

**July 10, 2024
5:15 PM**

The Planning Commission Meeting will be conducted on **July 10, 2024** at 6:30 p.m. in the City Council Chambers of City Hall, located at 2400 Margaret St., North St. Paul.

You can watch the meeting on our YouTube channel here: <https://tinyurl.com/NSPYouTube>

I. Call to Order

II. Roll Call

COMMISSION

Patrick Blee, Chair

Andrew Wise, Vice-Chair

Arthur Alvarez, Jr. Commissioner

Stephanie Kane-Burback, Commissioner

Elizabeth Gadbois, Commissioner

Cameron Muhic, Commissioner

Jim Rathe, Commissioner

STAFF/LIAISONS

Jason Nordby, City Council Liaison

Riley Grams, Community Development Director

Chris Cherne, Planning Commission Secretary

III. Adopt Agenda

IV. Approval of Minutes

A. Approval of June 6, 2024 Meeting Minutes

V. Meeting Open to the Public

VI. Public Hearings

VII. Commission Business, Action Items & Recommendations

A. Recommend Approval of Delaware Place Final Plat

Recommend Approval of Delaware Place Final Planned Unit Development (PUD)

VIII. Reports

IX. Adjournment

The next regularly scheduled Planning Commission meeting is August 1, 2024.



To

Planning Commissioners

Date

July 10, 2024

Agenda Placement #

Approval of Minutes

Subject

Approval of June 6, 2024 Meeting Minutes

Background/Facts

N/A

Recommended Action

Staff recommend approval of the June 6, 2024 meeting minutes.

Attachments

1. PC Minutes 06-06-2024

Respectfully submitted,
Chris Cherne, Community Development Administrative Assistant



**Planning Commission
Regular Meeting Minutes
June 6, 2024
6:30 PM**

North St. Paul City Hall – Council Chambers
2400 Margaret Street

I. CALL TO ORDER

Chair Patrick Blees called the meeting to order at 6:30 PM.

II. ROLL CALL

COMMISSION

Patrick Blees, Chair

Andrew Wise, Vice-Chair

Arthur Alvarez, Jr., Commissioner

Absent

Stephanie Kane-Burback, Commissioner

Absent

Elizabeth Gadbois, Commissioner

Cameron Muhic, Commissioner

Jim Rathe, Commissioner

STAFF/LIAISONS

Jason Nordby, City Council Liaison

Riley Grams, Community Development Director

Chris Cherne, Planning Commission Secretary

III. ADOPT AGENDA

Blees asked for a motion to adopt the June 6, 2024 meeting agenda.

M/Wise, S/Rathe.

Motion carried 5-0.

IV. APPROVAL OF MINUTES

A. Approval of May 2, 2024 Meeting Minutes

Blees asked for a motion to approve the May 2, 2024 meeting minutes.

M/Muhic, S/Rathe.

Motion carried 5-0.

V. MEETING OPEN TO THE PUBLIC

John Schmahl, 2750 Chisholm Avenue, shared his experience as a 49-year resident of North St. Paul and dealing with the effects of a survey not being required for fence installation. Mr. Schmahl asked the Planning Commission to consider adding something to the zoning ordinance that prevents fences from crossing property lines and from disturbing underground utilities.

VI. PUBLIC HEARINGS

There were no public hearings.

VII. COMMISSION BUSINESS, ACTION ITEMS & RECOMMENDATIONS

A. Workshop Discussion – Introductions & Goal Setting

Community Development Director Riley Grams introduced himself to the Planning Commission. He shared his background of being Intern, City Planner, Community Development Director, Assistant City Administrator, and then City Administrator of the City of Osseo for the last 9 years. Grams shared that he graduated from the University of Minnesota with a degree in Urban Studies and received his Master of Public Administration from Hamline University. The Commissioners in turn shared their educational and personal background.

Blees stated that a challenge that the Commission has encountered was what to include in the zoning ordinance and the idea that if the City is not going to enforce a regulation, it should not be included. The Commission must consider the reason behind regulations and whether it is appropriate to enforce them moving forward. There have been questions about off-street parking regulations for recreational vehicles. In addition, there are many aspects to be considered such as what can be parked on driveways and where the vehicles can be parked on driveways.

Blees shared that one of the things that the former Community Development Director did great was the presentation of zoning text amendments, and doing so in a clear format and outline. The action of making regulations simple and readable is a huge thing that the Commission can do to make the zoning ordinance better. Muhic concurred. Blees stated that when the Community Development Director is settled in and ready to take on this project, the Commission is ready.

Wise stated that the Commission should take a look at parking minimum requirements. There are fairly high parking minimums in the City, and that makes it tough for development in the downtown and pushes new development through many extra hoops such as planned unit developments. Wise also indicated that the Commission should take a critical look at accessory dwelling unit regulations, including size requirements and having multiple structures on a property.

VIII. REPORTS

Nordby stated that it sounds like some of the fencing regulations will be coming back to the Planning Commission. The Commission has done great work but will need to revisit some of the details at a future date.

Rathe welcomed Grams to the City of North St. Paul.

Blees stated he missed the reveal of the new Project Snowy statues, but it looked like there was a great turnout from both the sponsors and the public.

IX. ADJOURNMENT

Blees asked for a motion to adjourn the meeting at 7:05 PM.

M/Rathe, S/Muhic.

Motion carried 5-0.

The next regularly scheduled Planning Commission Meeting is Thursday, August 1, 2024 at 6:30 PM.

Members, please notify any planned absences to:

Chris Cherne
Planning Commission Secretary
651-747-2440
chris.cherne@northstpaul.org

Planning Commission Staff Report



**NORTH
ST. PAUL**

Report To: North St. Paul Planning Commission

Report From: Riley Grams, Community Development Director

Meeting Date: July 10, 2024

Agenda Item: Recommend Approval of Final Plat (Delaware Place Development)
Recommend Approval of Final Planned Unit Development (Delaware Place Development)

RECOMMENDED ACTIONS

Recommend Approval of Final Plat and Final Planned Unit Development (PUD) for the Delaware Place Development Project

BACKGROUND

General information on the proposed development:

Applicant: Doug Andrus (Andrus Built, LLC)
Subject Property: 2329 17th Avenue East
Zoning District: R2 Mixed Residential District
2040 Comp Plan: Medium Density Residential
Application Date: July 8, 2024

PROJECT OVERVIEW

The subject property is 2329 17th Avenue, which is located on the corner of 17th Avenue and Delaware Avenue. This 2.43-acre parcel is the location of a former church that was demolished in 2009. The City had been the owner of the site since 2010. The City issued an RFP for development proposals for the property in the spring of 2023. Three were received and the City Council reviewed development proposals in August and again in December 2023.

On January 4, 2024, the applicant presented the concept plan for the site to the Planning Commission. The applicant proposes to develop approximately one acre of the site with 10 townhouse units (5 buildings, two units per structure); four of the lots will front Delaware Avenue and six will front 17th Avenue E. The remaining 1.5-acre is proposed to remain as open space for stormwater and recreational purposes for residents of the development. Based on the Planning Commission's review, the City Council selected Doug Andrus of Andrus Built, LLC to develop the site on January 16, 2024. On March 19, 2024, the City Council approved a contract for private development and sale of property with Andrus Built, LLC.

At the May 2, 2024 Planning Commission meeting, the developer presented applications to rezone the property from R-1 Single Family Residential to R-2 Mixed Residential, the preliminary plat, and preliminary planned unit development (PUD). The Planning Commission recommended approval of these applications to the City Council, and the City Council formally approved these applications at their May 7, 2024 meeting.

Below is a comprehensive review of the submitted final plat and final planned unit development applications:

Development Standards

Section 154.010(A)-(C) outlines general standards for new development. Analysis of applicable standards are listed, below. The zoning ordinance includes additional supplemental regulations specific to townhouse developments (154.010(D)).

Reference	Standard	Proposed Townhome Lots
(A)5(d)	Decks may not extend more than 6 feet into a yard	<u>The optional decks on lots 5, 6, 7, 8 extend 12 feet into the required rear yard.</u>
(A)9	All on-site utility installations shall be placed underground.	Water, sanitary, and storm sewer installations will be underground. Requirement met.
(B)1(d)	Each lot shall contain at least 25% of each individual lot area as usable open space.	Staff measures a minimum of 38% of open space per lot. Requirement met.
(D)45(a)	Each unit shall have direct access from garage and driveway to public road.	Driveways provided for each dwelling. Requirement met.
(D)45(b)	Drainage shall be provided consistent with the city and Watershed District requirements. Any required ponds shall be integrated into the overall plan and proper easement and maintenance agreements shall be provided.	See engineering review comments. Conditions of approval recommended.
(D)45(c)	Air conditioning or heating units shall not project through exterior walls or windows unless screened from view as viewed from public and private streets.	None proposed at this time. If the developer intends to install projecting air conditioning or heating units, they must be shown on building elevations submitted prior to building permit issuance.
(D)45(d)	Building utility services and structures such as meters, transformers, refuse containers, etc., shall be either located inside the principal building, inside an accessory building, or, where allowed, be outside and entirely screened from off-site views.	Refuse containers will be stored in the garage or rear or side yards per 154.010(A)12.
(D)45(e)	Townhouses within the Mixed-Use Districts shall be developed in accordance with the density as guided by the Comprehensive Plan.	Not applicable.
(D)45(f)	Each townhouse development shall have direct vehicle access to a public road.	Requirement met.
(D)45(g)	Off-street parking areas for guests must be considered for each development. In instances where the length and width of the driveway and the street are not adequate	Requirement met confirm this is met with 2-car garage + driveway spaces

	for parking, a separate parking bay or parking lot might be required.	
(J)3(a)i and (b)i	Each space for a passenger vehicle shall contain a minimum area of not less than 180 sf (9x20).	Requirement met. Proposed driveways measure 512 sf.
(J)4(a)	Parking areas, driveways, and parking lots shall be surfaced with an all-weather dustless material consisting of bituminous, brick, concrete pavers or concrete.	Requirement met. Proposed surfacing is bituminous.
(J)9(c)	New driveways and off-street parking shall be set back a minimum of three feet from side property lines.	Requirement met.
(J)9(e)i	Driveways must not exceed a 22-foot maximum width at the property line.	Driveway measures 20 feet at property line. Requirement met.
(J)9(e)v	Driveways located on a corner lot shall be set back a minimum of 15 feet from the corner of the two streets fronting the lot.	Requirement met.

Landscaping Standards

Section 154.010(F) of the zoning ordinance includes landscaping and requirements for townhouse dwellings. Analysis of applicable standards are listed below.

Reference	Standard	Proposed Townhome Lots
(F)3(a)	Trees must be planted within the property lines and in a location so as not to interfere with sight line visibility at maturity. Trees shall not be planted in drainage and utility easements.	2 of the proposed trees are located within a drainage/utility easement.
(F)3(a)ii	Residential structures containing two or more units shall contain as a minimum: one tree per dwelling unit.	6 trees are proposed for the site; a minimum of 10 are required.
(F)4(b)	In the R-2 district, at least 50% of the front yard must be landscaped.	TBD at the time of final PUD
(F)5(a)	All developed uses shall consist of, but not limited to, a landscaped yard, including grass, plantings, decorative stones, trees and shrubs, along all streets.	Requirement met. All open space areas will be seeded or sodded within 7 days of grading.
(F)5(b)	Except for driveways, the yard shall extend along the entire frontage of the lot, and along both streets in the case of a corner lot, such yard shall have a depth of at least ten feet.	Requirement met.
(F)5(c)	Required yards and setback areas, except driveways, shall be graded to final elevations and sodded or seeded and landscaped with grass, plantings, decorative stones, trees and shrubs.	Requirement met. All open space areas will be seeded or sodded within 7 days of grading.
(F)8(c)	A triangular area of clear vision formed by the two intersecting streets and driveways and a line connecting said centerlines, shall be kept clear of visual obstruction.	Requirement met.

(F)9(a)	No landscape material other than grass, or retaining walls, shall be placed within a drainage, access or utility easement.	2 of the proposed trees are located within a drainage/utility easement.
(F)11.	Prior to the issuance of building permits for all new and/or expanded uses, a tree preservation plan shall be submitted.	There is only one existing tree on the site that will be removed and replaced as a result of development.

PLANNED UNIT DEVELOPMENT REVIEW

PUDs are allowed to encourage innovation in project design that cannot be achieved through traditional zoning. The proposed development site is difficult to develop given its unique shape. Approximately 1½-acre is very narrow and abuts platted lots on three sides, which diminishes the developability of this portion of the property. The proposed PUD enables the developer to build a financially feasible product while meeting land use objectives of 2040 Comprehensive Plan.

PUD Purpose

Section 154.008(C)1 of the City Code outlines the purpose statement for PUDs. Analysis of PUD purpose standards are listed below.

Reference	Standard	Proposed Townhome Lots
(C)1(a)	Development as an integrated, coordinated unit as opposed to parcel-by-parcel approach to development.	Coordinated development plan proposed.
(C)1(b)	Introduce flexibility of site design and architecture for the conservation of land and open space through clustering of buildings and activities.	Buildings clustered and 1.5-acre portion of site preserved as wetland/ open space.
(C)1(c)	Enable development that is characterized by central management, integrated planning and architecture, joint or common use of parking, maintenance of open space and other similar facilities, and a harmonious selection and efficient distribution of uses.	Open space will be maintained in common ownership; architecture will be consistent; uses harmonious with adjacent land uses.
(C)1(d)	Provide flexibility from ordinance requirements and joint planning between the city and developer to protect other features such as existing development, planned streets, vegetation, slopes, wetlands, lakes or streams.	Zoning flexibility is needed to provide greater density which is consistent with the Comp Plan and to preserve wetland and open space area.
(C)1(e)	Promote efficient use of land while preserving existing landscape amenities and allowing harmonious development consistent with the Comp Plan and preserving the health, safety and general welfare of the community.	Layout is the most efficient given the irregular shape of the property and is consistent with the Comp Plan.

PUD Objectives

According to §154.008(C)2, the PUD is intended to encourage the efficient use of land and resources, to promote greater efficiency in public utility services and encourage innovation in the planning and building of all types of development. Analysis of PUD objectives are listed below.

Reference	Standard	Proposed Townhome Lots
(C)2(a)	Harmonious mix of land uses, building types, open spaces, and circulation elements.	Buildings complement existing adjacent development. No circulation elements.
(C)2(b)	Concentration of open space into more usable areas.	Buildings clustered and 1.5-acre portion of site preserved as wetland/ open space.
(C)2(c)	Preserve natural resources of the site including wetlands, woodlands, steep slopes and scenic areas.	Buildings clustered and 1.5-acre portion of site preserved as wetland/ open space.
(C)2(d)	Facilitate the economical provision of streets and public utilities.	No new streets proposed.
(C)2(e)	Preserve and enhance historic and natural resources.	Not applicable.
(C)2(f)	Allow more than one principal building on a lot.	Ten buildings proposed on what is currently one existing lot.
(C)2(g)	Provision of a mixture of residential unit types and densities in an integrated and well-planned area creating a variety of housing types, consistent with the city's housing goals.	Density is consistent with they City's housing goals as demonstrated by the future land use map/
(C)2(h)	Promote energy conservation through the use of more efficient building designs, sites and clustering of land uses and buildings.	Not applicable.

General PUD Requirements and Standards

General requirements and standards applicable to PUDs are outlined in §154.008(C)3(a)-(p). Analysis of PUD standards are listed below.

Reference	Standard	Proposed Townhome Lots
(C)3(a)	Has two or more principal uses or structures on a single parcel of land.	Within the PUD boundary, the project has two uses on a single parcel of land; townhomes and open space. Requirement met.
(C)3(b)	An application for PUD approval must be filed by the landowner or jointly by all landowners of the property included in a project.	Presently owned by the City with an active contract for private development with applicant. Requirement met.
(C)3(c)	The proposed PUD shall be consistent with the Comprehensive Plan.	The proposal for townhomes at the proposed density is consistent with the <i>medium density</i> future land use designation for this site. Requirement met.
(C)3(d)	All permitted, conditional, and interim uses contained in the underlying zoning district shall be treated as	Townhomes are permitted by right in the R2 district.

	permitted, conditional, and interim uses in the PUD Overlay District.	Requirement met if property rezoned to R2.
(C)3(e)	The city may provide concessions in setbacks, density, or lot size.	Flexibility requested for setbacks and lot size through PUD overlay.
(C)3(f)	Minimum lot size requirements of the underlying zone shall serve as a guideline to determine the maximum dwelling unit density of a total development.	Proposed density is 9 units per acre, which aligns with R-2 district density standards.
(C)3(g)	The city may, but shall not be required to, provide concessions in setbacks, density, lot size, building height, street width or parking.	Flexibility requested
(C)3(h)	Relationship to adjacent areas.	The proposal is consistent with the height and uses of adjacent properties (single family homes).
(C)3(i)	Utilities shall be installed underground.	All new utilities connections will be installed underground
(C)3(j)	Off-street parking and loading space shall be provided in each PUD in the same ratios for types of buildings and uses as required in the underlying zoning district.	Standard parking requirements are met.
(C)3(k)	Street width.	Not applicable.
(C)3(l)	The developer shall prepare and submit a landscaping plan.	Landscape plan depicts four Northwood Red Maple trees and two Sunburst Honeylocust trees are proposed for the site, in addition to the required seeding/sod at the time of site construction.
(C)3(m)	The proposed project shall be served by the city water and sewer system.	The project will be served by City water/sewer. Requirement met.
(C)3(n)	Height limitations shall be the same as imposed in the respective zoning districts.	Requirement met.
(C)3(o)	Prior to the issuance of a building permit as part of the PUD, the permit applicant, builder, or developer shall execute and deliver to the City Council a development agreement for the PUD.	This shall be a condition of PUD approval.
(C)3(p)	Common open space shall be either held in common ownership by all owners in the PUD or dedicated for public use with approval of the City Council.	Approximately 1.5-acre will remain as open space on the site to be held in common ownership in the PUD. Requirement met.

Section 154.008(C)5(d)ix(A-I) outlines the criteria that the Planning Commission and City Council shall use to evaluate the PUD.

Reference	Standard	Proposed Townhome Lots
(d)ixA	Adequate property control is provided to protect the individual owner's rights and property values and the public responsibility for maintenance and upkeep.	HOA bylaws have been provided, review of which will be a condition of approval.
(d)ixB	The circulation plan does not create congestion or dangers and is adequate for the safety of the project resident and the general public.	Not applicable.
(d)ixC	A sufficient amount of usable open space is provided.	Requirement met.
(d)ixD	The arrangement of buildings, structures, and accessory uses does not unreasonably disturb the privacy or property values of the surrounding residential uses.	Requirement met.
(d)ixE	The architectural design of the project is visually compatible with the surrounding area. Architectural style or type of buildings shall not solely be a basis for denial or approval of the preliminary PUD plan. However, the overall appearance and compatibility of individual buildings to other site elements of surrounding development will be given primary consideration in the review stages of the Planning Commission and City Council.	To be determined in final PUD phase.
(d)ixF	The drainage and utility system plans are submitted to the City Engineer and shall be subject to approval of the City Engineer.	Refer to Engineering review memo.
(d)ixG	The development schedule insures a logical development of the site which will protect the public interest and conserve land.	The site is planned to be constructed in summer 2024.
(d)ixH	Proposed unit and accessory use requirements are in compliance with the district provisions in which the development is planned.	Requirement met, unless otherwise stated, above.

City Engineer, Morgan Dawley, comprehensively reviewed the submitted applications and plans from Andrus Built, LLC and included a memorandum outlining his findings (see attached).

Based on the submitted application and plans, Staff recommends the Planning Commission recommend approval of the Delaware Place final plat and final planned unit development, subject to the conditions of approval from the City Engineering report to the North St. Paul City Council.

ATTACHMENTS

1. Engineering Review Memo, Morgan Dawley – WSB & Associates
2. Final Plat
3. Resolution Approving Final Plat
4. Resolution Approving Final Planned Unit Development (PUD)

Memorandum

To: Riley Grams, Community Development Director

From: Morgan Dawley

CC: Brian Frandle, City Manager

Date: July 5, 2024

Re: Delaware Place Final PUD and Final Plat Site Plan Review

The Applicant is proposing a project on the vacant 1.39-acre parcel located at the northeast corner of Delaware Avenue and 17th Avenue East. The project includes grading for five twin homes (10 units) and construction of stormwater, sanitary, and water infrastructure. Approximately 24,940 SF of new impervious will be added to the site. A single infiltration basin is proposed to provide water quality, volume, and rate controls.

The following review is only for engineering, stormwater management, and site grading issues. Comments are based on the final plan submittal received from the applicant on June 20, 2024, and the final plat submittal received June 25, 2024. Additional engineering comments and conditions of approval may be provided upon future revised submittals.

Upon review of the submitted plans and supporting information for the above-referenced project, I offer comments and conditions of approval as outlined in the following sections of this memorandum.

General Engineering and Grading Comments:

1. The applicant is responsible for and shall provide copies of all applicable permitting for the project prior to grading permit (mass grading) and/or building permit issuance, including but not limited to Ramsey County Public Works for work within the 17th Avenue right of way, Ramsey Washington Metro Watershed District (RWMWD) and Minnesota Pollution Control Agency (MPCA) NPDES construction stormwater.
2. City Standard Plates and Specifications shall supersede all submitted details and specifications for work within the right of way and for all public infrastructure, including any changes during construction not anticipated or contemplated at the time of final plan approval or initial grading/demolition permit or building permit issuance.
3. A haul route plan and a traffic control/detour plan for utility work on Delaware Avenue and 17th Avenue E (CSAH 23) shall be submitted for review and approval prior to permit issuance.
4. Sanitary sewers, as proposed to be relocated by the developer, shall remain publicly owned and maintained by the City. Watermain as proposed, and stormwater management infrastructure and storm sewer as proposed, shall be privately owned and maintained.
5. A Developer's Agreement shall be required as a condition of approval to be executed between the City and the developer, with securities presented to the city in a form and format acceptable to the City Attorney, prior to signing of the final plat mylars.

6. A Stormwater Maintenance Agreement for the privately maintained stormwater management system shall be required as a condition of approval to be executed between the City and the developer.
7. The City Engineer shall review and approve final signed plans prior to building permit issuance/mass grading/demolition permit issuance.
8. Final hydrants and locations, if any, shall be added as required by the Fire Chief.
9. All pavement removals on Delaware Avenue shall be sawcut at full depth of bituminous, and to the edge of the parking lane (measured 8 feet from the face of curb) or across the full road to the opposite concrete curb and gutter if trench excavation depth requires further removals.
10. A record drawing as built for the site shall be required documenting all stormwater management grading, all utilities private and public, drainage swales, emergency overflow routes and grades, to be submitted to the city prior to the issuance of the first (temporary or final) certificate of occupancy on the site.
11. A lot survey/grading plan for each individual site shall be submitted with the building permit application for each lot and approved by the City Engineer prior to building permit issuance for each lot.
12. An as built lot survey/grading plan for each individual site shall be submitted with the request for (temporary or final) Certificate of Occupancy and approved by the City Engineer prior to the issuance of (temporary or final) Certificate of Occupancy for each lot.

Utilities:

1. Add clarification to the final utility plans (prior to final plans to be submitted at time of demo/grading permit review prior to issuance) that the contractor shall be responsible to adjust all existing sanitary sewer manholes for revised finished grade and ongoing maintenance access to the satisfaction of Public Works as necessary.
2. City and MCES Sewer Access Charges and City Water Access charges shall be due at the time of building permit and based on Met Council SAC determination letter as provided by the developer to the City.

Stormwater Management:

1. A Stormwater Maintenance agreement shall be executed between the applicant and the City of North St. Paul prior to final plat signatures, and recorded with Ramsey County, prior to demolition permit issuance.

Landscaping:

1. Any changes or deviations from the final landscaping plan shall not place trees, vegetation, or other landscaping within lot line drainage swales, emergency overflow routes, and over or within a 1:1 excavation trench for existing and proposed underground utilities.

Final Plat:

1. Final Plat revisions shall incorporate all Ramsey County requirements as a condition of approval, including dedication of 17th Avenue/County Road C right of way dedications.
2. Submit revised boundary survey to reflect title work and all existing easements, informing as to whether any existing easements need to be vacated.
3. The applicant shall apply for vacation of all existing conflicting easements, such as the existing easement (to be confirmed by applicant's updated survey) over the existing sanitary sewer to be relocated. The vacation application, approval by action of City

Council, and recording of easement vacation at Ramsey County shall occur prior to recording of the final plat.

4. Decks on lots 5-10 shall not be allowed for proximity and depth to proposed sanitary sewer. Patios will be allowed on these lots/units at the discretion of the City Engineer and subject to a signed and recorded encroachment agreement for the patio allowing for future sanitary sewer excavations, repair, and maintenance by the City should it be necessary.
5. Drainage and utility easements shall be dedicated on the final plat to the satisfaction of the City Engineer.

Engineering Recommendation

Any approval of the project as proposed should include the following conditions in addition to any other conditions recommended by City Council, Planning Commission, and city staff:

1. Revision of plans and the stormwater management plan to satisfy all engineering comments included in this memo on the currently submitted development information prior to City Council conditional approval of the Final PUD and Final Plat, and any subsequent engineering comments prior to issuance of demolition/grading/building permits.
2. Easements shall be added to the final plat as required by the City Engineer.
3. Final hydrant locations and turnaround dimensions shall be approved by the Fire Chief
4. The applicant is responsible for obtaining all necessary permits for the project from the City and all applicable outside agencies, including but not limited to Ramsey County, Ramsey Washington Metro Watershed District, MPCA (NPDES and sanitary sewer), and MDH (Water main), and supplying copies of the issued permits to the City prior to issuance of demolition/mass grading and/or building permit.
5. A Developer's Agreement shall be required.
6. A Stormwater Management Agreement shall be required.
7. The sanitary sewer shall be public. The water and stormwater management pond and related infrastructure shall be privately owned and maintained, to be defined in the Developer's Agreement.

This concludes the engineering plan and related information review comments for the proposed development of the Delaware Place site. More comments may be generated following review of any future revised and additionally submitted material that may be provided by the applicant. Should you have any questions regarding this memorandum, please feel free to contact me at 612-670-3132.

DELAWARE PLACE

Special Planning Commission Meeting

July 10, 2024

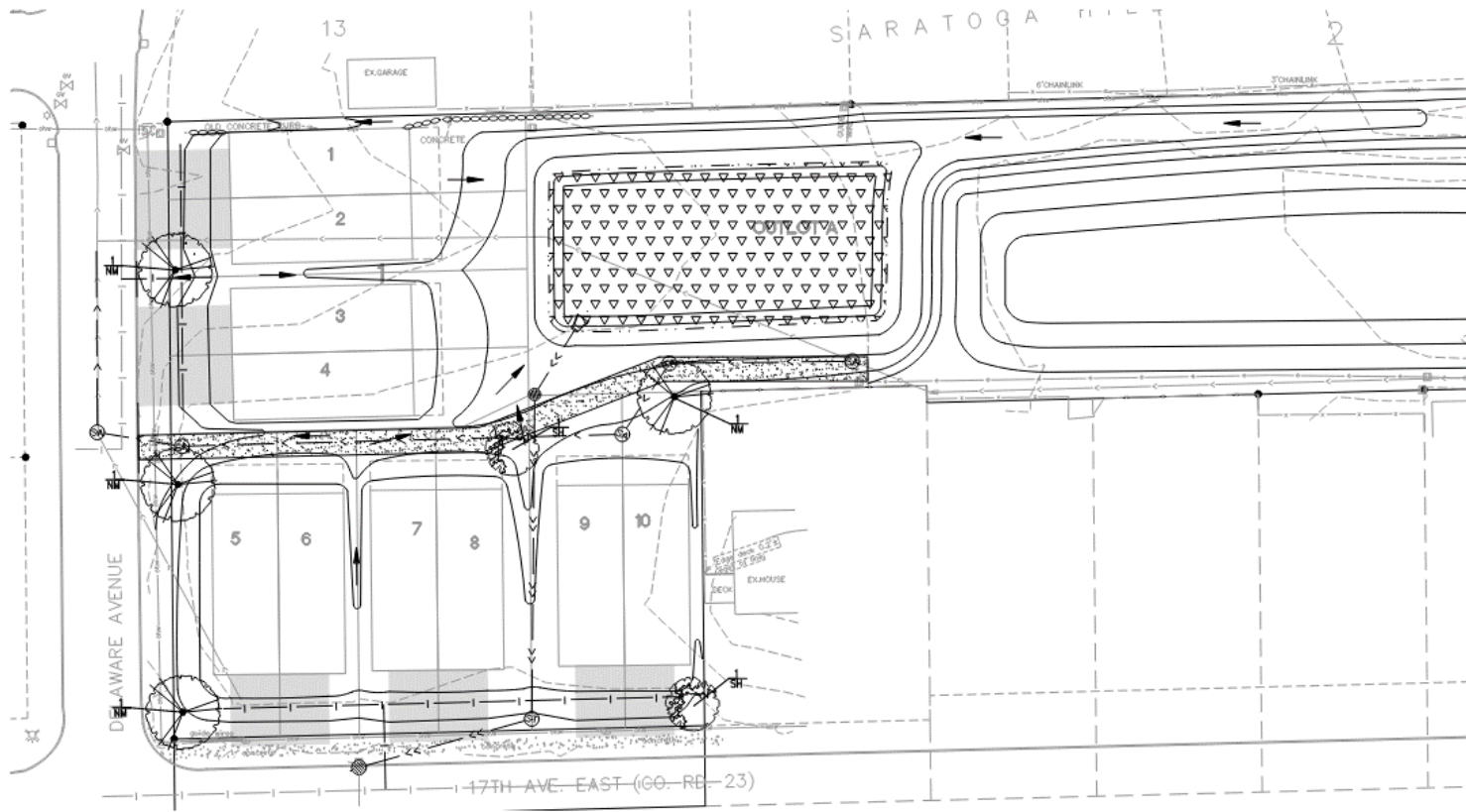


Property: 2329 17th Avenue

Applicant: Andrus Built, LLC

Requests: Final Plat and
Final Planned Unit
Development (PUD)

GENERAL INFORMATION



10 townhouse units
(twins)

1.5-acre open space
area

PROJECT OVERVIEW

Flexibilities Requested

- Side Setbacks
- Lot Width

Review Criteria

Development Standards

Architectural Standards

Landscaping Standards

Purpose and Objectives of PUD ordinance

PLANNED UNIT DEVELOP MENT

[illegible]

RECOMMENDATION

Recommend City Council approval of the Delaware Place Development

- Preliminary Plat
- Planned Unit Development

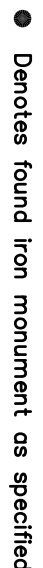
Subject to the approval conditions contained in the draft resolutions

City Council to approve on July 16, 2024

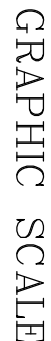


QUESTIONS

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(IN FEET)
1 inch = 30 ft.



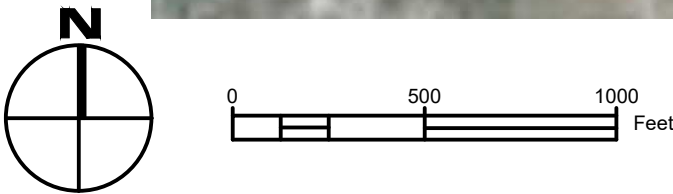
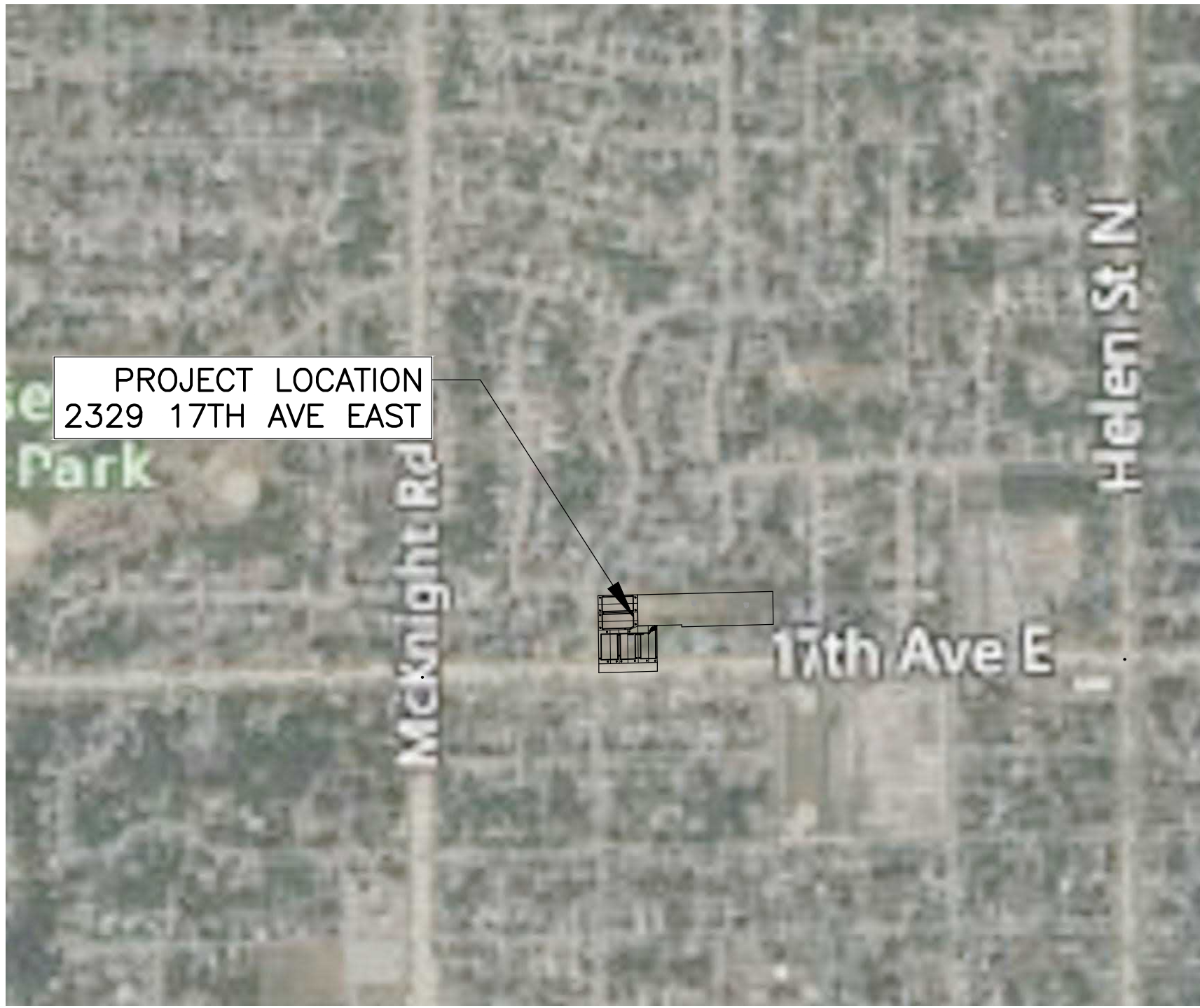
SECTION 1, TOWNSHIP 29, RANGE 22

Detail: No Scale

Blaine, MN 55449



CONSTRUCTION PLANS FOR
DELAWARE PLACE
NORTH ST. PAUL, MN
JUNE 2024



VICINITY MAP

PROJECT TITLE

CONTACTS

INDEX

NOTES

OWNER:

Andrus Built, LLC
2440 Charles Street N, Ste 210
North St. Paul, MN 55109
Attn: Doug Andrus
Ph: 651.777.0111
doug@andrusbuilt.com

SURVEY:

Acre Land Surveying, Inc.
9140 Baltimore St NE Ste 100
Blaine, MN 55449
Attn: Eric Vickaryous
Ph: (763) 458-2997
acrelandsurvey@gmail.com

CIVIL:

Civil Methods, Inc.
PO Box 28038
St. Paul, MN 55128
Attn: Dave Poggi, PE
Ph: 763.210.5713
dave.poggi@civilmethods.com

CITY / TOWNSHIP:

City of North St. Paul
2400 Margaret Street
North St. Paul, MN 55109
Ph: 651.747.2595 (P&Z)

Morgan Dawley, City Engineer (WSB)
Ph: 763.287.7173
mdawley@wsbeng.com

WATERSHED DISTRICT:

Ramsey Washington Metro WD
2665 Noel Dr
Little Canada, MN 55117
Ph: 651.792.7950

COUNTY:

Ramsey County Public Works
1425 Paul Kirkwold Drive
Arden Hills, MN 55112
Ph: 651.266.7186

SHEET NO.	DESCRIPTION
C001	COVER SHEET
C101	EXISTING CONDITIONS & REMOVALS
C301	UTILITIES
C401	GRADING PLAN
C501	EROSION & SEDIMENT CONTROL PLAN
C501	SWPPP NARRATIVE
C601-6XX	DETAILS & NOTES
C701	LANDSCAPING PLAN

LEGEND:

—————	PROPERTY LINE	=====	CURB & GUTTER		STORMWATER POND
- - - - -	SETBACK	— >> —	STORM SEWER / CULVERT		ROCK RIPRAP, RANDOM CRUSHED
- - - - -	EASEMENT	— >—	DRAINTILE		EROSION CONTROL BLANKET
WET —	WETLAND	— > —	SANITARY SEWER		TURF REINFORCEMENT MAT
=====	CONTOUR	— —	WATERMAIN		GEOGRID OR ARTICULATED CONCRETE
	SPOT ELEVATION	— o —	CLEANOUT		STABILIZED CONST. ENTRANCE
	DRAINAGE DIRECTION		SANITARY MANHOLE	— SF —	SILT FENCE
	BITUMINOUS SURFACE		WETLAND BUFFER	- - - - -	SEDIMENT CONTROL LOG
	BITUMINOUS SURFACE, HEAVY		BIORETENTION / INFILTRATION BASIN		INLET PROTECTION
	CONCRETE SURFACE		TREE LINE		FENCE
					RETAINING WALL

THE EXISTING UTILITY INFORMATION SHOWN IN THIS PLAN HAS BEEN SURVEYED BY OTHERS; THE CONTRACTOR SHALL FIELD VERIFY EXACT LOCATIONS PRIOR TO COMMENCING CONSTRUCTION AS REQUIRED BY STATE LAW. NOTIFY 811 OR GOPHER STATE ONE CALL (1.800.252.1166).

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

PLAN REFERENCES:

- CITY OF NORTH ST. PAUL CODE & DESIGN STANDARDS
- MINNESOTA DEPT. OF TRANSPORTATION – STANDARD SPECIFICATIONS FOR CONSTRUCTION, LATEST EDITION.
- CITY ENGINEERS ASSOCIATION OF MINNESOTA STANDARD SPECIFICATIONS, LATEST EDITION.
- UNREINFORCED CONCRETE PER ACI 330R-08 AND ACI 330.1-03.



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DAVID M. POGGI

DATE: 06-20-2024

LIC. NO.: 44573

DESIGNED: DMP

DRAWN: DMP

CHECKED: KEB

DATE / REVISION:

03-18-2024 Preliminary Plan Review Set. NOT FOR CONSTRUCTION

05-03-2024 Revised Lot 1-4 FFE & maintenance access route / grading. NOT FOR CONSTRUCTION

05-24-2024 Shifted basin east and changed to SOG homes per WD comment. NOT FOR CONSTRUCTION

06-19-2024 Revised per City, RWMWD, & County review comments.

06-20-2024 Revised Landscaping Plan.

DELAWARE PLACE

ANDRUS BUILT, LLC
NORTH ST. PAUL, MN

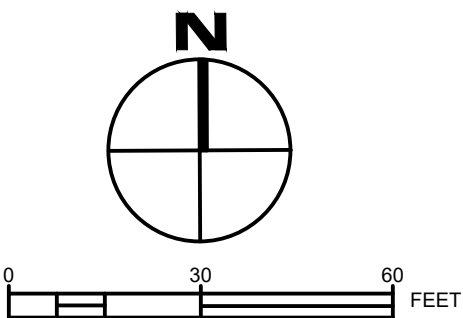
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SHEET NO:

C001

GENERAL NOTES:

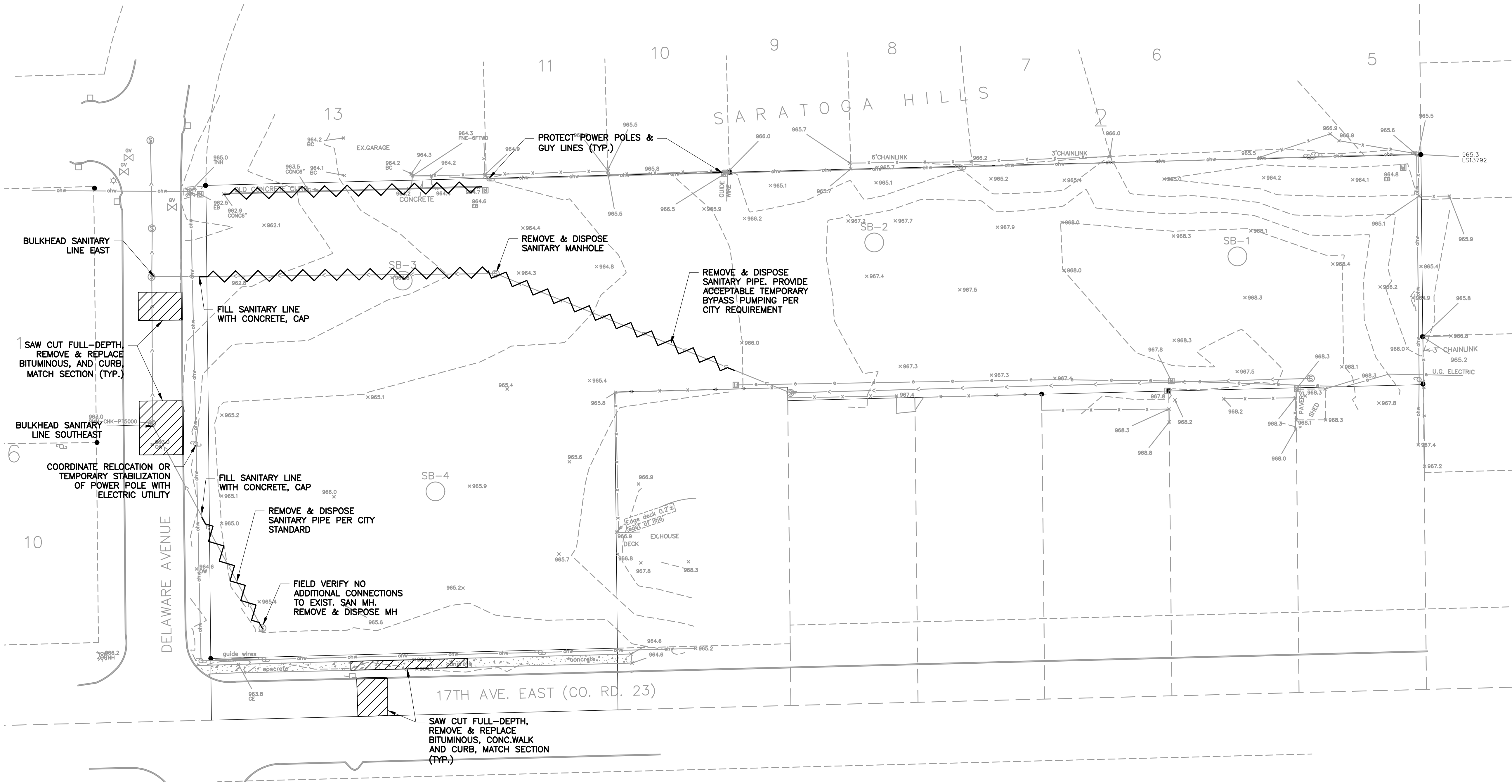
- The subsurface utility location information in this plan is utility quality level D. This utility quality level was determined according to the guidelines of CI/ASCE 38-02, titled "Standard Guidelines for the Collection and Depiction of Existing Subsurface Utility Data." Engineer does not guarantee the accuracy of utility locations or that all existing utilities are shown; Contractor is responsible for locating utilities prior to digging.
- Perimeter sediment controls shall be installed prior to beginning site disturbance operations, see Erosion Control Plan. No impact to adjacent properties is permitted without prior written authorization from property owner.
- Existing street pavement and curb shall be cut full-depth to provide a clean, uniform face for new connection. Pavement in Delaware Ave shall be removed to parking lane (8' off curb face) or full street width.
- Coordinate removal or relocation of private utilities with utility owner.
- Coordinate removal and abandonment of existing sewer and water services with City Public Works; meet City requirements for removal and restoration.
- Additional sidewalk removal and replacement may be necessary for driveway installation along 17th Ave East.
- Protect light poles and other existing utilities, signs, trees, etc. Relocation of any private utilities not directed on these plans shall be coordinated with the utility owner.
- Damaged items or property shall be repaired or replaced at Contractor's expense.



BENCHMARK
(ASSUMED, SEE SURVEY)

LEGEND:

- PROPERTY LINE ———
- PAVEMENT REMOVAL
- REMOVAL



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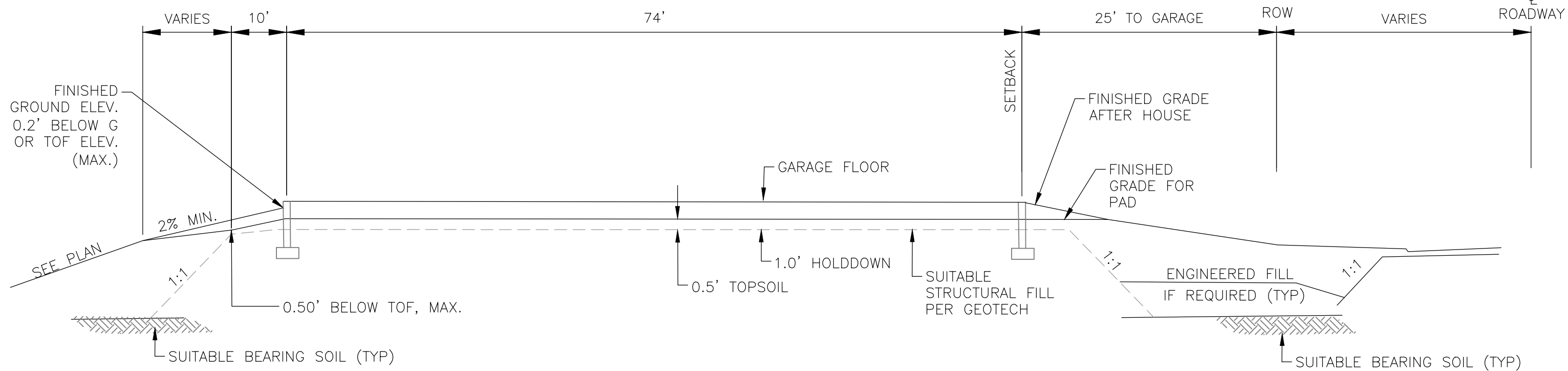
DELAWARE PLACE

ANDRUS BUILT, LLC
NORTH ST. PAUL, MN

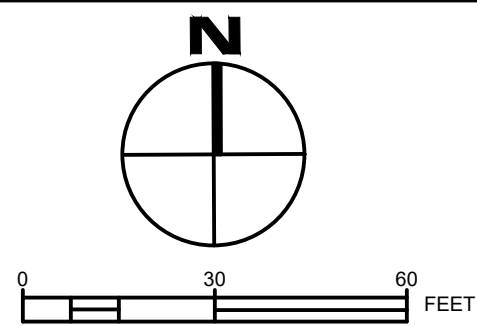
EXISTING CONDITIONS &
REMOVALS

SHEET NO:

C101

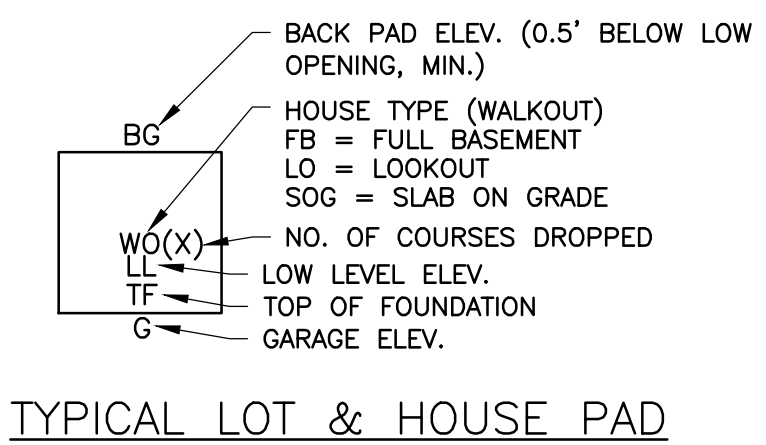
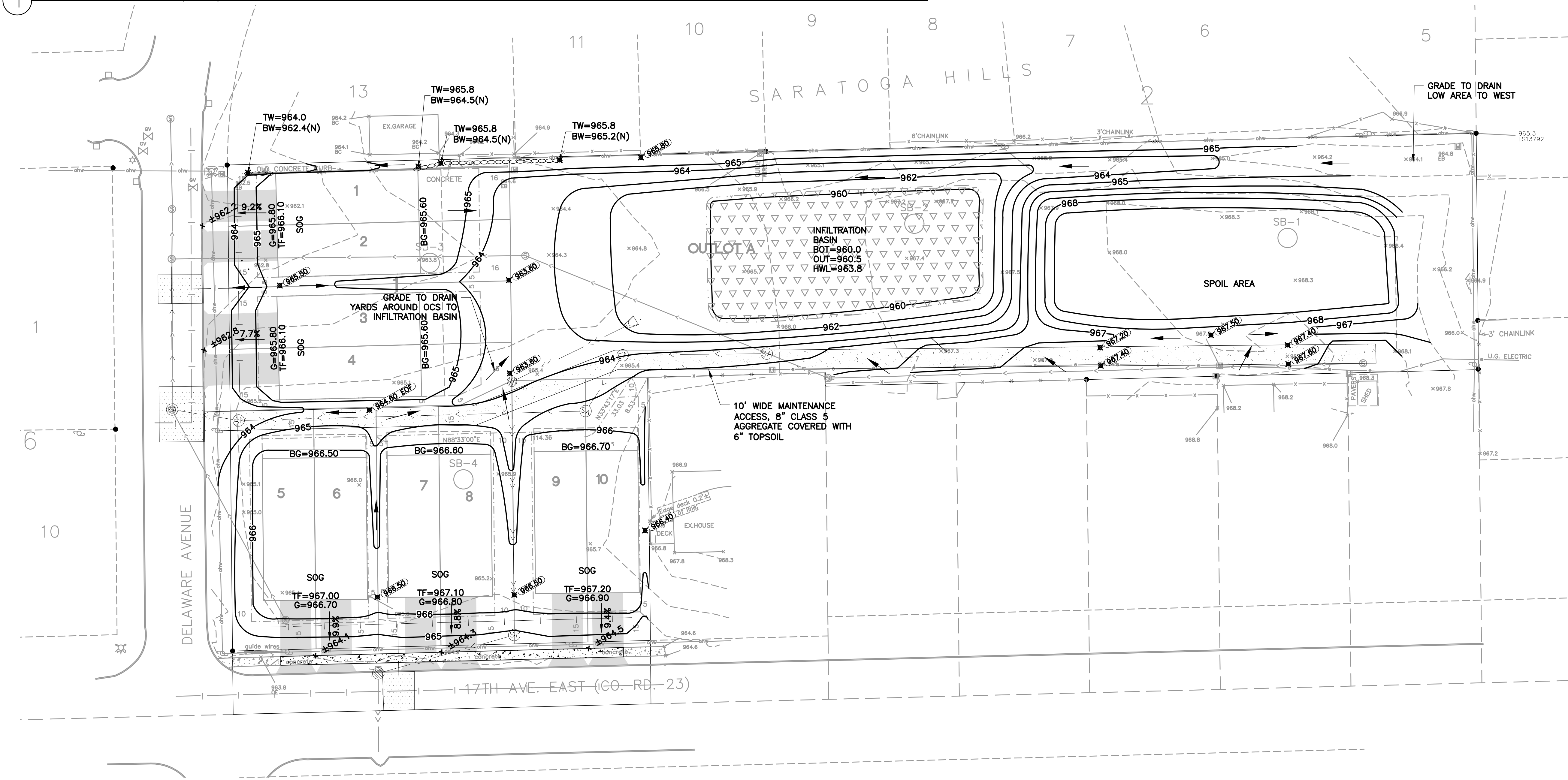


- GENERAL NOTES:**
1. The subsurface utility location information in this plan is utility quality level D. This utility quality level was determined according to the guidelines of CI/ASCE 38-02, titled "Standard Guidelines for the Collection and Depiction of Existing Subsurface Utility Data." Engineer does not guarantee the accuracy of utility locations or that all existing utilities are shown; Contractor is responsible for locating utilities prior to digging.
 2. Construction shall comply with all applicable governing codes.
 3. Notify Mary Fitzgerald (RWMWD, 651.792.7956) prior to beginning construction activity to schedule an initial erosion control inspection.
 4. Notify Mary Fitzgerald (RWMWD, 651.792.7956) at least 48 hours prior to construction of the proposed infiltration basin.
 5. Damaged items or property shall be repaired or replaced at Contractor's expense.
 6. See erosion control plan and SWPPP for required controls to be installed prior to site disturbance.
 7. Contractor shall install demarcation fencing at property line as necessary.
 8. Contours shown are to final grade.
 9. Curb point elevations are at flow line, unless noted otherwise.
 10. Basin side slopes shall be 4:1 (max.) below HWL.
 11. Maximum grading slope in mowed areas to be 3:1 (2:1 in natural areas).
 12. Structure low opening shall be 1.5' above EOF elevation (City). Low floor elevation must be 2.0' above HWL per RWMWD.
 13. Swales between lots shall be 2.0% (min.) to extent possible; not less than 1.5%.
 14. Driveway grades shown indicate grade from garage to back of curb or sidewalk (if applicable).
 15. Additional stockpiling may be needed; waste excess material as directed.
 16. See details and note sheets for additional specifications.



BENCHMARK (ASSUMED, SEE SURVEY)	
LEGEND:	
PROPERTY LINE	—
SETBACK	---
EASEMENT	- - - -
WETLAND	WET
CONTOUR	—
SPOT ELEVATION	X.XX
DRAINAGE DIRECTION	→
STORM SEWER / CULVERT	==>
BITUMINOUS SURFACE	[Pattern]
AGGREGATE W/ TOPSOIL COVER	[Pattern]
RIPRAP	[Pattern]
RETAINING WALL	[Pattern]

1 SLAB ON GRADE (SOG) – CORRECT PADS TO 74' DEEP



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DELAWARE PLACE
ANDRUS BUILT, LLC
NORTH ST. PAUL, MN

GRADING



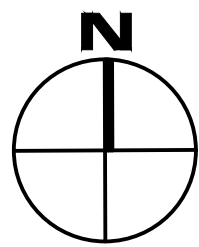
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C401

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SEDIMENT CONTROL & TURF RESTORATION NOTES:

1. Topsoil, vegetation, and erosion control items installed and maintained per Mn/DOT 2571-2575.
2. Notify Mary Fitzgerald (RWMWD, 651.792.7956) prior to beginning construction activity to schedule an initial erosion control inspection.
3. The specified erosion and sediment control practices are the minimum. Additional practices may be required during the course of construction.
4. Perimeter sediment controls shall be installed as indicated prior to site disturbance, and shall be installed to allow for high-flow bypass or overflow to prevent failure during significant rainfall.
5. In addition to this sheet, Contractor must be familiar with the SWPPP plan sheet. SWPPP shall remain onsite at all times, as noted in "Record Retention" section of SWPPP.
6. Silt fence shall be of type indicated on the plan (Mn/DOT 3886).
7. Contractor is responsible for keeping sediment from leaving the property, including vehicle tracking. Should sediment be tracked offsite onto adjacent street, Contractor shall sweep within 24 hours.
8. Install silt fence or sediment control log around any soil stockpiles that will be present for more than 7 days (if no perimeter controls in place to prevent sediment transport).
9. Inlet protection shall be in place on inlets throughout construction; type shall be suitable for each phase of construction.
10. Install sediment control logs around rim of bioretention basin immediately after final grading and leave in place until construction has ended and site is stabilized with vegetation.
11. Sediment control logs shall be minimum 8" diameter wood or straw (Mn/DOT 3897).
12. Devices shall be inspected weekly and after all rainfall events exceeding 1/2", and maintained as necessary to keep the intended functional condition.
13. Accumulated sediment shall be removed from sediment control devices when 1/3 of device height

14. After rough grading is completed, and topsoil spread, areas shall be seeded and blanketed (or sodded) within 7 days. Areas not being actively worked must be covered with temporary seed within 14 days.
15. Random crushed riprap per Mn/DOT 3601 shall be of class and quantity as indicated, and shall include geotextile fabric (3733).
16. Seed (or sod) in yard areas shall be Mn/DOT Mix 25-151 (3876) residential turf, other areas may be low maintenance turf, Mix 25-131, native prairie, Mix 35-241, or approved equal.
17. Seed infiltration basin bottom and sides with Mn/DOT Mix 33-261.
18. Ditch bottoms and 3:1 slopes shall include erosion control blanket, Cat.20 (3885).
19. All other seeded areas, including infiltration basin shall be seeded (or planted) and covered with hydraulic mulch matrix (3884.B2), blanket (Cat.10 or 15, 3885), or straw mulch, Type 1 (no straw in basins).
20. Turf shall be installed by a qualified professional and/or per the Mn/DOT Seeding Manual (latest edition), at rates indicated in the manual.
21. Perimeter sediment controls shall remain in place until vegetation is growing / established in all disturbed areas.
22. Erosion during construction shall be repaired by the Contractor within 24 hours of discovery.

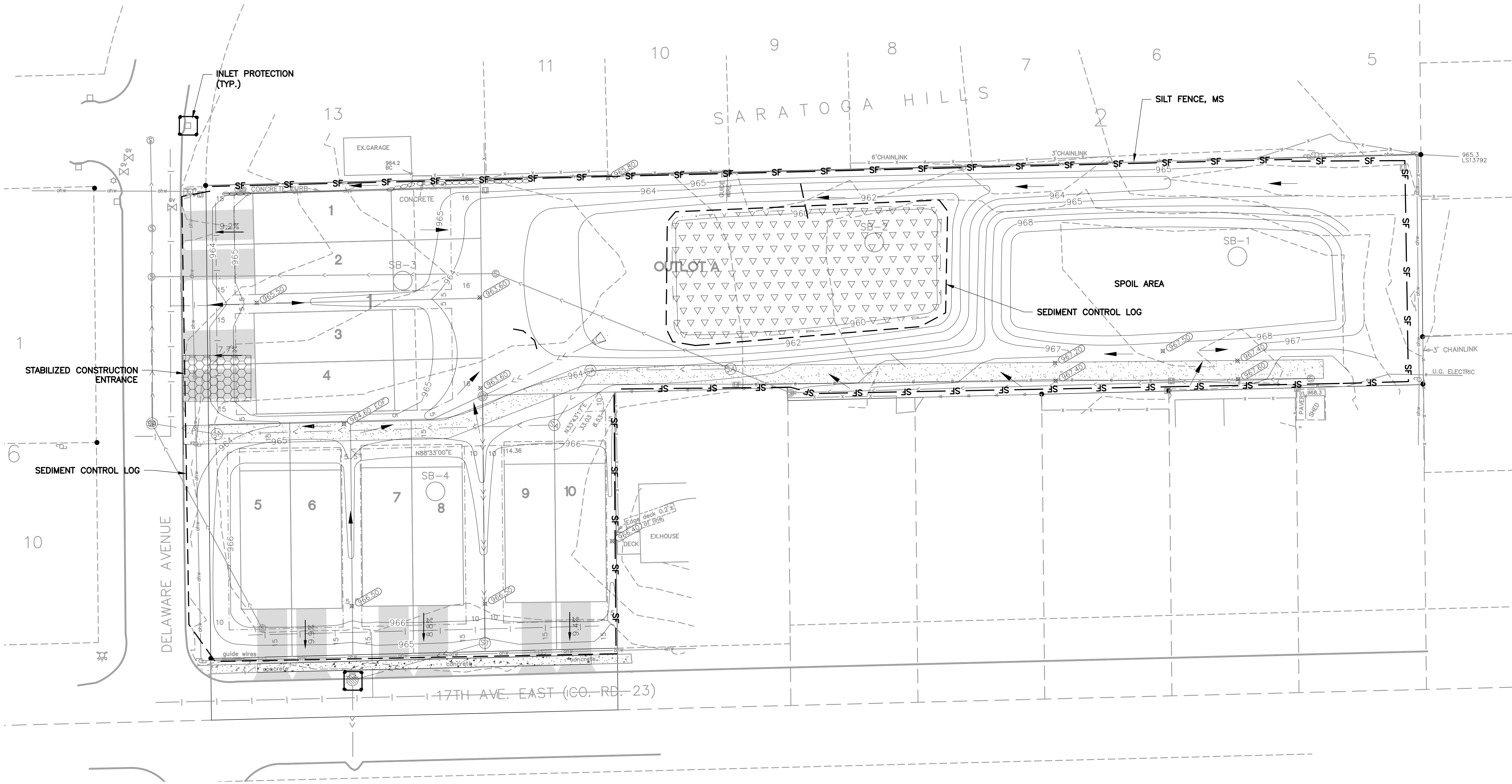


0 30 60
FEET

BENCHMARK
(ASSUMED, SEE SURVEY)

LEGEND:

PROPERTY LINE	----
INFILTRATION BASIN SEED MIX	XXXX
EROSION CONTROL BLANKET, CAT. 0, OR HYDRAULIC MULCH MATRIX	XXXX
EROSION CONTROL BLANKET, CAT. 3	XXXX
STABILIZED CONST. ENTRANCE	XXXX
SILT FENCE	SF
SEDIMENT CONTROL LOG	----
INLET PROTECTION	□
DETAIL ID: NO. / SHEET	⊗



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DELAWARE PLACE

ANDRUS BUILT, LLC
NORTH ST. PAUL, MN

EROSION & SEDIMENT CONTROL

SHEET NO:

C501



ALL CONSTRUCTION ACTIVITIES MUST MEET THE REQUIREMENTS OF THE MPCA'S **GENERAL PERMIT AUTHORIZATION TO DISCHARGE STORMWATER ASSOCIATED WITH CONSTRUCTION ACTIVITY UNDER THE NPDES/SDS PROGRAM (MNR100001)**. All sheets of this planset, as well as the related Project SWMP, are hereby referenced as part of this SWPPP; any related pages shall be revised as appropriate for differing site conditions. Specific reference permit sections included in parentheses throughout.

SITE AND CONSTRUCTION DESCRIPTION:

This project includes site grading for a new residential subdivision in North St. Paul, Ramsey County, MN (Lat: 45.021251, Long: -93.001876).

The site work will include disturbance of approximately 2.6 acres for the construction of five twin homes, as well as related utilities and associated site grading. Approximately 3,700 CY of material will be excavated and relocated on-site, and all areas will be stabilized and restored as indicated in the plans.

The existing site is vacant and included a church previously. No groundwater or soil contamination is anticipated (16.15).

The Contractor shall sign the MPCA NPDES Construction Stormwater Permit application as "Operator" and be solely responsible for meeting the erosion and sediment control requirements of the permit.

Disturbed Area: 2.6 acres
Pre-Construction Impervious Area: 0.00 acres
Post-Construction Impervious Area: 0.57 acres
Newly Created Impervious Area: 0.57 acres
Permanent Stormwater Treatment Required by MPCA (If >1.0 acre): NO

PERMANENT STORMWATER MANAGEMENT:

Permanent stormwater management is required by the City an Ramsey Washington Metro Watershed District (RWMWD), and is described in detail in the project Stormwater Management Plan (SWMP) report. In summary, the site has been designed to infiltrate a WQV of 1.1" from the site impervious area, as well as control rate of discharge for the design storm events. With no direct pipe inlet to the basin, pretreatment will be provided in grass swales.

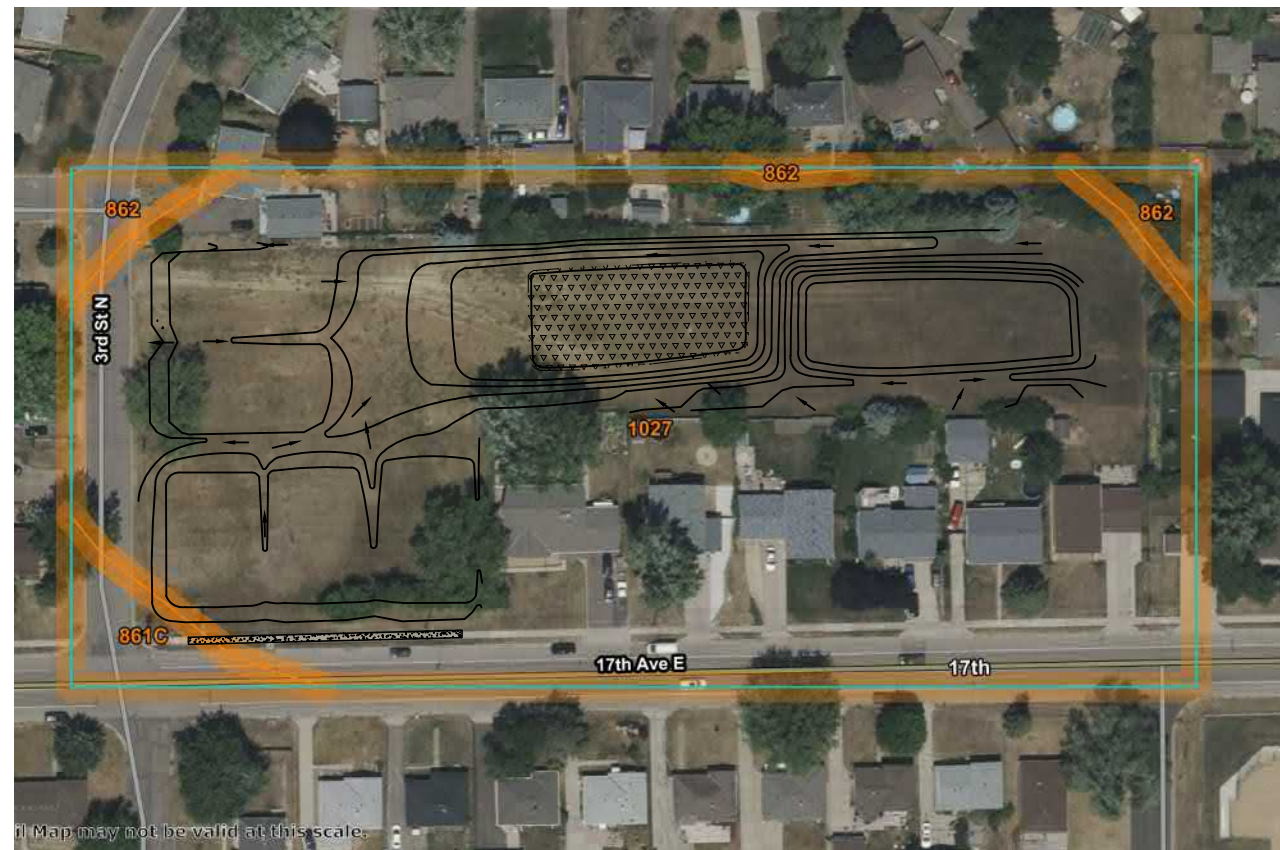
Geotechnical borings have been completed to a depth of approximately 20 ft; neither mottling nor groundwater level were noted. A minimum of 3' of separation is provided (as required) from bottom of infiltration to SHWT elevation (bore limit, in this case).

Soils at the site are primarily clays near the surface, with sandy-loams at depth in various areas. The soils range in hydrologic condition from highly permeable HSG Type A soils to low permeability HSG Type D soils. Since surface soils are all clayey near surface, this Type D condition is reflected in design runoff curve numbers. Soil permeability improves at depth in the area of the proposed infiltration basin, and therefore infiltration is feasible for stormwater management.

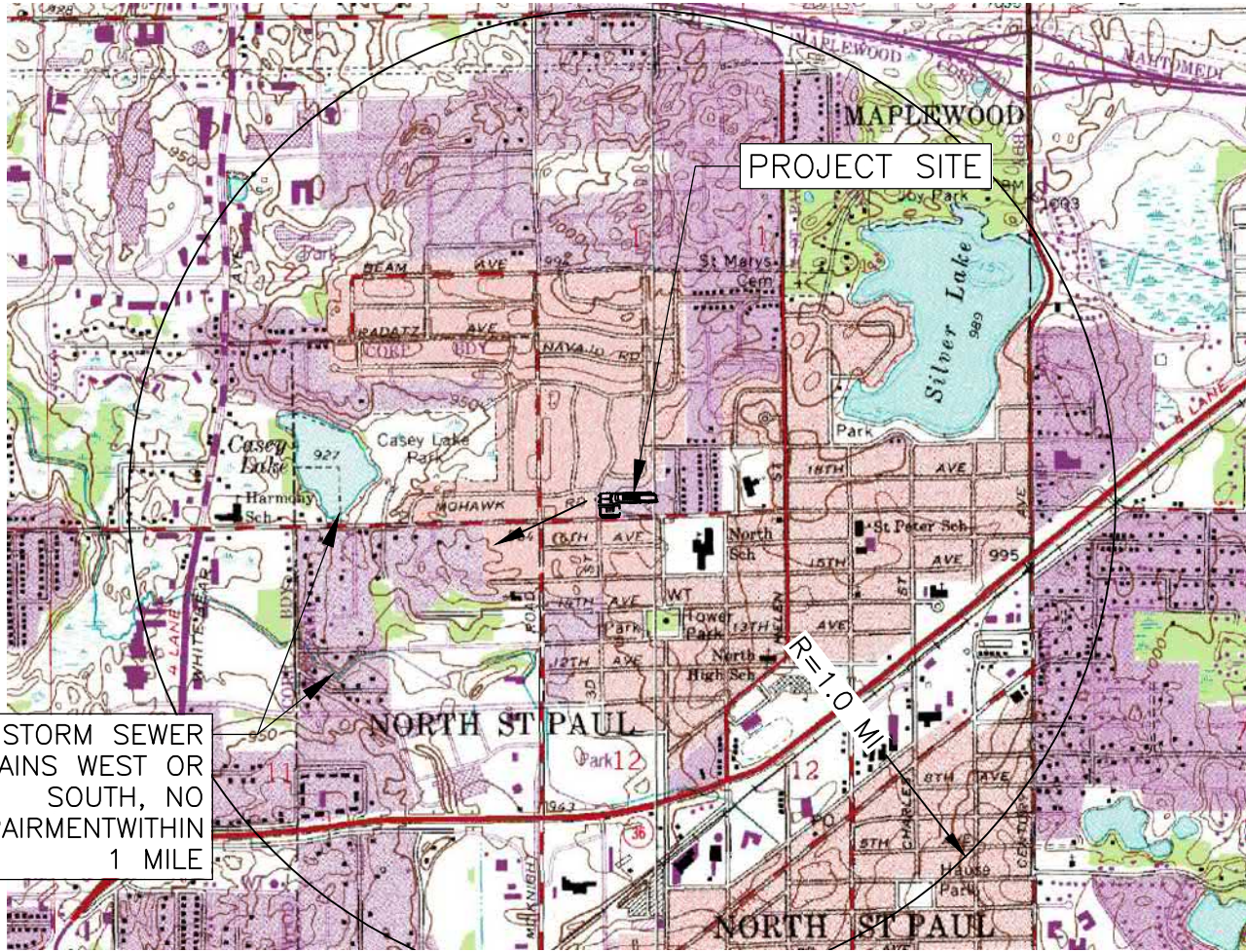
The entire property drains west and south into storm sewer in the adjacent streets. A small depression exists in the northeast corner of the property that collects runoff from nearby backyards before overflowing west through the site. A swaled outlet will be graded to drain the depression, which should help the existing drainage condition of neighboring properties.

The project site does not discharge to an Impaired Water within 1 mile, as defined by the State's Impaired Waters List.

SOILS MAP



DOWNSTREAM SURFACE WATERS AND WETLANDS



EROSION & SEDIMENT CONTROL QUANTITIES

EROSION & SEDIMENT CONTROL

- 1.The contractor shall use phased construction whenever practical to minimize disturbed area at any one time. Disturbed area shall not exceed that which can be effectively inspected and maintained.
- 2.All exposed soil areas, including stockpiles, must be stabilized as soon as possible to limit soil erosion but in no case later than 14 days after the construction activity in that portion of the site has temporarily or permanently ceased.
- 3.The following shall be installed within 24 hours of connection to surface water or property edge:
 - 3.1.Energy dissipation (riprap) at all outlet aprons
 - 3.2.Stabilization of temporary or permanent drainage swales within 200' of property boundary or connection to surface water (e.g., storm sewer inlet, drainage swale, etc.)
- 4.A vehicle tracking BMP must be installed at the site entrance where haul vehicles are entering and exiting the site, including: rock pad, slash mulch, wash rack, etc. Streets must be swept within 24 hours of discovery of offsite tracking.
- 5.Temporary stockpiles must have silt fence or other applicable sediment control device around the base of the pile.
- 6.The Contractor shall be responsible to control sediment-laden surface water from leaving site. All mobilized sediment that has left the construction zone shall be collected by the contractor and properly disposed of at no additional cost to the owner.
- 7.Any fines levied due to inadequate erosion or sediment control practices, sediment discharging from the site, etc., shall be the responsibility of the Contractor.
- 8.Inlets shall be protected from sediment at all times, with appropriate protection installed for each phase of development.
- 9.Infiltration basin shall not be excavated to final grade until contributing drainage area has been fully stabilized, unless rigorous measures are incorporated to keep sediment from draining to the basins (16.4).
10. When excavating to within 3' of final grade of infiltration basin, area shall be staked to ensure vehicles and equipment do not compact the soil in basin bottom.
11. Additional temporary BMPs may be required to reduce the potential for sediment transport during construction. If deemed necessary by onsite personnel, Engineer or Owner shall be contacted immediately for approval or guidance, if available. Otherwise best judgment shall be used to provide rapid stabilization or sediment controls as necessary to minimize potential pollutant discharge.

CONSTRUCTION IMPLEMENTATION SCHEDULE & PHASING

- 1.Install perimeter silt fence / sediment logs, and construction entrance as shown prior to site disturbance.
- 2.Complete soil stripping and rough grading of site.
- 3.Seed and stabilize area where work is completed; provide temporary stabilization as necessary.
- 4.Install sewer and water works.
- 5.Final grade infiltration basin and install protective sediment control log.
- 6.Replace topsoil and establish vegetative cover.
- 7.Complete site restoration and final stabilization measures (remove temporary controls after construction acitivity has ceased and vegetation is established).
- 8.Submit Notice of Termination (NOT) to MPCA within 30 days.

DEWATERING & BASIN DRAINING

- 1.Dewatering water, if necessary, must be discharged to a sediment control device (e.g., sediment basin or trap, filter bag, etc.) to prevent sediment-laden water with visual turbidity from discharging downstream. To the extent feasible, use well-vegetated upland areas of the site to infiltrate dewatering water before discharge. Contractor must visually check and photograph the discharge at the beginning and at least once every 24 hours of operation.
- 2.If nuisance conditions result from the discharge (e.g., cloudy or opaque water, oil film, erosion, etc.), Contractor must cease dewatering and correct the situation immediately.
- 3.If discharge water contains oil or grease, an oil-water separation or filtration device shall be used prior to discharge.
- 4.Use appropriate energy dissipation measures on all discharges to prevent erosion at discharge outlet. Discharge must not cause nuisance or erosive conditions to downstream properties or receiving channels. Excessive inundation of downstream wetlands is not permitted (if applicable).
- 5.If filters with backwash water are used, all backwash water must be hauled offsite for disposal, returned to the beginning of the treatment process, or incorporated into the site in a manner not causing erosion.
- 6.Contractors shall inspect and photograph discharge at the beginning of, and every 24 hours during, operation.

INSPECTIONS & MAINTENANCE

1. The contractor must routinely inspect the construction site and areas adjacent to the project once every 7 days during construction, and within 24 hrs of receiving more than ½" of rain in 24 hrs. Rainfall amounts must be measured by a properly installed rain gage onsite, or from a weather station within 1 mile of the project, or from a weather reporting system with site specific radar rainfall summaries (11.11).
2. All inspections and rainfalls > ¼" must be recorded and retained onsite with the SWPPP. Inspections shall include: date/time, name of individual, date & amount of rainfall, findings, corrective actions, observed discharge/location/description, any proposed SWPPP amendments.
3. Inspections may be suspended when work is stopped due to frozen conditions. The Contractor's inspector must resume inspections within 24 hours after runoff occurs at the site or prior to resuming construction, whichever comes first.
4. Silt fence (or related perimeter control device) must be maintained when accumulated sediment reaches ½ the height of the device, or if device becomes ineffective (by the end of the next business day following discovery).
5. Permanent and temporary sediment basins, if applicable, shall be drained and cleaned when sediment depth reaches ½ of original storage volume; complete within 72 hrs of discovery. Must be cleaned prior to project completion.
6. Non-functional BMPs must be repaired or replaced by the end of the next business day following discovery.
7. Inspect downstream drainage system for signs of erosion or sediment buildup during each inspection; stabilize within 7 days.
8. Contractor shall inspect and photograph dewatering discharges at the beginning and every 24 hours during operation.
9. Inspect vehicle exit locations and adjacent streets; remove sediment from surfaces within 1 day.

POLLUTION PREVENTION

1. All solid waste generated at the site must be disposed of in accordance with all applicable federal and state regulations.
2. All hazardous materials must be properly stored/contained to prevent spills or leaks; materials must be properly disposed of perapplicable regulations, including Minn. Rule Ch. 7045. Restricted access storage areas must be provided to prevent vandalism.
3. Vehicle or equipment washing must be confined to a defined area (minimum of 100' from pond or drainage ditch); runoff containing any hazardous materials must be collected and properly disposed of. Defined area must be delineated with heavy-duty silt fence (incidental); no engine degreasing is allowed on-site.
4. Pesticides, herbicides, insecticides, fertilizers, treatment chemicals, and landscape materials must be under cover to prevent pollutant discharge, or protected by similar means to minimize potential contact with stormwater.
5. Concrete and other washout waste must be effectively contained – solid and liquid washout waste must not contact ground and must be disposed of properly in compliance with MPCA rules. A sign must be installed at washout area requiring personnel to utilize the proper facilities for disposal of concrete and other wastes.
6. The contractor is solely responsible for monitoring air pollution and ensuring that it does not exceed levels set by any agency or LGU. This includes dust created by work performed at the site; air pollution and dust control measures are incidental to the contract. The engineer may require additional dust control measures to be implemented, as necessary.
7. Adequate temporary restroom facilities shall be present onsite in a stable and secure location during construction operations, and shall be maintained in an adequate functioning condition.

FINAL STABILIZATION & NOTICE OF TERMINATION (NOT)

1. The Contractor must ensure final site stabilization meets the Permit requirements, and submit the NOT within 30 days.
2. Final stabilization includes uniform perennial vegetative cover of at least 70% of the expected final growth density over the entire pervious surface area, or other equivalent cover to prevent soil erosion.
3. All temporary synthetic and structural BMPs must be removed as part of final stabilization.
4. Ground or aerial photographs shall be taken and submitted with the NOT, confirming final stabilization measures.

SWPPP UPDATES & RECORD RETENTION

1. The SWPPP, all revisions to it, and inspection & maintenance records are the responsibility of the Contractor and must remain at the site during construction hours. The materials may be kept in a field office, onsite vehicle, or "SWPPP Mailbox", or be otherwise electronically available on-site.
2. This SWPPP shall be updated within 7 days to include additional or modified designs when there is a change in design having significant effect on the discharge of pollutants to surface waters or groundwater.
3. Training documentation shall be provided by Contractor as outlined below and required.
4. The SWPPP, project permits, inspection/maintenance logs, stormwater maintenance agreements, and stormwater management design calculations must be retained for 3 years after submittal of permit NOT. Contractor shall provide Owner or Engineer copies of inspection and maintenance logs prior to final payment.

TRAINING REQUIREMENTS

1. The permittees must comply with the training requirements as outlined in Section 21 of the Permit. The Contractor shall have a trained individual performing BMP installations and inspections, as required.
2. Training table (below) to be completed prior to construction, as appropriate.

RESPONSIBLE PARTIES & TRAINING SUMMARY

	COMPANY	CONTACT	PHONE	TRAINING DATE	COURSE / ENTITY	CONTENT
OWNER:				NA	NA	NA
SWPPP PREPARER:	CIVIL METHODS, INC.	KENT BRANDER, PE	763.210.5713	1/24/2022	UNIVERSITY OF MN	DESIGN OF CONSTR. SWPPPS
GENERAL CONTRACTOR / INSPECTOR:						
EROSION & SEDIMENT CONTROL INSTALLER:						
PERMANENT BMP OPERATOR / MAINTAINER:				NA	NA	NA

CIVIL METHODS, INC.

P.O. Box 28038
St. Paul, MN 55128
o:763.210.5713 | www.civilmethods.com

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

DAVID M. POGGI

DATE: 06-20-2024
LIC. NO.: 44573

DESIGNED: DMP

DRAWN: DMP

CHECKED: KEB

DATE / REVISION:
03-18-2024 Preliminary Plan Review Set. NOT FOR CONSTRUCTION
05-03-2024 Revised Lot 1-4 FFE & maintenance access route / grading. NOT FOR CONSTRUCTION
05-24-2024 Shifted basin east and changed to SOG homes per WD comment. NOT FOR CONSTRUCTION
06-19-2024 Revised per City, RWMWD, & County review comments.
06-20-2024 Revised Landscaping Plan.

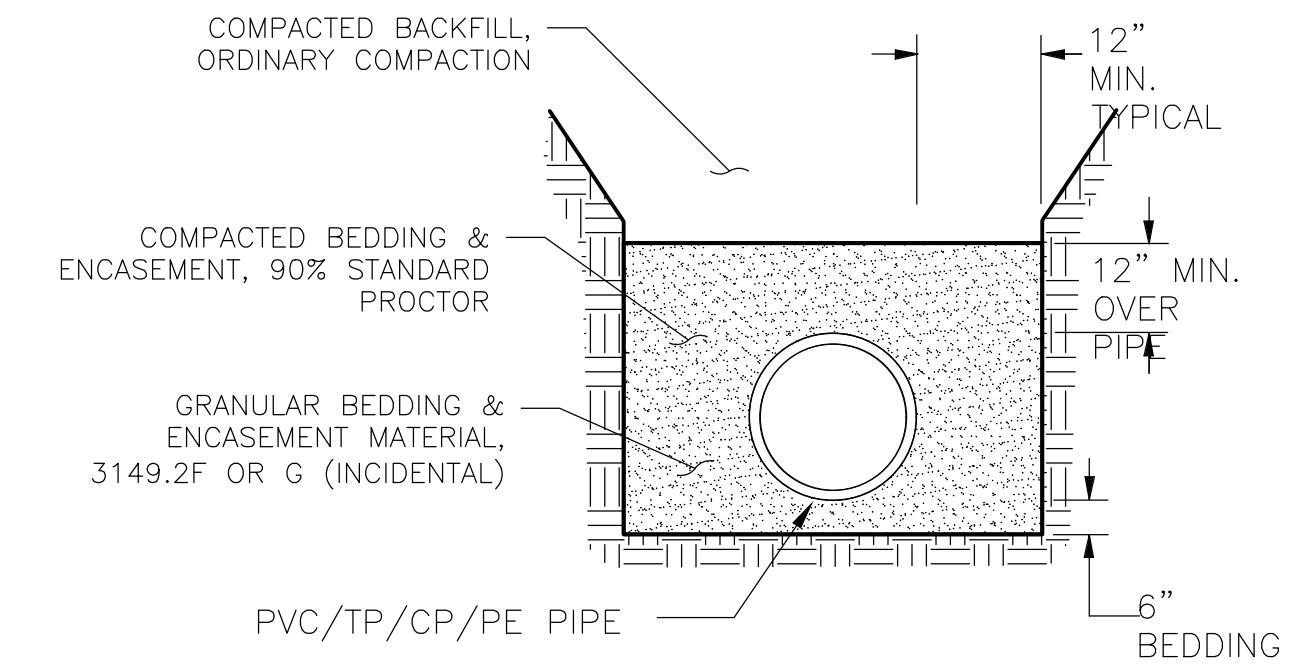
DELAWARE PLACE

ANDRUS BUILT, LLC
NORTH ST. PAUL, MN

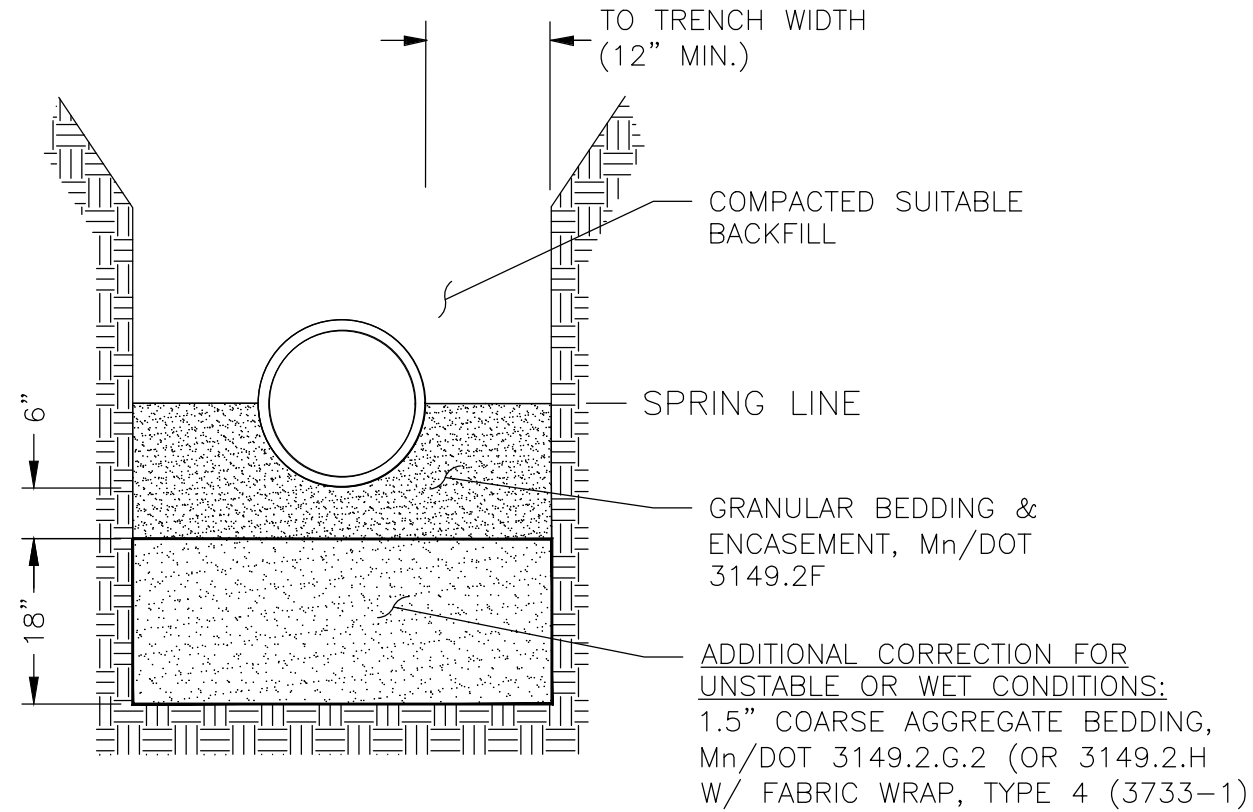
SWPPP

SHEET NO:

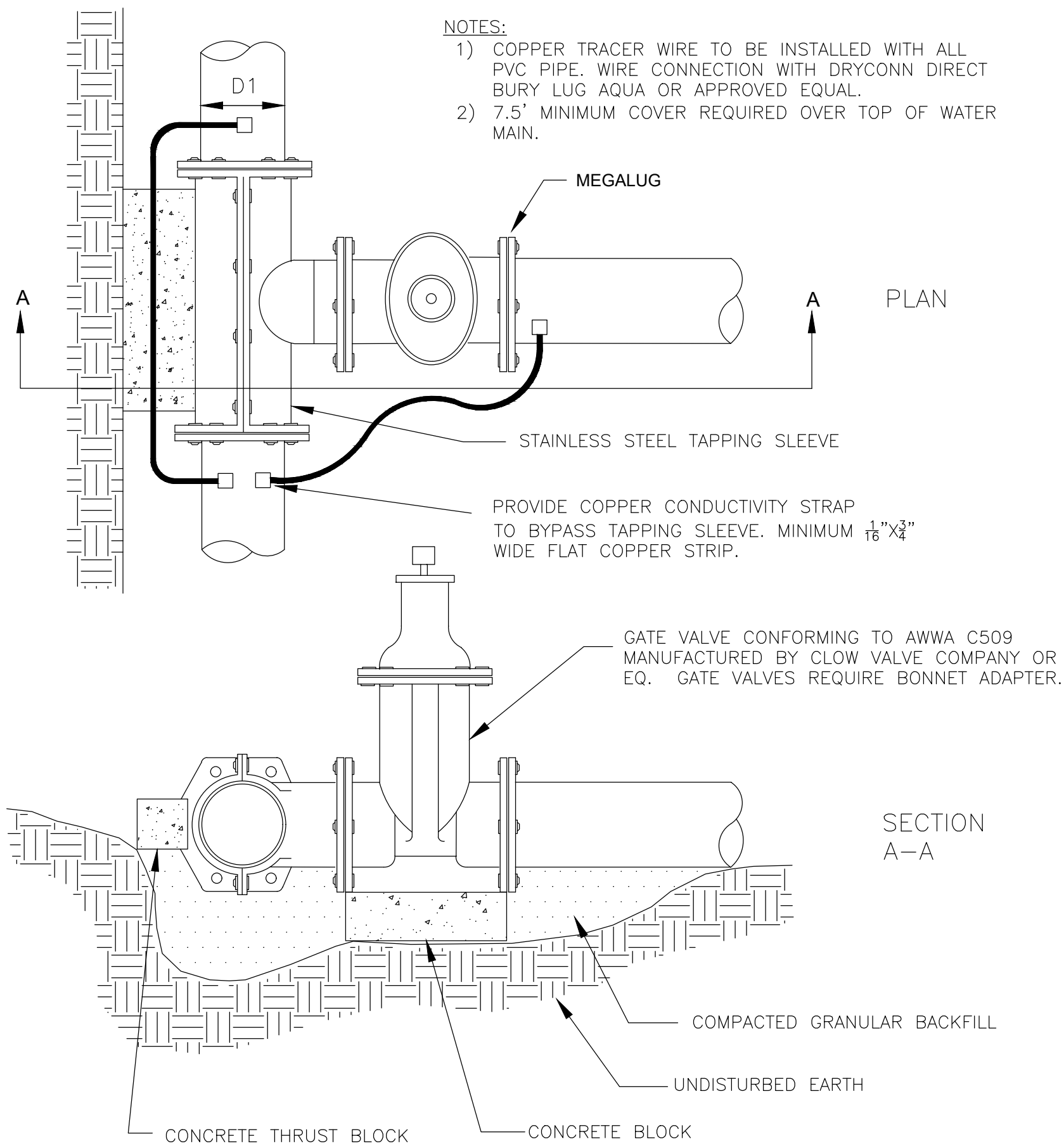
C502



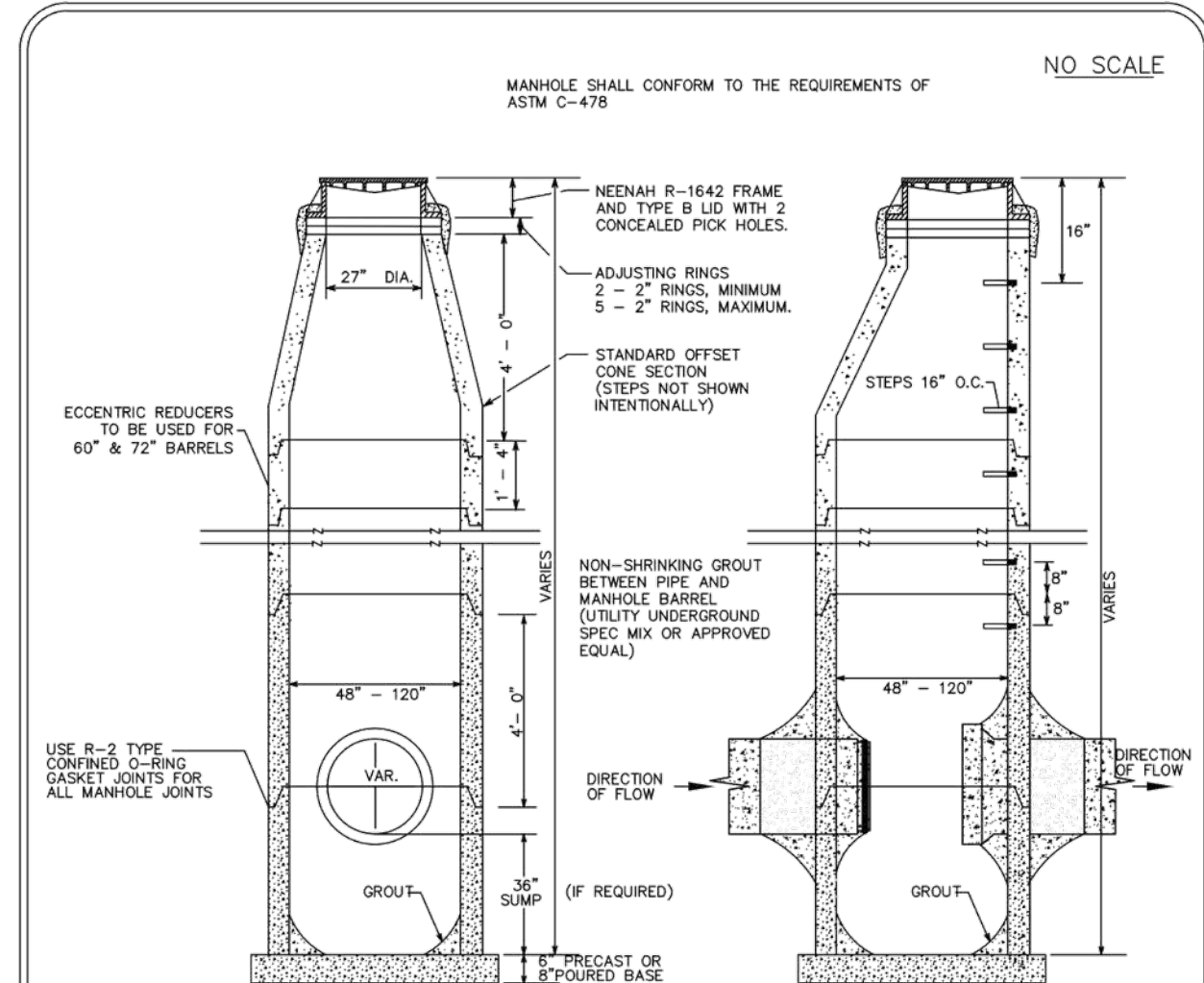
1 PIPE TRENCH – FLEXIBLE & DIP



2 CONCRETE PIPE TRENCH



3 WATER MAIN WET-TAP

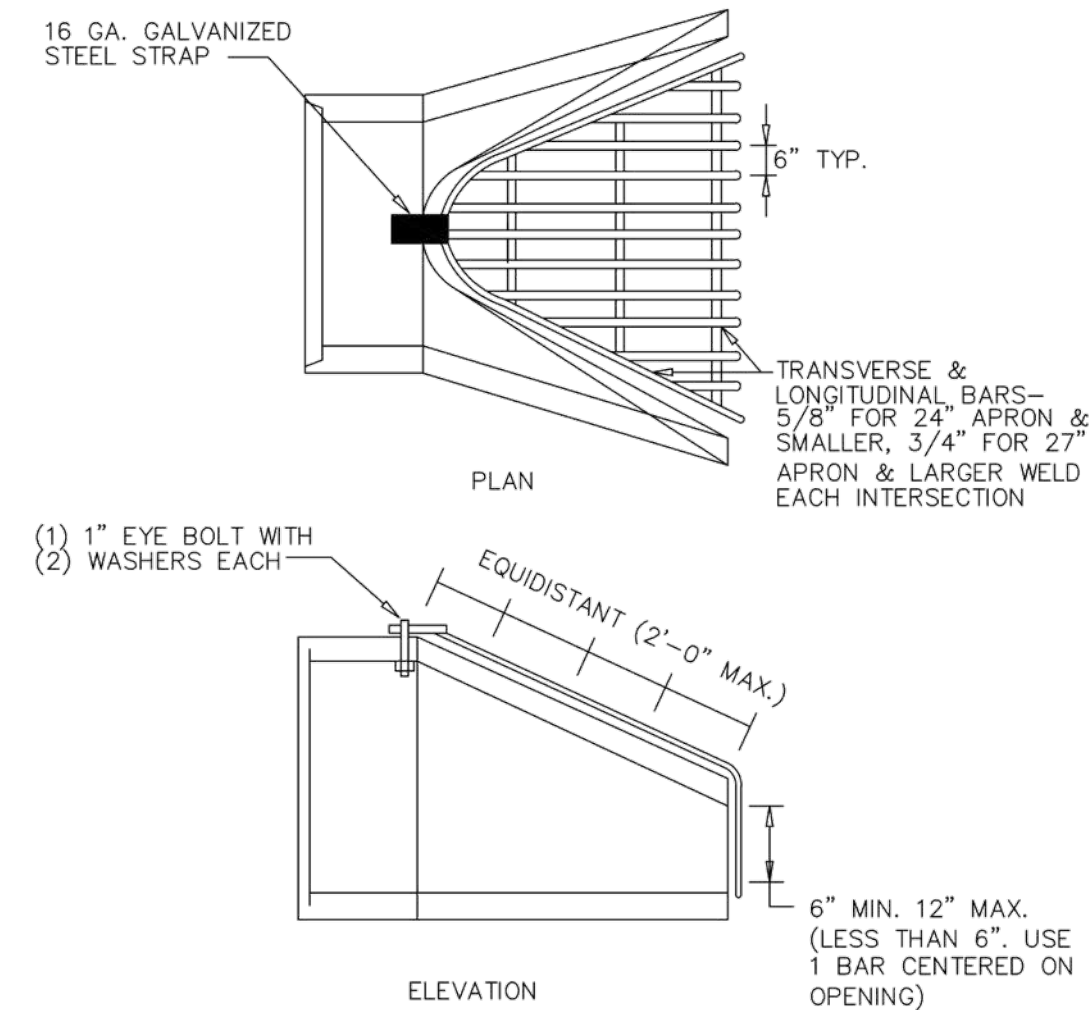


- NOTES:
1. MANHOLE STEPS SHALL BE ALUMINUM OR STEEL REINFORCED PLASTIC CONFORMING TO MNDOT SPEC. 2506 AND SHALL BE LOCATED ON THE DOWN STREAM SIDE OF THE MANHOLE
 2. STEPS SHALL BE PLACED SO THAT THE OFFSET VERTICAL PORTION OF THE CONE IS FACING DOWN STREAM
 3. MANHOLE COVER SHALL BE CAST WITH THE WORDS "STORM SEWER"
 4. MAXIMUM DEPTH FROM TOP OF CASTING TO FIRST STEP SHALL NOT BE MORE THAN 16"
 5. STEPS SHALL ALIGN WITH THE OPENING TO PROVIDE ACCESS TO THE MANHOLE



STANDARD MANHOLE
FOR STORM DRAIN

SPECIAL DETAILS	
Date: Dec. 2018	STM-3
Revised:	

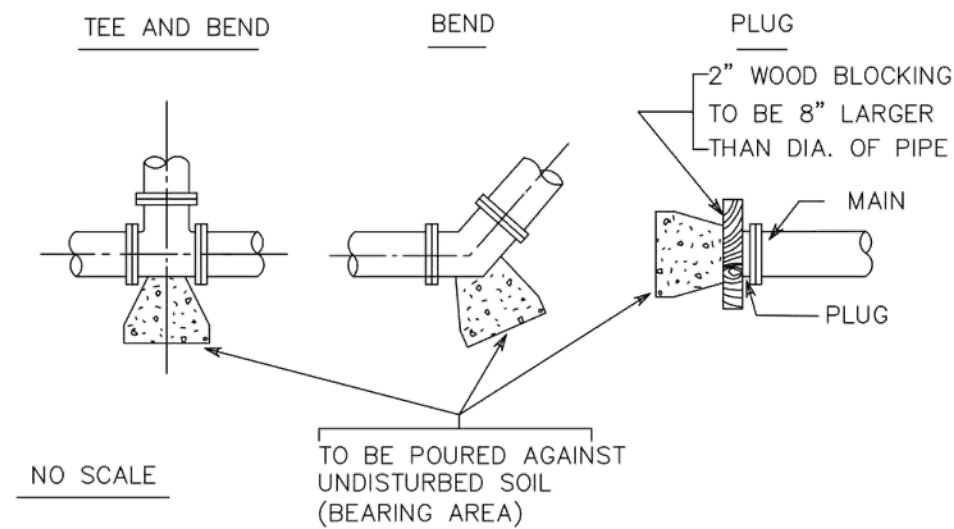


- NOTES:
1. ENTIRE TRASH GUARD ASSEMBLY TO BE HOT-DIP GALVANIZED AFTER FABRICATION.
 2. SIZE OF TRASH GUARD DETERMINED BY SIZE OF FLARED END SECTION.
 3. PLACE TRASH GUARDS ON APRONS 18" AND LARGER, UNLESS OTHERWISE NOTED.



TRASH GUARD FOR
STORM SEWER APRONS

SPECIAL DETAILS	
Date: Dec. 2018	STM-11
Revised:	



PIPE SIZE	BEARING AREA
6"	4.0 SQ. FT.
8"	6.0"
10" - 12"	12.0"
16"	20.0"

- NOTES:
1. THRUST BLOCKING TO BE USED FOR ALL BENDS
 2. THRUST BLOCKING SHALL ONLY BE USED WHERE WORKING PRESSURES ARE LESS THAN 150 PSI
 3. ALL FITTINGS MUST HAVE MEGA-LUGS. 3/4" TIE RODS INSTALLED WHERE NECESSARY TO RESTRAIN ALL JOINTS
 4. POURED CONCRETE THRUST BLOCKING WILL BE REQUIRED ON ALL WATERMAIN PLUGS AND ON ALL FITTINGS FOR 12" DIAMETER PIPE AND LARGER OR AS DIRECTED



THRUST BLOCKING
FOR WATERMAIN

SPECIAL DETAILS	
Date: Dec. 2018	W-7
Revised:	

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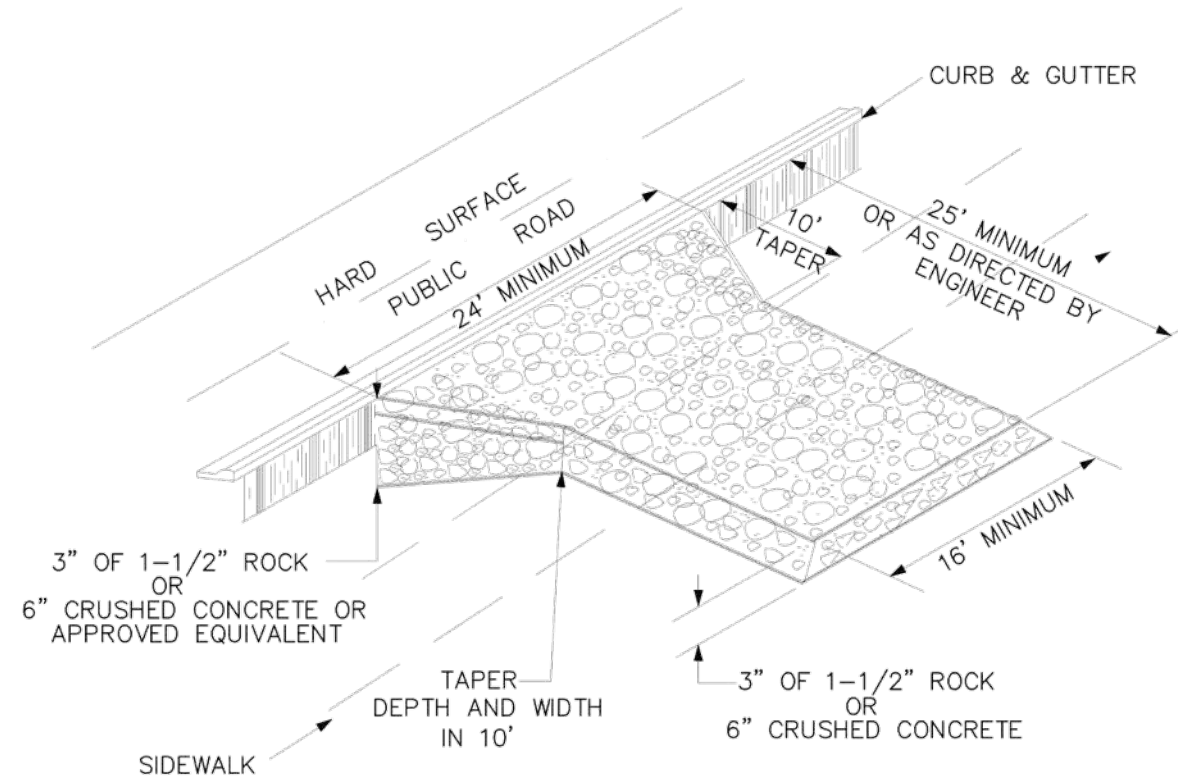
DELAWARE PLACE
ANDRUS BUILT, LLC
NORTH ST. PAUL, MN

DETAILS

SHEET NO:
C602

DETAILS ARE NOT TO SCALE

SPECIAL NOTE:
SPECIAL ATTENTION SHALL BE PAID WHEN
INSTALLING DRIVEWAYS TO NOT
UNDERMINE OR DAMAGE EXISTING
SIDEWALKS.



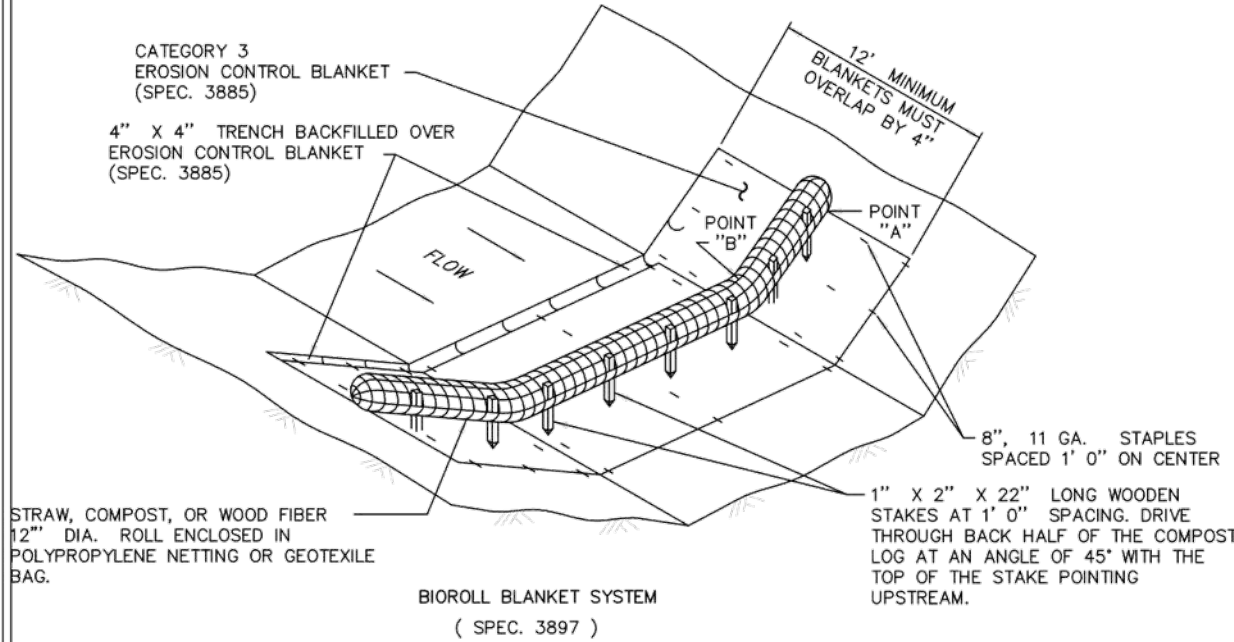
NORTH
ST. PAUL

ROCK CONSTRUCTION
ENTRANCE

SPECIAL DETAILS

Date: Dec. 2018
Revised:

EC-1



- NOTES
1. FILTER BARRIERS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.
 2. SHOULD THE BIOROLL DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USEABLE LIFE AND THE BARRIER STILL BE NECESSARY, THE BIOROLL SHALL BE PLACED PROMPTLY.
 3. SEDIMENT DEPOSITS MUST BE REMOVED WHEN DEPOSITS REACH APPROXIMATELY 1/2 HEIGHT OF THE BARRIER, OR AS DIRECTED BY THE ENGINEER.
 4. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE OR FILTER BARRIER IS NO LONGER REQUIRED, SHALL BE DRESSED TO CONFORM WITH THE EXISTING GRADE, PREPARED AND SEEDED.
 5. ALL MATERIAL & INSTALLATION MUST CONFORM TO THE REQUIREMENTS OF THE CURRENT EDITION OF THE MNDOT CONSTRUCTION SPECIFICATIONS SECTION 3887.
 6. POINT A MUST BE A MINIMUM OF 6" HIGHER THAN POINT B TO ENSURE THAT WATER FLOWS OVER THE DIKE AND NOT AROUND THE ENDS.
 7. STAPLE DENSITY SHALL CONFORM TO MANUFACTURER'S SPECIFICATIONS.



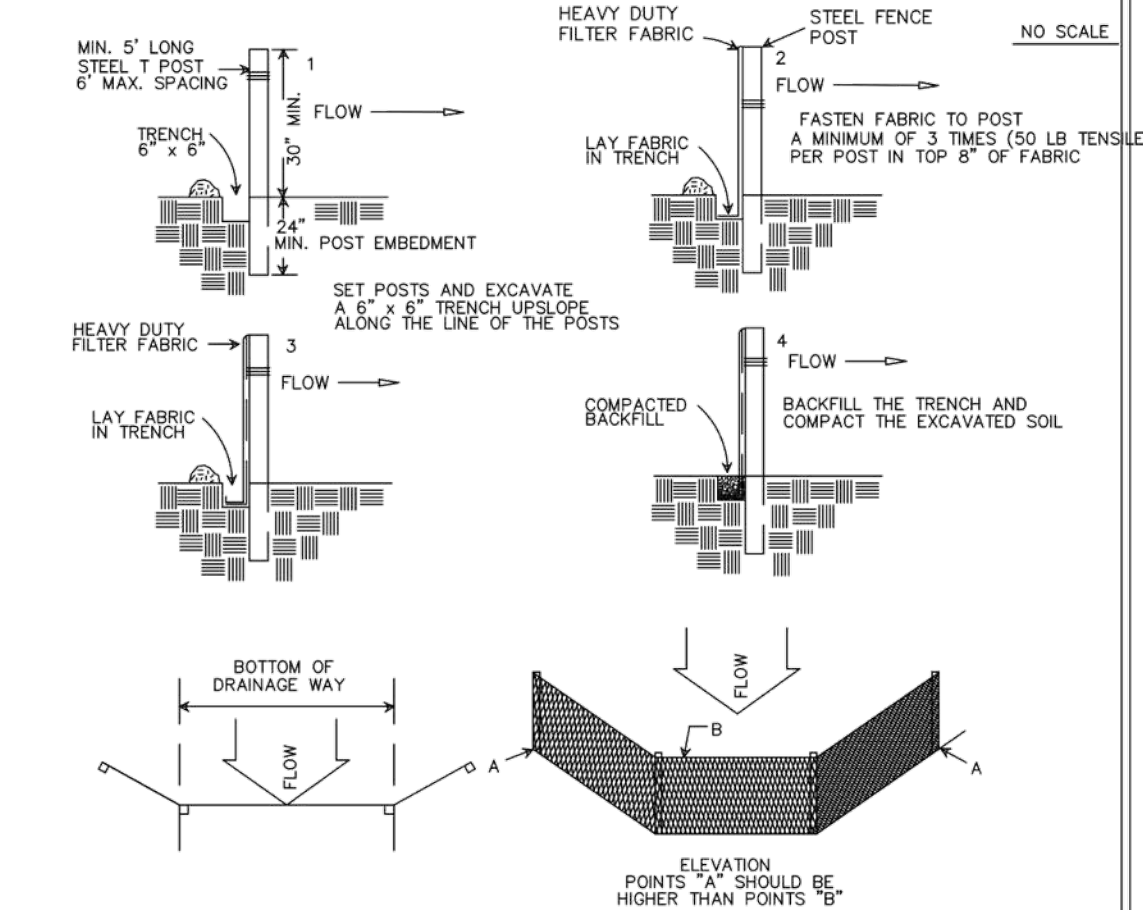
NORTH
ST. PAUL

BIO-ROLL BLANKET

SPECIAL DETAILS

Date: Dec. 2018
Revised:

EC-2



- NOTES:
1. FILTER BARRIERS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.
 2. SHOULD THE FABRIC DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USEABLE LIFE AND THE BARRIER STILL BE NECESSARY, THE FABRIC SHALL BE REPLACED PROMPTLY.
 3. WETLANDS ARE TO BE PROTECTED BY TWO ROWS OF H.D. SILT FENCE. DOUBLE H.D. SILT FENCE IS REQUIRED AROUND WATER BODIES, STEEP SLOPES AND HIGHLY ERODIBLE SOILS.
 4. SEDIMENT DEPOSITS MUST BE REMOVED WHEN DEPOSITS REACH APPROXIMATELY 1/2 HEIGHT OF THE BARRIER, OR AS DIRECTED BY THE ENGINEER.
 5. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE OR FILTER BARRIER IS NO LONGER REQUIRED, SHALL BE DRESSED TO CONFORM WITH THE EXISTING GRADE, PREPARED AND SEEDED.
 6. ALL MATERIAL & INSTALLATION MUST CONFORM TO THE REQUIREMENTS OF THE CURRENT EDITION OF THE MNDOT CONSTRUCTION SPECIFICATIONS TABLE 3886-1.



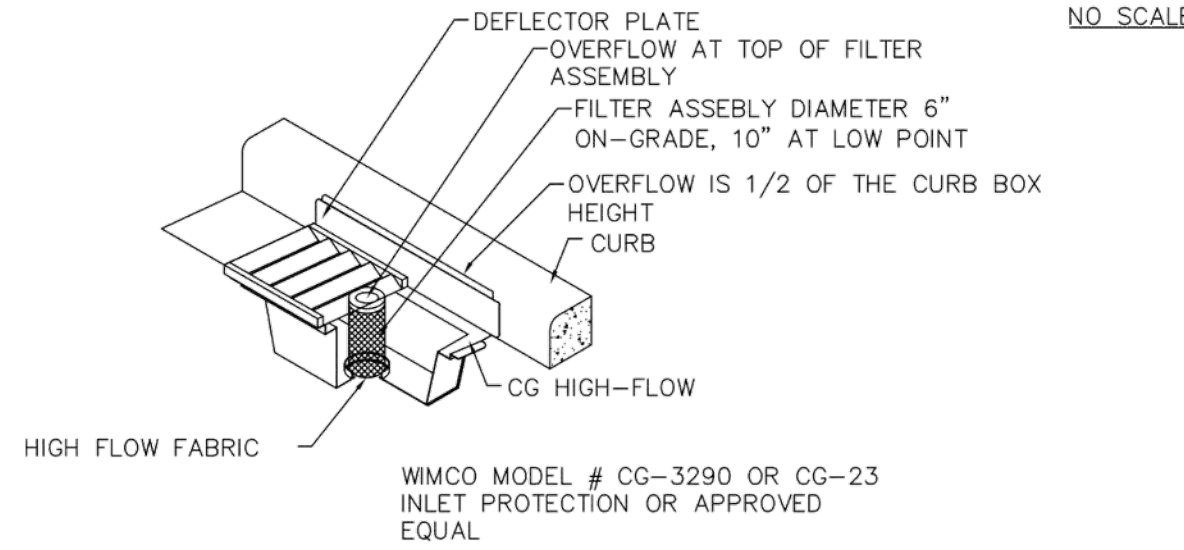
NORTH
ST. PAUL

PLACEMENT AND
CONSTRUCTION OF
SILT FENCE

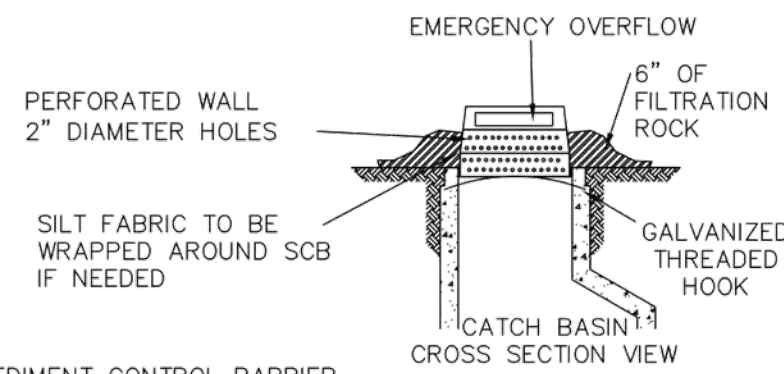
SPECIAL DETAILS

Date: Dec. 2018
Revised:

EC-3



CURB AND GUTTER INLET PROTECTION



INFRASAFE SEDIMENT CONTROL BARRIER
ROYAL ENVIRONMENTAL SERVICES OR AN
ENGINEER APPROVED EQUAL

REAR YARD INLET PROTECTION

- NOTES:
1. DEVICES TO BE INSTALL IMMEDIATELY UPON INSTALLATION OF CONCRETE STRUCTURE CONE OR TOP SLAB. CASTING ASSEMBLY MUST ALSO BE AT LEAST TEMPORARILY IN PLACE.
 2. CHECK FILTER MEDIA AFTER EACH RAIN EVENT & CLEAN AND REPLACE IF SEDIMENT CLOGS FILTER.
 3. REMOVE SEDIMENT AND DEBRIS FROM RECEPTICLE AFTER EACH RAIN EVENT.



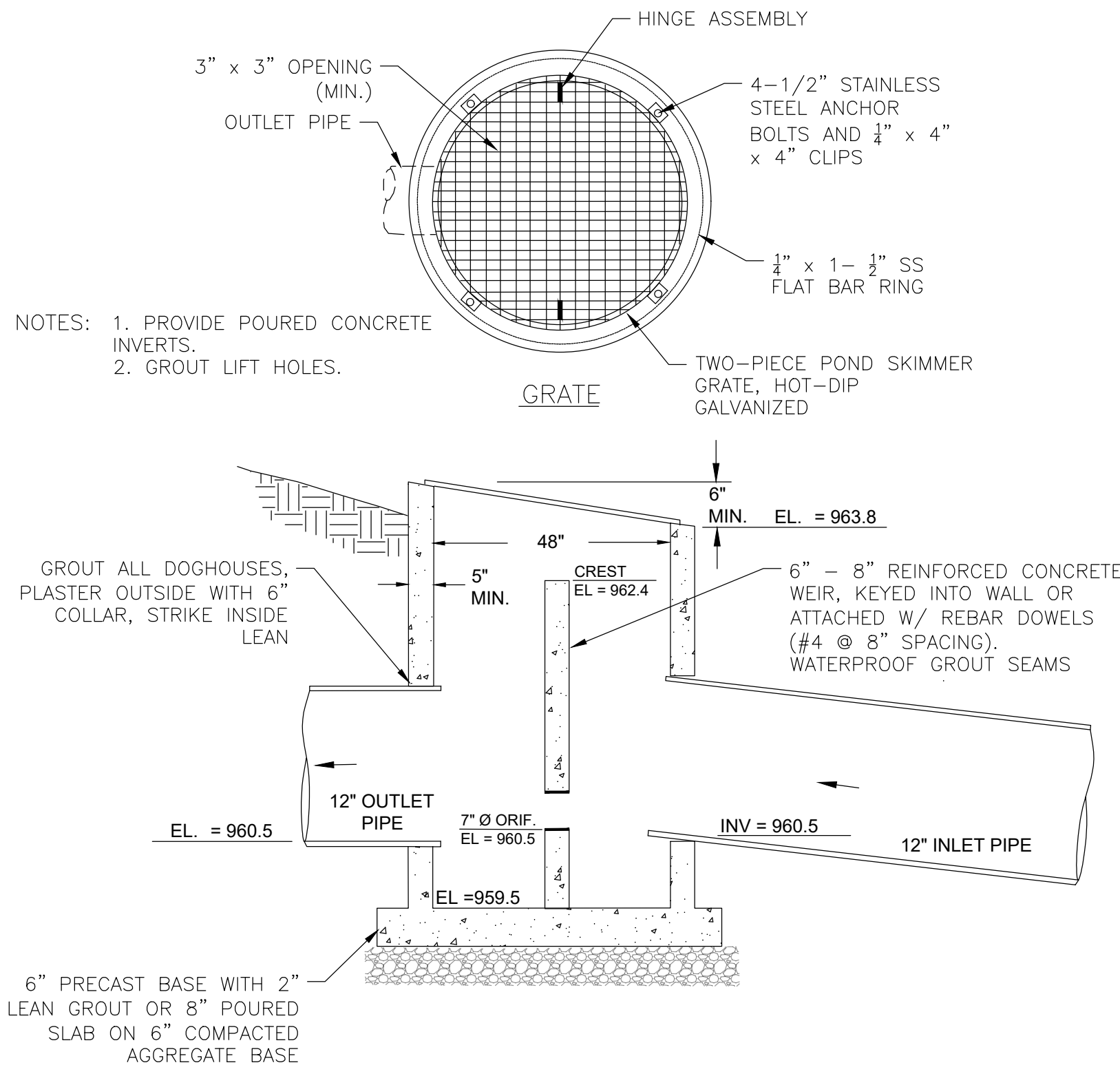
NORTH
ST. PAUL

STORM SEWER
INLET PROTECTION

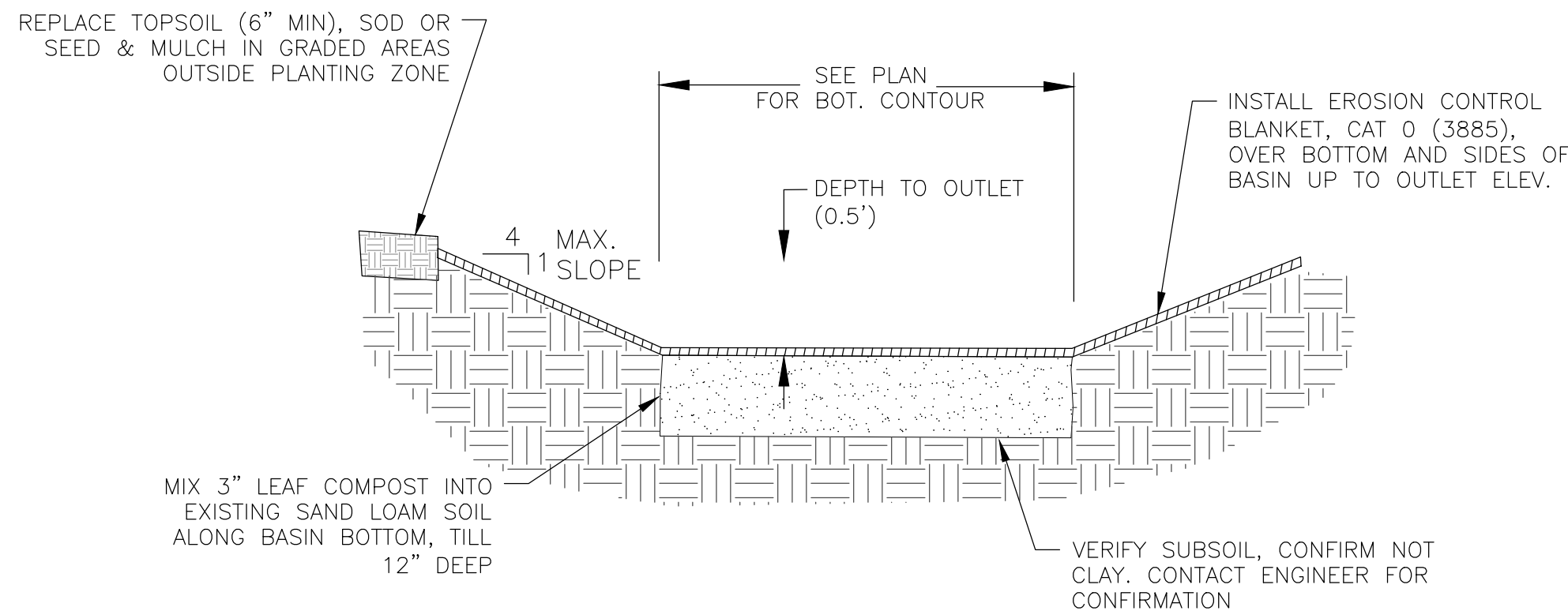
SPECIAL DETAILS

Date: Dec. 2018
Revised:

EC-5



- NOTES:
1. PROVIDE POURED CONCRETE INVERTS.
 2. GROUT LIFT HOLES.



BASIN VEGETATION: INSTALL WET-TOLERANT "RAIN GARDEN" NATIVE SEED MIX (Mn/DOT MIX 33-261 OR EQ), ALTERNATIVELY, INSTALL NATIVE "RAIN GARDEN" PLANT PLUGS FOR QUICKER ESTABLISHMENT

INSTALL EROSION CONTROL
BLANKET, CAT 0 (3885),
OVER BOTTOM AND SIDES OF
BASIN UP TO OUTLET ELEV.

VERIFY SUBSOIL, CONFIRM NOT
CLAY. CONTACT ENGINEER FOR
CONFIRMATION

1 POND OCS W/ INTERNAL WEIR

2 INFILTRATION BASIN

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DELAWARE PLACE
ANDRUS BUILT, LLC
NORTH ST. PAUL, MN

DETAILS

SHEET NO:

C603

DETAILS ARE NOT TO SCALE

3. Contractor shall obtain and pay for all permits, tests, inspections, etc. required by agencies that have jurisdiction over the project, not previously applied for by the Owner (Contractor to verify). Execute and inspect work in accordance with all Local and State codes, rules, ordinances, or regulations pertain to the particular type of work involved.
2. The subsurface utility location information in this plan is utility quality level D. This utility quality level was determined according to the guidelines of CI/ASCE 38-02, titled "Standard Guidelines for the Collection and Depiction of Existing Subsurface Utility Data." Engineer does not guarantee the accuracy of utility locations or that all existing utilities are shown; Contractor is responsible for locating utilities.
3. Existing boundary, utility and topographic information shown on this plan from topographic survey produced by Acre Land Surveying.
4. Contractor to call Digger's Hotline / Gopher State One Call for location of all utilities within the construction area prior to beginning construction. Digger's Hotline: 811 Gopher One: 800.252.1166.
5. Where existing utilities such as gas, electric, telephone or cable lines conflict with the work, Contractor shall coordinate the abandonment, removal, relocation, offset, or support of the existing utilities with the appropriate local utility companies. Coordinate any new gas meter and gas line installation, electric meter and electric service installation, cable service, and telephone service installation with the local utility companies.
6. Contractor is solely responsible for jobsite conditions, including safety of all persons and property throughout the duration of the project (not limited to working hours).
7. Contractor is responsible for providing traffic control as necessary at site entrance, including barricades, flag persons, warning signs, etc. Controls shall be installed and maintained per Mn/DOT standards.
8. Construction shall be performed in accordance with the referenced standards and specifications, including: Mn/DOT, CEAM, Minnesota Plumbing Code, International Building Code, City Codes, ASTM, and the ADA.
9. Contractor shall include in prices bid for items listed all work and materials necessary to satisfactorily complete the project as indicated by these plans; additional payment will not be made for ancillary items unless prior approval is requested and received from Owner.
10. The Contractor shall provide and be responsible for all construction staking necessary to accurately perform the work identified in these plans, unless otherwise coordinate with Owner.
11. Perform all grading, base construction, pavement construction, and miscellaneous construction in accordance with the Mn/DOT Standard Specifications (latest edition) and all subsequent amendments provided that the provisions for measurement and payment do not apply to the work of this contract.
12. Protect subgrades from damage by surface water runoff. Provide and maintain temporary drainage throughout construction until the permanent drainage system is in place and operational. Install temporary ditches, piping, pumps, or other means as necessary in order to insure proper drainage at all times. Provide positive outfalls for low points at building pad and roadway/parking locations.
13. Quantities of items bid are approximate; constructed items shall be paid for quantity installed, unless indicated planned quantity (P) or lump sum.
14. All pipe testing shall conform to current Mn/DOT standards, City/LGU requirements, and/or as indicated on plans.
15. Unless other agreements are made, all work shall be warranted free of defect for a period of 1 year from project closeout; repair or replacement necessary during this period shall be completed at Contractor expense, including areas of settlement.
16. Contractor shall not impact adjacent properties and is solely responsible for any such impacts..

1. See Erosion Control and SWPPP sheets prior to beginning site disturbance.
2. Unless otherwise noted, all proposed grades shown are finished grades. Finished grades at the points between spot elevations or contours are determined by uniform slopes between the given grades.
3. Earthwork is not necessarily balanced given topsoil assumptions; site work determination is the responsibility of the Contractor.
4. At locations where new work connects to existing work, field verify existing elevations and grades prior to beginning the new work. Match existing grades at construction limits.
5. Topsoil from grading areas shall be stripped, salvaged and stockpiled; subcut below final grade for placement of a minimum of 6" salvaged topsoil in green areas (incidental).
6. Building pads and maintenance access route to be brought to grade with suitable material.
7. Swales and areas outside building or pavement footprints to be formed and compacted per Mn/DOT 2105. Spread in layers no thicker than 8" and compact with suitable compaction equipment.
8. At the direction of the Engineer/Owner, offsite suitable borrow or stabilizing aggregate may be required for structural areas.
9. Building pads to be prepared and compacted per NTI geotechnical report recommendations (June 19, 2019).

1. Mn/DOT specification 2211 shall apply to the Class 5 aggregate construction.
2. Subgrade preparation is incidental to aggregate base construction, and shall be approved by Engineer prior to placement of aggregate.
3. The depth and class of aggregate base to be constructed shall be as shown on the plans. Aggregate base construction shall take place only after the subgrade condition and grade has been examined by the Owner/Engineer.
4. Aggregate shall be placed in lifts no greater than 4". Each layer of base course shall be wetted and rolled to achieve compaction per the Quality Compaction Method.
5. Contractor shall perform testing by driving a fully loaded tandem truck over the aggregate and areas that deflect shall be reworked.

1. Trench excavations shall be in accordance with the requirements of CEAM Standard Specifications Section 2600.3B
2. Granular Bedding and Granular Encasement – Bedding and granular encasement materials used in the pipe zone area (4" below the pipe to 12" over the pipe) shall conform to Mn/DOT 3149.2F.
3. Backfill material shall consist of soil from trench; in the case of unsuitable material, backfill shall consist of Mn/DOT 3149.D1.
4. Bedding and encasement shall be compacted to 90% Standard Proctor using Specified Density Method, or as recommended by manufacturer, whichever is denser.
5. Backfill shall be compacted in 12" lifts to Specified Density Method:
 - 5.1. 100% Standard Proctor from subgrade elevation down 3 feet.
 - 5.2. 95% Standard Proctor from bottom of excavation up to 3 feet below
6. Backfill material around all manholes, catch basins, valve boxes, curb boxes, and hydrants shall be compacted with hand-machines. The maximum lift thickness shall be 6 inches.

1. The Contractor shall keep accurate records as to the location of the service connections, field tile, utility crossings, etc., either constructed or encountered during construction. Measurements to service lines shall be taken from the two nearest permanent structures (i.e., hydrants, valves, manholes, buildings, etc.) or as directed by the Engineer. Final payment for the project will not be made until the information is in the possession of the Owner.
2. When connecting to an existing pipe or structure, Contractor shall thoroughly review existing pipe size, location and type, and be prepared for alternative pipe sizes; payment claims against Engineer for inaccurate existing information shall not be observed.
3. When connection to an existing conduit is required at proposed manhole or conduit connection, the Contractor shall expose and verify the elevation of the existing conduit prior to laying any pipe toward, or away from, the connection point. If the elevation of the existing conduit does not match the elevation shown on the plans, the Contractor shall notify the Engineer, at which time the Engineer may adjust the proposed grades.
4. Commence pipe-laying at the lowest point in the proposed sewer line and lay the pipe with the bell end or receiving groove end of the pipe pointing upgrade. Do not lay pipes in water or when the trench conditions are unsuitable for such work.
5. The inverts of existing sewers (storm and sanitary), culverts, subdrains, etc., shall be protected during construction. The Contractor is responsible to inspect and clean, if necessary, all lines which have become compromised by the construction operations.
6. Pipe shall be sleeved through masonry footings and walls (plumbing contractor).
7. **Testing and Inspections:** All plumbing installations, including water and sewer services, must be tested and inspected in accordance with the requirements of the Minnesota Plumbing Code (MN Rules Chapter 4715). Coordinate testing and inspection with State Dept. of Health and the City Public Works Department. No drainage or plumbing work may be covered prior to completing the required tests and inspections.
8. All pipes shall be tested per City requirements.

1. Pipe sewer per Mn/DOT 2503 and structures per Mn/DOT 2506
2. RCP pipe shall be Class V unless noted otherwise.
3. RCP joints shall include o-ring rubber gaskets and be water-tight.
4. Rim elevations shall be set 0.05 feet below surrounding grade or flow line elevation.
5. An adequate coupling shall be used to connect to existing pipe with a water-tight connection.
6. All water must be kept out of the bell of the pipe until the joint is completed.

1. Sanitary sewer shall be push-on PVC SDR-35 (unless noted otherwise) with elastomeric gasket joints which are bonded to the inner wall of the gasket recess for the bell socket meeting ASTM D-3212. Sewer service pipes shall be Schedule 40 with solvent cement joints per ASTM D1785, D2665.
2. Sanitary service lateral shall be installed at a minimum grade of 2.00% (4") and 1.00% (6"); any deviation shall be approved by the Engineer prior to installation.
3. Sanitary fittings are incidental.
4. When connecting to existing lines, Contractor shall field verify location, elevation, type and size of existing material to ensure a proper connection. Notify engineer if differs from plan.
5. Connections to existing structures shall be core-drilled with City-approved gasket/boot (see detail).
6. An adequate direct-bury coupling shall be used to connect to existing pipe with a water-tight connection.
7. All water must be kept out of the bell of the pipe until the joint is completed.
8. Extend service pipe to 5' past property line (residential), or within 5' of building wall; coordinate location with building contractor / mechanical drawings.
9. Maximum spacing of service cleanouts shall be 100'.
10. Sanitary service bends > 45° shall include cleatout, per MN Plumbing Code.
11. Sanitary stub end to be plugged and marked per LGU standard until building connection made.

1. Water pipe shall be ductile iron, class 52, push-on gasket pipe with plain rubber gaskets.
2. Pipe bends, tees, plugs, etc., shall contain concrete thrust blocks and mechanical joint restraints MEGALUG Series 1100 or approved equal. Thrust blocks shall be cast in place or solid blocks placed between the appurtenance and the undisturbed trench wall - fill all voids with mortar or concrete.
3. Pipes shall not be placed directly on sandstone bedrock, if encountered. Trench shall be over-excavated a minimum of 6" and filled with compacted granular/sand bedding.
4. A minimum of 7.5 feet of cover shall be provided over all water main and service pipe.
5. Maintain 18" separation from outside walls at crossings (insulation required when < 18").
6. Watermain installation shall be in accordance with CEAM Standard Specifications.
7. All ductile iron pipe shall be wrapped in polyethylene encasement meeting AWWA C105 standard for tube-type installation, with a minimum of 8 mil thickness (incidental).
8. Watermain fittings and thrust blocking are incidental.
9. Water service pipe shall be 1" copper, Type K, with curb stop.
10. Extend service pipe to 5' past property line (residential) or within 5' of building wall; coordinate location with building contractor / mechanical drawings.
7. Water stub end to be plugged until building connection made.

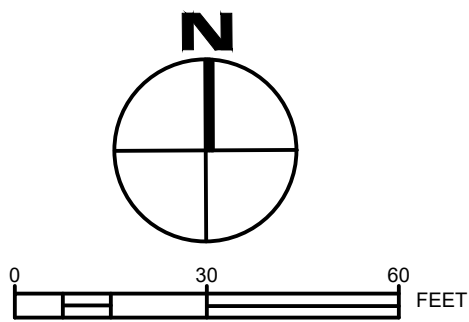
1. The infiltration area shall be staked / fenced prior to construction to prevent excessive compaction throughout construction. Minimize traffic in this area.
2. Basin shall not be excavated to within less than 6" of final grade prior to street installation and seeding and mulching of contributing areas. Grade to final grade at time of planting. If engineered media being installed, can excavate to within 6" of final bottom of media elevation.
3. Excavate the infiltration basin to final grade with light-weight equipment or from outside the basin footprint to minimize compaction to extent practical.
4. Soil borings indicate sand likely at infiltration basin bottom elevation; therefore, after final grade is reached, add 3" Grade 2 compost (Mn/DOT 3890.2B), till 8-12" deep. Clays present at basin bottom shall be replaced with Rooting Topsoil Borrow (3877.2E).
5. Plant native seed and hydromulch bottom and sideslopes of infiltration basin (see detail).

1. Concrete curbing, driveways and walks in R.O.W. shall meet City and County specifications, as appropriate.
2. ACI 330 R-08, ACI 330.1-03 Specifications and Mn/DOT Specification Section 2521 & 2531 shall apply to ready-mixed concrete pavement materials, construction, curing, and quality control for curb and gutter construction and miscellaneous concrete work (walks, driveway aprons, etc.).
3. The concrete mix (2461) to be used shall be 3F52 for curb & gutter (2531), walks and drives (2521).
4. Contractor shall supply mix design data for review.
5. Provide contraction and expansion jointing per Mn/DOT 2521 / 2531. Curb contraction joints shall be placed at even 10' increments.
6. Isolation/expansion joint (½") shall be provided at connection with existing concrete pad, as well as end of curb return; joints shall be filled with preformed joint filler material (3702).
7. Contractor shall provide a smooth radius curb return.
8. When vertical tapering is necessary (inlets and ends), taper shall be from curb height to zero height in no less than 3.0 feet (UNO).
9. All concrete shall be coated with white pigmented curing compound immediately after finishing is complete in accordance with Mn/DOT 3754, meeting ASTM C309, Type 2.
10. Testing shall be the responsibility of the Contractor, and performed by a certified independent tester as required by Owner, and may include:
 - 10.1. One set of 3 cylinders taken for every 100 cu yd of concrete (one set per day minimum).
 - 10.2. Air testing and slump testing shall be completed with each cylinder set that is molded, and should be performed at the site upon delivery, after water addition (if applicable), with results reported to Owner representative or Engineer immediately.
 - 10.3. Concrete failing to meet strength shall be removed and replaced at Contractor's expense.
11. Minimum 6" depth of Class 5 (3138) aggregate base shall be furnished under all curb. All base material shall be compacted to 100% Standard Proctor upon the prepared subgrade.
12. Base course shall be moist, but not saturated during concrete placement. Apply water not less than 6 hours before placement; if base dries, sprinkle water to moisten to avoid pools.
13. Suitable salvaged material shall be used for backfill behind curb (once concrete has obtained sufficient strength).
14. Contractor to install adequate barricades to keep automobile and pedestrian traffic off pavement for a minimum of 3 days, and truck traffic 7 days (incidental).

1. Bituminous street patches shall at a minimum match existing conditions and meet requirements of City or County, as appropriate. Agency standards shall govern.
2. Bituminous pavement shall be of type indicated in the details, meeting all material and installation requirements of Mn/DOT Specification Section 2360.
3. Test results and/or certificates of compliance shall be submitted for verification of mineral aggregates, gradation, aggregate quality, mix design, asphalt material, and tack coat.
4. The bituminous surfacing shall be prepared, handled, and constructed per Mn/DOT 2360, with a maximum deviation of plus or minus ¼ inch from the planned compacted thickness.
5. The bituminous material for tack coat shall be CSS-1, CSS-1h, CRS-1, or CRS-2 meeting requirements of Mn/DOT 2357.
6. When connecting to old bituminous pavement, a clean, straight, vertical edge will be provided by saw-cutting full depth through the existing pavement. New bituminous pavement shall match grade of existing pavement, with no noticeable difference at joint.
7. The contact surfaces of all fixed structures, the edge of the in-place mixture in all courses at transverse joints, and the wearing course at longitudinal joints shall be given a uniform coating of Liquid Asphalt or Emulsified Asphalt tackifier before placing the adjoining mixture. The bituminous material shall be applied at a rate of 0.05 Gal/SY and by methods that will ensure uniform coating and in no case shall the application be excessive. The contractor shall thoroughly clean all hard surfaces immediately before applying tack material.
8. Protect pavement areas from overloading by delivery trucks, construction equipment, and other vehicles prior to final lift compaction and cooling.
9. Compaction of all street patch / driveway / parking lot bituminous asphalt mixtures shall be by the Ordinary Compaction Method (2360).
10. Contractor shall test density of the nonwear and wear courses through an independent tester using a nuclear density meter or density of the core samples (NW only).
11. Pavement sections shall be per details.
12. Pavement marking striping shall be per Mn/DOT 2582 with epoxy resin (3590), as required by City or County.
13. Bituminous asphalt item payment includes furnishing, preparing, hauling, placing, compacting and testing.

1. Contractor shall submit all material data sheets and shop drawings with adequate time for review and approval prior to receiving materials onsite.
2. Pipe sewer shop drawings.
3. Granular and aggregate material gradations.
4. Soil media gradations.
5. Geotextile fabric specification sheets.
6. Erosion and sediment control materials.
7. Turf restoration seed mixes.
8. Bituminous mix: asphalt content and aggregate gradation.
9. Compaction and other testing results, as required by LGU.

PLANT SCHEDULE					
TREES					
KEY	QTY	COMMON NAME	BOTANICAL NAME	ROOT	CAL/SIZE
NS	3	Norway Spruce	Picea abies	B&B	6'
RC	3	Eastern Red Cedar	Juniperus virginiana	B&B	6'



BENCHMARK
(ASSUMED, SEE SURVEY)

LEGEND:

- PROPERTY LINE ———
- EASEMENT - - - - -
- DECIDUOUS TREE
- STORMWATER SEED MIX

NOTES:

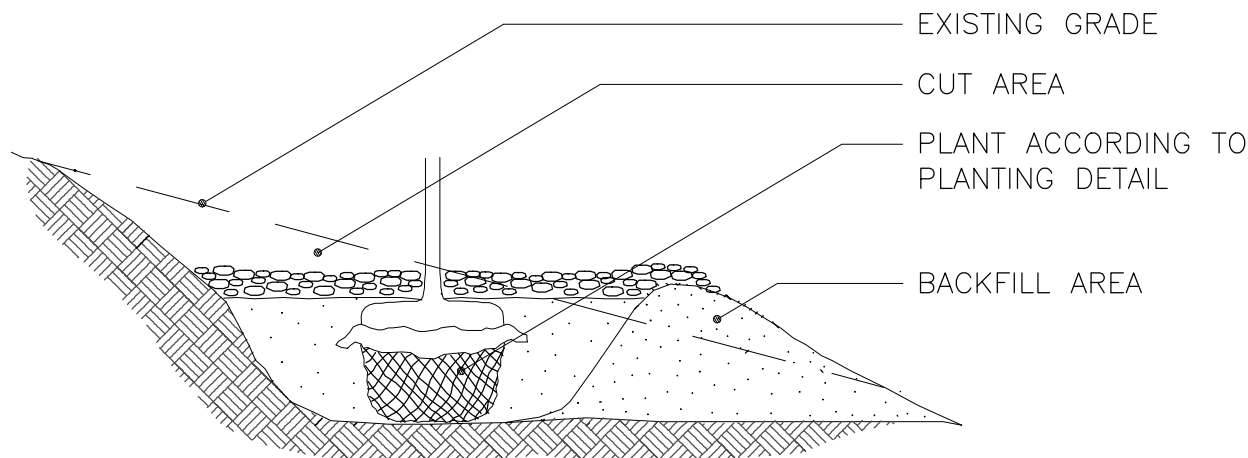
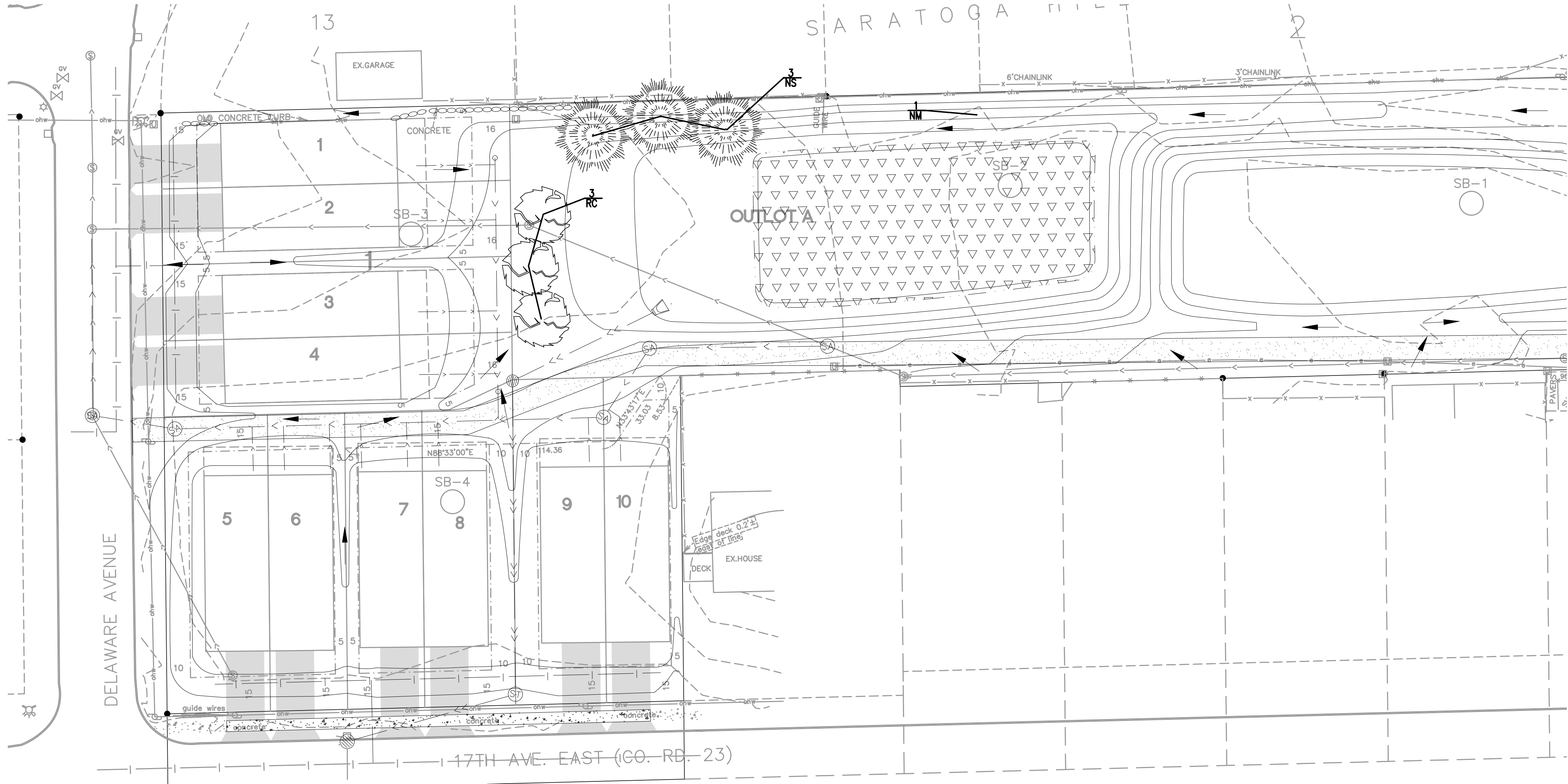
- TREES MAY BE SUBSTITUTED WITH SIMILAR SPECIES GIVEN AVAILABILITY. CONTAINER STOCK MAY BE SUBSTITUTED FOR B&B AS APPROPRIATE.
- DECIDUOUS TREES 2.5" DIAMETER UPON INSTALLATION.
- TREES SHALL BE WARRANTED FOR A PERIOD OF 1 YEAR AFTER INSTALLATION. DEAD OR DISEASED PLANTS WITHIN THIS PERIOD SHALL BE REPLACED AT CONTRACTOR EXPENSE.
- THE PLANTING DETAILS REPRESENT ADEQUATELY DRAINED SOIL CONDITIONS. THE CONTRACTOR SHOULD EXERCISE DISCRETION IN SETTING PLANTS 1"-3" HIGHER IN POORLY DRAINED SOILS.
- ON 2:1 SLOPES OR GREATER, DO NOT CONSTRUCT THE UPHILL HALF OF THE WATERING BASIN.
- ON WET, POORLY DRAINED SOILS, DO NOT CONSTRUCT WATERING BASIN.
- THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ADEQUATE DRAINAGE IN HEAVY POORLY DRAINED OR IMPERVIOUS SOILS.
- PLANTS SHOULD BE SET AT THE PROPER DEPTH WHEREBY THE BEGINNING TAPER OF THE ROOT FLARE IS AT THE SAME ELEVATION AS THE FINISHED SOIL GRADE. THIS SHOULD BE THE SAME DEPTH AS THE PLANTS WERE GROWN AT IN THE NURSERY. NOTE THAT THE ROOTS OF BALLED AND BURLAPPED PLANTS ARE UNACCEPTABLE WHEN THEY ARE COVERED BY MORE THAN 4" OF SOIL IN THE TOP OF THE BALL.
- DELAY MULCH PLACEMENT IF NECESSARY TO ALLOW MORE TIME FOR EXCESS SOIL MOISTURE TO EVAPORATE FROM PLANTING AREAS BEFORE PLACING MULCH.

BALLED & BURLAPPED STOCK

- SCARIFY SIDES AND BOTTOM OF HOLE.
- PROCEED WITH CORRECTIVE PRUNING AS REQUIRED, REMOVING ANY WINDING OR GIRDING ROOTS.
- SET PLANT ON UNDISTURBED NATIVE SOIL, OR THOROUGHLY COMPACTED BACKFILL SOIL AT THE SAME DEPTH (IF PROPER) AS IT WAS GROWN IN THE NURSERY.
- EXPOSE ROOT FLARE AND SET AT GRADE. REMOVE ALL BURLAP AND ROPES FROM TOP 1/3 OF ROOT BALL, CUT WIRE BASKET DOWN TO SECOND HORIZONTAL WIRE FROM THE BOTTOM, AND DISPOSE OF OFF-SITE. CONTRACTOR IS RESPONSIBLE TO MAINTAIN PLUMB POSITION THROUGHOUT THE MAINTENANCE PERIOD, STAKE AS NECESSARY.
- APPLY WATER TO SETTLE PLANTS AND FILL VOIDS THEN CONSTRUCT 3" DEPTH WATERING BASIN.
- WATER THOROUGHLY WITHIN 2 HOURS.
- PLACE MULCH WITHIN 48 HOURS OF THE SECOND WATERING UNLESS SOIL MOISTURE IS EXCESSIVE.
- BIODEGRADABLE TWINE MAY BE LEFT ON AS SUPPORT BETWEEN THE ROOT BALL AND ROOT COLLAR UNTIL THE END OF THE PLANT ESTABLISHMENT PERIOD AT WHICH TIME IT MUST BE CUT AND TOTALLY REMOVED FROM THE ROOT COLLAR. THE TWINE MUST BE TIED OR RETIED TO MID-LEVEL LOOPS OR POINTS ON THE BASKET. USE OF NONBIODEGRADABLE TWINE IS PROHIBITED.

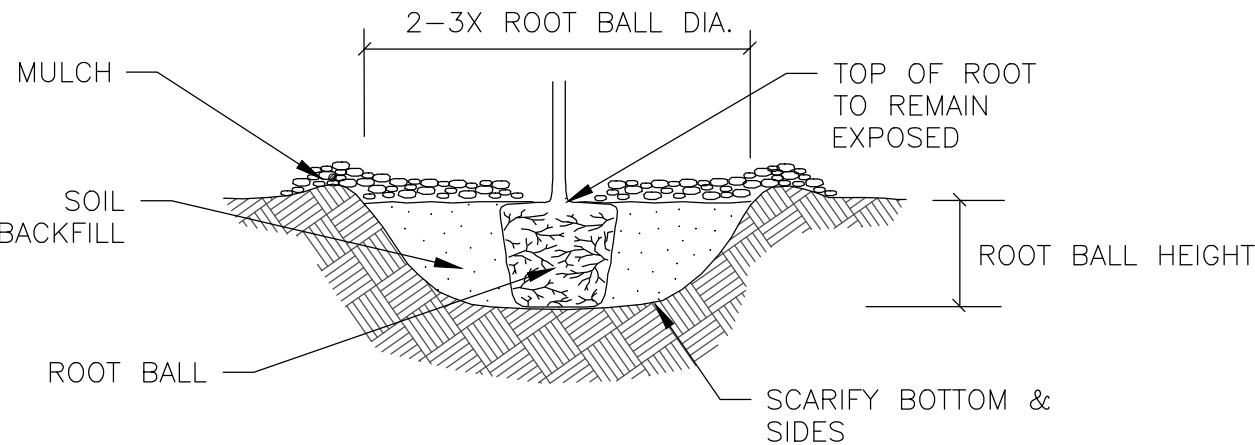
CONTAINER STOCK

- SCARIFY SIDES AND BOTTOM OF HOLE.
- PROCEED WITH CORRECTIVE PRUNING.
- REMOVE CONTAINER AND SCORE OR PRUNE OUTSIDE OF SOIL MASS TO REDIRECT CIRCLING FIBROUS ROOTS AS NECESSARY.
- SET PLANT ON UNDISTURBED NATIVE SOIL, OR THOROUGHLY COMPACTED BACKFILL SOIL AT THE SAME DEPTH (IF PROPER) AS IT WAS GROWN IN THE NURSERY.
- APPLY WATER TO SETTLE PLANTS AND FILL VOIDS THEN CONSTRUCT 3" DEPTH WATERING BASIN.
- WATER THOROUGHLY WITHIN 2 HOURS.
- PLACE MULCH WITHIN 48 HOURS OF THE SECOND WATERING UNLESS SOIL MOISTURE IS EXCESSIVE.



- NOTE:
- EXTENDED EXCAVATION AND BACKFILL SOIL TO A POINT DOWNSLOPE EQUAL TO OR LOWER IN ELEVATION THAN THE BOTTOM OF THE HOLE DIRECTLY BENEATH THE PLANT TO INSURE ADEQUATE DRAINAGE IN HEAVY SOILS. GRANULAR SOIL MUST BE ADDED AS BACKFILL IN AREAS OF POOR DRAINAGE.

FOR STEEP SLOPES



1 ISOLATED TREE PLANTINGS
BALLED & BURLAPPED OR CONTAINER STOCK

CIVIL METHODS, INC.

P.O. Box 28038
St. Paul, MN 55128
o:763.210.5713 | www.civilmethods.com

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

DAVID M. POGGI

DATE: 06-20-2024

LIC. NO.: 44573

DESIGNED: DMP

DRAWN: DMP

CHECKED: KEB

DATE / REVISION:
03-18-2024 Preliminary Plan Review Set. NOT FOR CONSTRUCTION
05-03-2024 Revised Lot 1-4 FFE & maintenance access route / grading. NOT FOR CONSTRUCTION
05-24-2024 Shifted basin east and changed to SOG homes per WD comment. NOT FOR CONSTRUCTION
06-19-2024 Revised per City, RWMWD, & County review comments.
06-20-2024 Revised Landscaping Plan.

DELAWARE PLACE

ANDRUS BUILT, LLC
NORTH ST. PAUL, MN

LANDSCAPING

SHEET NO:

C701

CITY OF NORTH ST. PAUL

RESOLUTION #2024-###

**RESOLUTION APPROVING A FINAL PLAT
FOR PROPERTY LOCATED AT 2329 17TH AVENUE E, PID 01292233012**

WHEREAS, Doug Andrus of Andrus Built, LLC has requested approval of a final plat of property legally described as follows:

The South 286 feet of the East 650 feet of the SW 1/4 of SW 1/4 of Section 1, Township 29, Range 22, EXCEPT the South 163 feet of the East 340 feet and EXCEPT the West 92.5 feet of the South 170 feet of the East 432.5 feet, Ramsey County, Minnesota.

WHEREAS, the proposed plat meets the requirements of Chapter 153 of the City Ordinance and the dimensional standards of Chapter 154 as proposed to be modified through the proposed Planned Unit Development (PUD) plan submitted by the applicant; and

WHEREAS, the proposed plat is consistent with the Comprehensive Plan; and

WHEREAS, as required by City Ordinance, the Planning Commission held a public hearing on May 2, 2024; and

WHEREAS, the Planning Commission recommended conditional approval of the preliminary plat based on findings in the associated staff report.

NOW THEREFORE BE IT RESOLVED, the final plat for 2329 17th Avenue E, PID 012922330125, is hereby approved with the following conditions:

1. Ramsey County review and approval on final plat. Any comments or requirements of Ramsey County shall be incorporated into the final plat, along with any changes to the final PUD plans that may be needed to accommodate Ramsey County platting requirements.
2. All existing drainage and utility easements to be applied for vacation by the applicant, the vacation granted and recorded at Ramsey County prior to recording of the final plat.
3. Payment of park dedication fees at the time of building permit issuance.
4. The applicant shall satisfy all engineering requirements/conditions as set forth in the final engineering review memorandum.

ADOPTED this ____ day of ____, 2024.

Motion by Council Member
Second by Council Member

Voting: Ayes:
Nays:

Absent:
Abstain:

John Monge, Mayor

ATTEST:

Brian Frandle, City Manager/Clerk

CITY OF NORTH ST. PAUL

RESOLUTION #2024-###

**A RESOLUTION APPROVING A FINAL PLANNED UNIT DEVELOPMENT AND
SITE PLAN FOR PROPERTY LOCATED AT 2329 17TH AVENUE E, PID
012922330125**

WHEREAS, Doug Andrus of Andrus Built, LLC has requested approval of a preliminary planned unit development (PUD) and site plan at property legally described as follows:

The South 286 feet of the East 650 feet of the SW 1/4 of SW 1/4 of Section 1, Township 29, Range 22, EXCEPT the South 163 feet of the East 340 feet and EXCEPT the West 92.5 feet of the South 170 feet of the East 432.5 feet, Ramsey County, Minnesota.

WHEREAS, the proposed PUD meets the requirements of City Code Chapter 154.008(C) and is consistent with the Comprehensive Plan; and

WHEREAS, as required by City Ordinance, the Planning Commission held a public hearing on May 2, 2024; and

WHEREAS, the Planning Commission recommended conditional approval of the preliminary PUD based on findings in the associated staff report.

NOW THEREFORE BE IT RESOLVED, by the City Council of the City of North St. Paul that the final planned unit development for 2329 17th Avenue E, PID 012922330125, is hereby approved with the following conditions:

1. A Developer's Agreement shall be prepared to the satisfaction of the City Attorney and approved by the City Council for execution, including development securities in an amount acceptable to the City Engineer.
2. Easements shall be added to the final plat as required by the City Engineer.
3. Final hydrant locations and turnaround dimensions shall be approved by the Fire Chief
4. The applicant is responsible for obtaining all necessary permits for the project from the City and all applicable outside agencies, including but not limited to Ramsey County, Ramsey Washington Metro Watershed District, MPCA (NPDES and sanitary sewer), and MDH (Water main).
5. The sanitary sewer shall be public. The water and stormwater management pond and related infrastructure shall be privately owned and maintained.
6. The applicant shall satisfy all engineering requirements/conditions as set forth in the final engineering review memorandum.

ADOPTED this ____ day of ____, 2024.

Motion by Council Member
Second by Council Member

Voting: Ayes:
Nays:
Absent:
Abstain:

John Monge, Mayor

ATTEST:

Brian Frandle, City Manager/Clerk