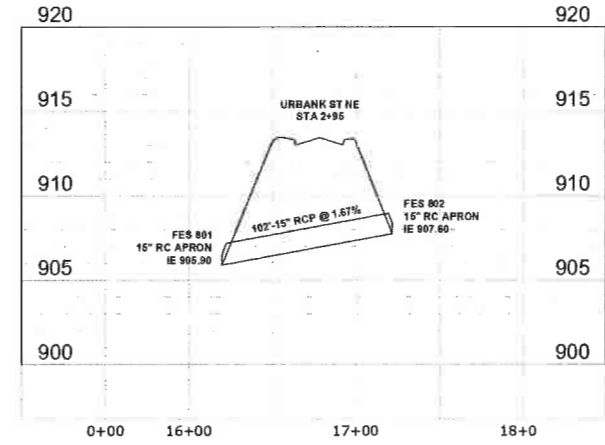
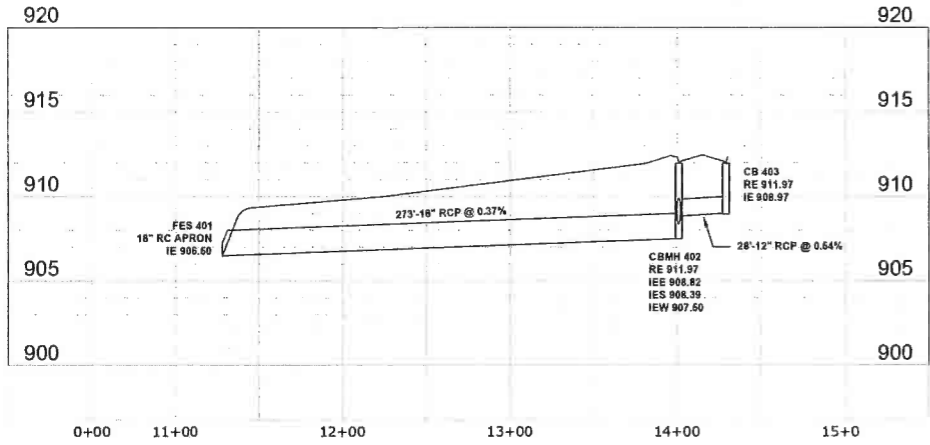
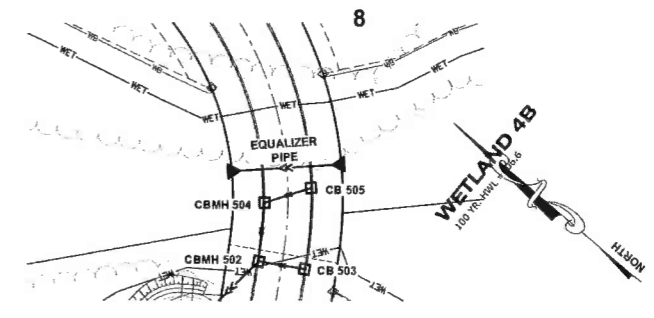
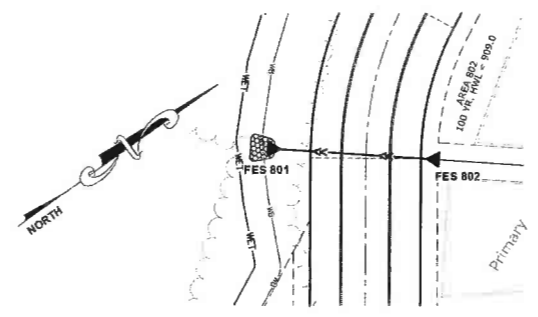
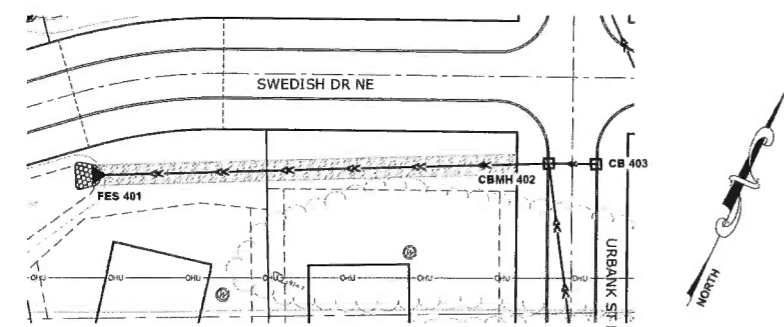
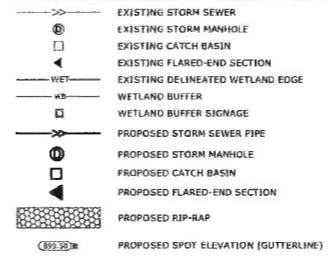
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3. DO NOT BACKFILL CATCH BASINS UNTIL FABRIC WRAP IS INSPECTED BY CITY.
4. TRASH GUARDS ARE REQUIRED FOR ALL FLARED-END SECTIONS LESS THAN 48" IN DIAMETER.
5. PROVIDE CLASS III RIP-RAP W/ FILTER FABRIC AT ALL PIPE OUTLETS.
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2. ALL MATCH POINTS AND PAVEMENT PATCHES TO BE SAW-CUT AT FULL DEPTH.
3. RESTORE DISTURBED STREET TO EXISTING OR BETTER SECTION.
4. BACKFILLING OF CURB IS INCIDENTAL TO CURB INSTALLATION.

**LEGEND**



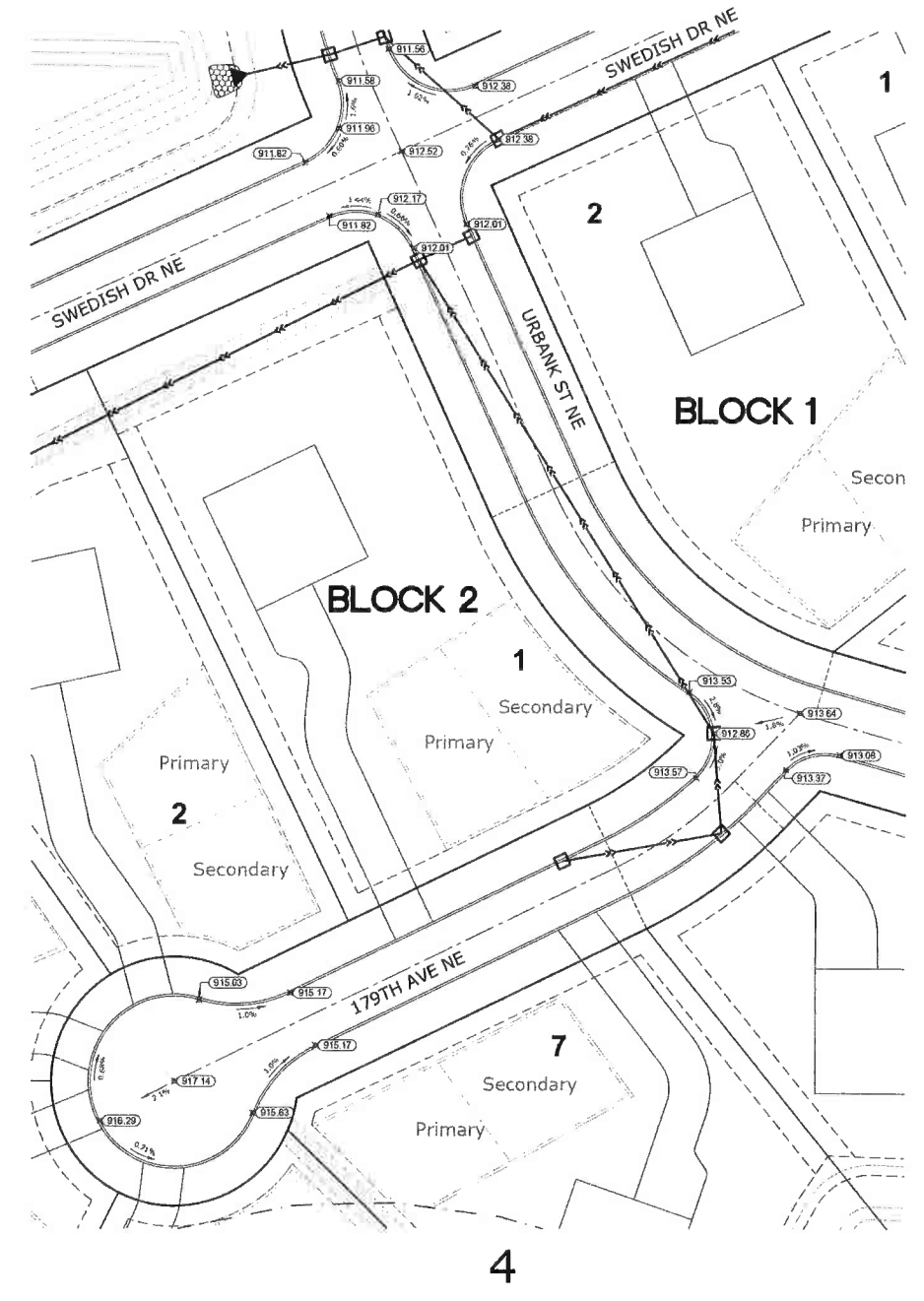
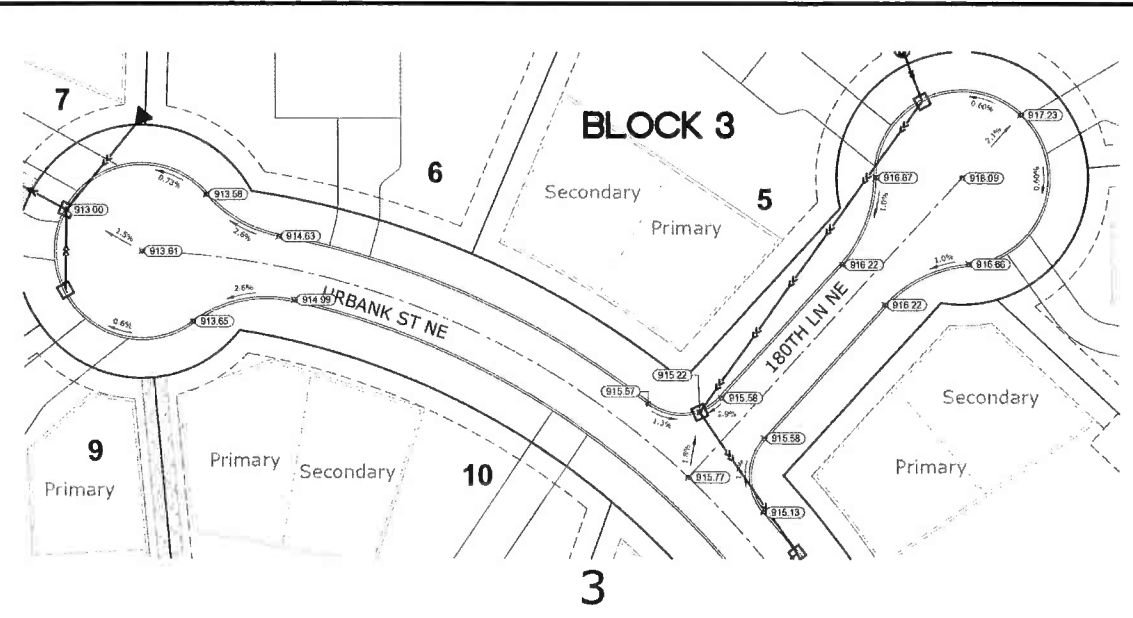
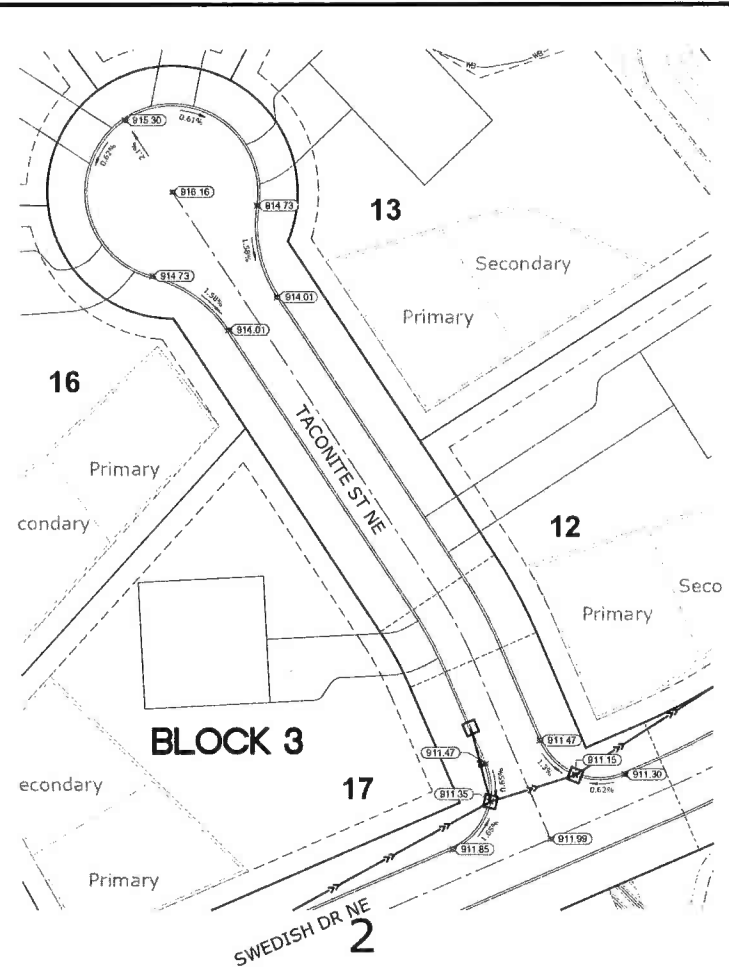
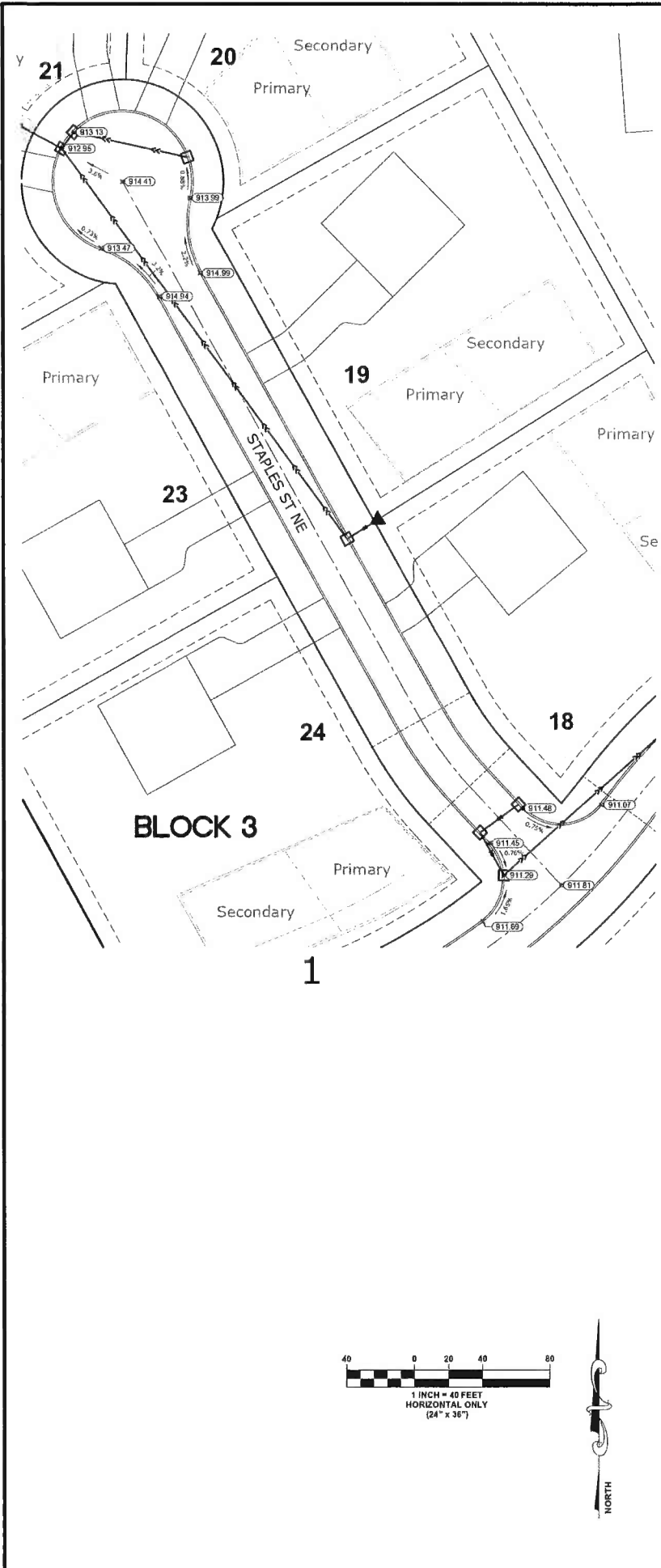
DRAWN BY: JAC  
 JOB NO: 23-2122  
 CHECKED BY: MCK  
 DATE: 03/20/24

NO.	DATE	DESCRIPTION
1	03/25/24	PLANT PROFILES
2		
3		
4		
5		
6		
7		

I hereby certify that this plan was prepared by me or under my direct supervision and that I am a duly licensed professional engineer under the laws of the State of Minnesota.  
 ADAM J. PAVEL  
 License No. 43863  
 Date: 07/02/2024

**SWEDISH CHAPEL ESTATES**  
 HAMI LAKE, MN  
**PLAN 1 PROFILE**  
**MISC. STORM SEWER & POND OUTLETS**  
 PREPARED FOR: MN DEVELOPMENTS, LLC

SHEET  
**C1.7**



KEY - NOT TO SCALE



**PLOWE**  
ENGINEERING, INC.  
1100 LINDEN DRIVE  
LINO LAKE, MN 55014  
PHONE: (855) 381-8210  
FAX: (855) 381-8701



PREPARED BY: JAS LUD  
JOB NO: 23-2122  
CHECKED BY: MCA  
DATE: 03/20/24

NO.	DATE	DESCRIPTION
1	08-26-24	PLAN PROFILES
2	07-02-24	ADDITIONAL SPOT ELEVATION DETAIL ADDED
3		
4		
5		
6		
7		
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I hereby certify that this plan was prepared by me, or under my direct supervision and that I am a duly licensed professional engineer under the laws of the State of Minnesota.  
ADAM PINNELL  
Date: 07-02-2024 License No. 43863

**SWEDISH CHAPEL ESTATES**  
HAM LAKE, MN  
**INTERSECTION & C-D-S DETAILS**  
PREPARED FOR: MN DEVELOPMENTS, LLC

SHEET  
**C1.8**

PROJECT TITLE  
SWEDISH CHAPEL ESTATES

PROJECT LOCATION  
2506 SWEDISH DR NE  
HAM LAKE, MN 55304  
ANOKA COUNTY

LATITUDE: 45.29521  
LONGITUDE: 93.20970

DEVELOPER

MN DEVELOPMENTS, LLC  
17404 WARD LAKE DR 1/W  
ANDOVER, MN 55304

CONTACT NAME: JEFF STALLBERGER  
CONTACT PHONE: (612) 778-1471  
CONTACT E-MAIL: stallj08@man.com

GENERAL CONTRACTOR

TBD

NARRATIVE - PERMANENT STORMWATER TREATMENT SYSTEMS

PERMANENT STORMWATER MANAGEMENT FEATURES WILL INCLUDE SEVERAL NURP POND(S). SEE "STORMWATER DRAINAGE REPORT" FOR FURTHER DISCUSSION.

SITE IMPERVIOUS AREAS

Table with columns: ANALYZED AREA, BEFORE CONSTRUCTION, AFTER CONSTRUCTION. Rows include TOTAL ESTIMATED IMPERVIOUS and TOTAL ESTIMATED PERVIOUS.

TOTAL DISTURBED AREA

-34.0 ACRES

SITE MAP: EXISTING AND FINAL GRADES AND DESIGN CALCULATIONS

SEE "STORMWATER DRAINAGE REPORT" FOR EXISTING AND PROPOSED AREA MAPS, DETONING DRAINAGE AREA BOUNDARIES, DIRECTIONS OF FLOW, AND DISCHARGE POINTS WHERE STORMWATER LEAVES THE SITE.

RECEIVING WATERS WITHIN ONE MILE

Table with columns: NAME OF WATER BODY, TYPE OF WATER BODY, SPECIAL WATER, IMPAIRED WATER. Rows include UNNAMED WETLANDS, COUNTRY DITCH 58, COUNTRY DITCH 28, COON LAKE.

BUFFER TO SURFACE WATER

IF THE SITE DRAINS TO A SURFACE WATER, IS A 50-FT NATURAL BUFFER ADJACENT TO THE SURFACE WATER PRESERVED?

NOTE: NATURAL BUFFERS ARE NOT REQUIRED ADJACENT TO ROAD DITCHES, JUDICIAL DITCHES, COUNTY DITCHES, STORMWATER CONVEYANCE CHANNELS, STORM DRAIN INLETS, AND SEDIMENT BASINS.

WHERE A 50-FT BUFFER CANNOT BE ACHIEVED, REDUNDANT SEDIMENT CONTROL MEASURES ARE PROVIDED.

TEMPORARY SEDIMENTATION BASINS

IF TEN (10) OR MORE ACRES OF DISTURBED SOIL DRAIN TO A COMMON LOCATION, IS A TEMPORARY SEDIMENT BASIN PROVIDED FOR TREATMENT OF THE RUNOFF BEFORE IT LEAVES THE CONSTRUCTION SITE OR ENTERS SURFACE WATERS?

BECAUSE THIS SITE IS WITHIN ONE MILE OF AN IMPAIRED WATER, THIS REQUIREMENT BECOMES FIVE (5) MILES. THE CONTRACTOR SHALL PROVIDE TEMPORARY SEDIMENT BASINS AS NEEDED.

INFILTRATION FEASIBILITY

ARE THERE ANY INFILTRATION RESTRICTIONS FOR THE SITE (SEE 16.14 THROUGH 16.21)?

THE SITE HAS SANDY SOILS WITH A RELATIVELY HIGH WATER TABLE AND IS UNSUITABLE FOR INFILTRATION BMPs.

ADDITIONAL STORMWATER MITIGATION MEASURES

ARE THERE ANY STORMWATER MITIGATION MEASURES PER

- ENVIRONMENTAL REVIEW DOCUMENT?
ENDANGERED SPECIES REVIEW?
ARCHAEOLOGICAL REVIEW?
OTHER LOCAL, STATE OR FEDERAL REVIEW?

IF YES TO ANY OF THE ABOVE, DESCRIBE THE MITIGATION MEASURES FOR PURPOSES OF THIS PERMIT. MITIGATION MEASURES MEANS ACTIONS NECESSARY TO AVOID, MINIMIZE, OR MITIGATE FOR IMPACTS RELATED TO EROSION PREVENTION, SEDIMENT CONTROL, THE PERMANENT STORMWATER TREATMENT SYSTEM, POLLUTION PREVENTION MANAGEMENT MEASURES AND DISCHARGES ASSOCIATED WITH THE PROJECT'S CONSTRUCTION ACTIVITY (MNH R 7090)

DOCUMENTATION OF TRAINED INDIVIDUALS

A INDIVIDUAL WHO PREPARED THE SWPPP

ADAM GRINEL  
PLOW ENGINEERING, INC  
8776 LAKE DRIVE  
LINO LAKE, MN 55014  
(651) 361-8234  
adam@plowe.com

B INDIVIDUAL(S) OVERSEEING IMPLEMENTATION OF, REVISING AND/OR AMENDING THE SWPPP AND INDIVIDUALS PERFORMING INSPECTIONS FOR THE PROJECT. ONE OF THESE INDIVIDUALS MUST BE AVAILABLE FOR AN ON-SITE INSPECTION WITHIN 72 HOURS UPON REQUEST BY THE MPCA (MNH R 7090)

CONTACT NAME: \_\_\_\_\_
CONTACT PHONE: \_\_\_\_\_
CONTACT E-MAIL: \_\_\_\_\_

C INDIVIDUAL(S) PERFORMING OR SUPERVISING THE INSTALLATION, MAINTENANCE AND REPAIR OF BMPs (MNH R 7090)

CONTACT NAME: \_\_\_\_\_
CONTACT PHONE: \_\_\_\_\_
CONTACT E-MAIL: \_\_\_\_\_

LONG TERM OPERATION AND MAINTENANCE OF PERMANENT STORMWATER FACILITIES

THE PROPOSED STORMWATER MANAGEMENT FEATURE FOR THIS SITE IS AN INFILTRATION BASIN AND WILL BE PRIVATELY OWNED AND MAINTAINED.

REVEGETATION SPECIFICATIONS

Table with columns: ITEM, MNDOT SPECIFICATION/NOTES. Rows include SOD, SEED, TURF ESTABLISHMENT (COMMERCIAL, RESIDENTIAL), SOIL BUILDING COVER (FALL, WINTER, 1-2 YEARS, 2-5 YEARS), MULCH, HYDROMULCH, FERTILIZER, WOOD FIBER BLANKET.

MOW A MINIMUM OF RESIDENTIAL TURF - ONCE PER 2 WEEKS
COMMERCIAL TURF - ONCE PER 4 WEEKS

SEEDING AREAS SHALL BE EITHER MULCHED OR COVERED BY FIBROUS BLANKETS TO PROTECT SEEDS AND LIMIT EROSION.

QUANTITIES - ESTIMATED QUANTITIES FOR EROSION AND SEDIMENT CONTROL MEASURES

Table with columns: TYPE, QTY, UNIT. Rows include SILT FENCE, BIO-ROLLS, RIP-RAP W/ GEO-FABRIC, CATCH BASIN INLET PROTECTION, STABILIZED RIPRAP OVERFLOW, EROSION CONTROL BLANKET, SEED & MULCH (GENERAL), ROCK CONSTRUCTION ENTRANCE.

NARRATIVE - TIMING FOR INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES

- A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN AND SWPPP MUST BE AVAILABLE ON THE PROJECT SITE AT ALL TIMES.
CONTRACTOR SHALL INSTALL SILT FENCE AS SHOWN ON PLAN.
ADDITIONAL SILT FENCE MAY BE NECESSARY IF LOCAL CONDITIONS REQUIRE.
CONTRACTOR SHALL MAINTAIN SILT FENCE, INCLUDING THE REMOVAL OF ACCUMULATED SEDIMENT, THROUGH COMPLETION OF BUILDING CONSTRUCTION.
SILT FENCE SHALL REMAIN IN PLACE UNTIL SITE HAS BEEN STABILIZED.
CONTRACTOR SHALL INSTALL A ROCK CONSTRUCTION ENTRANCE AT ALL LOCATIONS WHERE CONSTRUCTION TRAFFIC WILL ENTER/EXIT SITE.
CONTRACTOR TO INSTALL TREE PROTECTION FENCING AS APPLICABLE.
CONTRACTOR SHALL PERFORM SITE GRADING ON AN AREA-BY-AREA BASIS TO MINIMIZE UNSTABILIZED AREAS.
CONTRACTOR MUST IMMEDIATELY INITIATE STABILIZATION OF EXPOSED SOIL AREAS, AS DESCRIBED IN ITEM 8.4 OF THE PERMIT, AND COMPLETE THE STABILIZATION WITHIN 24 HOURS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE TEMPORARILY OR PERMANENTLY CEASES.
CONTRACTOR TO PROVIDE TEMPORARY SEDIMENTATION BASINS AS REQUIRED IN SECTION 14.1 THROUGH 14.10.
CONTRACTOR TO SHALL PAY SPECIAL ATTENTION TO ADJACENT PROPERTY LINES TO ENSURE THE EROSION CONTROL PRACTICES IN THOSE AREAS PREVENT MIGRATION OF SEDIMENT ONTO ADJACENT PROPERTIES.
ALL EROSION AND SEDIMENT CONTROL MEASURES SHOWN ON THE PLANS OR IMPLEMENTED BY THE FIELD SHALL BE IN ACCORDANCE WITH THE CITY AND MPDES PHASE II PERMIT REQUIREMENTS.
CONTRACTOR TO PROVIDE ADDITIONAL SILT FENCE, BIOROLLS, EROSION CONTROL BLANKET, OR OTHER APPROVED EQUAL FOR ANY SLOPES THAT APPEAR TO BE FAILING.
CONTRACTOR TO STABILIZE SOIL STOCKPILES; STABILIZATION SHALL BE INITIATED IMMEDIATELY.
CONTRACTOR SHALL FINAL GRADE SWALE AREAS UPON STABILIZATION OF UPSTREAM AREAS.
CONTRACTOR SHALL BE RESPONSIBLE TO SWEEP/SCRAPE ADJACENT STREETS WHEN MATERIALS OR DEBRIS HAVE WASHED/FLOWED ONTO ADJACENT STREETS OR AS DIRECTED BY CITY.
COORDINATE SMALL UTILITIES INSTALLATIONS (GAS, PHONE, ELECTRIC, CABLE, FIBEROPTIC, ETC.) AFTER PAVEMENT INSTALLATION.

"BEST MANAGEMENT PRACTICES (BMPs)" MEANS THE MOST EFFECTIVE AND PRACTICABLE MEANS OF EROSION PREVENTION AND SEDIMENT CONTROL AND WATER QUALITY MANAGEMENT PRACTICES THAT ARE THE MOST EFFECTIVE AND PRACTICABLE MEANS OF TO CONTROL, PREVENT, AND MINIMIZE DEGRADATION OF SURFACE WATER, INCLUDING AVOIDANCE OF IMPACTS, CONSTRUCTION PHASING, MINIMIZING THE LENGTH OF TIME SOIL AREAS ARE EXPOSED, PROHIBITIONS, POLLUTION PREVENTION THROUGH GOOD HOUSEKEEPING, AND OTHER MANAGEMENT PRACTICES PUBLISHED BY STATE OR DESIGNATED AREA-WIDE PLANNING AGENCIES (MNH R 7090)

"CONSTRUCTION ACTIVITY" MEANS ACTIVITIES INCLUDING CLEARING, GRADING, AND EXCAVATING, THAT RESULT IN LAND DISTURBANCE OF EQUAL TO OR GREATER THAN ONE ACRE, INCLUDING THE DISTURBANCE OF LESS THAN ONE ACRE OF TOTAL LAND AREA THAT IS PART OF A LARGER COMMON PLAN OF DEVELOPMENT OR SALE IF THE LARGER COMMON PLAN WILL ULTIMATELY DISTURB EQUAL TO OR GREATER THAN ONE ACRE. THIS INCLUDES A DISTURBANCE TO THE LAND THAT RESULTS IN A CHANGE IN THE TOPOGRAPHY, EXISTING SOIL COVER, BOTH VEGETATIVE AND NONVEGETATIVE, OR THE EXISTING SOIL TOPOGRAPHY THAT MAY RESULT IN ACCELERATED STORMWATER RUNOFF THAT MAY LEAD TO SOIL EROSION AND MOVEMENT OF SEDIMENT. CONSTRUCTION ACTIVITY DOES NOT INCLUDE A DISTURBANCE TO THE LAND OF LESS THAN FIVE ACRES FOR THE PURPOSE OF ROUTINE MAINTENANCE PERFORMED TO MAINTAIN THE ORIGINAL LIFE AND GRADE, HYDRAULIC CAPACITY, AND ORIGINAL PURPOSE OF THE FACILITY. ROUTINE MAINTENANCE DOES NOT INCLUDE ACTIVITIES SUCH AS REPAIRS, REPLACEMENT AND OTHER TYPES OF NON-ROUTINE MAINTENANCE, PAVEMENT REHABILITATION (THAT DOES NOT DISTURB THE UNDERLYING SOILS [E.G. MILL AND OVERLAY PROJECTS]) IS NOT CONSTRUCTION ACTIVITY (MNH R 7090)

"DEWATERING" MEANS THE REMOVAL OF SURFACE OR GROUND WATER TO DRY AND/OR SOLIDIFY A CONSTRUCTION SITE TO ENABLE CONSTRUCTION ACTIVITY. DEWATERING MAY REQUIRE A MINNESOTA DEPARTMENT OF NATURAL RESOURCES WATER APPROPRIATION PERMIT AND, IF DEWATERING WATER IS CONTAMINATED, DISCHARGE OF SUCH WATER MAY REQUIRE AN INDIVIDUAL MPCA NPDES/SIS PERMIT (MNH R 7090)

"EROSION PREVENTION" MEANS MEASURES EMPLOYED TO PREVENT EROSION SUCH AS SOIL STABILIZATION PRACTICES, PERMANENT COVER OR CONSTRUCTION PHASING (MNH R 7090)

"GENERAL CONTRACTOR" MEANS THE PARTY WHO SIGNS THE CONSTRUCTION CONTRACT WITH THE OWNER TO CONSTRUCT THE ENTIRE PROJECT DESCRIBED IN THE FINAL PLANS AND SPECIFICATIONS. WHERE THE CONSTRUCTION PROJECT INVOLVES MORE THAN ONE CONTRACTOR, THE GENERAL CONTRACTOR IS THE PARTY RESPONSIBLE FOR MANAGING THE ENTIRE PROJECT ON BEHALF OF THE OWNER. IN SOME CASES, THE OWNER IS THE GENERAL CONTRACTOR. IN THESE CASES, THE OWNER SIGNS THE PERMIT APPLICATION AS THE OPERATOR AND BECOMES THE SOLE PERMITEE (MNH R 7090)

"GROUNDWATER" MEANS THE WATER CONTAINED BELOW THE SURFACE OF THE EARTH IN THE SATURATED ZONE INCLUDING, WITHOUT LIMITATION, ALL WATERS WHETHER UNDER CONFINED, UNCONFINED, OR PERCHED CONDITIONS, IN NEAR SURFACE UNCONSOLIDATED SEDIMENT OR REGolith, OR IN ROCK FORMATIONS DEEPER UNDERGROUND (MNH R 7090)

"HOMEOWNER FACT SHEET" MEANS AN MPCA FACT SHEET AVAILABLE ON THE MPCA CONSTRUCTION STORMWATER WEBSITE FOR PERMITEES TO GIVE TO HOMEOWNERS AT THE TIME OF SALE (MNH R 7090)

"INFEASIBLE" MEANS NOT TECHNOLOGICALLY POSSIBLE OR NOT ECONOMICALLY PRACTICABLE AND ACHIEVABLE IN LIGHT OF THE BEST INDUSTRY PRACTICES (MNH R 7090)

"INITIATED IMMEDIATELY" MEANS TAKING AN ACTION TO COMMENCE SOIL STABILIZATION AS SOON AS PRACTICABLE, BUT NO LATER THAN THE END OF THE WORK DAY, FOLLOWING THE DAY WHEN THE LAND-DISTURBING ACTIVITIES TEMPORARILY OR PERMANENTLY CEASE. IF THE PERMITEE KNOWS THAT CONSTRUCTION WORK ON THAT PORTION OF THE SITE WILL BE TEMPORARILY CEASED FOR 14 OR MORE ADDITIONAL CALENDAR DAYS OR 7 CALENDAR DAYS WHERE ITEM 23.9 APPLIES, PERMITEES CAN INITIATE STABILIZATION BY

- A. PREPPING THE SOIL FOR VEGETATIVE OR NON-VEGETATIVE STABILIZATION, OR
B. APPLYING MULCH OR OTHER NON-VEGETATIVE PRODUCT TO THE EXPOSED SOIL AREA, OR
C. SEEDING OR PLANTING THE EXPOSED AREA, OR
D. STARTING ANY OF THE ACTIVITIES IN A., C. OR E. PORTION OF THE AREA TO BE STABILIZED, BUT NOT ON THE ENTIRE AREA, OR
E. FINALIZING ARRANGEMENTS TO HAVE STABILIZATION PRODUCT FULLY INSTALLED IN COMPLIANCE WITH THE APPLICABLE DEADLINE FOR COMPLETING STABILIZATION (MNH R 7090)

"IMPERVIOUS SURFACE" MEANS A CONSTRUCTED HARD SURFACE THAT EITHER PREVENTS OR RETARDS THE ENTRY OF WATER INTO THE SOIL AND CAUSES WATER TO RUN OFF THE SURFACE IN GREATER QUANTITIES AND AT AN INCREASED RATE OF FLOW THAN PRIOR TO DEVELOPMENT. EXAMPLES INCLUDE ROADS, SIDEWALKS, DRIVEWAYS, PARKING LOTS, AND CONCRETE, ASPHALT, OR GRAVEL ROADS. FIELDS OVER SURFACE WATERS ARE CONSIDERED IMPERVIOUS SURFACES (MNH R 7090)

"NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)" MEANS THE PROGRAM FOR ISSUING, MONITORING, REVOKING, REISSUING, TERMINATING, MODIFYING, AND ENFORCING PERMITS UNDER THE CLEAN WATER ACT, AS AMENDED (33 U.S.C. 1251 ET SEQ SECTION 1342 AND 40 CFR PARTS 122, 123, 124 AND 450) (MNH R 7090)

"NATURAL BUFFER" MEANS AN AREA OF UNDISTURBED COVER SURROUNDING SURFACE WATERS WITHIN WHICH CONSTRUCTION ACTIVITIES ARE RESTRICTED. NATURAL BUFFER INCLUDES THE VEGETATION, EXPOSED ROCK, OR BARREN GROUND THAT EXISTS PRIOR TO COMMENCEMENT OF EARTH-DISTURBING ACTIVITIES (MNH R 7090)

"NOTICE OF TERMINATION (NOT)" MEANS THE FORM (ELECTRONIC OR PAPER) REQUIRED FOR TERMINATING COVERAGE UNDER THE CONSTRUCTION GENERAL PERMIT (MNH R 7090)

"OPERATOR" MEANS THE PERSON (USUALLY THE GENERAL CONTRACTOR), FIRM, GOVERNMENTAL AGENCY, OR OTHER ENTITY DESIGNATED BY THE OWNER WHO HAS DAY TO DAY OPERATIONAL CONTROL AND/OR THE ABILITY TO MODIFY PROJECT PLANS AND SPECIFICATIONS RELATED TO THE SWPPP. THE PERMIT APPLICATION MUST LIST THE OPERATOR AS A PERMITEE. SUBCONTRACTORS HIRED BY AND UNDER SUPERVISION OF THE GENERAL CONTRACTOR ARE NOT OPERATORS (MNH R 7090)

"OWNER" MEANS THE PERSON, FIRM, GOVERNMENTAL AGENCY, OR OTHER ENTITY POSSESSING THE TITLE OF THE LAND ON WHICH THE CONSTRUCTION ACTIVITIES WILL OCCUR OR IF THE CONSTRUCTION ACTIVITY IS FOR A LEASE, EASEMENT, OR MINERAL RIGHTS LICENSE HOLDER. THE PARTY OR INDIVIDUAL IDENTIFIED AS THE LEASE, EASEMENT OR MINERAL RIGHTS LICENSE HOLDER, OR THE CONTRACTING GOVERNMENT AGENCY RESPONSIBLE FOR THE CONSTRUCTION ACTIVITY (MNH R 7090)

"PERMANENT COVER" MEANS SURFACE TYPES THAT WILL PREVENT SOIL FAILURE UNDER EROSION CONDITIONS. EXAMPLES INCLUDE GRAVEL, CONCRETE, PEREGRINE COVER, OR OTHER LANDSCAPED MATERIAL THAT WILL PERMANENTLY ARREST SOIL EROSION. PERMITEES MUST ESTABLISH A UNIFORM PEREGRINE VEGETATIVE COVER (I.E., EVENLY DISTRIBUTED, WITHOUT LARGE BARE AREAS) WITH A DENSITY OF 70 PERCENT OF THE NATIVE BACKGROUND VEGETATIVE COVER ON ALL AREAS NOT COVERED BY PERMANENT STRUCTURES, OR EQUIVALENT PERMANENT STABILIZATION MEASURES. PERMANENT COVER DOES NOT INCLUDE TEMPORARY BMPs SUCH AS WOOD FIBER BLANKET, MULCH, AND ROLLED EROSION CONTROL PRODUCTS (MNH R 7090)

"PERMITEE" MEANS THE PERSONS, FIRM, GOVERNMENTAL AGENCY, OR OTHER ENTITY IDENTIFIED AS THE OWNER AND OPERATOR ON THE APPLICATION SUBMITTED TO THE MPCA AND ARE RESPONSIBLE FOR COMPLIANCE WITH THE TERMS AND CONDITIONS OF THIS PERMIT (MNH R 7090)

"PROJECT(S)" MEANS ALL CONSTRUCTION ACTIVITY PLANNED AND/OR CONDUCTED UNDER A PARTICULAR PERMIT. THE PROJECT OCCURS ON THE SITE OR SITES DESCRIBED IN THE PERMIT APPLICATION, THE SWPPP AND IN THE ASSOCIATED PLANS, SPECIFICATIONS AND CONTRACT DOCUMENTS (MNH R 7090)

"PUBLIC WATERS" MEANS ALL WATER BASINS AND WATERCOURSES DESCRIBED IN MNH STAT. SECT. 1036.005 SUBP. 15 (MNH R 7090)

"SEDIMENT CONTROL" MEANS METHODS EMPLOYED TO PREVENT SUSPENDED SEDIMENT IN STORMWATER FROM LEAVING THE SITE (E.G. SILT FENCES, COMPOST LOGS AND STORM DRAIN INLET PROTECTION) (MNH R 7090)

"STABILIZED" "STABILIZATION" MEANS THE EXPOSED GROUND SURFACE HAS BEEN COVERED BY APPROPRIATE MATERIALS SUCH AS MULCH, STAKED SOIL, RIPRAP, EROSION CONTROL BLANKET, MATS OR OTHER MATERIAL THAT PREVENTS EROSION FROM OCCURRING. GRASS SEEDING, AGRICULTURAL CROP SEEDING, OR OTHER SEEDING ALONE IS NOT STABILIZATION. MULCH MATERIALS MUST ACHIEVE APPROXIMATELY 90 PERCENT GROUND COVERAGE (TYPICALLY 2 TON/ACRE) (MNH R 7090)

"STORMWATER" MEANS PRECIPITATION RUNOFF, STORMWATER RUNOFF, SNOWMELT RUNOFF, AND ANY OTHER SURFACE RUNOFF AND DRAINAGE (MNH R 7090)

"STEEP SLOPES" MEANS SLOPES THAT ARE 1:3 (V:H) (33 PERCENT) OR STEEPER IN GRADE (MNH R 7090)

"STORM WATER POLLUTION PREVENTION PLAN (SWPPP)" MEANS A PLAN FOR STORMWATER DISCHARGE THAT INCLUDES ALL REQUIRED CONTENT UNDER IN SECTION 5 THAT DESCRIBES THE EROSION PREVENTION, SEDIMENT CONTROL, AND WASTE CONTROL BMPs AND PERMANENT STORMWATER TREATMENT SYSTEMS (MNH R 7090)

"SURFACE WATER OR WATERS" MEANS ALL STREAMS, LAKES, PONDS, MARSHES, WETLANDS, RESERVOIRS, SPRINGS, RIVERS, DRAINAGE SYSTEMS, WATERWAYS, WATERCOURSES, AND IRRIGATION SYSTEMS WHETHER NATURAL OR ARTIFICIAL. PUBLIC OR PRIVATE, EXCEPT THAT SURFACE WATERS DO NOT INCLUDE STORMWATER TREATMENT SYSTEMS CONSTRUCTED FROM UPLAND. THIS PERMIT DOES NOT CONSIDER STORMWATER TREATMENT SYSTEMS CONSTRUCTED IN WETLANDS AND MITIGATED IN ACCORDANCE WITH SECTION 22 AS SURFACE WATERS (MNH R 7090)

"WATERS OF THE STATE" AS DEFINED IN MNH STAT. SECT. 115.01, SUBP. 22) MEANS ALL STREAMS, LAKES, PONDS, MARSHES, WATERCOURSES, WATERWAYS, WELLS, SPRINGS, RESERVOIRS, AQUIFERS, IRRIGATION SYSTEMS, DRAINAGE SYSTEMS AND ALL OTHER BODIES OR ACCUMULATIONS OF WATER, SURFACE OR UNDERGROUND, NATURAL OR ARTIFICIAL, PUBLIC OR PRIVATE, WHICH ARE CONTAINED WITHIN FLOW THROUGH, OR BORDER UPON THE STATE OR ANY PORTION THEREOF (MNH STAT. 115.01, SUBP. 22)

"WATER QUALITY VOLUME" MEANS ONE (1) INCH OF RUNOFF FROM THE NET INCREASE IN IMPERVIOUS SURFACES CREATED BY THE PROJECT (CALCULATED AS AN INSTANTANEOUS VOLUME) (MNH R 7090)

"WETLANDS" AS DEFINED IN MNH R. 7050.0166, SUBP. 1A.B.) MEANS THOSE AREAS THAT ARE INUNDATED OR SATURATED BY SURFACE WATER OR GROUNDWATER AT A FREQUENCY AND DURATION SUFFICIENT TO SUPPORT, AND UNDER NORMAL CIRCUMSTANCES DO SUPPORT, A PREVALENCE OF VEGETATION TYPICALLY ADAPTED FOR LIFE IN SATURATED SOIL CONDITIONS. WETLANDS GENERALLY INCLUDE SWAMPS, MARSHES, BOGS, AND SIMILAR AREAS. CONSTRUCTED WETLANDS DESIGNED FOR WASTEWATER TREATMENT ARE NOT WATERS OF THE STATE. WETLANDS MUST HAVE THE FOLLOWING ATTRIBUTES:

- 1. A PREDOMINANCE OF HYDRIC SOILS, AND
2. INUNDATED OR SATURATED BY SURFACE WATER OR GROUNDWATER AT A FREQUENCY AND DURATION SUFFICIENT TO SUPPORT A PREVALENCE OF HYDROPHYTIC VEGETATION TYPICALLY ADAPTED FOR LIFE IN A SATURATED SOIL CONDITION, AND
3. UNDER NORMAL CIRCUMSTANCES SUPPORT A PREVALENCE OF SUCH VEGETATION (MNH R. 7050.0166, SUBP. 1A.B)

MAP OF SURFACE WATERS

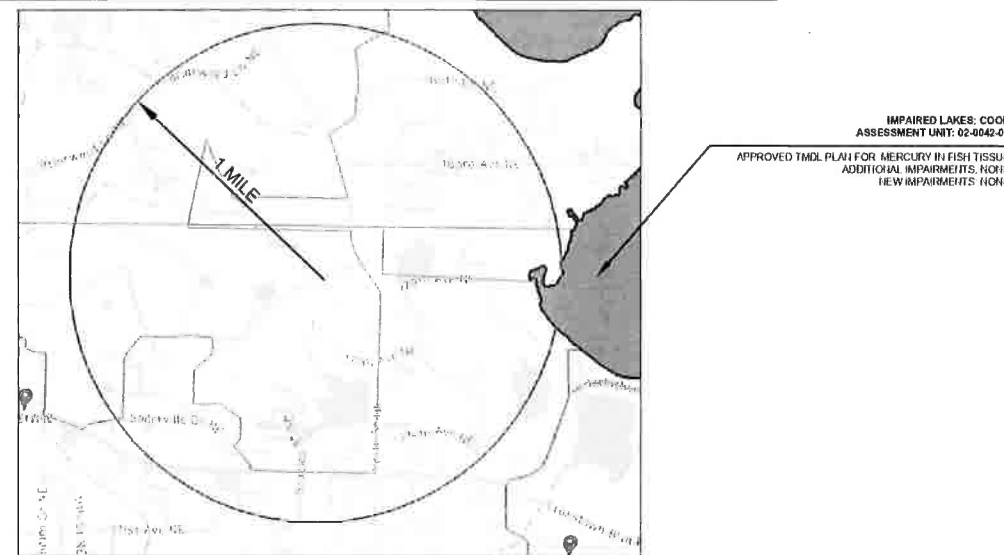


Table with columns: DRAWN BY, AG, JOB NO., DATE, CHECK BY, MCA, DATE. Values include AG, 23-2122, MCA, 03/20/24.

Table with columns: NO, DATE, DESCRIPTION. Row 1: 1, 05/09/24, SIGNED.

I hereby certify that this plan was prepared by me, or under my direct supervision and that I am a duly licensed professional engineer under the laws of the State of Minnesota. ADAM GRINEL, License No. 43983, Date: 07/02/2024.

SWEDISH CHAPEL ESTATES
HAM LAKE, MN
SWPPP
PREPARED FOR: MN DEVELOPMENTS, LLC

SHEET C2.1



4.1 TERMINATION OF COVERAGE. [MINN. R. 7090]

- 4.2 PERMITTEES MUST SUBMIT A NOT WITHIN 30 DAYS AFTER ALL TERMINATION CONDITIONS LISTED IN SECTION 13 ARE COMPLETED. [MINN. R. 7090]
4.3 PERMITTEES MUST SUBMIT A NOT WITHIN 30 DAYS AFTER SELLING OR OTHERWISE LEGALLY TRANSFERRING THE ENTIRE SITE, INCLUDING PERMIT RESPONSIBILITY FOR ROADS (E.G., STREET SWEEPING) AND STORMWATER INFRASTRUCTURE FINAL CLEAN UP, OR TRANSFERRING PORTIONS OF A SITE TO ANOTHER PARTY. THE PERMITTEES' COVERAGE UNDER THIS PERMIT TERMINATES AT MIDNIGHT ON THE SUBMISSION DATE OF THE NOT. [MINN. R. 7090]
4.4 PERMITTEES MAY TERMINATE COVERAGE PRIOR TO COMPLETION OF ALL CONSTRUCTION ACTIVITY IF THEY MEET ALL OF THE FOLLOWING CONDITIONS:
A. CONSTRUCTION ACTIVITY HAS CEASED FOR AT LEAST 90 DAYS; AND
B. AT LEAST 90 PERCENT (BY AREA) OF ALL ORIGINALLY PROPOSED CONSTRUCTION ACTIVITY HAS BEEN COMPLETED AND PERMANENT COVER HAS BEEN ESTABLISHED ON THOSE AREAS; AND
C. ON AREAS WHERE CONSTRUCTION ACTIVITY IS NOT COMPLETE, PERMANENT COVER HAS BEEN ESTABLISHED; AND
D. THE SITE COMPLIES WITH ITEM 13.3 THROUGH 13.7.

AFTER PERMIT COVERAGE IS TERMINATED UNDER THIS ITEM, ANY SUBSEQUENT DEVELOPMENT ON THE REMAINING PORTIONS OF THE SITE WILL REQUIRE PERMIT COVERAGE IF THE SUBSEQUENT DEVELOPMENT ITSELF OR AS PART OF THE REMAINING COMMON PLAN OF DEVELOPMENT OR SALE WILL RESULT IN LAND DISTURBING ACTIVITIES OF ONE (1) OR MORE ACRES IN SIZE. [MINN. R. 7090]

4.5 PERMITTEES MAY TERMINATE COVERAGE UPON MPCA APPROVAL AFTER SUBMITTING INFORMATION DOCUMENTING THE OWNER CANCELLED THE PROJECT. [MINN. R. 7090]

6.1 SWPPP AMENDMENTS. [MINN. R. 7090]

- 6.2 ONE OF THE INDIVIDUALS DESCRIBED IN ITEM 21.2.A OR ITEM 21.2.B OR ANOTHER QUALIFIED INDIVIDUAL MUST COMPLETE ALL SWPPP CHANGES. CHANGES INVOLVING THE USE OF A LESS STRINGENT BMP MUST INCLUDE A JUSTIFICATION DESCRIBING HOW THE REPLACEMENT BMP IS EFFECTIVE FOR THE SITE CHARACTERISTICS. [MINN. R. 7090]
6.3 PERMITTEES MUST AMEND THE SWPPP TO INCLUDE ADDITIONAL OR MODIFIED BMPs AS NECESSARY TO CORRECT PROBLEMS IDENTIFIED OR ADDRESS SITUATIONS WHENEVER THERE IS A CHANGE IN DESIGN, CONSTRUCTION, OPERATION, MAINTENANCE, WEATHER OR SEASONAL CONDITIONS HAVING A SIGNIFICANT EFFECT ON THE DISCHARGE OF POLLUTANTS TO SURFACE WATERS OR GROUNDWATER. [MINN. R. 7090]
6.4 PERMITTEES MUST AMEND THE SWPPP TO INCLUDE ADDITIONAL OR MODIFIED BMPs AS NECESSARY TO CORRECT PROBLEMS IDENTIFIED OR ADDRESS SITUATIONS WHENEVER INVESTIGATIONS BY THE SITE OWNER OR OPERATOR, USEPA OR MPCA OFFICIALS INDICATE THE SWPPP IS NOT EFFECTIVE IN ELIMINATING OR SIGNIFICANTLY MINIMIZING THE DISCHARGE OF POLLUTANTS TO SURFACE WATERS OR GROUNDWATER OR THE DISCHARGES ARE CAUSING WATER QUALITY CONDITIONS AS DEFINED IN MINN. R. 7050.0210, SUBP. 2) OR THE SWPPP IS NOT CONSISTENT WITH THE OBJECTIVES OF A USEP APPROVED TMDL. [MINN. R. 7050.0210]

7.1 BMP SELECTION AND INSTALLATION. [MINN. R. 7090]

7.2 PERMITTEES MUST SELECT, INSTALL, AND MAINTAIN THE BMPs IDENTIFIED IN THE SWPPP AND IN THIS PERMIT IN AN APPROPRIATE AND FUNCTIONAL MANNER AND IN ACCORDANCE WITH RELEVANT MANUFACTURER SPECIFICATIONS AND ACCEPTED ENGINEERING PRACTICES. [MINN. R. 7090]

8.1 EROSION PREVENTION PRACTICES. [MINN. R. 7090]

- 8.2 BEFORE WORK BEGINS, PERMITTEES MUST DELINEATE THE LOCATION OF AREAS NOT TO BE DISTURBED. [MINN. R. 7090]
8.3 PERMITTEES MUST MINIMIZE THE NEED FOR DISTURBANCE OF PORTIONS OF THE PROJECT WITH STEEP SLOPES. WHEN DISTURBANCE IS REQUIRED, PERMITTEES MUST USE TECHNIQUES SUCH AS PHASING AND STABILIZATION PRACTICES DESIGNED FOR STEEP SLOPES (E.G., SLOPE DRAINING AND TERRACING). [MINN. R. 7090]
8.4 PERMITTEES MUST STABILIZE ALL EXPOSED SOIL AREAS, INCLUDING STOCKPILES. STABILIZATION MUST BE INITIATED IMMEDIATELY TO LIMIT SOIL EROSION WHEN CONSTRUCTION ACTIVITY HAS PERMANENTLY OR TEMPORARILY CEASED ON ANY PORTION OF THE SLOPE EXCEEDING 7 CALENDAR DAYS. STABILIZATION OF EXPOSED SOIL AREAS MUST BE COMPLETED NO LATER THAN 24 HOURS AFTER THE CONSTRUCTION ACTIVITY HAS CEASED. STABILIZATION IS NOT REQUIRED ON CONSTRUCTED BASE COMPONENTS OF ROADS, PARKING LOTS AND SIMILAR SURFACES. STABILIZATION IS NOT REQUIRED ON TEMPORARY STOCKPILES OF SOILS, CLAY OR ORGANIC COMPONENTS (E.G., CLEAN AGGREGATE STOCKPILES, DEMOLITION CONCRETE SITE, ROCKS, SAND STOCKPILES) BUT PERMITTEES MUST PROVIDE SEDIMENT CONTROLS AT THE BASE OF THE STOCKPILE. [MINN. R. 7090]
8.5 FOR PUBLIC WATERS THAT THE MINNESOTA DNR HAS PROMULGATED "WORK IN WATER RESTRICTIONS" DURING SPECIFIED FISH SPawning TIMES, PERMITTEES MUST COMPLETE STABILIZATION OF ALL EXPOSED SOIL AREAS WITHIN 200 FEET OF THE WATER'S EDGE, AND THAT DRAIN TO THESE WATERS, WITHIN 24 HOURS DURING THE RESTRICTION PERIOD. [MINN. R. 7090]
8.6 PERMITTEES MUST STABILIZE THE NORMAL WETTED PERIMETER OF THE LAST 200 LINEAR FEET OF TEMPORARY OR PERMANENT DRAINAGE DITCHES OR SWALES THAT DRAIN WATER FROM THE SITE WITHIN 24 HOURS AFTER CONNECTING TO A SURFACE WATER OR PROPERTY EDGE. PERMITTEES MUST COMPLETE STABILIZATION OF REMAINING PORTIONS OF TEMPORARY OR PERMANENT DITCHES OR SWALES WITHIN 14 CALENDAR DAYS AFTER CONNECTING TO A SURFACE WATER OR PROPERTY EDGE AND CONSTRUCTION IN THAT PORTION OF THE DITCH TEMPORARILY OR PERMANENTLY CEASES. [MINN. R. 7090]
8.7 TEMPORARY OR PERMANENT DITCHES OR SWALES BEING USED AS A SEDIMENT CONTAINMENT SYSTEM DURING CONSTRUCTION (WITH PROPERLY DESIGNED ROCK-DITCH CHECKS, BIO ROLLS, SILT DIKES, ETC.) DO NOT NEED TO BE STABILIZED. PERMITTEES MUST STABILIZE THESE AREAS WITHIN 24 HOURS AFTER THEIR USE AS A SEDIMENT CONTAINMENT SYSTEM CEASES. [MINN. R. 7090]
8.8 PERMITTEES MUST NOT USE MULCH, HYDROMULCH, TACKIFIER, POLYACRYLAMIDE OR SIMILAR EROSION PREVENTION PRACTICES WITHIN ANY PORTION OF THE NORMAL WETTED PERIMETER OF A TEMPORARY OR PERMANENT DRAINAGE DITCH OR SWALE SECTION WITH A CONTINUOUS SLOPE OF GREATER THAN 2 PERCENT. [MINN. R. 7090]
8.9 PERMITTEES MUST PROVIDE TEMPORARY OR PERMANENT ENERGY DISSIPATION AT ALL PIPE OUTLETS WITHIN 24 HOURS AFTER CONNECTION TO A SURFACE WATER OR PERMANENT STORMWATER TREATMENT SYSTEM. [MINN. R. 7090]
8.10 PERMITTEES MUST NOT DISTURB MORE LAND (I.E., PHASING) THAN CAN BE EFFECTIVELY INSPECTED AND MAINTAINED IN ACCORDANCE WITH SECTION 11. [MINN. R. 7090]

9.1 SEDIMENT CONTROL PRACTICES. [MINN. R. 7090]

- 9.2 PERMITTEES MUST ESTABLISH SEDIMENT CONTROL BMPs ON ALL DOWNGRADIENT PERIMETERS OF THE SITE AND DOWNGRADIENT AREAS OF THE SITE THAT DRAIN TO ANY SURFACE WATER, INCLUDING CURB AND GUTTER SYSTEMS. PERMITTEES MUST LOCATE SEDIMENT CONTROL PRACTICES UPGRADEMENT OF ANY BUFFER ZONES. PERMITTEES MUST INSTALL SEDIMENT CONTROL PRACTICES BEFORE ANY UPGRADING ACTIVITIES BEGIN AND MUST KEEP THE SEDIMENT CONTROL PRACTICES IN PLACE UNTIL THEY ESTABLISH PERMANENT COVER. [MINN. R. 7090]
9.3 IF DOWNGRADIENT SEDIMENT CONTROLS ARE OVERLOADED, BASED ON FREQUENT FAILURE OR EXCESSIVE MAINTENANCE REQUIREMENTS, PERMITTEES MUST INSTALL ADDITIONAL UPGRADEMENT SEDIMENT CONTROL PRACTICES OR REDUNDANT BMPs TO ENHANCE THE PROTECTION AND AMEND THE SWPPP TO IDENTIFY THESE ADDITIONAL PRACTICES AS REQUIRED IN ITEM 6.3. [MINN. R. 7090]
9.4 TEMPORARY OR PERMANENT DRAINAGE DITCHES AND SEDIMENT BASINS DESIGNED AS PART OF A SEDIMENT CONTAINMENT SYSTEM (E.G., DITCHES WITH ROCK-CHECK DAMS) REQUIRE SEDIMENT CONTROL PRACTICES ONLY AS APPROPRIATE FOR SITE CONDITIONS. [MINN. R. 7090]
9.5 A FLOATING SILT CURTAIN PLACED IN THE WATER IS NOT A SEDIMENT CONTROL BMP TO SATISFY ITEM 9.2 EXCEPT WHEN WORKING ON A SHORELINE OR BELOW THE WATERLINE. IMMEDIATELY AFTER THE SHORT TERM CONSTRUCTION ACTIVITY (E.G., INSTALLATION OF RIP RAP ALONG THE SHORELINE) IN THAT AREA IS COMPLETE, PERMITTEES MUST INSTALL AN UPDRAIN PERIMETER CONTROL PRACTICE IF EXPOSED SOILS STILL DRAIN TO A SURFACE WATER. [MINN. R. 7090]
9.6 PERMITTEES MUST RE-INSTALL ALL SEDIMENT CONTROL PRACTICES ADJUSTED OR REMOVED TO ACCOMMODATE SHORT-TERM ACTIVITIES SUCH AS CLEARING OR GRUBBING, OR PASSAGE OF VEHICLES, IMMEDIATELY AFTER THE SHORT-TERM ACTIVITY IS COMPLETED. PERMITTEES MUST RE-INSTALL SEDIMENT CONTROL PRACTICES BEFORE THE NEXT PRECIPITATION EVENT EVEN IF THE SHORT-TERM ACTIVITY IS NOT COMPLETE. [MINN. R. 7090]
9.7 PERMITTEES MUST PROTECT ALL STORM DRAIN INLETS USING APPROPRIATE BMPs DURING CONSTRUCTION UNTIL THEY ESTABLISH PERMANENT COVER ON ALL AREAS WITH POTENTIAL FOR DISCHARGING TO THE INLET. [MINN. R. 7090]
9.8 PERMITTEES MAY REMOVE INLET PROTECTION FOR A PARTICULAR INLET IF A SPECIFIC SAFETY CONCERN (E.G. STREET FLOODING/FREEZING) IS IDENTIFIED BY THE PERMITTEES OR THE JURISDICTIONAL AUTHORITY (E.G., CITY/COUNTY/TOWNSHIP/MINNESOTA DEPARTMENT OF TRANSPORTATION ENGINEER). PERMITTEES MUST DOCUMENT THE NEED FOR REMOVAL IN THE SWPPP. [MINN. R. 7090]
9.9 PERMITTEES MUST PROVIDE SILT FENCE OR OTHER EFFECTIVE SEDIMENT CONTROLS AT THE BASE OF STOCKPILES ON THE DOWNGRADIENT PERIMETER. [MINN. R. 7090]
9.10 PERMITTEES MUST LOCATE STOCKPILES OUTSIDE OF NATURAL BUFFERS OR SURFACE WATERS, INCLUDING STORMWATER CONVEYANCES SUCH AS CURB AND GUTTER SYSTEMS UNLESS THERE IS A BYPASS IN PLACE FOR THE STORMWATER. [MINN. R. 7090]
9.11 PERMITTEES MUST INSTALL A VEHICLE TRACKING BMP TO MINIMIZE THE TRACK OUT OF SEDIMENT FROM THE CONSTRUCTION SITE OR ONTO PAVED ROADS WITHIN THE SITE. [MINN. R. 7090]
9.12 PERMITTEES MUST USE STREET SWEEPING IF VEHICLE TRACKING BMPs ARE NOT ADEQUATE TO PREVENT SEDIMENT TRACKING ONTO THE STREET. [MINN. R. 7090]
9.13 PERMITTEES MUST INSTALL TEMPORARY SEDIMENT BASINS AS REQUIRED IN SECTION 14. [MINN. R. 7090]
9.14 IN AREAS OF THE SITE WHERE FINAL EROSION CONTROL IS NOT YET COMPLETE, PERMITTEES MUST RESTRICT VEHICLE AND EQUIPMENT USE TO MINIMIZE SOIL COMPACTION. [MINN. R. 7090]
9.15 PERMITTEES MUST PRESERVE TOPSOIL ON THE SITE, UNLESS INFEASIBLE. [MINN. R. 7090]
9.16 PERMITTEES MUST DIRECT DISCHARGES FROM BMPs TO VEGETATED AREAS UNLESS INFEASIBLE. [MINN. R. 7090]
9.17 PERMITTEES MUST PRESERVE A 50 FOOT NATURAL BUFFER OR, IF A BUFFER IS INFEASIBLE ON THE SITE, PROVIDE REDUNDANT (DOUBLE) PERIMETER SEDIMENT CONTROLS WHEN A SURFACE WATER IS LOCATED WITHIN 50 FEET OF THE PROJECTS EARTH DISTURBANCES AND STORMWATER FLOWS TO THE SURFACE WATER. PERMITTEES MUST INSTALL PERIMETER SEDIMENT CONTROLS AT LEAST 3 FEET FROM THE BUFFER. PERMITTEES MUST PROVIDE NATURAL BUFFERS ARE NOT REQUIRED ADJACENT TO ROUND DITCHES, JUDICIAL DITCHES, COUNTY DITCHES, STORMWATER CONVEYANCE CHANNELS, STORM DRAIN INLETS, AND SEDIMENT BASINS. IF PRESERVING THE BUFFER IS INFEASIBLE, PERMITTEES MUST DOCUMENT THE REASONS IN THE SWPPP. SHEET PILING IS A REDUNDANT PERIMETER CONTROL IF INSTALLED IN A MANNER THAT RETAINS ALL STORMWATER. [MINN. R. 7090]
9.18 PERMITTEES MUST USE POLYMERS, FLOCCULANTS, OR OTHER SEDIMENTATION TREATMENT CHEMICALS IN ACCORDANCE WITH ACCEPTED ENGINEERING PRACTICES, DOSING SPECIFICATIONS AND SEDIMENT REMOVAL DESIGN SPECIFICATIONS PROVIDED BY THE MANUFACTURER OR SUPPLIER. THE PERMITTEES MUST USE CONVENTIONAL EROSION AND SEDIMENT CONTROLS PRIOR TO CHEMICAL ADDITION AND MUST DIRECT TREATED STORMWATER TO A SEDIMENT CONTROL SYSTEM FOR FILTRATION OR SETTLEMENT OF THE FLOC PRIOR TO DISCHARGE. [MINN. R. 7090]

10.1 POLLUTION PREVENTION AND BASIN DRAINING. [MINN. R. 7090]

- 10.2 PERMITTEES MUST DISCHARGE TURBID OR SEDIMENT-LADEN WATERS RELATED TO DEWATERING OR BASIN DRAINING (E.G., PUMPOUT DISCHARGE, TRENCH/DITCH CUT-OR-DRAINAGE) TO A TEMPORARY OR PERMANENT SEDIMENT BASIN ON THE PROJECT SITE UNLESS INFERRED TO PERMITTEES' DEWATER TO SURFACE WATERS IF THEY VISUALLY CHECK TO ENSURE ADEQUATE TREATMENT HAS BEEN OBTAINED AND NUISANCE CONDITIONS (SEE MINN. R. 7050.0210, SUBP. 2) WILL NOT RESULT FROM THE DISCHARGE. IF PERMITTEES CANNOT DISCHARGE THE WATER TO A SEDIMENTATION BASIN PRIOR TO ENTERING A SURFACE WATER, PERMITTEES MUST TREAT WITH APPROPRIATE BMPs SUCH THAT THE DISCHARGE DOES NOT ADVERSELY AFFECT THE SURFACE WATER OR DOWNSTREAM PROPERTIES. [MINN. R. 7050.0210]
10.3 IF PERMITTEES MUST DISCHARGE WATER CONTAINING OIL OR GREASE, THEY MUST USE AN OIL-WATER SEPARATOR OR SUITABLE FILTRATION DEVICE (E.G., CARTRIDGE FILTERS, ABSORBENTS PADS) PRIOR TO DISCHARGE. [MINN. R. 7090]
10.4 PERMITTEES MUST DISCHARGE ALL WATER FROM DEWATERING OR BASIN-DRAINING ACTIVITIES IN A MANNER THAT DOES NOT CAUSE EROSION OR DISCHARGE TO WETLANDS WITH APPROPRIATE BMPs SUCH THAT THE DISCHARGE DOES NOT ADVERSELY AFFECT THE SURFACE WATER OR DOWNSTREAM PROPERTIES. [MINN. R. 7050.0210]
10.5 IF PERMITTEES USE FILTERS WITH BACKWASH WATER, THEY MUST HAUL THE BACKWASH WATER AWAY FOR DISPOSAL, WATER INTO THE SITE IN A MANNER THAT DOES NOT CAUSE EROSION. [MINN. R. 7090]

11.1 INSPECTIONS AND MAINTENANCE. [MINN. R. 7090]

- 11.2 PERMITTEES MUST ENSURE A TRAINED PERSON, AS IDENTIFIED IN ITEM 21.2.B, WILL INSPECT THE ENTIRE CONSTRUCTION SITE AT LEAST EVERY SEVEN (7) DAYS DURING ACTIVE CONSTRUCTION AND WITHIN 24 HOURS AFTER A RAINFALL EVENT GREATER THAN 1/2 INCH IN 24 HOURS. [MINN. R. 7090]
11.3 PERMITTEES MUST INSPECT AND MAINTAIN ALL PERMANENT STORMWATER TREATMENT BMPs. [MINN. R. 7090]
11.4 PERMITTEES MUST INSPECT ALL EROSION PREVENTION AND SEDIMENT CONTROL BMPs AND POLLUTION PREVENTION MANAGEMENT MEASURES TO ENSURE INTEGRITY AND EFFECTIVENESS. PERMITTEES MUST REPAIR, REPLACE OR SUPPLEMENT ALL NONFUNCTIONAL BMPs WITH FUNCTIONAL BMPs BY THE END OF THE NEXT BUSINESS DAY AFTER DISCOVERY UNLESS ANOTHER TIME FRAME IS SPECIFIED IN ITEM 11.5 OR 11.6. PERMITTEES MAY TAKE ADDITIONAL TIME IF FIELD CONDITIONS PREVENT ACCESS TO THE AREA. [MINN. R. 7090]
11.5 DURING EACH INSPECTION, PERMITTEES MUST INSPECT SURFACE WATERS, INCLUDING DRAINAGE DITCHES AND CONVEYANCE SYSTEMS BUT NOT CURB AND GUTTER SYSTEMS, FOR EVIDENCE OF EROSION AND SEDIMENT DEPOSITION. PERMITTEES MUST REMOVE ALL DELTAS AND SEDIMENT DEPOSITED IN SURFACE WATERS, INCLUDING DRAINAGE WAYS, CANALS, BASINS, AND OTHER DRAINAGE SYSTEMS AND RESTABILIZE THE AREAS WHERE SEDIMENT REMOVAL RESULTS IN EXPOSED SOIL. PERMITTEES MUST COMPLETE REMOVAL AND STABILIZATION WITHIN SEVEN (7) CALENDAR DAYS OF DISCOVERY UNLESS PRECLUDED BY LEGAL, REGULATORY, OR PHYSICAL ACCESS CONSTRAINTS. PERMITTEES MUST USE ALL REASONABLE EFFORTS TO OBTAIN ACCESS. IF PRECLUDED, REMOVAL AND STABILIZATION MUST TAKE PLACE WITHIN SEVEN (7) DAYS OF OBTAINING ACCESS. PERMITTEES ARE RESPONSIBLE FOR CONTACTING ALL LOCAL, REGIONAL, STATE AND FEDERAL AUTHORITIES AND RECEIVING ANY APPLICABLE PERMITS, PRIOR TO CONDUCTING ANY WORK IN SURFACE WATERS. [MINN. R. 7090]
11.6 PERMITTEES MUST INSPECT 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. PERMITTEES MUST REMOVE SEDIMENT FROM ALL PAVED SURFACES WITHIN ONE (1) CALENDAR DAY OF DISCOVERY, IF APPLICABLE, WITHIN A SHORTER TIME TO AVOID A SAFETY HAZARD TO USERS OF PUBLIC STREETS. [MINN. R. 7090]
11.7 PERMITTEES MUST REPAIR, REPLACE OR SUPPLEMENT ALL PERMIT CONTROL DEVICES WHEN THEY BECOME NONFUNCTIONAL OR THE SEDIMENT REACHES 1/2 OF THE HEIGHT OF THE DEVICE. [MINN. R. 7090]
11.8 PERMITTEES MUST DRAIN TEMPORARY AND PERMANENT SEDIMENTATION BASINS AND REMOVE THE SEDIMENT WHEN THE DEPTH OF SEDIMENT EXCEEDS 1/2 THE STORAGE VOLUME. [MINN. R. 7090]
11.9 PERMITTEES MUST ENSURE THAT AT LEAST ONE INDIVIDUAL PRESENT ON THE SITE (OR AVAILABLE TO THE PROJECT SITE IN THREE (3) CALENDAR DAYS) IS TRAINED IN THE JOB DUTIES DESCRIBED IN ITEM 21.2.B. [MINN. R. 7090]
11.10 PERMITTEES MAY ADJUST THE INSPECTION SCHEDULE DESCRIBED IN ITEM 11.2 AS FOLLOWS:
A. INSPECTIONS OF AREAS WITH PERMANENT COVER CAN BE REDUCED TO ONCE PER MONTH, EVEN IF CONSTRUCTION ACTIVITY CONTINUES ON OTHER PORTIONS OF THE SITE; OR
B. WHERE SITES HAVE PERMANENT COVER ON ALL EXPOSED SOIL AND NO CONSTRUCTION ACTIVITY IS OCCURRING ANYWHERE ON THE SITE, INSPECTIONS CAN BE REDUCED TO ONCE PER MONTH AND, IF NECESSARY, MAY BE SUSPENDED COMPLETELY UNTIL CONSTRUCTION ACTIVITY RESUMES. THE MPCA MAY REQUIRE INSPECTIONS TO RESUME IF CONDITIONS WARRANT; OR
C. WHERE CONSTRUCTION ACTIVITY HAS BEEN SUSPENDED DUE TO FROZEN GROUND CONDITIONS, INSPECTIONS MAY BE SUSPENDED. INSPECTIONS MUST RESUME WITHIN 24 HOURS OF THAWING OR RUNOFF OCCURRING, OR UPON RESUMING CONSTRUCTION, WHICHEVER COMES FIRST. [MINN. R. 7090]
11.11 PERMITTEES MUST RECORD ALL INSPECTIONS AND MAINTENANCE ACTIVITIES WITHIN 24 HOURS OF BEING CONDUCTED AND THESE RECORDS MUST BE RETAINED WITH THE SWPPP. THESE RECORDS MUST INCLUDE:
A. DATE AND TIME OF INSPECTIONS; AND
B. NAME OF PERSONS CONDUCTING INSPECTIONS; AND
C. ACCURATE FINDINGS OF INSPECTIONS, INCLUDING THE SPECIFIC LOCATION WHERE CORRECTIVE ACTIONS ARE NEEDED; AND
D. CORRECTIVE ACTIONS TAKEN (INCLUDING DATES, TIMES, AND PARTY COMPLETING MAINTENANCE ACTIVITIES); AND
E. DATE OF ALL RAINFALL EVENTS GREATER THAN 1/2 INCHES IN 24 HOURS, AND THE AMOUNT OF RAINFALL FOR EACH EVENT. PERMITTEES MUST OBTAIN RAINFALL AMOUNTS BY EITHER A PROPERLY MAINTAINED RAIN GAUGE INSTALLED ONSITE, A WEATHER STATION THAT IS WITHIN ONE (1) MILE OF YOUR LOCATION, OR A WEATHER REPORTING SYSTEM THAT PROVIDES SITE SPECIFIC RAINFALL DATA; AND
F. IF PERMITTEES OBSERVE A DISCHARGE DURING THE INSPECTION, THEY MUST RECORD AND SHOULD PHOTOGRAPH AND DESCRIBE THE LOCATION OF THE DISCHARGE (I.E., COLOR, ODOR, SETTLED OR SUSPENDED SOLIDS, OIL SHEEN, AND OTHER OBVIOUS INDICATORS OF POLLUTANTS); AND
G. ANY AMENDMENTS TO THE SWPPP PROPOSED AS A RESULT OF THE INSPECTION MUST BE DOCUMENTED AS REQUIRED IN SECTION 6 WITHIN SEVEN (7) CALENDAR DAYS. [MINN. R. 7090]
11.12 PERMITTEES MUST RECORD ALL INSPECTIONS AND MAINTENANCE ACTIVITIES WITHIN 24 HOURS OF BEING CONDUCTED AND THESE RECORDS MUST BE RETAINED WITH THE SWPPP. THESE RECORDS MUST INCLUDE:
A. DATE AND TIME OF INSPECTIONS; AND
B. NAME OF PERSONS CONDUCTING INSPECTIONS; AND
C. ACCURATE FINDINGS OF INSPECTIONS, INCLUDING THE SPECIFIC LOCATION WHERE CORRECTIVE ACTIONS ARE NEEDED; AND
D. CORRECTIVE ACTIONS TAKEN (INCLUDING DATES, TIMES, AND PARTY COMPLETING MAINTENANCE ACTIVITIES); AND
E. DATE OF ALL RAINFALL EVENTS GREATER THAN 1/2 INCHES IN 24 HOURS, AND THE AMOUNT OF RAINFALL FOR EACH EVENT. PERMITTEES MUST OBTAIN RAINFALL AMOUNTS BY EITHER A PROPERLY MAINTAINED RAIN GAUGE INSTALLED ONSITE, A WEATHER STATION THAT IS WITHIN ONE (1) MILE OF YOUR LOCATION, OR A WEATHER REPORTING SYSTEM THAT PROVIDES SITE SPECIFIC RAINFALL DATA; AND
F. IF PERMITTEES OBSERVE A DISCHARGE DURING THE INSPECTION, THEY MUST RECORD AND SHOULD PHOTOGRAPH AND DESCRIBE THE LOCATION OF THE DISCHARGE (I.E., COLOR, ODOR, SETTLED OR SUSPENDED SOLIDS, OIL SHEEN, AND OTHER OBVIOUS INDICATORS OF POLLUTANTS); AND
G. ANY AMENDMENTS TO THE SWPPP PROPOSED AS A RESULT OF THE INSPECTION MUST BE DOCUMENTED AS REQUIRED IN SECTION 6 WITHIN SEVEN (7) CALENDAR DAYS. [MINN. R. 7090]

12.1 POLLUTION PREVENTION MANAGEMENT MEASURES. [MINN. R. 7090]

- 12.2 PERMITTEES MUST PLACE BUILDING PRODUCTS AND LANDSCAPE MATERIALS UNDER COVER (E.G., PLASTIC SHEETING OR TEMPORARY ROOFS) OR PROTECT THEM BY SIMILARLY EFFECTIVE MEANS DESIGNED TO MINIMIZE CONTACT WITH STORMWATER. PERMITTEES ARE NOT REQUIRED TO COVER OR PROTECT PRODUCTS WHICH ARE EITHER NOT A SOURCE OF CONTAMINATION TO STORMWATER OR ARE DESIGNED TO BE EXPOSED TO STORMWATER. [MINN. R. 7090]
12.3 PERMITTEES MUST PLACE PESTICIDES, FERTILIZERS AND TREATMENT CHEMICALS UNDER COVER, PLASTIC SHEETING OR TEMPORARY ROOFS OR PROTECT THEM BY SIMILARLY EFFECTIVE MEANS DESIGNED TO MINIMIZE CONTACT WITH STORMWATER. [MINN. R. 7090]
12.4 PERMITTEES MUST STORE HAZARDOUS MATERIALS AND TOXIC WASTE, INCLUDING OIL, DIESEL FUEL, GASOLINE, HYDRAULIC FLUIDS, PAINT SOLVENTS, PETROLEUM-BASED PRODUCTS, WOOD PRESERVATIVES, ADDITIVES, CURING COMPOUNDS, AND ADHESIVES IN SEALED CONTAINERS TO PREVENT SPILLS, LEAKS OR OTHER DISCHARGES. STORAGE AND DISPOSAL OF HAZARDOUS WASTE MATERIALS MUST BE IN COMPLIANCE WITH MINN. R. CH. 7045 INCLUDING SECONDARY CONTAINMENT AS APPLICABLE. [MINN. R. 7090]
12.5 PERMITTEES MUST PROPERLY STORE, COLLECT AND DISPOSE SOLID WASTE IN COMPLIANCE WITH MINN. R. CH. 7035. [MINN. R. 7035]
12.6 PERMITTEES MUST POSITION PORTABLE TOILETS SO THEY ARE SECURE AND WILL NOT TIP OR BE KNOCKED OVER. PERMITTEES MUST PROPERLY DISPOSE SANITARY WASTE IN ACCORDANCE WITH MINN. R. CH. 7041. [MINN. R. 7041]
12.7 PERMITTEES MUST TAKE REASONABLE STEPS TO PREVENT THE DISCHARGE OF SPILLED OR LEAKED CHEMICALS, INCLUDING FUEL, FROM ANY AREA WHERE CHEMICALS OR FUEL WILL BE LOADED OR UNLOADED INCLUDING THE USE OF DRIP PANS OR ABSORBENT UNLESS INFEASIBLE. PERMITTEES MUST ENSURE ADEQUATE SUPPLIES ARE AVAILABLE AT ALL TIMES TO CLEAN UP DISCHARGED MATERIALS AND THAT AN APPROPRIATE DISPOSAL METHOD IS AVAILABLE FOR RECOVERED SPILLED MATERIALS. PERMITTEES MUST REPORT AND CLEAN UP SPILLS IMMEDIATELY AS REQUIRED BY MINN. STAT. 115.061, USING DRY CLEAN UP MEASURES WHERE POSSIBLE. [MINN. STAT. 115.061]
12.8 PERMITTEES MUST LIMIT VEHICLE EXTERIOR WASHING AND EQUIPMENT TO A DEFINED AREA OF THE SITE. PERMITTEES MUST CONTAIN RUNOFF FROM THE WASHING AREA IN A SEDIMENT BASIN OR OTHER SIMILARLY EFFECTIVE CONTROLS AND MUST DISPOSE WASTE FROM THE WASHING ACTIVITY PROPERLY. PERMITTEES MUST PROPERLY USE AND STORE SOLIDS, DETERGENTS, OR SOLVENTS. [MINN. R. 7090]
12.9 PERMITTEES MUST PROVIDE EFFECTIVE CONTAINMENT FOR ALL LIQUID AND SOLID WASTES GENERATED BY WASHOUT OPERATIONS (E.G., CONCRETE, STUCCO, PAINT, FLOOR RELEASE OILS, CURING COMPOUNDS AND OTHER CONSTRUCTION MATERIALS) RELATED TO THE CONSTRUCTION ACTIVITY. PERMITTEES MUST PREVENT LIQUID AND SOLID WASHOUT WASTES FROM CONTACTING THE GROUND AND MUST DESIGN THE CONTAINMENT SO IT DOES NOT RESULT IN RUNOFF FROM THE WASHOUT OPERATIONS OR AREAS. PERMITTEES MUST PROPERLY DISPOSE LIQUID AND SOLID WASTES IN COMPLIANCE WITH MPCA RULES. PERMITTEES MUST INSTALL A SIGN INDICATING THE LOCATION OF THE WASHOUT FACILITY. [MINN. R. 7035, MINN. R. 7090]
13.1 PERMIT TERMINATION CONDITIONS. [MINN. R. 7090]
13.2 PERMITTEES MUST COMPLETE ALL CONSTRUCTION ACTIVITY AND MUST INSTALL PERMANENT COVER OVER ALL AREAS PRIOR TO SUBMITTING THE NOT. VEGETATIVE COVER MUST CONSIST OF A UNIFORM PERENNIAL VEGETATION WITH A DENSITY OF 70 PERCENT OF ITS EXPECTED FINAL GROWTH. VEGETATION IS NOT REQUIRED WHERE THE FUNCTION OF A SPECIFIC AREA DICTATES NO VEGETATION, SUCH AS IMPERVIOUS SURFACES OR THE BASE OF A SAND FILTER. [MINN. R. 7090]
13.3 PERMITTEES MUST CLEAN THE PERMANENT STORMWATER TREATMENT SYSTEM OF ANY ACCUMULATED SEDIMENT AND MUST ENSURE THE SYSTEM MEETS ALL APPLICABLE REQUIREMENTS IN SECTION 15 THROUGH 19 AND IS OPERATING AS DESIGNED. [MINN. R. 7090]
13.4 PERMITTEES MUST REMOVE ALL SEDIMENT FROM CONVEYANCE SYSTEMS PRIOR TO SUBMITTING THE NOT. [MINN. R. 7090]
13.5 PERMITTEES MUST REMOVE ALL TEMPORARY EROSION PREVENTION AND SEDIMENT CONTROL BMPs PRIOR TO SUBMITTING THE NOT. PERMITTEES MAY LEAVE BMPs DESIGNED TO PROTECT THE SITE IN PLACE. [MINN. R. 7090]
13.6 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 RESIDENT SELLS TO THE HOMEOWNER, AND THE PERMITTEE DISTRIBUTES THE MPCA'S "HOMEOWNER FACT SHEET" TO THE HOMEOWNER. [MINN. R. 7090]
13.7 FOR CONSTRUCTION PROJECTS ON AGRICULTURAL LAND (E.G., PIPELINES ACROSS CROPLAND), PERMITTEES MUST RETURN THE DISTURBED LAND TO ITS PRECONSTRUCTION AGRICULTURAL USE PRIOR TO SUBMITTING THE NOT. [MINN. R. 7090]

14.1 TEMPORARY SEDIMENT BASINS. [MINN. R. 7090]

- 14.2 WHERE TEN (10) OR MORE ACRES OF DISTURBED SOIL DRAIN TO A COMMON LOCATION, PERMITTEES MUST PROVIDE A TEMPORARY SEDIMENT BASIN TO RECEIVE RUNOFF BEFORE IT LEAVES THE CONSTRUCTION SITE OR ENTERS SURFACE WATERS. PERMITTEES MAY CONVERT A TEMPORARY SEDIMENT BASIN TO A PERMANENT BASIN AFTER CONSTRUCTION IS COMPLETE. THE TEMPORARY BASIN IS NO LONGER REQUIRED WHEN PERMANENT COVER HAS REDUCED THE ACRES OF DISTURBED SOIL TO LESS THAN TEN (10) ACRES DRAINING TO A COMMON LOCATION. [MINN. R. 7090]
14.3 THE TEMPORARY BASIN MUST PROVIDE LIVE STORAGE FOR A CALCULATED VOLUME OF RUNOFF FROM A TWO (2)-YEAR, 24-HOUR STORM FROM EACH ACRE DRAINED TO THE BASIN OR 1,800 CUBIC FEET OF LIVE STORAGE PER ACRE DRAINED, WHICHEVER IS GREATER. [MINN. R. 7090]
14.4 WHERE PERMITTEES HAVE NOT CALCULATED THE TWO (2)-YEAR, 24-HOUR STORM RUNOFF AMOUNT, THE TEMPORARY BASIN MUST PROVIDE 3,600 CUBIC FEET OF LIVE STORAGE PER ACRE OF THE BASIN'S DRAINAGE AREA. [MINN. R. 7090]
14.5 PERMITTEES MUST DESIGN BASIN OUTLETS TO PREVENT SHORT-CIRCUITING AND THE DISCHARGE OF FLOATING DEBRIS. [MINN. R. 7090]
14.6 PERMITTEES MUST DESIGN THE OUTLET STRUCTURE TO WITHDRAW WATER FROM THE SURFACE TO MINIMIZE THE DISCHARGE OF POLLUTANTS. PERMITTEES MAY TEMPORARILY SUSPEND THE USE OF A SURFACE WITHDRAWAL MECHANISM DURING FROZEN CONDITIONS. THE BASIN MUST INCLUDE A STABILIZED EMERGENCY OVERTFLOW TO PREVENT FAILURE OF FLOOD INTEGRITY. [MINN. R. 7090]
14.7 PERMITTEES MUST PROVIDE ENERGY DISSIPATION FOR THE BASIN OUTLET WITHIN 24 HOURS AFTER CONNECTION TO A SURFACE WATER. [MINN. R. 7090]
14.8 PERMITTEES MUST LOCATE TEMPORARY BASINS OUTSIDE OF SURFACE WATERS AND ANY BUFFER ZONE REQUIRED IN ITEM 23.11. [MINN. R. 7090]
14.9 PERMITTEES MUST CONSTRUCT THE TEMPORARY BASINS PRIOR TO DISTURBING 10 OR MORE ACRES OF SOIL DRAINING TO A COMMON LOCATION. [MINN. R. 7090]
14.10 WHERE A TEMPORARY SEDIMENT BASIN MEETING THE REQUIREMENTS OF ITEM 14.3 THROUGH 14.9 IS INFEASIBLE, PERMITTEES MUST INSTALL EFFECTIVE SEDIMENT CONTROLS SUCH AS SMALLER SEDIMENT BASINS AND/OR SEDIMENT TRAPS, SILT FENCES, VEGETATIVE BUFFER STRIPS OR ANY APPROPRIATE COMBINATION OF MEASURES AS DICTATED BY INDIVIDUAL SITE CONDITIONS. IN DETERMINING WHETHER INSTALLING A SEDIMENT BASIN IS INFEASIBLE, PERMITTEES MUST CONSIDER PUBLIC SAFETY AND MAY CONSIDER FACTORS SUCH AS SITE SLOPE, AND AVAILABLE AREA ON-SITE. PERMITTEES MUST DOCUMENT THIS DETERMINATION OF INFEASIBILITY IN THE SWPPP. [MINN. R. 7090]

15.1 PERMANENT STORMWATER TREATMENT SYSTEM. [MINN. R. 7090]

- 15.2 PERMITTEES MUST DESIGN THE PROJECT SO ALL STORMWATER DISCHARGED FROM THE PROJECT DURING AND AFTER CONSTRUCTION ACTIVITIES DOES NOT CAUSE A VIOLATION OF STATE WATER QUALITY STANDARDS, INCLUDING NUISANCE CONDITIONS, EROSION IN RECEIVING CHANNELS OR ON DOWNSLOPE PRIORITIES, OR A SIGNIFICANT ADVERSE IMPACT TO WETLANDS CAUSED BY INUNDATION OR DECREASE OF FLOW. [MINN. R. 7090]
15.3 PERMITTEES MUST DESIGN AND CONSTRUCT A PERMANENT STORMWATER TREATMENT SYSTEM TO TREAT THE WATER QUALITY VOLUME IF THE PROJECT'S ULTIMATE DEVELOPMENT REPLACES VEGETATION AND/OR OTHER PERVIOUS SURFACES CREATING A NET INCREASE OF ONE (1) OR MORE ACRES OF CUMULATIVE IMPERVIOUS SURFACE. [MINN. R. 7090]
15.4 PERMITTEES MUST CALCULATE THE WATER QUALITY VOLUME AS ONE (1) INCH TIMES THE NET INCREASE OF IMPERVIOUS SURFACES CREATED BY THE PROJECT. [MINN. R. 7090]
15.5 PERMITTEES MUST FIRST CONSIDER VOLUME REDUCTION PRACTICES ON-SITE (E.G., INFILTRATION OR OTHER) WHEN DESIGNING THE PERMANENT STORMWATER TREATMENT SYSTEM. IF THIS PERMIT PROHIBITS INFILTRATION AS DESCRIBED IN ITEM 16.3, INFILTRATION THROUGH THE PROJECT'S EXISTING INFILTRATION SYSTEMS IS NOT ALLOWED. PERMITTEES MUST CONSIDER WET SEDIMENTATION BASINS AND FILTRATION SYSTEMS TO BE VOLUME REDUCTION PRACTICES. [MINN. R. 7090]
15.6 FOR PROJECTS WHERE THE FULL VOLUME REDUCTION REQUIREMENT CANNOT BE MET ON-SITE (E.G., THE SITE HAS INFILTRATION PROHIBITIONS), PERMITTEES MUST DOCUMENT THE REASONS IN THE SWPPP. [MINN. R. 7090]
15.7 PERMITTEES MUST REDUCE THE WATER QUALITY VOLUME TO PERMIT THE PERMANENT STORMWATER TREATMENT SYSTEM TO DISCHARGE TO A SURFACE WATER. FOR PURPOSES OF THIS ITEM, SURFACE WATERS DO NOT INCLUDE MAN-MADE DRAINAGE SYSTEMS THAT CONVEY STORMWATER TO A PERMANENT STORMWATER TREATMENT SYSTEM. [MINN. R. 7090]
15.8 WHERE THE PROXIMITY TO BEDROCK PRECLUDES THE INSTALLATION OF ANY OF THE PERMANENT STORMWATER TREATMENT PRACTICES REQUIRED BY SECTIONS 15 THROUGH 19, PERMITTEES MUST INSTALL OTHER TREATMENT SUCH AS GRASSED SWALES, SMALLER PONDS, OR GRIT CHAMBERS, PRIOR TO THE DISCHARGE OF STORMWATER TO SURFACE WATERS. [MINN. R. 7090]
15.9 FOR LINEAR PROJECTS WHERE PERMITTEES CANNOT TREAT THE ENTIRE WATER QUALITY VOLUME WITHIN THE EXISTING RIGHT-OF-WAY, PERMITTEES MUST MAKE A REASONABLE ATTEMPT TO OBTAIN ADDITIONAL RIGHT-OF-WAY, EASEMENT OR OTHER PERMISSION FOR TREATMENT DURING THE PROJECT PLANNING PROCESS. PERMITTEES MUST DOCUMENTATION OF THESE ATTEMPTS MUST BE IN THE SWPPP. PERMITTEES MUST STILL CONSIDER VOLUME REDUCTION PRACTICES FIRST AS DESCRIBED IN ITEM 15.5. IF PERMITTEES CANNOT OBTAIN ADDITIONAL RIGHT-OF-WAY, EASEMENT OR OTHER PERMISSION, THEY MUST MAXIMIZE THE TREATMENT OF THE WATER QUALITY VOLUME PRIOR TO DISCHARGE TO SURFACE WATERS. [MINN. R. 7090]

16.1 INFILTRATION SYSTEMS. [MINN. R. 7090]

- 16.2 INFILTRATION OPTIONS INCLUDE, BUT ARE NOT LIMITED TO: INFILTRATION BASINS, INFILTRATION TRENCHES, RAINWATER GARDENS, BIOTRENTATION AREAS WITHOUT UNDERDRAINS, SWALES WITH IMPERMEABLE CHECK DAMS, AND NATURAL DEPRESSIONS. IF PERMITTEES UTILIZE AN INFILTRATION SYSTEM TO MEET THE REQUIREMENTS OF THIS PERMIT, THEY MUST INCORPORATE THE FOLLOWING DESIGN AND CONSTRUCTION REQUIREMENTS:
16.3 PERMITTEES MUST DESIGN INFILTRATION SYSTEMS THAT PRE-EXISTING HYDROLOGIC CONDITIONS OF WETLANDS IN THE VICINITY OF THE INFILTRATION SYSTEMS ARE NOT IMPACTED (E.G., INUNDATION OR BREACHING A PERCHED WATER TABLE SUPPORTING A WETLAND). [MINN. R. 7090]
16.4 PERMITTEES MUST NOT EXCAVATE INFILTRATION SYSTEMS TO FINAL GRADE, OR WITHIN THREE (3) FEET OF FINAL GRADE, UNTIL THE CONTRIBUTING DRAINAGE AREA HAS BEEN CONSTRUCTED AND FULLY STABILIZED UNLESS THEY PROVIDE RIGOROUS EROSION PREVENTION AND SEDIMENT CONTROLS (E.G., DIVERSION BERMS) TO KEEP SEDIMENT AND RUNOFF COMPLETELY AWAY FROM THE INFILTRATION SYSTEM. [MINN. R. 7090]
16.5 WHEN EXCAVATING AN INFILTRATION SYSTEM TO WITHIN THREE (3) FEET OF FINAL GRADE, PERMITTEES MUST STAKE OFF AND MARK THE AREA SO HEAVY CONSTRUCTION VEHICLES OR EQUIPMENT DO NOT COMPACT THE SOIL IN THE INFILTRATION AREA. [MINN. R. 7090]
16.6 PERMITTEES MUST USE A PRE-TREATMENT DEVICE SUCH AS A VEGETATED FILTER STRIP, FOREBAY, OR WATER QUALITY INLET (E.G., GRIT CHAMBER) TO REMOVE SOLIDS, FLOATING MATERIALS, AND OIL AND GREASE FROM THE RUNOFF, TO THE MAXIMUM EXTENT PRACTICABLE, BEFORE THE SURFACE ROUTES STORMWATER TO THE INFILTRATION SYSTEM. [MINN. R. 7090]
16.7 PERMITTEES MUST DESIGN INFILTRATION SYSTEMS TO PROVIDE A WATER QUALITY VOLUME (CALCULATED AS AN INSTANTANEOUS VOLUME) OF ONE (1) INCH MINUS THE VOLUME OF STORMWATER TREATED BY ANOTHER SYSTEM ON THE SITE, FROM THE NET INCREASE OF IMPERVIOUS SURFACES CREATED BY THE PROJECT. [MINN. R. 7090]
16.8 PERMITTEES MUST DESIGN THE INFILTRATION SYSTEM TO DISCHARGE ALL STORMWATER (INCLUDING STORMWATER IN EXCESS OF THE WATER QUALITY VOLUME) TO THE SYSTEM THROUGH THE UPPERMOST SOIL SURFACE OR ENGINEERED MEDIA SURFACE WITHIN 48 HOURS. PERMITTEES MUST ROUTE ADDITIONAL FLOWS THAT CANNOT INFILTRATE WITHIN 48 HOURS TO BYPASS THE SYSTEM THROUGH A STABILIZED DISCHARGE POINT. [MINN. R. 7090]
16.9 PERMITTEES MUST PROVIDE A MEANS TO VISUALLY VERIFY THE INFILTRATION SYSTEM IS DISCHARGING THROUGH THE SOIL SURFACE OR FILTER MEDIA SURFACE WITHIN 48 HOURS. [MINN. R. 7090]
16.10 PERMITTEES MUST PROVIDE AT LEAST ONE SOIL BORING, TEST PIT OR INFILTRATER TEST IN THE LOCATION OF THE INFILTRATION PRACTICE FOR DETERMINING INFILTRATION RATES. [MINN. R. 7090]
16.11 FOR DESIGN PURPOSES, PERMITTEES MUST DIVIDE FIELD MEASURED INFILTRATION RATES BY 2 AS A SAFETY FACTOR OR PERMITTEES CAN USE SOIL-BORING RESULTS WITH THE INFILTRATION RATE CHART IN THE MINNESOTA STORMWATER MANUAL TO DETERMINE DESIGN INFILTRATION RATES. PERMITTEES SHOULD PERFORM FIELD MEASUREMENTS TO VERIFY THE RATE IS NOT ABOVE 8.3 INCHES PER HOUR. THIS PERMIT PROHIBITS INFILTRATION IF THE FIELD MEASURED INFILTRATION RATE IS ABOVE 8.3 INCHES PER HOUR. [MINN. R. 7090]
16.12 PERMITTEES MUST EMPLOY APPROPRIATE ON-SITE TESTING TO ENSURE A MINIMUM OF THREE (3) FEET OF SEPARATION FROM THE SEASONALLY SATURATED SOILS (OR FROM BEDROCK) AND THE BOTTOM OF THE PROPOSED INFILTRATION SYSTEM. [MINN. R. 7090]
16.13 PERMITTEES MUST DESIGN A MAINTENANCE ACCESS, TYPICALLY EIGHT (8) FEET WIDE, FOR THE INFILTRATION SYSTEM. [MINN. R. 7090]
16.14 THIS PERMIT PROHIBITS PERMITTEES FROM CONSTRUCTING INFILTRATION SYSTEMS THAT RECEIVE RUNOFF FROM VEHICLE FUELING AND MAINTENANCE AREAS INCLUDING CONSTRUCTION OF INFILTRATION SYSTEMS NOT REQUIRED BY THIS PERMIT. [MINN. R. 7090]
16.15 THIS PERMIT PROHIBITS PERMITTEES FROM CONSTRUCTING INFILTRATION SYSTEMS WHERE INFILTRATING STORMWATER MAY MOBILIZE HIGH LEVELS OF CONTAMINANTS IN SOIL OR GROUNDWATER. PERMITTEES MUST EITHER COMPLETE THE MPCA'S CONTAMINATION SCREENING CHECKLIST OR CONDUCT THEIR OWN ASSESSMENT TO DETERMINE SUITABILITY FOR INFILTRATION. PERMITTEES MUST RETURN THE CHECKLIST OR ASSESSMENT WITH THE SWPPP, FOR MORE INFORMATION AND TO ACCESS THE MPCA'S "CONTAMINATION SCREENING CHECKLIST" SEE THE MINNESOTA STORMWATER MANUAL. [MINN. R. 7090]
16.16 THIS PERMIT PROHIBITS PERMITTEES FROM CONSTRUCTING INFILTRATION SYSTEMS IN AREAS WHERE SOIL INFILTRATION RATES ARE FIELD MEASURED TO BE MORE THAN 8.3 INCHES PER HOUR UNLESS THEY AMEND SOILS TO SLOW THE INFILTRATION RATE BELOW 8.3 INCHES PER HOUR. [MINN. R. 7090]
16.17 THIS PERMIT PROHIBITS PERMITTEES FROM CONSTRUCTING INFILTRATION SYSTEMS IN AREAS WITH LESS THAN THREE (3) FEET OF SEPARATION DISTANCE FROM THE BOTTOM OF THE INFILTRATION SYSTEM TO THE ELEVATION OF THE SEASONALLY SATURATED SOILS OR THE TOP OF BEDROCK. [MINN. R. 7090]
16.18 THIS PERMIT PROHIBITS PERMITTEES FROM CONSTRUCTING INFILTRATION SYSTEMS IN AREAS OF PREDOMINANTLY HYDROLOGIC SOIL GROUP TYPE D SOILS (CLAY). [MINN. R. 7090]
16.19 THIS PERMIT PROHIBITS PERMITTEES FROM CONSTRUCTING INFILTRATION SYSTEMS WITHIN A DRINKING WATER SUPPLY MANAGEMENT AREA (DWSMA) AS DEFINED IN MINN. R. 4720.5100, SUBP. 13, IF THE SYSTEM WILL BE LOCATED:
A. IN AN EMERGENCY RESPONSE AREA (ERA) WITHIN A DWSMA CLASSIFIED AS HAVING HIGH OR VERY HIGH VULNERABILITY AS DETERMINED BY THE MINNESOTA DEPARTMENT OF HEALTH; OR
B. IN AN ERA WITHIN A DWSMA CLASSIFIED AS MODERATE VULNERABILITY UNLESS A REGULATED MS4 PERMITTEE FORMERLY OR APPROVED A HIGHER LEVEL OF ENGINEERING REVIEW SUFFICIENT TO PROVIDE A FUNCTIONING TREATMENT SYSTEM AND TO PREVENT ADVERSE IMPACTS TO GROUNDWATER; OR
C. OUTSIDE OF AN ERA WITHIN A DWSMA CLASSIFIED AS HAVING HIGH OR VERY HIGH VULNERABILITY, UNLESS A REGULATED MS4 PERMITTEE FORMERLY OR APPROVED A HIGHER LEVEL OF ENGINEERING REVIEW SUFFICIENT TO PROVIDE A FUNCTIONING TREATMENT SYSTEM AND TO PREVENT ADVERSE IMPACTS TO GROUNDWATER. [MINN. R. 7090]
16.20 THIS PERMIT PROHIBITS PERMITTEES FROM CONSTRUCTING INFILTRATION SYSTEMS IN AREAS WITHIN 1,000 FEET UPGRADE OR 100 FEET DOWNGRADEMENT OF ACTIVE KARST FEATURES. [MINN. R. 7090]
16.21 THIS PERMIT PROHIBITS PERMITTEES FROM CONSTRUCTING INFILTRATION SYSTEMS IN AREAS THAT RECEIVE RUNOFF FROM THE FOLLOWING INDUSTRIAL FACILITIES NOT AUTHORIZED TO INFILTRATE STORMWATER UNDER THE NECEP STORMWATER PERMIT FOR INDUSTRIAL ACTIVITIES: AUTOMOBILE SALVAGE YARDS; SCRAP RECYCLING AND WASTE RECYCLING FACILITIES; HAZARDOUS WASTE STORAGE OR DISPOSAL FACILITIES; OR AIR TRANSPORTATION FACILITIES THAT CONDUCT DELTA ACTIVITIES. [MINN. R. 7090]

17.1 FILTRATION SYSTEMS. [MINN. R. 7090]

- 17.2 FILTRATION OPTIONS INCLUDE, BUT ARE NOT LIMITED TO: SAND FILTERS WITH UNDERDRAINS, BIOTRENTATION AREAS, SWALES USING COMPLEXION WITH IMPERMEABLE CHECK



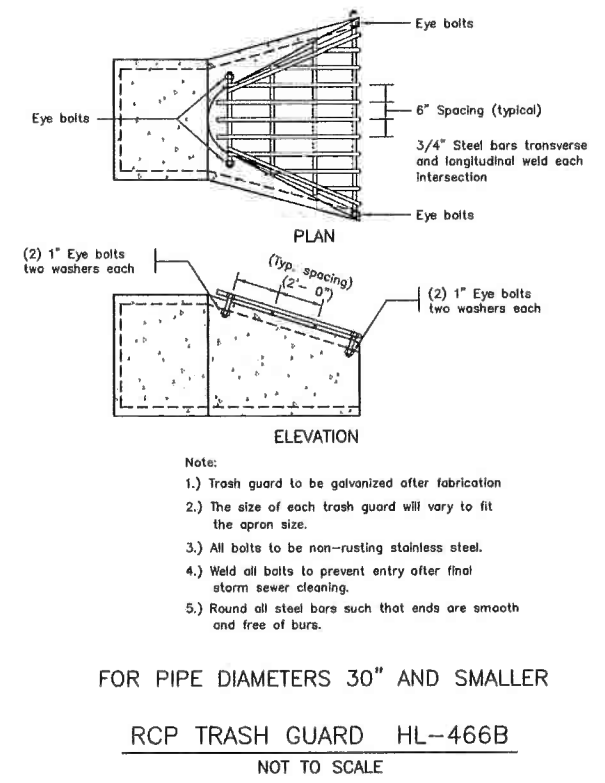
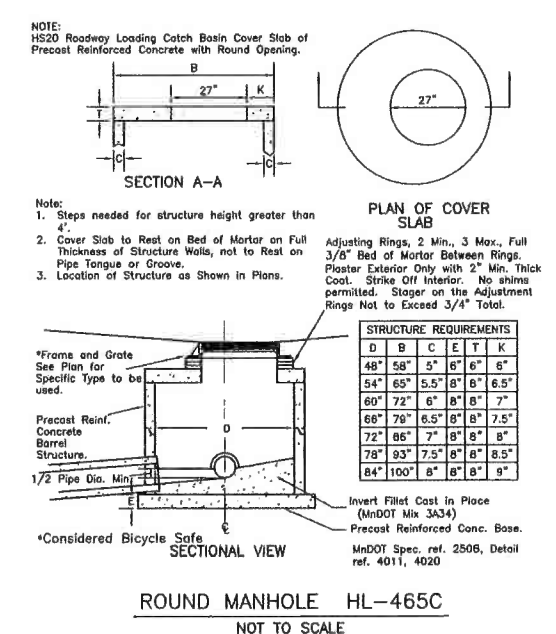
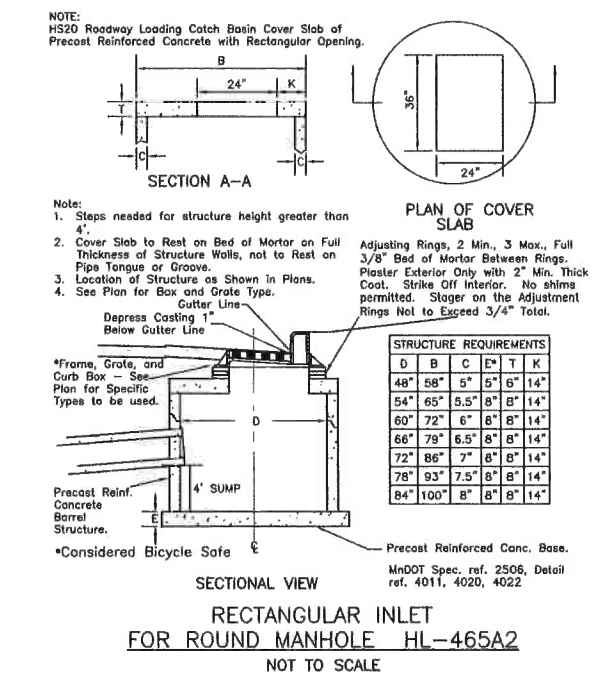
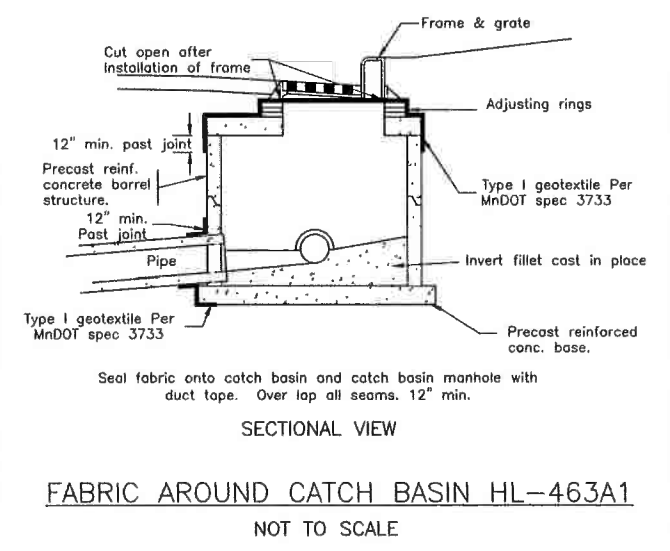
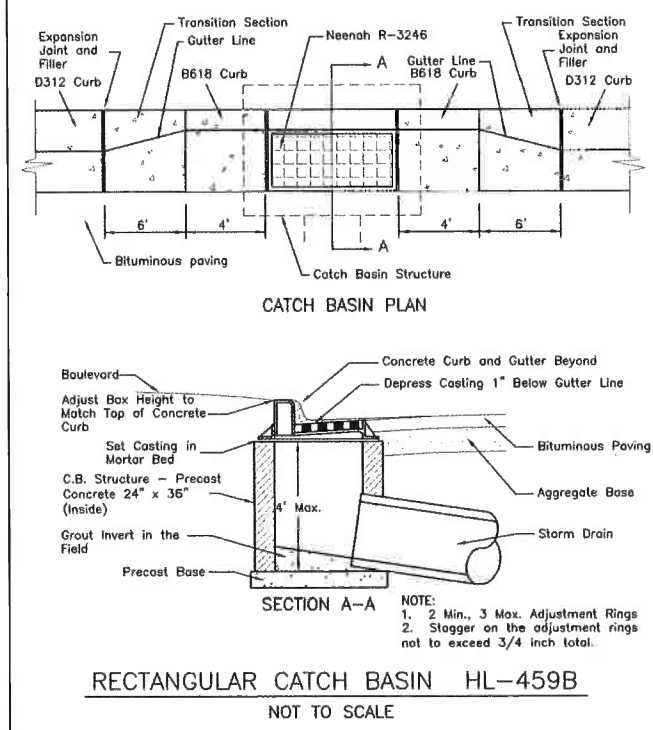
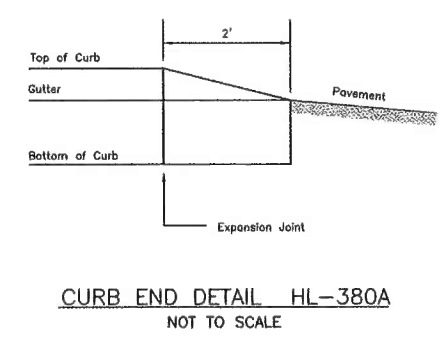
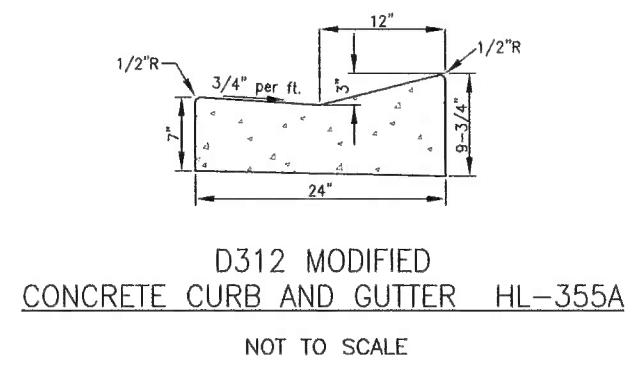


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CHECK BY	MOA	DATE	03/20/24
SCALE			
DESCRIPTION			

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

*Adam J. Plowe*  
 ADAM PLOWE  
 License No. 43863  
 Date: 07/02/2004

**SWEDISH CHAPEL ESTATES**  
 HAM LAKE, MN  
**DETAILS**  
 PREPARED FOR: WIN DEVELOPMENTS, LLC

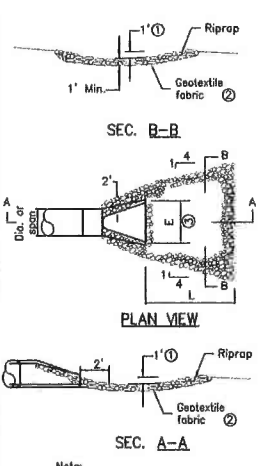


**TABLE OF QUANTITIES**  
 Riprap at RCP Outlets

Dia. Pipe (In.)	L (ft.)	Class II D <sub>50</sub> = 6"		Class III D <sub>50</sub> = 9"		Class IV D <sub>50</sub> = 12"	
		Depth Riprap (Cu. Yd.)	Depth Riprap (Cu. Yd.)	Depth Riprap (Cu. Yd.)	Depth Riprap (Cu. Yd.)	Depth Riprap (Cu. Yd.)	Depth Riprap (Cu. Yd.)
12	8	3.0	4.4	5.9			
15	8	3.2	4.8	6.4			
18	10	4.3	6.4	8.5			
21	10	4.7	7.1	9.4			
24	12	6.2	9.2	12.3			
27	12	6.6	9.9	13.2			
30	14	8.2	12.3	16.4			
36	16	10.6	15.8	21.1			
42	18	12.5	18.7	24.9			
48	20	14.8	22.2	29.6			

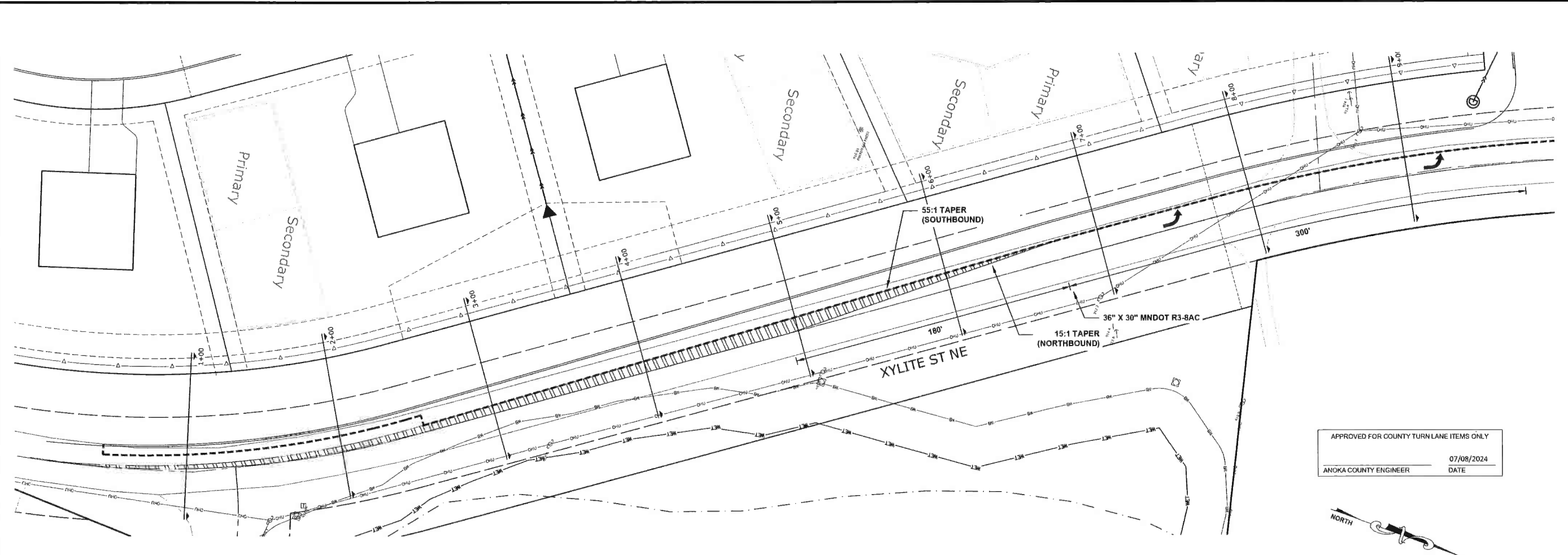
**Riprap at RCPA Outlets**

Span Pipe Arch (In.)	L (ft.)	Class II D <sub>50</sub> = 6"		Class III D <sub>50</sub> = 9"		Class IV D <sub>50</sub> = 12"	
		Depth Riprap (Cu. Yd.)	Depth Riprap (Cu. Yd.)	Depth Riprap (Cu. Yd.)	Depth Riprap (Cu. Yd.)	Depth Riprap (Cu. Yd.)	Depth Riprap (Cu. Yd.)
22	10	4.1	6.1	8.1			
28	12	5.7	8.5	11.3			
36	14	7.5	11.2	14.9			
43	16	9.5	14.3	19.0			
51	18	11.3	16.9	22.5			
58	20	13.2	19.8	26.4			



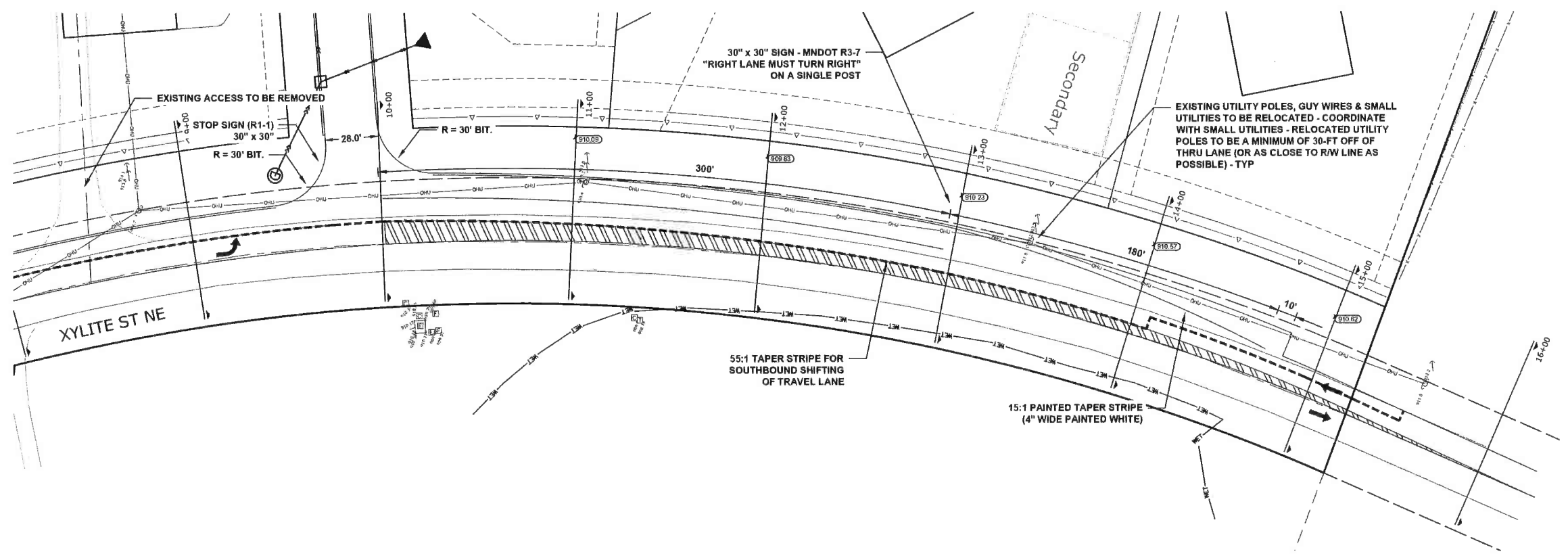
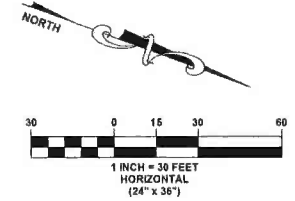
Note:  
 1. For pipes greater than or equal to 30" use 1.5' Geotextile fabric, Spec. 3501. The fabric should cover the area of the riprap and extend under the culvert apron 3 feet.  
 2. Requirements for riprap size is shown in the plans.





— = EDGE OF EXISTING BITUMINOUS  
 - - - = SAWCUT LINE

APPROVED FOR COUNTY TURN LANE ITEMS ONLY  
 ANOKA COUNTY ENGINEER \_\_\_\_\_ DATE 07/08/2024



**PLOWE ENGINEERING, INC.**  
 8771 LAKE DRIVE  
 SUITE 110  
 LIND LAKES, MN 55014  
 PHONE (851) 981-8210  
 FAX (851) 981-8701



DRAWN BY: AG  
 JOB NO: 73.2127  
 CHECK BY: MGA  
 DATE: 03/20/24

NO.	DATE	DESCRIPTION
1	04.10.24	RFI & COND COMMENTS
2	04.17.24	ADDITIONAL TURN LANE DETAIL
3	05.28.24	RIGHT
4	06.25.24	ARCH COMMENTS
5	07.05.24	SH RTI ARROW REMOVED
6		
7		

I hereby certify that this plan was prepared by me or under my direct supervision and that I am a duly licensed professional engineer under the laws of the State of Minnesota.  
 ADAM MIKEL  
 License No. 43883  
 Date: 07.05.2024

**SWEDISH CHAPEL ESTATES**  
 HAIN LAKE, MN  
**LEFT & RIGHT TURN LANE PLAN**  
 PREPARED FOR: MN DEVELOPMENTS, LLC

SHEET  
**C4.1**

**GENERAL NOTES**

1. THE INFORMATION SHOWN ON THESE DRAWINGS CONCERNING TYPE AND LOCATION OF EXISTING UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATION AS TO TYPE AND LOCATION OF UTILITIES AS NECESSARY TO AVOID DAMAGE TO THESE UTILITIES.
2. CALL "811" FOR EXISTING UTILITIES LOCATIONS PRIOR TO ANY EXCAVATIONS.
3. THE CONTRACTOR SHALL FIELD VERIFY SIZE, ELEVATION, AND LOCATION OF EXISTING UTILITIES AND NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO THE START OF INSTALLATIONS.
4. INSTALLATIONS SHALL CONFORM TO THE CITY STANDARD SPECIFICATIONS AND DETAIL PLATES.
5. STORAGE OF MATERIALS OR EQUIPMENT SHALL NOT BE ALLOWED ON PUBLIC STREETS OR WITHIN PUBLIC RIGHT-OF-WAY.
6. NOTIFY CITY AND COON CREEK WATERSHED DISTRICT (CCWD) A MINIMUM OF 48 HOURS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
7. ALL ELECTRIC, TELEPHONE, AND GAS EXTENSIONS INCLUDING SERVICE LINES SHALL BE CONSTRUCTED TO THE APPROPRIATE UTILITY COMPANY SPECIFICATIONS. ALL UTILITY DISCONNECTIONS SHALL BE COORDINATED WITH THE APPROPRIATE UTILITY COMPANY.

APPROVED FOR COUNTY TURN LANE ITEMS ONLY

\_\_\_\_\_  
 ANOKA COUNTY ENGINEER      DATE

**PLOWE**  
 ENGINEERING, INC.  
 10000 STATE RD  
 LINDEN, MN 55014  
 PHONE: (651) 961-8210  
 FAX: (651) 361-8701



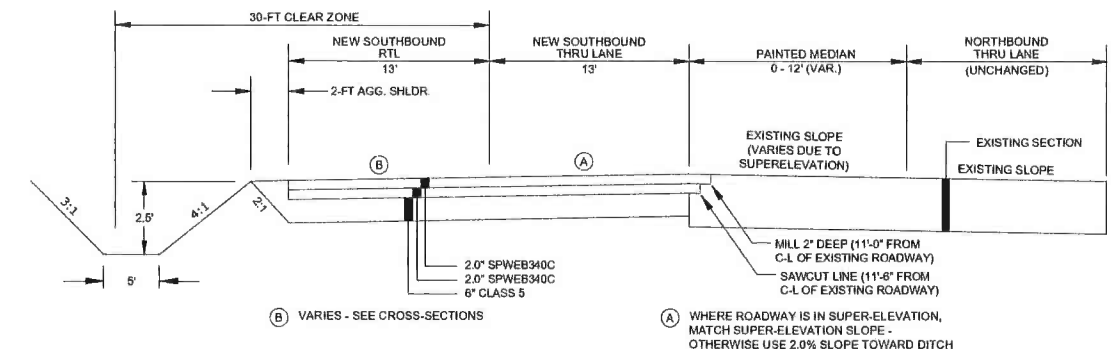
DRAWN BY: JAC  
 JOB NO: 23-212  
 CHECK BY: MWA  
 DATE: 03/27/24

NO.	DATE	DESCRIPTION
1	04.10.24	DATE & CCWD COMMENTS
2	04.17.24	ADDITIONAL TURN LANE DETAIL
3	05.28.24	SIGNED
4	06.06.24	SLOPE ADJ. FOR SR RIGHT TURN LANE
5		
6		
7		
8		

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

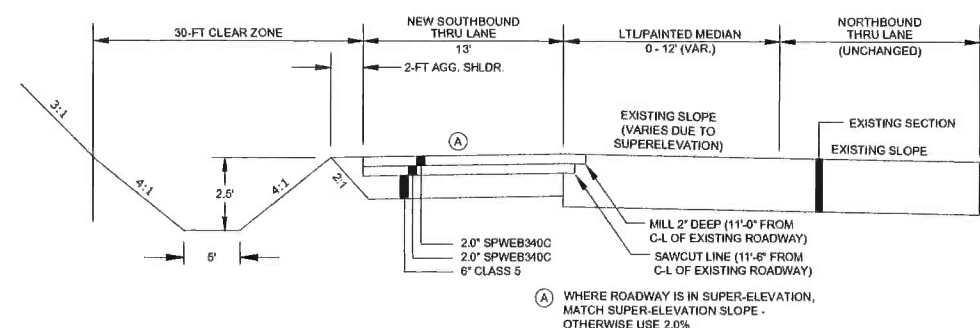
*Adam Grindel*  
 ADAM GRINDEL  
 License No. 43983  
 Date: 07/05/2024

**XYLITE ST NE**  
 SOUTHBOUND RIGHT TURN LANE



- NOTES**
1. ALL INSTALLATIONS SHALL BE IN ACCORDANCE WITH MNDOT SPECIFICATIONS (LATEST EDITION)
  2. ALL DISTURBED SOIL WITHIN COUNTY RIGHT-OF-WAY MUST BE SEEDED (MNDOT 25-141) & MULCHED (TYPE 1, DISC ANCHORED)
  3. USE ALL STRAW FIBER BLANKET FOR DITCH SLOPES OF 3:1 OR GREATER
  4. PAVEMENT MARKINGS SHALL BE EPOXY
  5. CONTRACTOR TO CONTACT ANOKA COUNTY PERMITS SECTION AT (763) 324-3176 TO OBTAIN THE RIGHT-OF-WAY PERMIT.

**XYLITE ST NE**  
 NORTHBOUND LEFT TURN LANE



- NOTES**
1. ALL INSTALLATIONS SHALL BE IN ACCORDANCE WITH MNDOT SPECIFICATIONS (LATEST EDITION)
  2. ALL DISTURBED SOIL WITHIN COUNTY RIGHT-OF-WAY MUST BE SEEDED (MNDOT 25-141) & MULCHED (TYPE 1, DISC ANCHORED)
  3. USE ALL STRAW FIBER BLANKET FOR DITCH SLOPES OF 3:1 OR GREATER
  4. PAVEMENT MARKINGS SHALL BE EPOXY
  5. CONTRACTOR TO CONTACT ANOKA COUNTY PERMITS SECTION AT (763) 324-3176 TO OBTAIN THE RIGHT-OF-WAY PERMIT.

**SWEDISH CHAPEL ESTATES**  
 HAM LAKE, MN  
**LEFT & RIGHT TURN LANE PLAN**

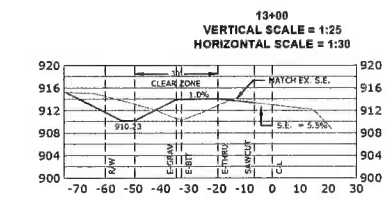
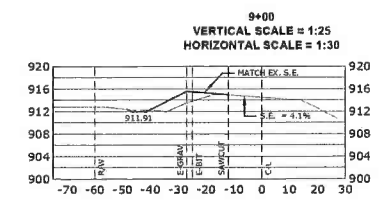
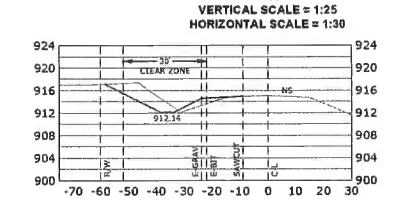
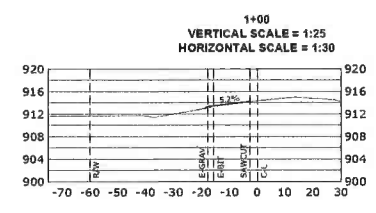
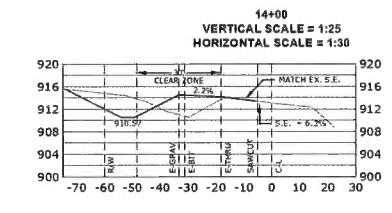
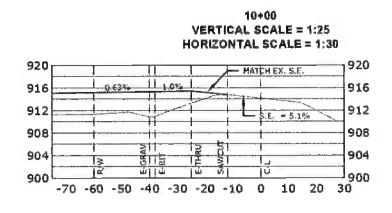
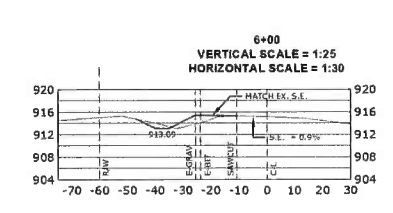
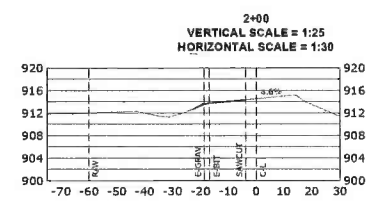
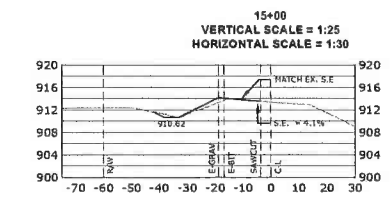
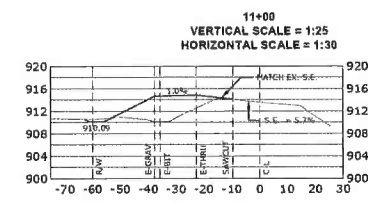
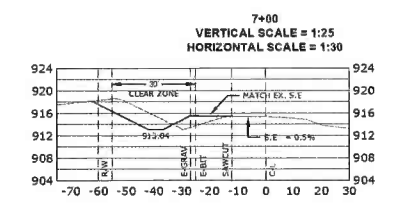
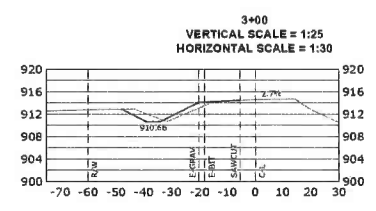
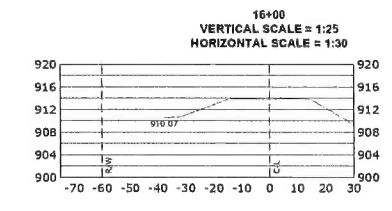
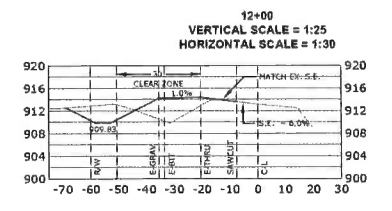
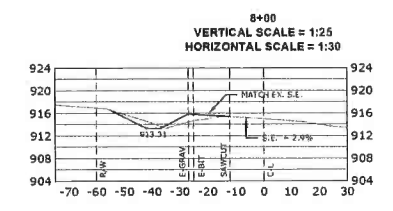
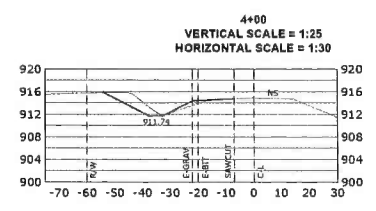
PREPARED FOR: MN DEVELOPMENTS, LLC

SHEET  
**C4.2**

APPROVED FOR COUNTY TURN LANE ITEMS ONLY  
 ANOKA COUNTY ENGINEER \_\_\_\_\_ DATE \_\_\_\_\_



DRAWN BY: AC  
 JOB NO.: 23-2122  
 CHECK BY: MOA  
 DATE: 03/20/24



ALL GREEN AREA SLOPES ARE 4:1 UNLESS OTHERWISE NOTED  
 S.E. = SUPER-ELEVATION  
 NS = NOT SUPER-ELEVATED

NO.	DATE	DESCRIPTION
1	04.17.24	SHEET ADDED TO SET
2	05.14.24	CROSS SECTIONS ADJ.
3	05.22.24	GRF REVIEW COMMENTS
4	05.28.24	SIGNED
5	06.06.24	SI (PPE) ADJ. FOR SR RIGHT TURN LANE
6	08.25.24	ADPH COMMENTS
7		
8		

I hereby certify that this plan was prepared by me or by a licensed professional engineer under the laws of the State of Minnesota.  
 ADAM WINZEL  
 License No. 43983  
 Date: 06.24.2024

**SWEDISH CHAPEL ESTATES**  
 HAM LAKE, MN  
**LEFT & RIGHT TURN LANE PLAN**  
 PREPARED FOR: MN DEVELOPMENTS, LLC

SHEET  
**C4.3**







# Anoka County

## TRANSPORTATION DIVISION

Highway

Joseph J. MacPherson, PE  
County Engineer

July 8, 2024

Adam Ginkel  
Plowe Engineering, Inc.  
6776 Lake Dr, Suite 110  
Lino Lakes, MN 55014

**RE: Swedish Chapel Estates  
Anoka County Approval**

Dear Mr. Ginkel,

Anoka County has reviewed the Swedish Chapel Estates plan and has no further comments. Your contractor can contact our permits section at 763-324-3176 or [HighwayPermits@anokacountymn.gov](mailto:HighwayPermits@anokacountymn.gov) to obtain the right of way permit.

Sincerely,

Brandon T. Ulvenes  
Design Engineer

cc: File (Ham Lake)  
Joe MacPherson, ACHD  
Jerry Auge, ACHD  
Sue Burgmeier, ACHD  
I:\Eng\Plan Reviews\Ham Lake\2023\Swedish Chapel Estates (Stalberger)\ACHD Approval (07-08-24).docx

Our Passion Is Your Safe Way Home

1440 Bunker Lake Boulevard N.W. ▲ Andover, MN 55304-4005  
Office: 763-324-3100 ▲ Fax: 763-324-3020 ▲ [www.anokacounty.us/highway](http://www.anokacounty.us/highway)

Affirmative Action / Equal Opportunity Employer

**PERMIT AMENDMENT**  
COON CREEK WATERSHED DISTRICT  
13632 Van Buren St NE  
Ham Lake, MN 55304

**Project:** Swedish Chapel Estates

**Issued To:** MN Developments, LLC  
Attn: Jeff Stalberger  
17404 Ward Lake Dr NW  
Andover, MN 55304

**Location:** 2506 Swedish Dr NE, Ham Lake MN

**Permit Application #:** P24-014

**Purpose:** Construction of a single family home residential development and associated stormwater treatment features.

This letter is in response to the 7/29/2024 submittal from Plowe Engineering Inc., providing updated construction plans for the work of the below referenced project.

**BACKGROUND:**

CCWD authorized, as part of CCWD permit #2378 issued 7/11/2024, the construction of a single family home residential development and associated stormwater treatment features.

On July 11, 2024, updated construction plans and geotechnical report were submitted for review and approval.

**FINDINGS**

1. The updated construction plans and geotechnical report received 7/29/24 and dated 7/29/24 and 7/25/24 have been reviewed and meet the CCWD standards.


**CONCLUSIONS**

Coon Creek Watershed Permit #2378 is hereby amended and expires 7/11/2025 with the following conditions and stipulations:

1. Adherence to all general permit conditions of permit #2378.

If you have questions, please call me at 763-755-0975.

Sincerely,

  
\_\_\_\_\_  
Tim Kelly  
District Administrator

Cc: File P24-014  
Eileen Weigel, Stantec  
Tom Collins, City of Ham Lake

## David Krugler

---

**From:** Emanuel, Mary E <mary\_emanuel@fws.gov>  
**Sent:** Wednesday, June 12, 2024 7:53 AM  
**To:** David Krugler  
**Subject:** Re: [EXTERNAL] RE: Eagle's Nest - 2506 Swedish Drive- Ham Lake MN

Hi David,

Try not to think about it in super ridged terms, as long as you're more than 100' away for this project, I think take is very unlikely to occur. If the nest becomes active during the next breeding season, we can revisit things and see if a permit would be recommended. Sometimes it is possible to do the work closest to the nest sooner while it is inactive so that, if it is occupied in the next breeding season, work is at 200' away and moving out rather than at 200' and moving closer.

The disturbance I described as resulting in "parents abandoning a nest" is just one example. Regulations further define "disturb" as "to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, 1) injury to an eagle, 2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or 3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior".

The penalty for violating the Bald and Golden Eagle Protection Act can result in a fine of \$100,000 (\$200,000 for organizations), imprisonment for one year, or both, for a first offense. Penalties increase substantially for additional offenses, and a second violation of this Act is a felony. So it can be quite significant.

Currently, the nest you described to me sounds like it was not used this year. The 100' minimum buffer is recommended to protect the nest tree just as much as the eagles. No, the disturbance permits are not mandatory, we recommend them when it is possible that a project could result in take. Very close distances like the ones involved here, mean we would always recommend a permit (i.e. closer than 100'). Nests are generally assumed to be inactive for the year if not occupied by April 15<sup>th</sup> but if an eagle pair shows up on April 17<sup>th</sup> and decides to try and raise chicks, that nest will be active for the year, even if it doesn't end up being successful.

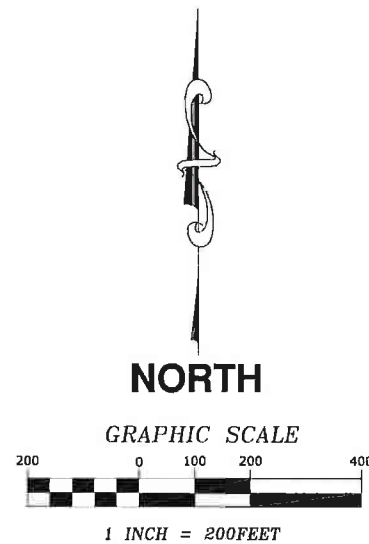
10 days after the last eagle chick leaves the nest, the brood is considered to have fledged. The status of the nest doesn't really change once the chicks fledge, we would say it is active in the current breeding season. Active vs inactive can get a little nitpicky depending on what the question is. A nest might be currently inactive for this breeding season but if it has been used in the last few years it could also be thought of as being generally active. It's a little splitting hairs at that point. Our General Permits are coming on line very soon. They should be available to apply for starting July 8<sup>th</sup> (possibly sooner), and will have an effective date of 9/1 and be valid for one year through 8/31. Let me know if you have any further questions.

Thank you,

Mary Emanuel  
Wildlife Biologist, Permitting  
USFWS, Region 3, Migratory Birds Permit Office  
5600 American Blvd. W, Suite 990  
Bloomington, MN 55437  
(612) 713-5441  
[Mary\\_Emanuel@fws.gov](mailto:Mary_Emanuel@fws.gov)

# SKETCH AND DESCRIPTION

~for~ SWEDISH CHAPEL ESTATES  
 ~of~ SWEDISH DRIVE NE VACATION



**LEGEND**  
 SWEDISH DRIVE NE VACATION

## NOTES

- The width of Swedish Drive's right-of-way shading is approximate.
- The vacation proposed is a blanket vacation over the entire property.

## SWEDISH DRIVE NE VACATION DESCRIPTION

That part of Swedish Drive NE, within the Northeast Quarter of Section 4, Township 32 North, Range 23 West, Anoka County, Minnesota, which lies easterly of the west 15 acres thereof and which lies westerly of the westerly right of way line of Xylite Street NE (also know as County Road No 68). Except for those portions of Swedish Drive NE which fall within the following described tracts of land:

1. A plot of ground, commencing at a point 23.49 chains South and 5.15 chains East (Variation 8 degrees 51 minutes in 1887) of Quarter corner on North side of Section 4, Township 32, Range 23; thence South 29 degrees East (Variation 8 degrees 51 minutes in 1887) 9 1/2 rods, to a tamarac stake; thence North 64 degrees East, 14 1/2 rods; thence North 29 degrees West, 10 1/2 rods; thence South 60 1/2 degrees West, 14 1/2 rods to point of commencement, containing 1 acres, more or less, being a part of the Southwest Quarter of Northeast Quarter of Section 4, Township 32, Range 23.
2. That part of the Northeast Quarter of Section 4, Township 32, Range 23, described as follows: Commencing at a point 289 feet East and 732 feet North of the Southwest corner of said Northeast Quarter; thence Northeasterly along the center of the road 424 feet; thence Northwesterly 701 feet to the point, which is 289 feet East of the West line of the said Northeast Quarter; thence South to the point of beginning.
3. Commencing at a point 1550.34 feet (23.49 chains) South and 339.9 feet (5.15 chains) East of the Quarter corner on the North side of Section 4; thence South 29 degrees East for 156.75 feet; thence South 64 degrees West for 187.4 feet; thence North, parallel with and 247.5 feet East of the Quarter Section line for 142.15 feet to the Southerly line of a public road; thence North 50 degrees 10 minutes East along said Southerly road line to the point of beginning, also all right of title in said adjacent public road to the center line thereof, Anoka County, Minnesota.

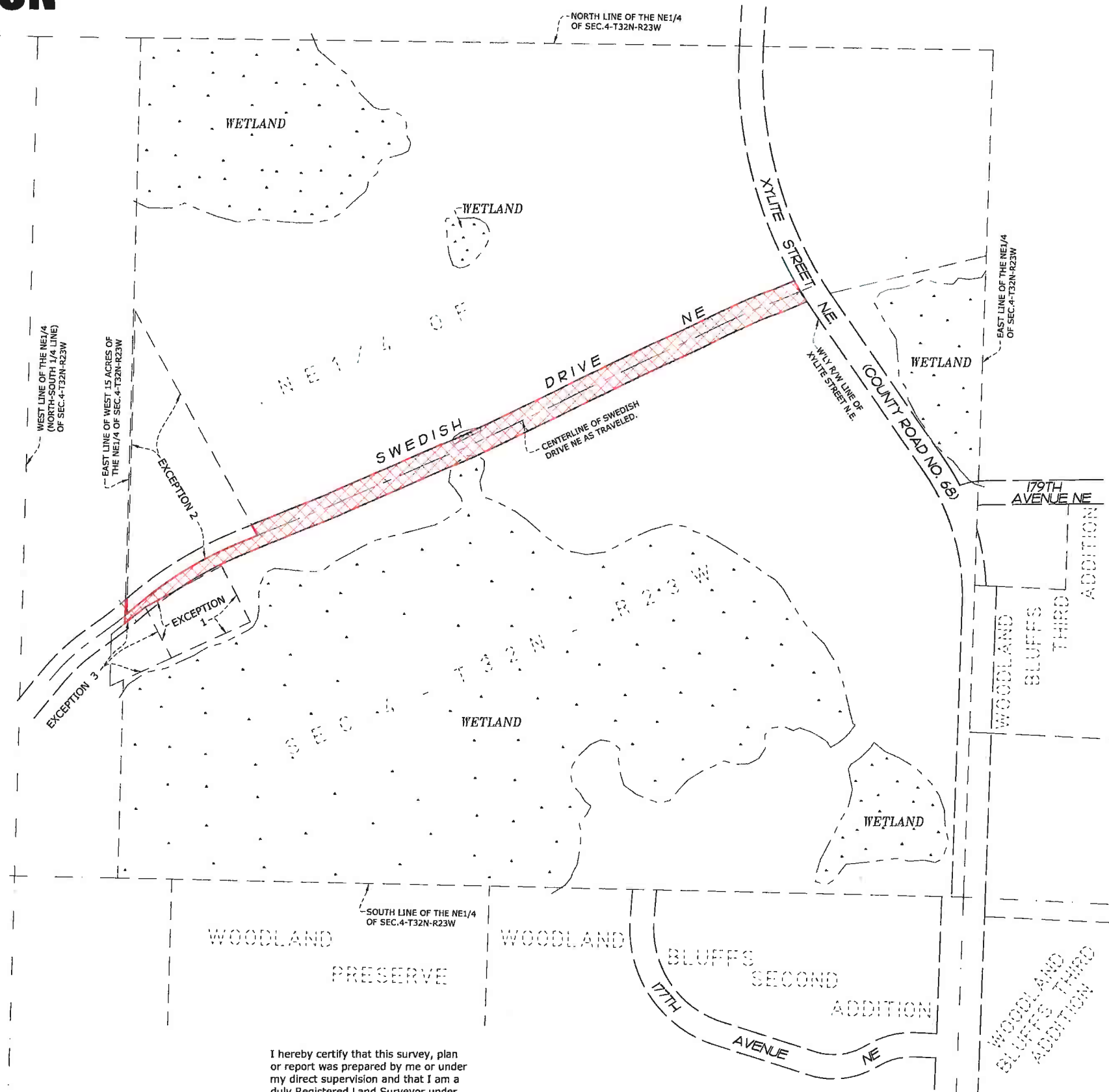
 **E. G. RUD & SONS, INC.**  
 EST. 1977 Professional Land Surveyors  
 6776 Lake Drive NE, Suite 110  
 Lino Lakes, MN 55014  
 Tel. (651) 361-8200 Fax (651) 361-8701

www.egrud.com

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

JASON E. BLUD

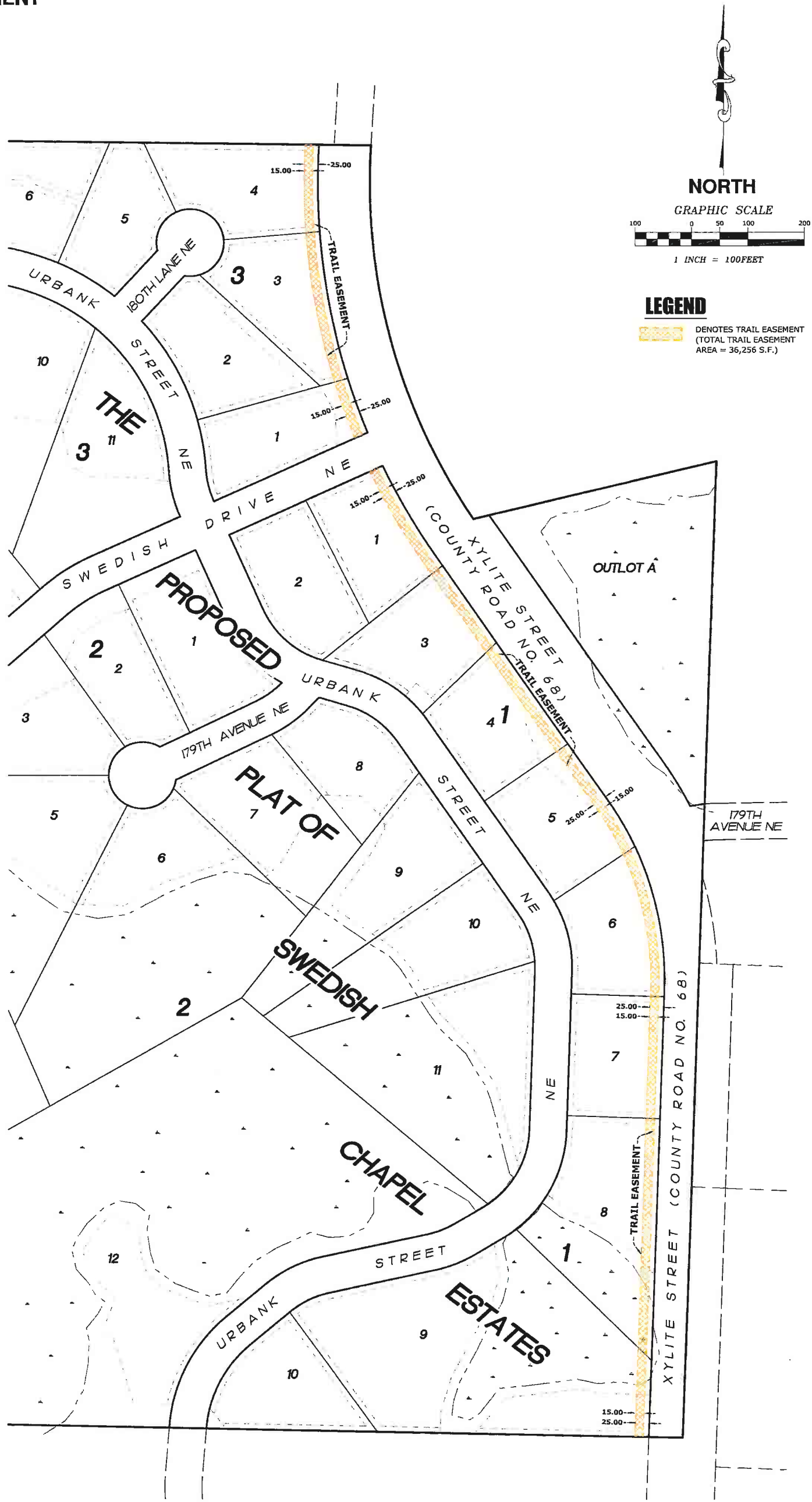
Date: 08-27-24 License No. 41578



DRAWN BY:	JEN	JOB NO:	23.0743	DATE:	08/14/24
CHECK BY:	JER	FIELD CREW:	DT-CT		
1	08/27/24	ADD NOTES PER CITY COMMENTS		JEN	
2					
3					
NO.	DATE	DESCRIPTION		BY	

# SKETCH AND DESCRIPTION

~for~ SWEDISH CHAPEL ESTATES  
~of~ TRAIL EASEMENT



## NOTES

- The plat of SWEDISH CHAPEL ESTATES is not of record at this time.

## TRAIL EASEMENT DESCRIPTION

A perpetual easement for trail purposes over and across the southwesterly 15.00 feet of the northeasterly 25.00 feet of Lots 1, 3, 4, 5 and 6, Block 1; the westerly 15.00 feet of the easterly 25.00 feet of Lots 7 through 9, Block 1; and the westerly 15.00 feet of the easterly 25.00 feet of Lots 1, 3 and 4, Block 3, all in SWEDISH CHAPEL ESTATES, Anoka County, Minnesota.

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

*Jason E. Rud*  
JASON E. RUD  
Date: 8-27-2024 License No. 41578

**E. G. RUD & SONS, INC.**  
EST. 1977  
Professional Land Surveyors  
6776 Lake Drive NE, Suite 110  
Lino Lakes, MN 55014  
Tel. (651) 361-8200 Fax (651) 361-8701

DRAWN BY:	JEN	JOB NO:	230743PP	DATE:	08/05/24
CHECK BY:	JER	FIELD CREW:	DT-CT		
1	08/27/24	REV. DESC. AND TYPO		JEN	
2					
3					
NO.	DATE	DESCRIPTION		BY	