

Riley Purgatory Bluff Creek Watershed District Permit Application Review

Permit No: 2024-086

Application Received complete: November 6, 2024

Considered at Board of Managers Meeting: December 11, 2024

Applicant: City of Eden Prairie

Consultant: Bolton & Menk, Inc, Bill Diede

Project: Eden Prairie Police Department Improvements– The applicant proposes construction of a building addition, new and rehabilitated asphalt pavements, erection of a security fence around police parking, adjacent sidewalks, retaining walls, and an infiltration basin for stormwater management at the Eden Prairie City Center building.

Location: 8080 Mitchell Rd, in Eden Prairie MN

Reviewer: Scott Sobiech, PE, Barr Engineering

Proposed Board Action

Manager _____ moved and Manager _____ seconded adoption of the following resolutions based on the permit report that follows and the presentation of the matter at the December 11, 2024 meeting of the managers:

Resolved that the application for Permit 2024-086 is approved, subject to the conditions and stipulations set forth in the Recommendations section of the attached report;

Resolved that on determination by the RPBCWD administrator that the conditions of approval have been met, the RPBCWD president or administrator is authorized and directed to sign and deliver Permit 2024086 to the applicant on behalf of RPBCWD.

Upon vote, the resolutions were adopted, _____ [VOTE TALLY].

Applicable Rule Conformance Summary

Rule	Description	Conforms to RPBCWD Rules?	Comments
C	Erosion Control Plan	See Comment	See rule-specific permit condition C1 related to name of individual responsible for on-site erosion control.
D	Wetland and Creek Buffers	See Comment	See rule-specific permit condition D1 related to incorporating the buffer maintenance into the existing programmatic agreement.

Rule	Description	Conforms to RPBCWD Rules?		Comments
J	Stormwater Management	Rate	Yes	
		Volume	Yes	See stipulation 4 requiring soil modification and infiltration testing during construction.
		Water Quality	Yes	
		Low Floor Elev.	Yes	
		Maintenance	See Comment	See Rule Specific Permit Condition J1 related to maintenance agreement
		Chloride Management	Yes	
		Wetland Protection	Yes	
L	Permit Fee Deposit	NA		Governmental Agency.
M	Financial Assurances	NA		Governmental Agency.

Project Description

The applicant proposes construction of a building addition, new and rehabilitated asphalt pavements, erection of a security fence around police parking, adjacent sidewalks, retaining walls, and an infiltration basin to provide volume control, water quality, and rate control. There is one on-site Wetland Conservation Act-protected wetland downgradient from the land-disturbing activities. No land-disturbing activity is proposed within the floodplain of the wetland. Because the wetland is downgradient from the proposed land disturbing activities, wetland buffer requirements apply to the proposed project.

Relevant project site information is summarized in the following table.

	Total Project
Total Site Area (acres)	25.81
Existing Site Impervious (acres)	13.82
Post Construction Site Impervious (acres)	12.99
Decrease in Site Impervious Area (acres)	0.83 (-6.0% of existing)
Disturbed impervious surface (acres) (i.e. all existing impervious disturbed, including mill and overlay)	2.94
Existing impervious converted to green space (ac)	1.11
New Site Imperviousness (acres) (areas not covered by impervious surface under existing conditions)	0.28
Exempt Impervious Surface (acres) (i.e. mill and overlay area)	1.33
Regulated Impervious Surface (acres)	0.78
Total Disturbed Area (acres) (all land disturbance including mill and overlay)	3.82

The following materials were reviewed in support of the permit request:

1. Permit application dated October 25, 2024 (Notified applicant on November 1, 2024 that submittal was incomplete, materials completing the application received November 6, 2024)

2. Construction Drawings (12 sheets) received October 25, 2024 (revised November 6, 2024)
3. Stormwater Management Plan (SWMP) dated October 25, 2024 (revised November 6, 2024)
4. Design Phase Geotechnical Evaluation by Chosen Valley Testing Inc. (CVT) (attached to SWMP) dated October 25, 2024
5. Double Ring Infiltrometer testing results by CVT dated October 25, 2024
6. Wetland Delineation report and MNRAM by Bolton & Menk, Inc. dated June 24, 2024
7. Electronic HydroCAD models for existing and proposed conditions received October 25, 2024 (revised November 6, 2024)
8. MIDS water quality models for existing and proposed conditions received October 25, 2024 (revised November 6, 2024)
9. Earthwork specifications received November 6, 2024.
10. New and Disturbed Impervious Coverage Map received November 6, 2024 (revised December 2, 2024)

Rule Specific Permit Conditions

Rule C: Erosion and Sediment Control

Because the project will alter 3.82 acres of land-surface area, the project must conform to the requirements in the RPBCWD Erosion and Sediment Control rule (Rule C, Subsection 2.1).

The erosion control plan prepared by Bolton & Menk includes installation of silt fence or sediment log perimeter control, rock construction entrance, erosion control blanket, weekly inspection, placement of a minimum of 6 inches of topsoil with at least 5% organic matter, decompaction of areas compacted during construction, and retention of native topsoil onsite. To conform to the RPBCWD Rule C requirements the following revisions are needed:

- C1. The Applicant must provide the name and contact information of the individual responsible for erosion control at the site. RPBCWD must be notified if the responsible individual changes during the permit term.

Rule D: Wetland and Creek Buffers

Because the proposed work triggers a permit under RPBCWD Rule J and the onsite wetland is downgradient from the proposed construction activities, Rule D, Subsections 2.1a and 3.1 require buffer along the edge of the wetland downgradient of the activities. No land disturbing activities are proposed within the onsite wetland.

The MnRAM analysis provided by RPBCWD indicates the wetland is a medium-value wetland. Rule D, Subsection 3.2.a.ii requires wetland buffer an average of 40 feet from the delineated edge of the wetland, minimum 20 feet. Per Rule D, subsection 3.2c, the buffer must encompass all or part of a slope averaging 18% or greater. Because the buffer area extends to the top of slopes that average steeper than 18% the

project conforms to Rule B, subsection 3.2c. As shown in the table below, the required buffer width to conform to the steep slopes provision (Rule B, subsection 3.2c), is greater than the required average buffer width to conform to Rule D, subsection 3.2.b.v, indicating that both requirements are met.

RPBCWD Wetland Value	Required Minimum Width (ft)	Required Average Width (ft)	Required Area (sq ft)	Provided Area (sq ft)	Provided Minimum Width (ft)	Provided Average Width (ft)
Medium	20	40	7,480	15,817	40	84.6

The plans require revegetating disturbed areas within the proposed buffer with native vegetation, thus conforming to Rule D, Subsection 3.3. A note is included on the plan sheet indicating the project will be constructed so as to minimize the potential transfer of aquatic invasive species (e.g., zebra mussels, Eurasian watermilfoil, etc.) to the maximum extent possible conforming to Rule D, Subsection 3.6.

To conform to the RPBCWD Rule D the following revisions are needed:

- D1. Buffer areas and maintenance requirements must be documented in an agreement after review and approval by RPBCWD in accordance with Rule D, Subsection 3.5. RPBCWD and Eden Prairie have entered into a programmatic maintenance agreement covering city projects subject to RPBCWD regulatory requirements. The buffers required under this permit (2024-086) must be incorporated into the inventory of those maintained in accordance with the programmatic agreement.

Rule J: Stormwater Management

Because the project will alter 3.82 acres of land-surface area, the project must meet the criteria of RPBCWD’s Stormwater Management rule (Rule J, Subsection 2.1). The criteria listed in Subsection 3.1 only apply to the disturbed areas and additional impervious surface on the project site because the proposed activity will not disturb more than 50 percent of the existing impervious surface and increases the impervious surface on the parcel by less than 50 percent (Rule J, Subsection 2.3).

The project proposes an infiltration basin to provide volume control, water quality, and rate control.

Rate Control

In order to meet the rate control criteria listed in Subsection 3.1.a, the 2-, 10-, and 100-year post development peak runoff rates must be equal to or less than the existing discharge rates at all locations where stormwater leaves the site. The Applicant used a HydroCAD hydrologic model to simulate runoff rates for pre- and post-development conditions for the 2-, 10-, and 100-year frequency storm events using a nested rainfall distribution, and a 100-year frequency, 10-day snowmelt event. The existing and proposed 2-, 10-, and 100-year frequency discharges from the site are summarized in the table below.

Modeled Discharge Location	2-Year Discharge (cfs)		10-Year Discharge (cfs)		100-Year Discharge (cfs)		10-Day Snowmelt (cfs)	
	Ex	Prop	Ex	Prop	Ex	Prop	Ex	Prop
Flow to Wetland	20.7	17.2	34.0	31.1	64.5	62.5	3.6	3.0

The engineer concurs with the applicant’s use of the inflow to the onsite wetland as a surrogate for the discharge leaving the site through the outlet from the wetland. The engineer finds that because the inflow to the wetland is reduced under proposed conditions, the outflow from the wetland will also be reduced and the proposed stormwater management plan will provide rate control in compliance with the RPBCWD requirements for the 2-, 10-, and 100-year events. Thus, the proposed project meets the rate control requirements in Rule J, Subsection 3.1a.

Volume Abstraction

Subsection 3.1.b of Rule J requires the abstraction onsite of 1.1 inches of runoff from the new and disturbed impervious surface of the parcel. An abstraction volume of 3,110 cubic feet is required from the proposed 0.78 acres of regulated impervious area. (The disturbance of 1.33 acres of existing impervious area by mill and overlay is rehabilitation that is not subject to RPBCWD stormwater-management requirements.) Plans indicate pretreatment for runoff entering the infiltration basin is provided by a sump manhole, thus the proposed project conforms with RPBCWD Rule J, Subsection 3.1b.1.

Soil borings performed by CVT show that soils in the project area are a mix of sandy and clayey soil with poorly graded sand at over the infiltration basin footprint. Groundwater was not observed in the soil boring within the footprint of the proposed infiltration basin (B-14). The subsurface investigation information summarized in the table below supports a determination that groundwater is at least 3 feet below the bottom of the proposed infiltration basin (Rule J, Subsection 3.1.b.2.a).

Proposed BMP	Nearest Subsurface Investigation	Boring is within footprint?	Groundwater Elevation (feet)	BMP Bottom Elevation (feet)	Separation (feet)
Infiltration Basin	B-14	Yes	Not Observed (presumed at boring bottom, el. 851.1)	868.7	17.6

Double ring infiltrometer testing results provided by CVT show an average infiltration rate of 52.87 inches per hour (in/hr) beneath the proposed infiltration basin. Because the measured rate is greater than the maximum allowable infiltration rate of 8.3 in/hr per Rule J, subsection 3.1.b.4, the applicant is proposing to amend the underlying soils and perform testing during construction to ensure the constructed infiltration rate is between 4.0 -8.3 in/hr. The engineer concurs with the applicant’s design infiltration rates of 4.0 inches per hour. To confirm an acceptable infiltration rate is achieved during construction, performance monitoring by the applicant during and post-construction is a stipulation of issuing a permit for this project. The proposed stormwater facility provides adequate surface area (3,243 SF) to drawdown the abstraction volume within the required 48-hour period, thus conforming with Rule J, Subsection 3.1.b.3. The table

below summarizes the volume abstraction required and the volume abstraction achieved by the proposed stormwater management facility on site. The engineer concurs with the submitted information and finds that the proposed project will conform with Rule J, Subsection 3.1.b.

Required Abstraction Depth (inches)	Required Abstraction Volume (cubic feet)	Provided Abstraction Depth (inches)	Provided Abstraction Volume (cubic feet)
1.1	3,110	1.7	4,763

Water Quality Management

Subsection 3.1.c of Rule J requires the Applicant to provide volume abstraction in accordance with 3.1b or least 60 percent annual removal efficiency for total phosphorus (TP), and at least 90 percent annual removal efficiency for total suspended solids (TSS) from site runoff, and no net increase in TSS or TP loading leaving the site from existing conditions. Because the infiltration basin proposed by the applicant provides volume abstraction meeting the standard in 3.1b and the engineer concurs with the modeling, under paragraph 3.1c.i, the engineer finds that the proposed project provides the required stormwater-quality protection.

Low floor Elevation

All new buildings must be constructed such that the lowest floor is at least two feet above the 100-year high water elevation or one foot above the emergency overflow of a stormwater-management facility according to Rule J, Subsection 3.6a. In addition, a stormwater-management facility must be constructed at an elevation that ensures that no adjacent habitable building will be brought into noncompliance with this requirement according to Rule J, Subsection 3.6b.

The low floor elevation of the building and the 100-year elevation of the infiltration basin are summarized below. Because the low floor elevations of the proposed structure are more than two feet above the 100-year flood elevation of the stormwater facility, the proposed project is in conformance with Rule J, Subsection 3.6.

Building Low Floor Elevation (ft)	Stormwater Facility	100-Year Elevation in Stormwater Facility (ft)	Freeboard (ft)
879.8	Infiltration Basin	870.68	9.12

Maintenance

Subsection 3.7 of Rule J requires the submission of maintenance plan. All stormwater management structures and facilities must be designed for maintenance access and properly maintained in perpetuity to

assure that they continue to function as designed. RPBCWD and Eden Prairie have entered into a programmatic maintenance agreement covering city projects subject to RPBCWD regulatory requirements.

- J1. To conform to RPBCWD Rule J maintenance requirements, the proposed infiltration basin must be incorporated into the inventory of those maintained in accordance with the programmatic agreement.

Chloride Management

Subsection 3.8 of Rule J requires the submission of chloride management plan that designates the individual authorized to implement the chloride management plan and the MPCA-certified salt applicator engaged in implementing the plan. The City of Eden Prairie's Streets Division Manager, Larry Doig, is authorized to implement the city's chloride management plan and documentation provided confirms he is certified by the Minnesota Pollution Control Agency as a certified salt applicator (Rule J, subsection 3.8).

Wetland Protection

Because runoff from the redeveloped site is tributary to on-site, medium value wetland, the project must comply with RPBCWD's wetland protection criteria in Rule J, subsection 3.10.

In accordance with Rule J, subsection 3.10a, the proposed land-disturbing activities will not increase the bounce in water level, duration of inundation, or change the runout elevation in the subwatershed, for the receiving wetland. Because the applicant's HydroCAD model results demonstrate, and the engineer concurs, that the proposed flow rate and volumes flowing toward the wetlands are less than the under existing conditions, the bounce and inundation will not increase, the project meets the bounce and inundation criteria.

Rule J, Subsection 3.10b requires that treatment of runoff to medium value wetland meet the water quality treatment criteria in Rule J, subsection 3.1c. Because runoff from the project site is routed to the proposed infiltration basin and the basin provides the water quality treatment required in accordance with 3.1c.i, the engineer finds that the proposed project is in conformance with Rule J, Subsection 3.10b.

Applicable General Requirements:

1. The RPBCWD Administrator and Engineer shall be notified at least three days prior to commencement of work.
2. Construction must be consistent with the plans, specifications, and models that were submitted by the applicant that were the basis of permit approval. The date(s) of the approved plans, specifications, and modeling are listed on the permit. The grant of the permit does not in any way relieve the permittee, its engineer, or other professional consultants of responsibility for the permitted work.
3. The grant of the permit does not relieve the permittee of any responsibility to obtain approval of any other regulatory body with authority.

4. The issuance of this permit does not convey any rights to either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations.
5. In all cases where the doing by the permittee of anything authorized by this permit involves the taking, using or damaging of any property, rights or interests of any other person or persons, or of any publicly owned lands or improvements or interests, the permittee, before proceeding therewith, must acquire all necessary property rights and interest.
6. RPBCWD's determination to issue this permit was made in reliance on the information provided by the applicant. Any substantive change in the work affecting the nature and extent of applicability of RPBCWD regulatory requirements or substantive changes in the methods or means of compliance with RPBCWD regulatory requirements must be the subject of an application for a permit modification to the RPBCWD.
7. If the conditions herein are met and the permit is issued by RPBCWD, the applicant, by accepting the permit, grants access to the site of the work at all reasonable times during and after construction to authorized representatives of the RPBCWD for inspection of the work.

Findings

1. The proposed project includes the information necessary, plan sheets and erosion control plan for review.
2. The proposed project will conform to Rules C, D, and J if the Rule Specific Permit Conditions listed above are met.

Recommendation:

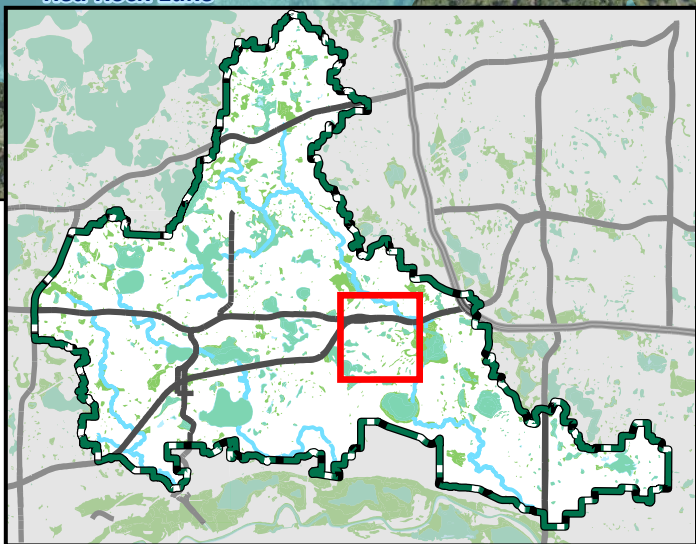
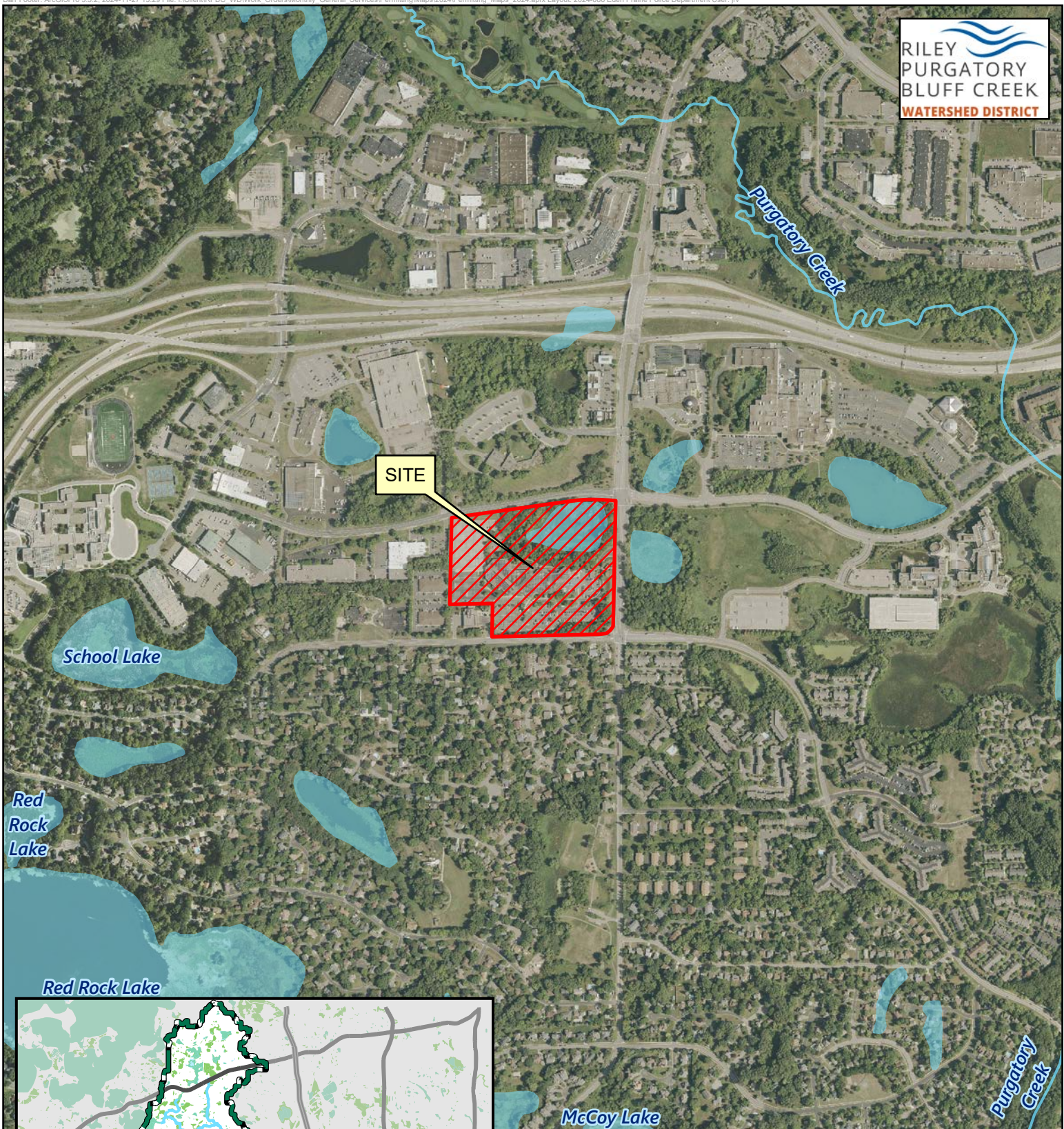
Approval of the permit contingent upon:

1. Permit applicant must provide the name and contact information of the general contractor responsible for the site. RPBCWD must be notified if the responsible party changes during the permit term.
2. Because RPBCWD and Eden Prairie have entered into a programmatic maintenance agreement covering city projects, the stormwater management facility and buffers required under this permit (2024-086) must be incorporated into the inventory of those maintained in accordance with the programmatic agreement.

By accepting the permit, when issued, the applicant agrees to the following stipulations:

1. Continued compliance with General Requirements.
2. Per Rule J Subsection 4.5, upon completion of the site work, the permittee must submit as-built drawings demonstrating that at the time of final stabilization the stormwater management facility conforms to design specifications and functions as intended and approved by the District. As-built/record drawings must be signed by a professional engineer licensed in Minnesota and include, but not limited to:

- a) the surveyed bottom elevations, water levels, and general topography of all facilities;
 - b) the size, type, and surveyed invert elevations of all stormwater facility inlets and outlets;
 - c) the surveyed elevations of all emergency overflows including stormwater facility, street, and other;
 - d) other important features to show that the project was constructed as approved by the Managers and protects the public health, welfare, and safety.
3. Providing the following additional close-out materials:
- a) Documentation that constructed infiltration facility performs as designed. This may include infiltration testing, flood testing, or other with prior approval from RPBCWD
 - b) Documentation that disturbed pervious areas remaining pervious have been decompacted per Rule C.2c criteria
4. Because the existing soils below the infiltration basin have a higher than allowable infiltration capacity, performance monitoring for the site will be required to ensure that the project is able to meet the RPBCWD abstraction criteria has been proposed. In accordance with Rule J, Subsection 2.6 performance monitoring, and as a stipulation of issuing a permit for this project, the Applicant must ensure the constructed infiltration rate is between 4.0 and 8.3 in/hr by providing documentation of the measured rate during and post construction. If the rate is outside this range, modifications to the infiltration basin will be required to achieve consistency with the approved design.



Feet

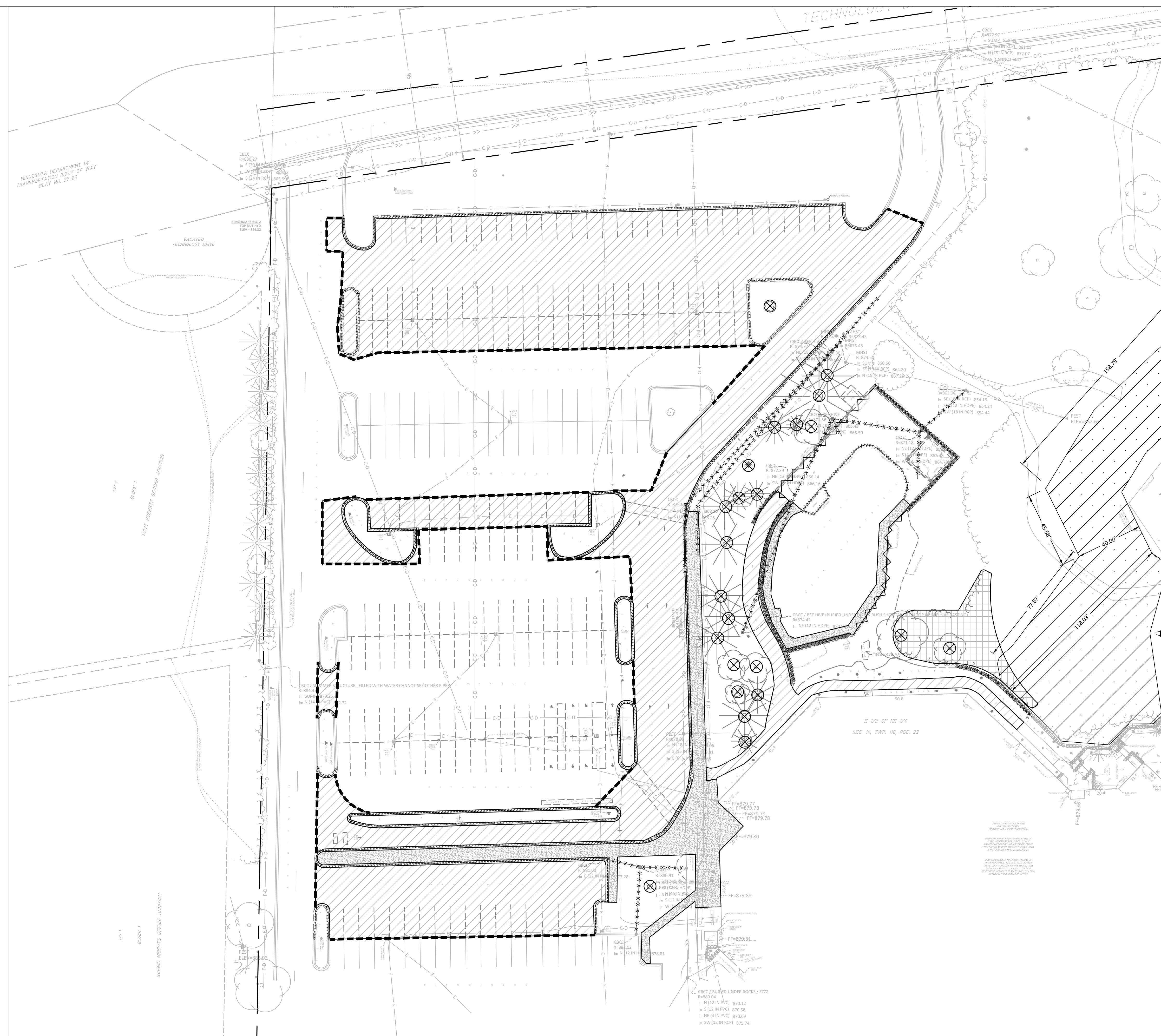


Permit Location Map

EDEN PRAIRIE POLICE
DEPARTMENT

Permit 2024-086

Riley Purgatory Bluff Creek
Watershed District

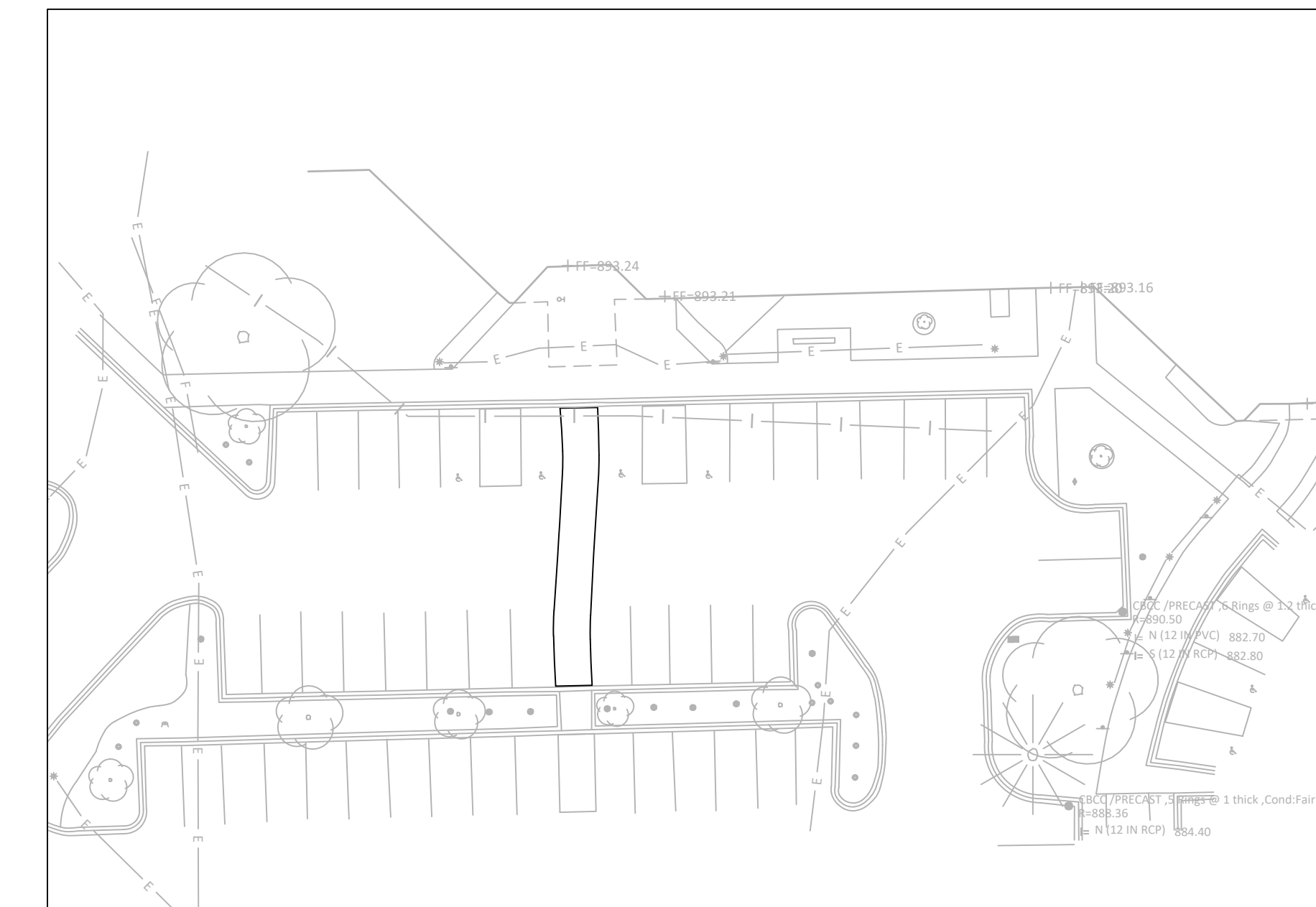


LEGEND

- CONCRETE CURB AND GUTTER REMOVALS
- XXXXXXXXXXXXXXXXX UNDERGROUND UTILITY REMOVALS
- CONCRETE PAVEMENT REMOVALS
- ASPHALT PAVEMENT REMOVALS
- FENCING REMOVALS
- REINFORCING WALL REMOVALS
- SAWCUT
- ⊗ TREE REMOVAL
- MASS TREE AND SHRUB REMOVALS
- 40' WETLAND BUFFER ZONE
- PROPERTY LINE

NOTES

1. REFER TO SHEET C3.01, GRADING PLAN, FOR GENERAL NOTES.
2. MINIMIZE DISTURBANCE TO SITE AND PROTECT EXISTING VEGETATION AND SITE FEATURES (CURBS, WALKS, PAVEMENTS, OVERHEAD AND UNDERGROUND UTILITIES, SIGNAGE, FENCING, ROADWAYS, ETC.) WHICH ARE TO REMAIN.
3. REPAIR OR REPLACE EXISTING PROPERTY AND SITE FEATURES, INCLUDING GRASS AND VEGETATION, WHICH IS TO REMAIN THAT IS DAMAGED BY THE WORK, TO THE OWNER'S SATISFACTION AND AT NO ADDITIONAL COST TO THE OWNER.
4. VISIT THE SITE PRIOR TO BIDDING; BE FAMILIAR WITH ACTUAL CONDITIONS IN THE FIELD. EXTRA COMPENSATION WILL NOT BE ALLOWED FOR CONDITIONS WHICH COULD HAVE BEEN DETERMINED OR ANTICIPATED BY EXAMINATION OF THE SITE, THE CONTRACT DRAWINGS AND THE INFORMATION AVAILABLE PERTAINING TO EXISTING SOILS, UTILITIES AND OTHER SITE CHARACTERISTICS.
5. HIRE THE SERVICES OF A UTILITY LOCATOR COMPANY TO LOCATE ALL PRIVATELY OWNED UTILITIES THAT MAY BE DISTURBED BY CONSTRUCTION OPERATIONS.
6. MAINTAIN DRAINAGE FROM EXISTING BUILDING AT ALL TIMES. PROVIDE TEMPORARY STORM SEWER, INCLUDING, BUT NOT LIMITED TO, CATCH BASINS, MANHOLES, PIPING, AND SIMILAR. DO NOT REMOVE EXISTING STORM SEWER UNTIL TEMPORARY OR PERMANENT STORM SEWER IS INSTALLED AND FUNCTIONAL. COORDINATE ALL REMOVALS WITH APPROPRIATE TRADES (SITE UTILITY CONTRACTOR, MECHANICAL CONTRACTOR, ETC.) AS REQUIRED.



1
C0.01 REMOVALS PLAN SOUTH

PROJECT TITLE:

**EDEN PRAIRIE
POLICE
DEPARTMENT**

ISSUE #	DATE	DESCRIPTION

CERTIFICATION

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

Date: 11/06/2024 Reg. No. 59632

Signed: *William J. Dede*
William J. Dede

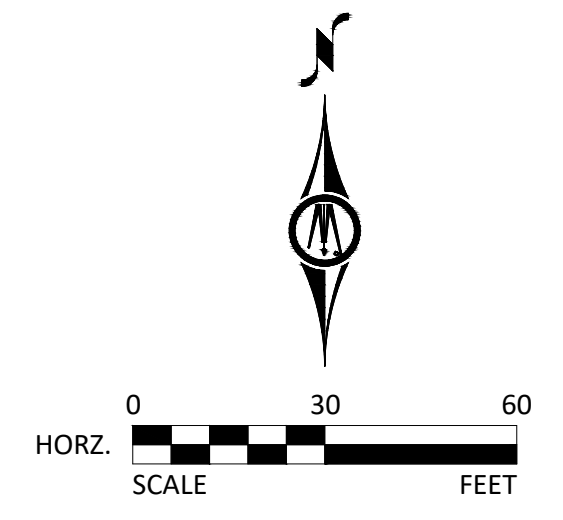
DRAWN BY	WJD
CHECKED BY	DAR
COMMISSION NUMBER	2653-01

SHEET TITLE

REMOVALS PLAN

SHEET NUMBER

C0.01



ISSUE #	DATE	DESCRIPTION

CERTIFICATION

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

Date: 11/06/2024 Reg. No. 59632

Signed: *William J. Diede*
William J. Diede

DRAWN BY	WJD
CHECKED BY	DAR
COMMISSION NUMBER	2653-01

SHEET TITLE

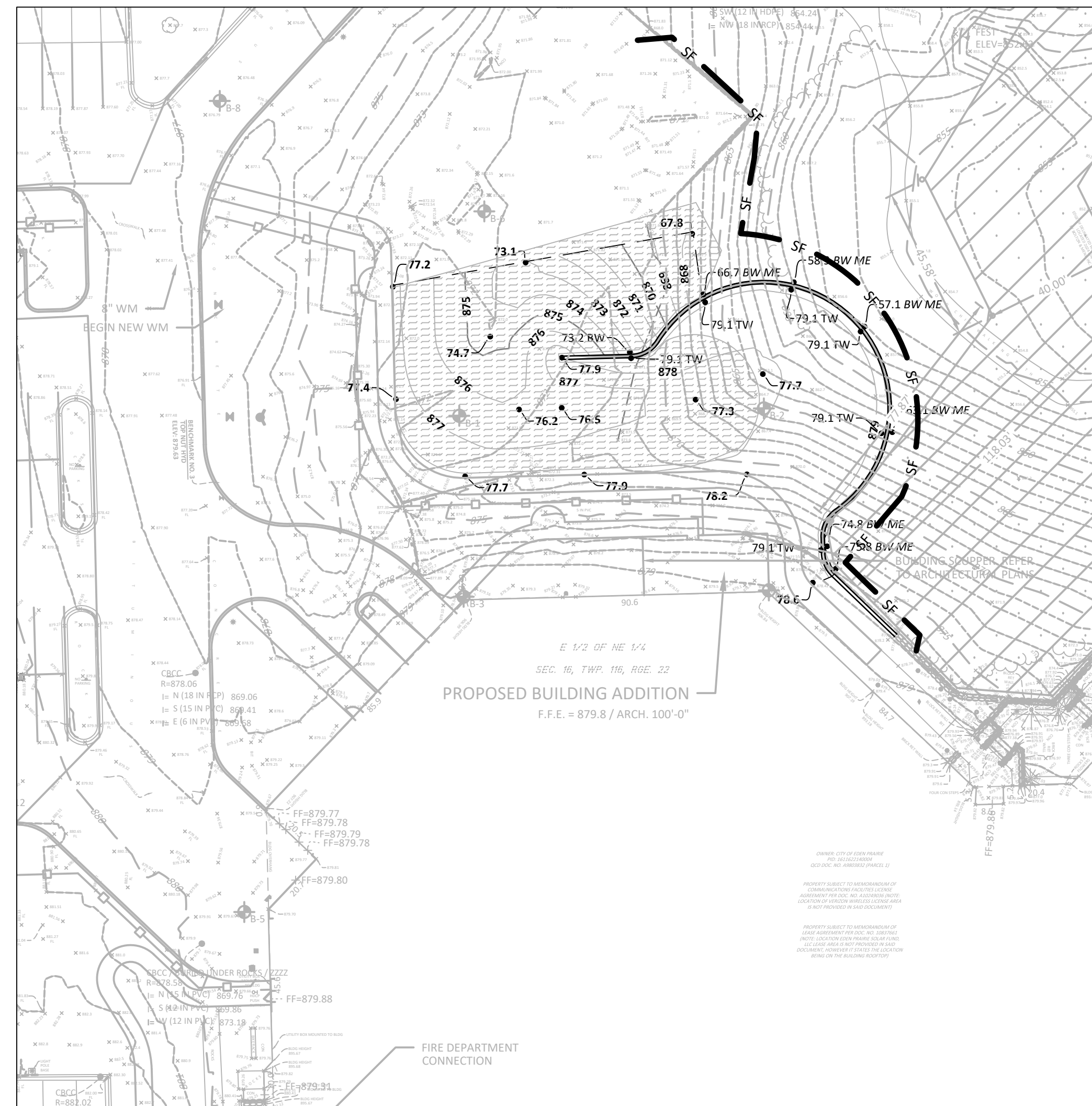
**ALTERNATE BID
REMOVALS PLAN
SITE PLAN
EROSION PLAN
GRADING PLAN**

SHEET NUMBER

C1.02



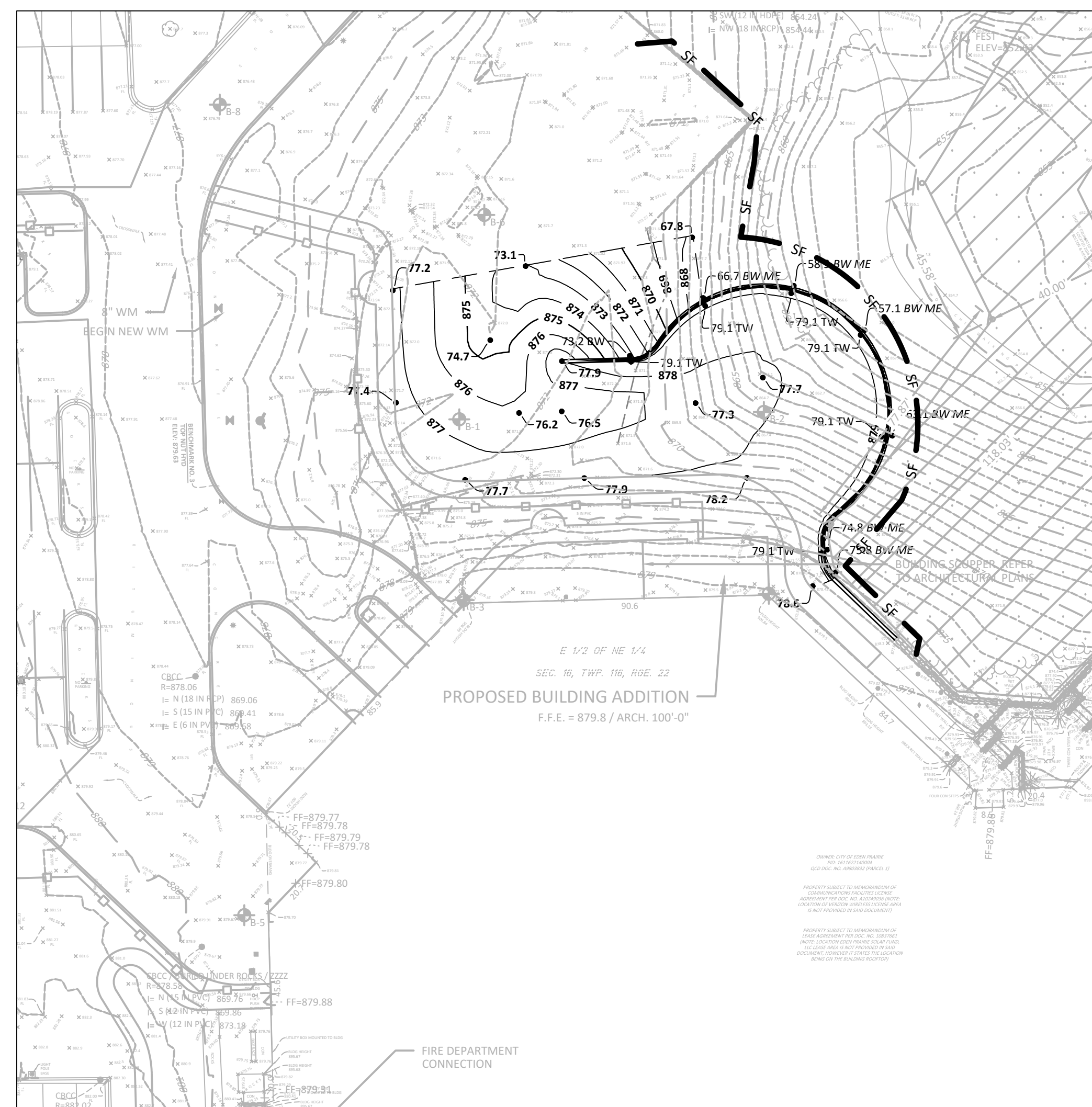
ALTERNATE BID - REMOVALS PLAN



ALTERNATE BID - EROSION CONTROL PLAN



ALTERNATE BID - SITE PLAN



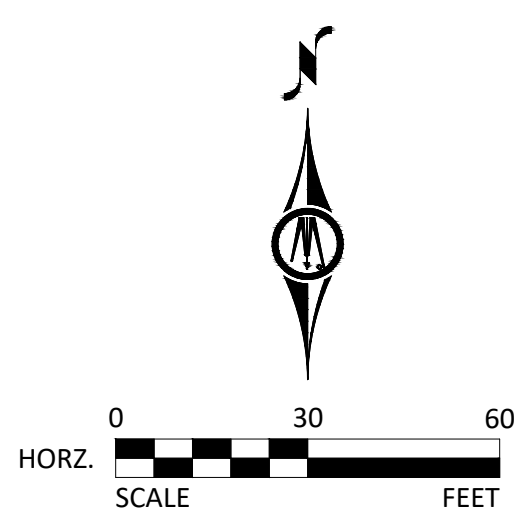
ALTERNATE BID - GRADING PLAN

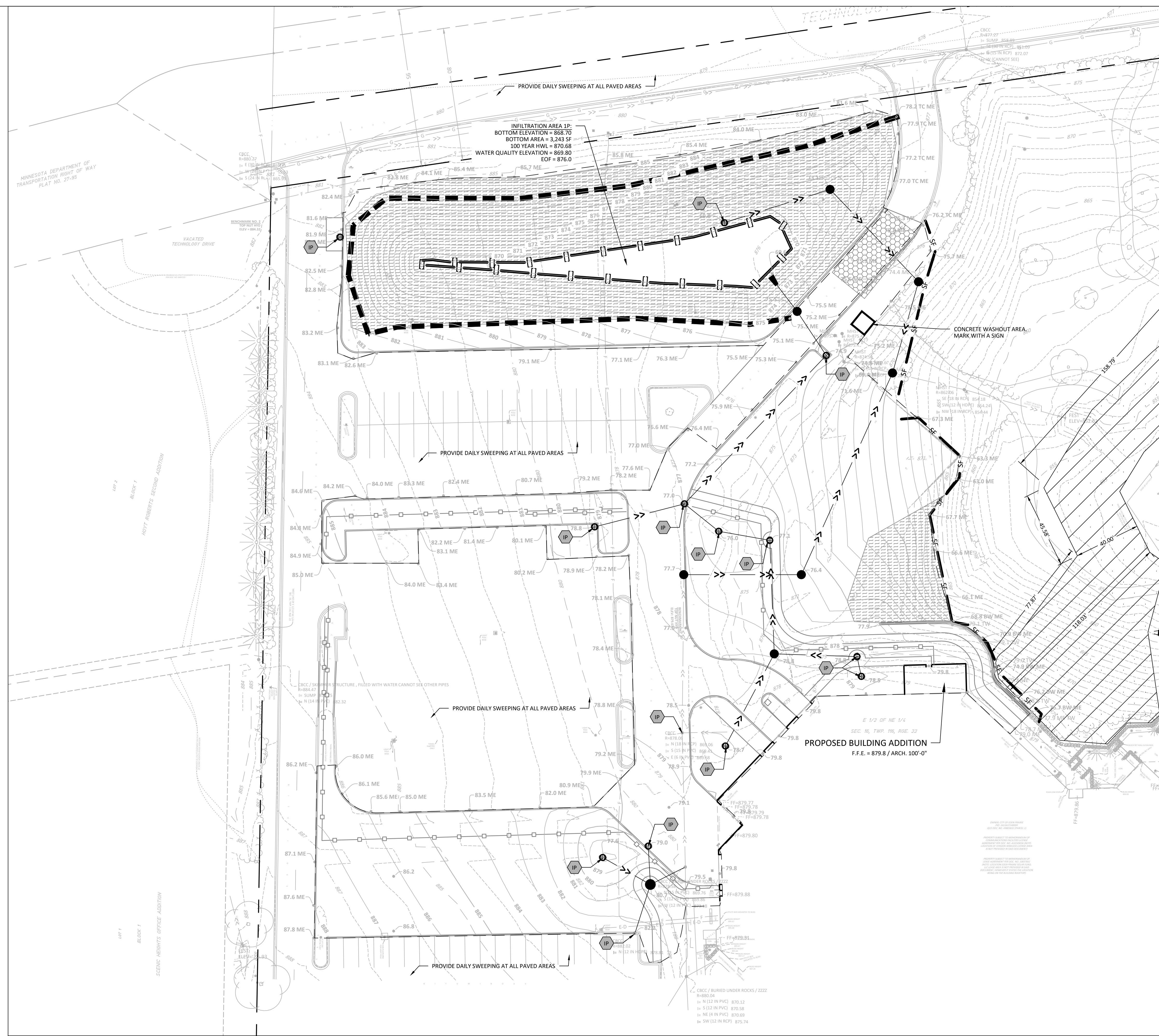
LEGEND

- REFERENCE KEY TO SITE DETAILS
DETAIL I.D. NUMBER (TOP)
DETAIL SHEET NUMBER (BOTTOM)
- BASELINE FOR DIMENSIONS
- POINT OF INTERSECTION
- EXISTING CONTOUR
- EXISTING SPOT ELEVATION
- PROPOSED CONTOUR
- PROPOSED SPOT ELEVATION
ME = MATCH EXISTING
EOF = EMERGENCY OVERFLOW
- PROPOSED GRADING LIMITS
- PROPOSED SAND SUBBASE AT FROST FOOTED STOOPS
- PROPOSED CONCRETE WALK
- PROPOSED CONCRETE SLAB
- PROPOSED HEAVY DUTY ASPHALT PAVEMENT
- PROPOSED MANHOLE (MH)
- PROPOSED CATCH BASIN (CB)
- PROPOSED FLARED END SECTION (FES)
- PROPOSED HYDRANT (HYD)
- PROPOSED GATE VALVE (GV)
- PROPOSED BUILDING STOOP - REFER TO ARCHITECTURAL PLANS
- PROPOSED LIGHT POLE - REFER TO ELECTRICAL PLANS
- PROPERTY LINE

NOTES

- REFER TO SHEET C3.01, GRADING AND DRAINAGE PLAN, FOR GENERAL NOTES.



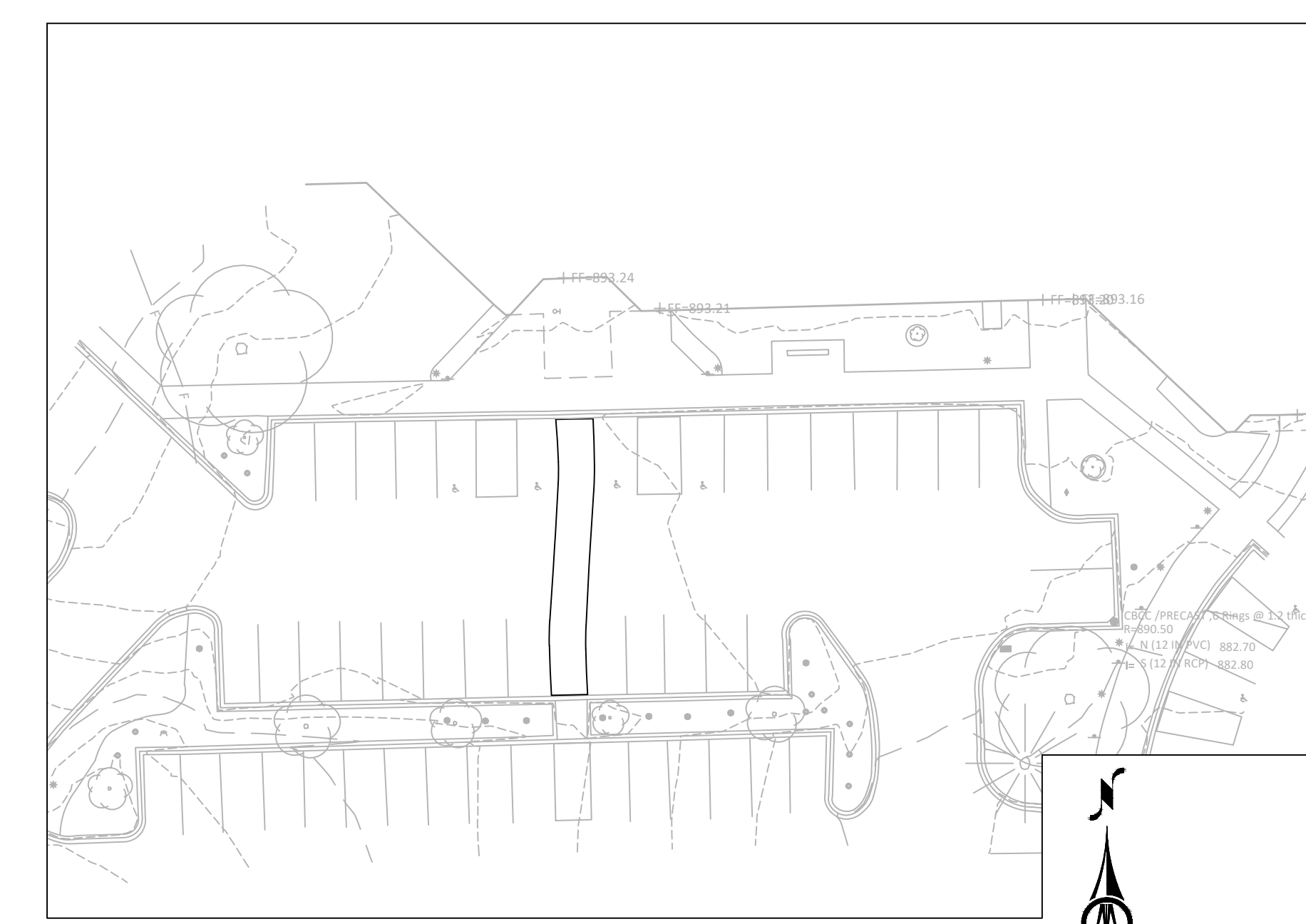


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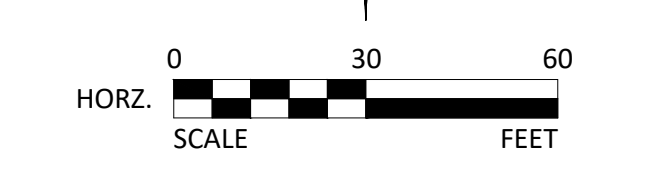
- REFERENCE KEY TO SITE DETAILS
DETAIL I.D. NUMBER (TOP)
DETAIL SHEET NUMBER (BOTTOM)
- EXISTING CONTOUR
- PROPOSED CONTOUR
- PROPOSED SPOT ELEVATION
ME = MATCH EXISTING
EOF = EMERGENCY OVERFLOW
TC = TOP OF CURB
TW = FINISH GRADE AT HIGH SIDE OF WALL
BW = FINISH GRADE AT LOW SIDE OF WALL
FFE = FINISH FLOOR ELEVATION
- PROPOSED GRADING LIMITS
- PROPOSED STORM SEWER
- PROPOSED DRAIN TILE (DT) / SUBSURFACE DRAINS (SD)
- PROPOSED MANHOLE (MH)
- PROPOSED CATCH BASIN (CB)
- PROPOSED FLARED END SECTION (FES)
- INLET PROTECTION DEVICE AT STORM SEWER INLET
- PROPOSED SILT FENCE
- PROPOSED SEDIMENT CONTROL LOG
- PROPOSED ROCK CONSTRUCTION ENTRANCE
- PROPOSED EROSION CONTROL BLANKET
- PROPOSED TEMPORARY DIVERSION BERM
- PROPOSED BUILDING STOOP - REFER TO ARCHITECTURAL PLANS
- 40' WETLAND BUFFER ZONE
- PROPERTY LINE

NOTES

1. REFER TO SHEET C3.01, GRADING PLAN, FOR GENERAL NOTES.
2. REFER TO SWPPP NARRATIVE, SHEET C2.03, FOR CONSTRUCTION SEQUENCING AND EROSION CONTROL REQUIREMENTS.
3. MAINTAIN ADJACENT PROPERTY AND PUBLIC STREETS CLEAN FROM CONSTRUCTION CAUSED DIRT AND DEBRIS ON A DAILY BASIS. PROTECT DRAINAGE SYSTEMS FROM SEDIMENTATION AS A RESULT OF CONSTRUCTION RELATED DIRT AND DEBRIS.
4. MAINTAIN DUST CONTROL DURING GRADING OPERATIONS.
5. ALL EROSION CONTROL METHODS SHALL COMPLY WITH MPCCA AND OTHER LOCAL REGULATIONS.
6. IF EROSION AND SEDIMENT CONTROL MEASURES TAKEN ARE NOT ADEQUATE AND RESULT IN DOWNSTREAM SEDIMENTATION, CLEAN OUT DOWNSTREAM STORM SEWERS AND OTHER CONVEYANCE DEVICES AS NECESSARY, INCLUDING ASSOCIATED RESTORATION.
7. INLET PROTECTION DEVICE AT STORM SEWER INLETS. AT THE INLETS TO ALL STORM SEWER STRUCTURES, PROVIDE A PRODUCT FROM THE FOLLOWING LIST OF APPROVED PRODUCTS:
 - a. ROAD DRAIN "TOP SLAB", MANUFACTURED BY WIMCO
 - b. ROAD DRAIN "CURB & GUTTER", MANUFACTURED BY WIMCO
 - c. INFRASAFE "SEDIMENT CONTROL BARRIER", MANUFACTURED BY ROYAL ENVIRONMENTAL SYSTEMS, INC.
 - d. INFRASAFE "DEBRIS COLLECTION DEVICE", MANUFACTURED BY ROYAL ENVIRONMENTAL SYSTEMS, INC.
 - e. INFRASAFE "CULVERT INLET PROTECTOR", MANUFACTURED BY ROYAL ENVIRONMENTAL SYSTEMS, INC.
 - f. DANDY SACK, MANUFACTURED BY DANDY PRODUCTS, INC.
 - g. DANDY CURB SACK, MANUFACTURED BY DANDY PRODUCTS, INC.
 - h. OR APPROVED EQUAL.
8. PRIOR TO CONSTRUCTION, DELINEATE TURF AND VEGETATED AREAS NOT TO BE DISTURBED WITH ORANGE SNOW FENCE. DO NOT ALLOW CONSTRUCTION TRAFFIC, EQUIPMENT, OR MATERIALS TO UTILIZE, ACCESS, OR OTHERWISE ENTER THE DELINEATED AREAS. MINIMIZE SOIL COMPACTION AND DISRUPTION OF TOPSOIL IN AREAS OUTSIDE THE CONSTRUCTION LIMITS TO COMPLY WITH THE MN CONSTRUCTION STORMWATER PERMIT.
9. NATURAL TOPOGRAPHY AND SOIL CONDITIONS MUST BE PROTECTED, INCLUDING RETENTION ON-SITE OF NATIVE TOPSOIL TO THE GREATEST EXTENT POSSIBLE.
10. ADDITIONAL MEASURES, SUCH AS HYDRAULIC MULCHING AND OTHER PRACTICES AS SPECIFIED BY THE DISTRICT MUST BE USED ON SLOPES OF 3:1 (H:V) OR STEEPER TO PROVIDE ADEQUATE STABILIZATION.
11. FINAL SITE STABILIZATION MEASURES MUST SPECIFY THAT AT LEAST SIX INCHES OF TOPSOIL OR ORGANIC MATTER BE SPREAD AND INCORPORATED INTO THE UNDERLYING SOIL DURING FINAL SITE TREATMENT WHEREVER TOPSOIL HAS BEEN REMOVED.
12. CONSTRUCTION SITE WASTE SUCH AS DISCARDED BUILDING MATERIALS, CONCRETE TRUCK WASHOUT, CHEMICALS, LITTER AND SANITARY WASTE MUST BE PROPERLY MANAGED.
13. ALL TEMPORARY EROSION AND SEDIMENT CONTROL BMPs MUST BE MAINTAINED UNTIL COMPLETION OF CONSTRUCTION AND VEGETATION IS ESTABLISHED SUFFICIENTLY TO ENSURE STABILITY OF THE SITE, AS DETERMINED BY THE DISTRICT.
14. ALL TEMPORARY EROSION AND SEDIMENT CONTROL BMPs MUST BE REMOVED UPON FINAL STABILIZATION.
15. SOIL SURFACES COMPACTED DURING CONSTRUCTION AND REMAINING PERVIOUS UPON COMPLETION OF CONSTRUCTION MUST BE DECOMPACTED TO ACHIEVE A SOIL COMPACTION TESTING PRESSURE OF LESS THAN 1,400 KILOPASCALS OR 200 POUNDS PER SQUARE INCH IN THE UPPER 12 INCHES OF THE SOIL PROFILE WHILE TAKING CARE TO PROTECT UTILITIES, TREE ROOTS, AND OTHER EXISTING VEGETATION.
16. ALL DISTURBED AREAS MUST BE STABILIZED WITHIN 7 CALENDAR DAYS AFTER LAND-DISTURBING WORK HAS TEMPORARILY OR PERMANENTLY CEASED ON A PROPERTY THAT DRAINS TO AN IMPAIRED WATER, WITHIN 14 DAYS ELSEWHERE.
17. THE PERMITTEE MUST, AT A MINIMUM, INSPECT, MAINTAIN AND REPAIR ALL DISTURBED SURFACES AND ALL EROSION AND SEDIMENT CONTROL FACILITIES AND SOIL STABILIZATION MEASURES EVERY DAY WORK IS PERFORMED ON THE SITE AND AT LEAST WEEKLY UNTIL LAND-DISTURBING ACTIVITY HAS CEASED. THEREAFTER, THE PERMITTEE MUST PERFORM THESE RESPONSIBILITIES AT LEAST WEEKLY UNTIL VEGETATIVE COVER IS ESTABLISHED. THE PERMITTEE WILL MAINTAIN A LOG OF ACTIVITIES UNDER THIS SECTION FOR INSPECTION BY THE DISTRICT ON REQUEST.
18. ACTIVITIES MUST BE CONDUCTED SO AS TO MINIMIZE THE POTENTIAL TRANSFER OF AQUATIC INVASIVE SPECIES (E.G., ZEBRA MUSSELS, EURASIAN WATERMILFOIL, ETC.) TO THE MAXIMUM EXTENT POSSIBLE.



1
C2.01 EROSION CONTROL PLAN SOUTH



ISSUE #	DATE	DESCRIPTION

CERTIFICATION

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

Date: 11/06/2024 Reg. No. 59632

Signed:
William J. Diede

DRAWN BY	WJD
CHECKED BY	DAR
COMMISSION NUMBER	2653-01

SHEET TITLE

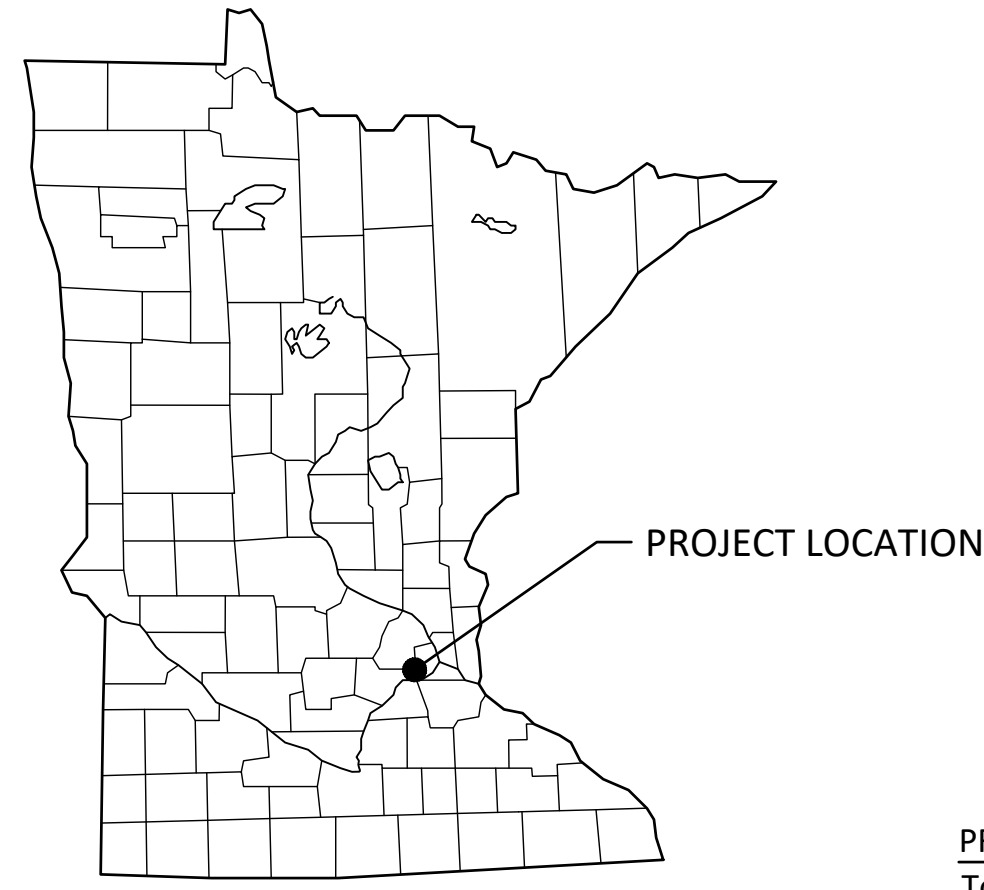
**EROSION CONTROL
PLAN**

SHEET NUMBER

C2.01

STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

EDEN PRAIRIE POLICE DEPARTMENT IMPROVEMENTS - 2025
CITY OF EDEN PRAIRIE
HENNEPIN COUNTY, MINNESOTA



LEGEND

	1-MILE BOUNDARY		
	PROJECT BOUNDARY		
	OR		IMPAIRED WATERS
	OR		SPECIAL OR PROTECTED WATERS
	NATIONAL WETLANDS INVENTORY		
	RECEIVING WATERS		

PROJECT AREAS:

Total Project Size (disturbed area) =	2.49	ACRES
Existing area of impervious surface =	3.24	ACRES
Post construction area of impervious surface =	2.41	ACRES
Total new impervious surface area created =	-0.83	ACRES

Planned Construction Start Date: 01/06/2025
Estimated Construction Completion Date: 01/01/2026

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

<input type="checkbox"/>	Wet Sedimentation Basin
<input checked="" type="checkbox"/>	Infiltration/Filtration
<input type="checkbox"/>	Regional Pond
<input type="checkbox"/>	Permanent Stormwater Management Not Required

PROJECT LOCATION:

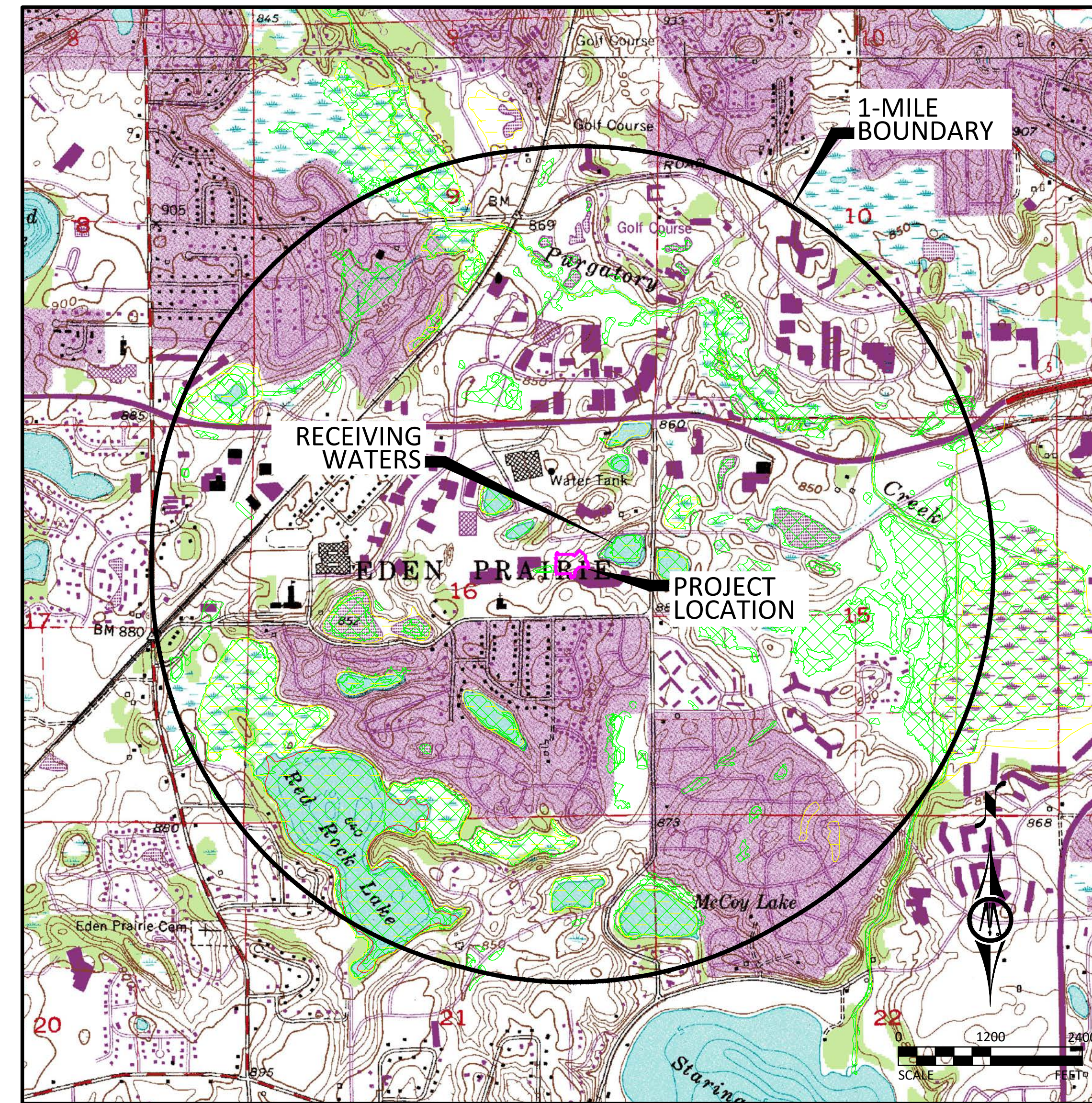
COUNTY	TOWNSHIP	RANGE	SECTION	LATITUDE	LONGITUDE
HENNEPIN	T116N	R22W	16	44.85664°	-93.46435°

BMP SUMMARY	QUANTITY	UNIT
ROCK CONSTRUCTION ENTRANCE	1	EACH
CONCRETE WASHOUT AREA	1	EACH
SILT FENCE, TYPE MS	586	LIN. FT.
SEDIMENT CONTROL LOG	501	LIN. FT.
TEMPORARY DIVERSION BERM	371	LIN. FT.
EROSION CONTROL BLANKET	340	SQ. YD.
INLET PROTECTION DEVICE	14	EACH

DESCRIPTION OF CONSTRUCTION ACTIVITIES AND STORMWATER MANAGEMENT:
Construction activities include: Site grading, storm sewer extensions, temporary erosion and sediment control, and permanent stabilization.

Stormwater currently sheet flows northeast across the site, collects in storm sewer, and discharges into a wetland. The wetland is located on the site's property. Stormwater from the wetland will ultimately flow into the city's storm sewer in Mitchell Road.

After construction is complete stormwater from the parking lot area of the site will sheet flow into storm sewer and discharge into an infiltration basin. Stormwater will infiltrate to groundwater or outlet into storm sewer and discharge into the existing wetland. The remaining drainage area from the site will continue to sheet flow to the existing wetland.



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

NAME OF WATER BODY	TYPE (ditch, pond, wetland, lake, etc.)	Special, Prohibited, Restricted Water ¹	Flows to Impaired Water Within 1-Mile ²	USEPA Approved Construction Related TMDL ³
Unnamed Wetland - PEM1A, PUBF	Wetland	No	No	No

¹ Special, prohibited, and restricted waters are listed in Section 23 of the MN Construction Stormwater General Permit (MNR100001).
² Identified as impaired under section 303 (d) of the federal Clean Water Act for phosphorus, turbidity, TSS, dissolved oxygen, and/or aquatic biota.
³ Construction Related TMDLs include those related to: phosphorus, turbidity, TSS, dissolved oxygen, and/or aquatic biota.

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

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

RESPONSIBLE PARTIES:
The Contractor and Owner will be joint applicants under the MPCA's General Stormwater Permit for Construction Activity as required by the National Pollutant Discharge Elimination System (NPDES) Phase II program.

The Contractor shall provide one or more trained Construction SWPPP Manager(s) knowledgeable and experienced in the application of erosion prevention and sediment control BMPs that will oversee the implementation of the SWPPP, and the installation, inspection and maintenance of the erosion prevention and sediment control BMPs.

A Construction SWPPP Manager must be available for an on-site inspection within 72 hours upon request by the MPCA.

	COMPANY	CONTACT PERSON	PHONE
OWNER:	City of Eden Prairie	Rick Clark	952-949-8488
SWPPP DESIGNER:	Bolton & Menk, Inc.	Allison Smith	906-430-5533
CONTRACTOR:	TBD	TBD	TBD
CONSTRUCTION SWPPP MANAGER:	TBD	TBD	TBD
PARTY RESPONSIBLE FOR LONG TERM O&M:	City of Eden Prairie	Rick Clark	952-949-8488

The SWPPP Designer, Construction SWPPP Manager, and BMP Installer must have appropriate training. Documentation showing training commensurate with the job duties and responsibilities is required to be included in the SWPPP prior to any work beginning on the site. Training documentation for the SWPPP Designer is included on the Narrative sheet. The Contractor shall attach training documentation to this SWPPP for the Construction SWPPP Manager and BMP Installer prior to the start of construction. This information shall be kept up to date until the project NOT is filed.

ADDITIONAL COMPENSATION
Payment for all work associated with Erosion and Sediment Control shall be as described in the Project Manual. Unless otherwise authorized by the Owner no additional payment shall be made for any work required to administer and maintain the site erosion and sediment control in compliance with the Minnesota Pollution Control Agency (MPCA) - General Stormwater Permit for Construction Activity (MN R100001) including but not limited to inspection, maintenance, and removal of BMPs or addition of BMPs to accommodate Contractor phasing.

DOCUMENT RETENTION
Permittees must make the SWPPP, including all inspection reports, maintenance records, training records and other information required by this permit, available to federal, state, and local officials within three (3) days upon request for the duration of the permit and for three (3) years following the NOT.

GENERAL STORMWATER DISCHARGE REQUIREMENTS
All requirements listed in Section 5.1 of the Permit for the design of the permanent stormwater management system and discharge have been included in the preparation of this SWPPP. These include but are not limited to:
1. The expected amount, frequency, intensity, and duration of precipitation.
2. The nature of stormwater runoff and run-on at the site
3. Peak flow rates and stormwater volumes to minimize erosion at outlets and downstream channel and stream bank erosion.
4. The range of soil particle sizes expected to be present on the site.

Permanent stormwater treatment systems for this project have been designed in accordance with the guidance in the MN Stormwater Manual in place at the time of bidding. Copies of the design information and calculations are part of this SWPPP and will be provided in digital format upon written request to the Engineer.

EDEN PRAIRIE POLICE DEPARTMENT

ISSUE #	DATE	DESCRIPTION

CERTIFICATION

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

Date: 11/06/2024 Reg. No. 59632

Signed:
William J. Diede

DRAWN BY	WJD
CHECKED BY	DAR
COMMISSION NUMBER	2653-01

SHEET TITLE

SWPPP PLAN

SHEET NUMBER

C2.02

Information contained in this SWPPP narrative sheet summarizes requirements of the GENERAL PERMIT AUTHORIZATION TO DISCHARGE STORMWATER ASSOCIATED WITH CONSTRUCTION ACTIVITY UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM/STATE DISPOSAL SYSTEM PROGRAM - Permit No: MN R100001 (Permit) as they apply to this project. All provisions of the Permit including those not specifically cited herein shall apply to this project. The Contractor is responsible to be familiar with and comply with all conditions of the permit. The full text of the Permit is available at: <https://www.pca.state.mn.us/sites/default/files/wq-strm2-80a.pdf>

SWPPP AMENDMENTS AND SUBMITTALS

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

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

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

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

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

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

EROSION PREVENTION PRACTICES

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

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

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

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

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

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

SEDIMENT CONTROL PRACTICES

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

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

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

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

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

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

TEMPORARY SEDIMENTATION BASINS

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

DEWATERING

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

POLLUTION PREVENTION

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

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

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

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

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

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

INSPECTION & MAINTENANCE

A trained person shall routinely inspect the entire construction site at the time interval indicated on this sheet of the SWPPP during active construction and within 24-hours after a rainfall event greater than 0.5 inches in 24 hours. Following an inspection that occurs within 24-hours after a rainfall event, the next inspection must be conducted at the time interval indicated in the Receiving Waters Table found on the SITE PLAN AND INFORMATION SHEET of the SWPPP.

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

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

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

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

Inspections must include:

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

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

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

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

PUBLIC WATER RESTRICTIONS:

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

FINAL STABILIZATION

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

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

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

SITE STABILIZATION COMPLETION:

Stabilization of exposed soils shall begin immediately and shall be completed after the construction activity has temporarily or permanently ceased no later than:	14 calendar days
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SITE INSPECTION INTERVAL:

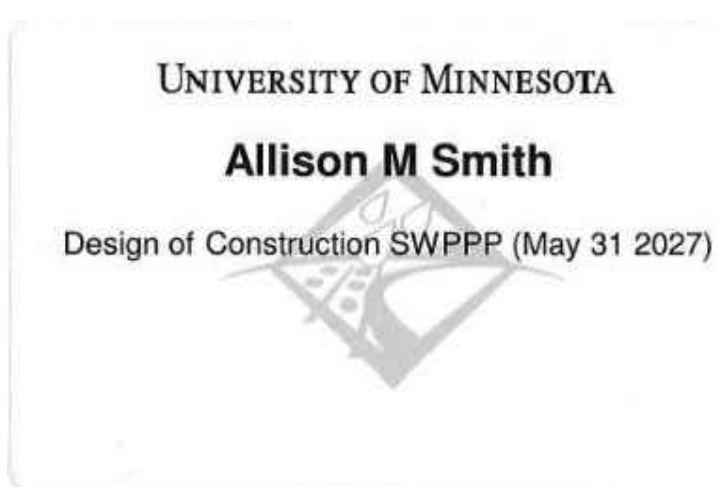
A trained person shall routinely inspect the entire construction site during active construction at an interval of no more than:	7 calendar days
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SPECIAL ENVIRONMENTAL CONSIDERATIONS AND PERMITS:

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

TYPE OF PERMIT	PERMITTING AGENCY	PERMIT STATUS AND CONDITIONS
Construction Stormwater NPDES	MPCA	IN PROGRESS
Stormwater Management	Riley Purgatory Bluff Creek Watershed District (RPBCWD)	IN PROGRESS

SWPPP DESIGNER TRAINING DOCUMENTATION:



Architecture
Interior Design
Landscape Architecture
Engineering

222 North Second Street
Long & Kees Bldg
Suite 101
Minneapolis, MN
55401
612.339.3752

www.bkvgroup.com



3300 FERNBROOK LANE NORTH, SUITE 300
PLYMOUTH, MN 55447
Phone: (763) 544-7229
Email: plymouth@bolton-menk.com
www.bolton-menk.com

PROJECT TITLE:

**EDEN PRAIRIE
POLICE
DEPARTMENT**

ISSUE #	DATE	DESCRIPTION

CERTIFICATION

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

Date: 11/06/2024 Reg. No. 59632

Signed:
William J. Diede

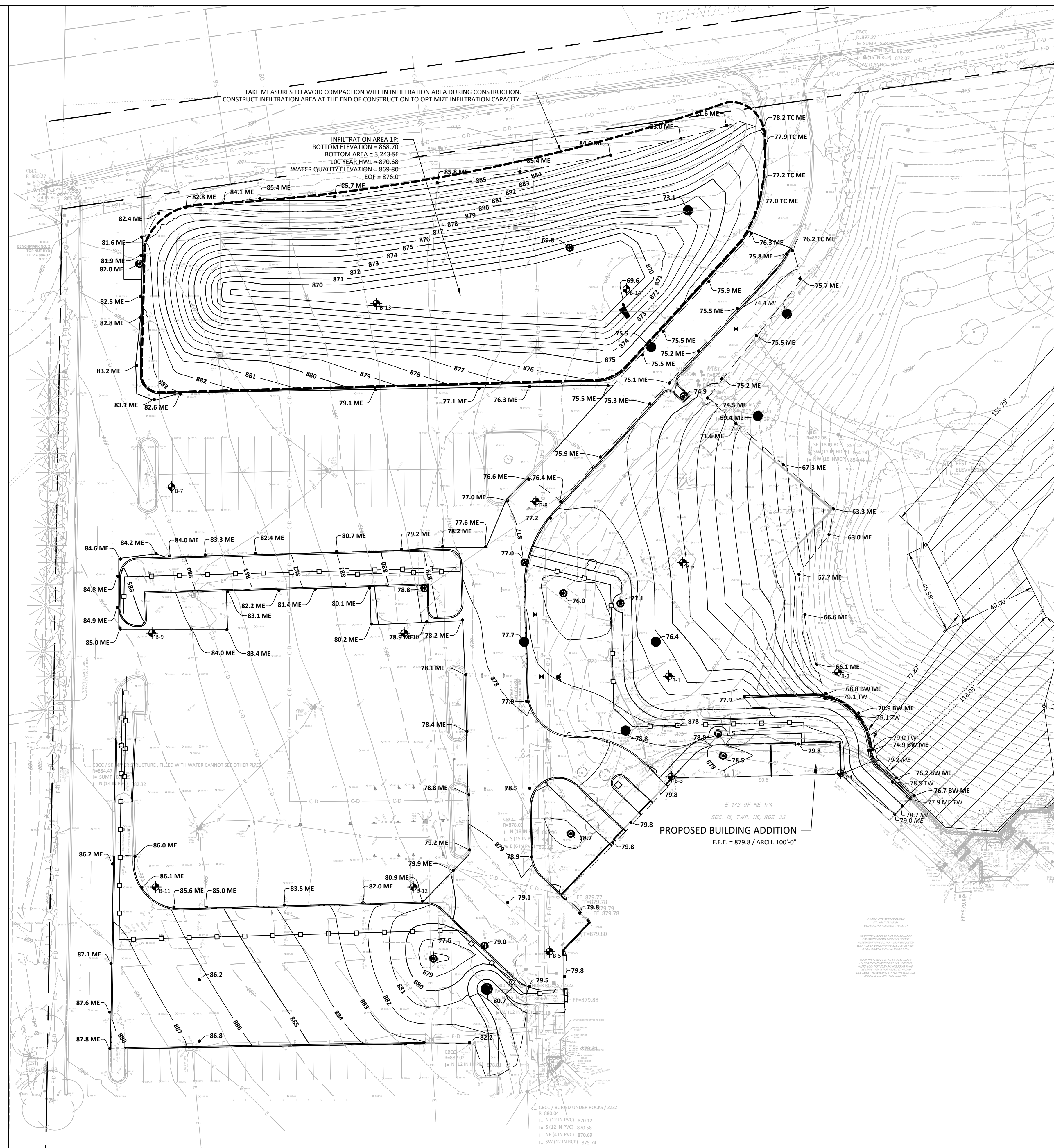
DRAWN BY	WJD
CHECKED BY	DAR
COMMISSION NUMBER	2653-01

SHEET TITLE

**SWPPP
NARRATIVE**

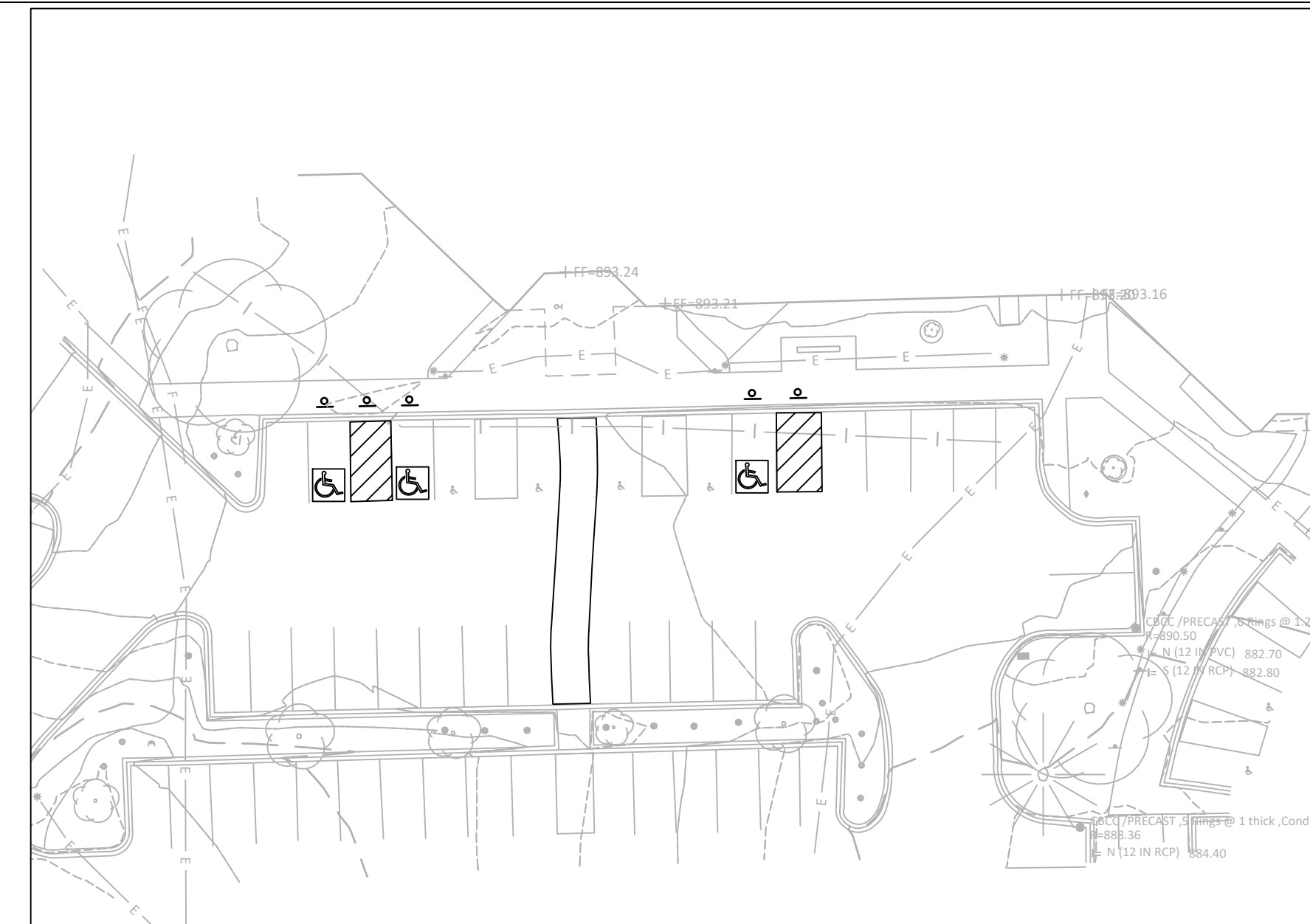
SHEET NUMBER

C2.03



SITE BENCHMARK

- BENCHMARK NO. 1**
TOP NUT HYDRANT NORTH SIDE OF TECHNOLOGY DRIVE ACROSS FROM NW COR. OF SURVEYED PROPERTY
ELEV: 889.61
- BENCHMARK NO. 2**
TOP NUT HYDRANT NEAR NW COR. OF SURVEYED PROPERTY
ELEV: 884.32
- BENCHMARK NO. 3**
TOP NUT HYDRANT NEAR NW COR. OF BUILDING & PLAYGROUND
ELEV: 879.63



1
C3.01 GRADING AND DRAINAGE PLAN SOUTH

LEGEND

- 1
C3.01 REFERENCE KEY TO SITE DETAILS
DETAIL I.D. NUMBER (TOP)
DETAIL SHEET NUMBER (BOTTOM)
- 875 EXISTING CONTOUR
- 875.6 EXISTING SPOT ELEVATION
- 875.6 PROPOSED CONTOUR
- PROPOSED SPOT ELEVATION:
ME = MATCH EXISTING
E.O.F. = EMERGENCY OVERFLOW
T.C. = TOP OF CURB
T.W. = FINISH GRADE AT HIGH SIDE OF WALL
B.W. = FINISH GRADE AT LOW SIDE OF WALL
F.F.E. = FINISH FLOOR ELEVATION
- PROPOSED GRADING LIMITS
- PROPOSED SAND SUBBASE AT FROST FOOTED STOOPS
- APPROXIMATE SOIL BORING LOCATION
- PROPOSED MANHOLE (MH)
- PROPOSED CATCH BASIN (CB)
- PROPOSED FLARED END SECTION (FES)
- PROPOSED STOOP - REFER TO ARCHITECTURAL PLANS
- 40' WETLAND BUFFER ZONE
- PROPERTY LINE

GENERAL NOTES

1. ALL CONSTRUCTION SHALL COMPLY WITH APPLICABLE STATE AND LOCAL ORDINANCES.
2. THE CONTRACTOR WILL BE RESPONSIBLE FOR AND SHALL PAY FOR ALL CONSTRUCTION STAKING / LAYOUT.
3. OBTAIN AND PAY FOR ALL RELATED CONSTRUCTION PERMITS, INCLUDING THE NPDES PERMIT FROM THE MPCA. SUBMIT A COPY OF ALL PERMITS TO THE CITY.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TRAFFIC CONTROL SIGNAGE (CONSTRUCTION ZONES) NECESSARY TO CONSTRUCT PROPOSED IMPROVEMENTS. ALL SIGNAGE LAYOUTS MUST BE DESIGNED BY THE CONTRACTOR AND APPROVED BY LOCAL AUTHORITIES.
5. INSTALL CONTROL FENCING AND BARRICADING AS NECESSARY TO PROTECT THE PUBLIC.
6. INSPECT SITE AND REVIEW SOIL BORINGS TO DETERMINE EXTENT OF WORK AND NATURE OF MATERIALS TO BE HANDLED.
7. REFER TO SPECIFICATIONS FOR DEWATERING REQUIREMENTS.
8. CHECK ALL PLAN AND DETAIL DIMENSIONS AND VERIFY SAME BEFORE FIELD LAYOUT.
9. REFER TO ARCHITECTURAL PLANS FOR BUILDING AND STOOP DIMENSIONS AND LAYOUT.
10. REFER TO THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) NARRATIVE, SHEET XXX, FOR EROSION CONTROL REQUIREMENTS. SECTION 31 00 00 SHALL BE RESPONSIBLE FOR FULL IMPLEMENTATION OF THE SWPPP.
11. MAINTAIN ADJACENT PROPERTY AND PUBLIC STREETS CLEAN FROM CONSTRUCTION CAUSED DIRT AND DEBRIS ON A DAILY BASIS. PROTECT DRAINAGE SYSTEMS FROM SEDIMENTATION AS A RESULT OF CONSTRUCTION RELATED DIRT AND DEBRIS.
12. MAINTAIN DUST CONTROL DURING GRADING OPERATIONS.
13. ALL EROSION CONTROL METHODS SHALL COMPLY WITH MPCA AND LOCAL REGULATIONS.
14. MINIMIZE DISTURBANCE TO SITE AND PROTECT EXISTING SITE FEATURES (INCLUDING TURF AND VEGETATION) WHICH ARE TO REMAIN.
15. PROPOSED CONTOURS AND SPOT ELEVATIONS ARE SHOWN TO FINISH GRADE UNLESS OTHERWISE NOTED.
16. PROPOSED ELEVATIONS SHOWN TYPICALLY AS 78.1 OR 78 SHALL BE UNDERSTOOD TO MEAN 78.1 OR 78.
17. SPOT ELEVATIONS SHOWN IN PARKING LOTS, DRIVES AND ROADS INDICATE GUTTER GRADES, UNLESS NOTED OTHERWISE. SPOT ELEVATIONS WITH LABELS OUTSIDE THE BUILDING PERIMETER INDICATE PROPOSED GRADES OUTSIDE THE BUILDING. SPOT ELEVATIONS WITH LABELS INSIDE THE BUILDING PERIMETER INDICATE PROPOSED FINISH FLOOR ELEVATIONS.
18. THE CONTRACTOR WILL BE SOLELY RESPONSIBLE FOR DETERMINING QUANTITIES OF CUT, FILL AND WASTE MATERIALS TO BE HANDLED, AND FOR AMOUNT OF GRADING TO BE DONE IN ORDER TO COMPLETELY PERFORM ALL WORK INDICATED ON THE DRAWINGS. IMPORT SUITABLE MATERIAL AND EXPORT UNSUITABLE / EXCESS / WASTE MATERIAL, AS REQUIRED, AT NO ADDITIONAL COST TO THE OWNER.
19. NO FINISHED SLOPES SHALL EXCEED 3' HORIZONTAL TO 1' VERTICAL (3:1), UNLESS OTHERWISE NOTED.
20. ALL DISTURBED AREAS OUTSIDE THE BUILDING PAD, WHICH ARE NOT DESIGNATED TO BE PAVED SHALL RECEIVE AT LEAST 6" OF TOPSOIL. REFER TO LANDSCAPING PLANS FOR LOCATION OF SEED, SOD, AND PLANTINGS.
21. ALL WATERMAIN PIPE SHALL BE DIP, CLASS 52. ALL WATERMAIN SHALL HAVE MINIMUM 8'-0" BURY (TOP OF PIPE TO FINISH GRADE). DIP SHALL BE ENCASED WITH POLYETHYLENE FILM CONFORMING TO ASTM D 1248-889.
22. ALL STORM SEWER PIPE SHALL BE RCP, CLASS III (MIN.), WITH FLEXIBLE WATERTIGHT JOINTS IN ACCORDANCE WITH ASTM C-361 OR PVC PIPE (ASTM D3034, SDR 35) INSTALLED IN ACCORDANCE WITH ASTM D2321, UNLESS OTHERWISE NOTED.
23. ALL STORM SEWER PIPE CROSSING WATERMAIN, OUTSIDE OF THE PUBLIC RIGHT-OF-WAY, SHALL BE ASTM D2665, SCHEDULE 40 PVC WITH SOLVENT WELD JOINTS.
24. FLEXIBLE JOINTS AT STORM SEWER PIPE CONNECTIONS TO STRUCTURES:
a. IN ACCORDANCE WITH MINNESOTA PLUMBING CODE, PROVIDE FLEXIBLE JOINTS AT ALL PIPE CONNECTIONS TO ALL STORM SEWER STRUCTURES.
b. ACCEPTABLE MANUFACTURERS / PRODUCTS:
i. FERROCO, "CONCRETE MANHOLE ADAPTORS" OR "LARGE-DIAMETER WATERSTOPS"
ii. PRESS-SEAL, WATERSTOP GROUTING RINGS"
iii. OR APPROVED EQUAL.
25. INSTALL WATERMAIN AT LEAST 10 FEET HORIZONTALLY FROM ANY MANHOLE, CATCH BASIN, STORM SEWER, SANITARY SEWER, DRAIN TILE, OR OTHER POTENTIAL SOURCE FOR CONTAMINATION PER MN PLUMBING CODE. THIS ISOLATION DISTANCE IS MEASURED FROM THE OUTER EDGE OF THE PIPE TO THE OUTER EDGE OF THE CONTAMINATION SOURCE (OUTER EDGE OF STRUCTURES OR SIMILAR).
26. INSTALL MANHOLES, CATCH BASINS, STORM SEWER, SANITARY SEWER, DRAIN TILE, AND OTHER POTENTIAL SOURCES OF CONTAMINATION AT LEAST 10 FEET HORIZONTALLY FROM ANY WATERMAIN PER MN PLUMBING CODE. THIS ISOLATION DISTANCE IS MEASURED FROM THE OUTER EDGE OF THE PIPE TO THE OUTER EDGE OF THE CONTAMINATION SOURCE (OUTER EDGE OF STRUCTURES OR SIMILAR).
27. LOCATE ALL EXISTING UTILITIES. VERIFY LOCATION, SIZE AND INVERT ELEVATION OF ALL EXISTING UTILITIES. BEFORE BEGINNING CONSTRUCTION.
28. PRIOR TO CONSTRUCTION OF PROPOSED BUILDING UTILITY SERVICES (STORM, SANITARY SEWER, WATERMAIN), VERIFY ALL PROPOSED BUILDING UTILITY SERVICE PIPE SIZES, LOCATIONS AND ELEVATIONS WITH MECHANICAL PLANS. COORDINATE CONSTRUCTION AND CONNECTIONS WITH MECHANICAL CONTRACTOR.
29. MAINTAIN DRAINAGE FROM EXISTING BUILDING AT ALL TIMES. PROVIDE TEMPORARY STORM SEWER, INCLUDING, BUT NOT LIMITED TO, CATCH BASINS, MANHOLES, PIPING, AND SIMILAR. DO NOT REMOVE EXISTING STORM SEWER UNTIL TEMPORARY OR PERMANENT STORM SEWER IS INSTALLED AND FUNCTIONAL. COORDINATE ALL REMOVALS WITH APPROPRIATE TRADES (SITE UTILITY CONTRACTOR, MECHANICAL CONTRACTOR, ETC.) AS REQUIRED.
30. STAKE LIMITS OF WALKS AND CURBING PRIOR TO INSTALLATION OF GATE VALVES, CATCH BASINS, AND MANHOLES. ADJUST GATE VALVE AND MANHOLE LOCATIONS TO AVOID PLACEMENT OF THESE STRUCTURES IN WALKS AND CURB AND GUTTER. STAKE CURB AND GUTTER ALIGNMENTS TO ALLOW CURB INLET TYPE CATCH BASINS TO PROPERLY ALIGN WITH CURB AND GUTTER.

LOW FLOOR / HWL ELEVATION TABLE

LOW FLOOR ELEVATION	879.80000
PURGATORY CREEK DESIGN FLOOD ELEVATION	843

*The nearest adjacent floodplain, Red Rock Lake, has a maximum recorded water level of 843'. The Base Flood Elevation for Purgatory Creek is not defined in this area, given the close proximity to Red Rock Lake it has been assumed Red Rock Lake and Purgatory Creek share the same design flood elevation.

ISSUE #	DATE	DESCRIPTION

CERTIFICATION

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

Date: 11/06/2024 Reg. No. 59532

Signed: *William J. Diede*
William J. Diede

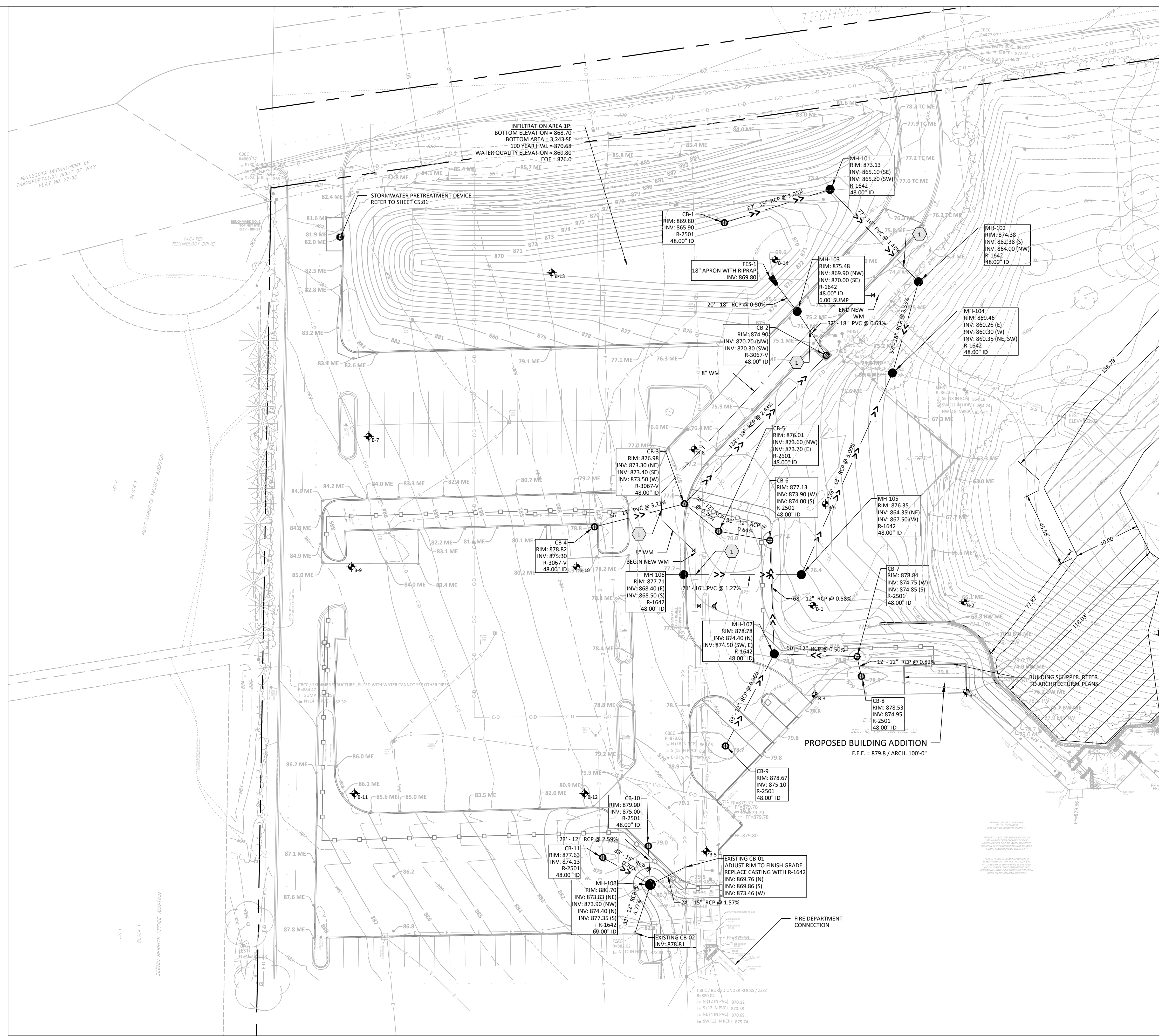
DRAWN BY	WJD
CHECKED BY	DAR
COMMISSION NUMBER	2653-01

SHEET TITLE

**GRADING AND
DRAINAGE PLAN**

SHEET NUMBER

C3.01



LEGEND

- REFERENCE KEY TO SITE DETAILS
DETAIL I.D. NUMBER (TOP)
DETAIL SHEET NUMBER (BOTTOM)
- EXISTING CONTOUR
- EXISTING SPOT ELEVATION
- PROPOSED CONTOUR
- PROPOSED SPOT ELEVATION
ME = MATCH EXISTING
EOP = EMERGENCY OVERFLOW
TC = TOP OF CURB
TW = FINISH GRADE AT HIGH SIDE OF WALL
BW = FINISH GRADE AT LOW SIDE OF WALL
- PROPOSED GRADING LIMITS
- PROPOSED STORM SEWER
- PROPOSED DRAIN TILE (DT) / SUBSURFACE DRAINS (SD)
- PROPOSED WATERMAIN (WM)
- PROPOSED HYDRANT
- PROPOSED GATE VALVE (GV)
- PROPOSED MANHOLE (MH)
- PROPOSED CATCH BASIN (CB)
- PROPOSED FLARED END SECTION (FES)
- PROVIDE MINIMUM 18" VERTICAL SEPARATION AT CROSSING - PROVIDE VERTICAL BENDS IN WATERMAIN AS REQUIRED TO ACCOMPLISH CENTER ONE LENGTH WATERMAIN PIPE ON CROSSING.
- CONNECT DRAIN TILE TO STRUCTURE AND PROVIDE BACKWATER VALVE
- APPROXIMATE SOIL BORING LOCATION
- PROPOSED BUILDING STOOP - REFER TO ARCHITECTURAL PLANS
- 40' WETLAND BUFFER ZONE
- PROPERTY LINE

NOTES

1. REFER TO SHEET C3.01, GRADING AND DRAINAGE PLAN, FOR GENERAL NOTES.
2. ALL WATERMAIN PIPE SHALL BE DIP, CLASS 52. ALL WATERMAIN SHALL HAVE MINIMUM 8'-0" BURY (TOP OF PIPE TO FINISH GRADE). DIP SHALL BE ENCASED WITH POLYETHYLENE FILM CONFORMING TO ASTM D 1248-889.
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**EDEN PRAIRIE
POLICE
DEPARTMENT**

ISSUE #	DATE	DESCRIPTION

CERTIFICATION

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

Date: 11/06/2024 Reg. No. 56532

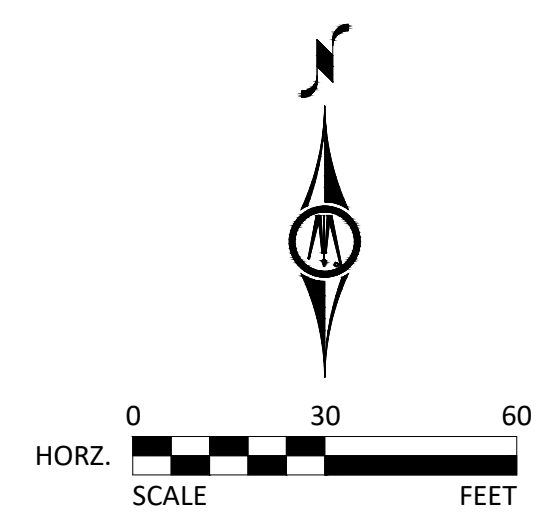
Signed:
William J. Diede

DRAWN BY	WJD
CHECKED BY	DAR
COMMISSION NUMBER	2653-01
SHEET TITLE	

UTILITY PLAN

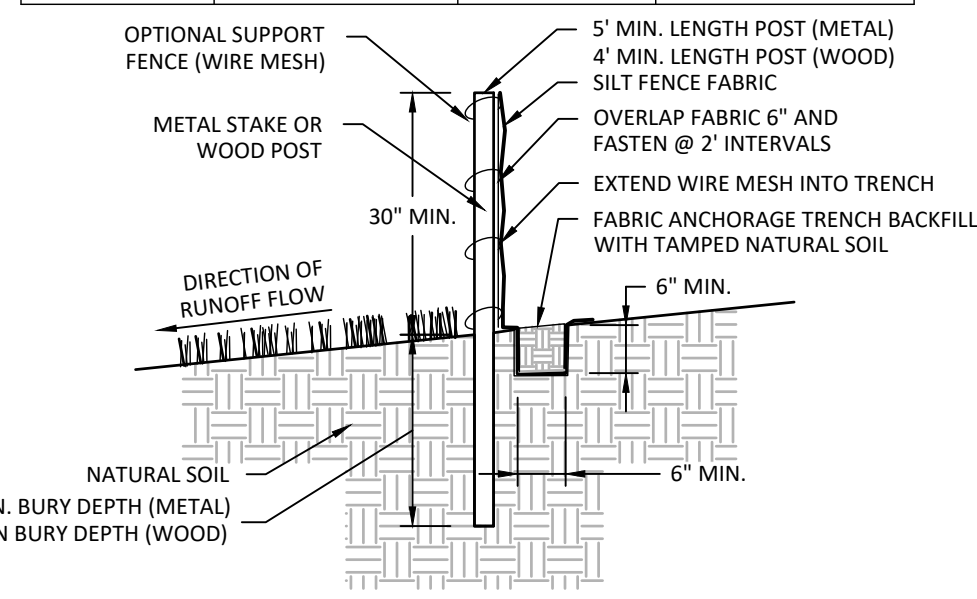
SHEET NUMBER

C4.01



ISSUE #	DATE	DESCRIPTION

NORMAL USE	POSTS: (IF USED WITHOUT SUPPORT FENCE)	WOOD 2" SQ. (MIN) @ 4' (MAX) SPACING	METAL 0.35 LB/FT (MIN.) @ 6" (MAX) SPACING
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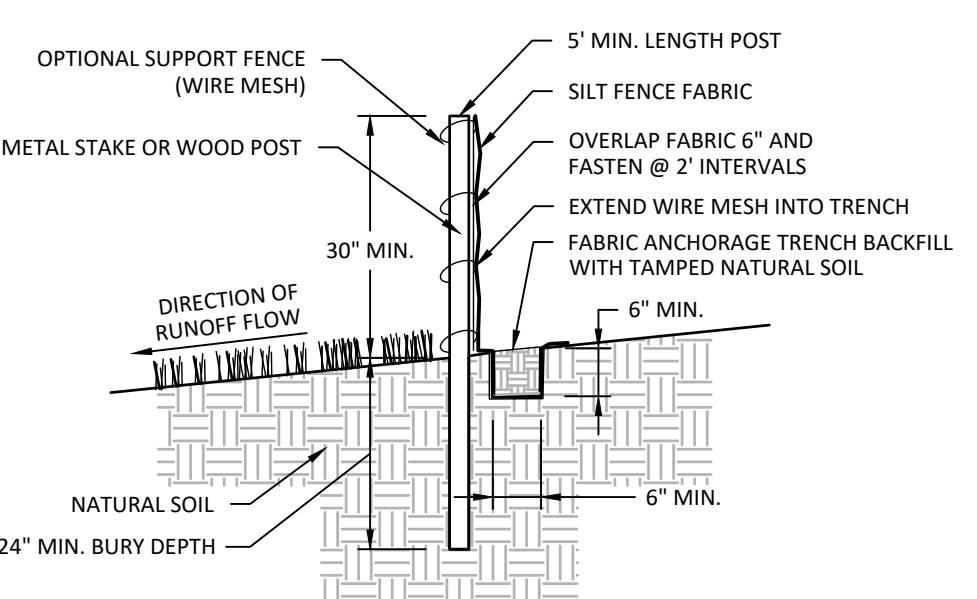


NOTE:
DEPENDENT UPON CONFIGURATION, ATTACH TO WIRE MESH WITH HOG RINGS, STEEL POSTS WITH THE WIRES, OR WOOD POSTS WITH STAPLES

SILT FENCE

NOT TO SCALE

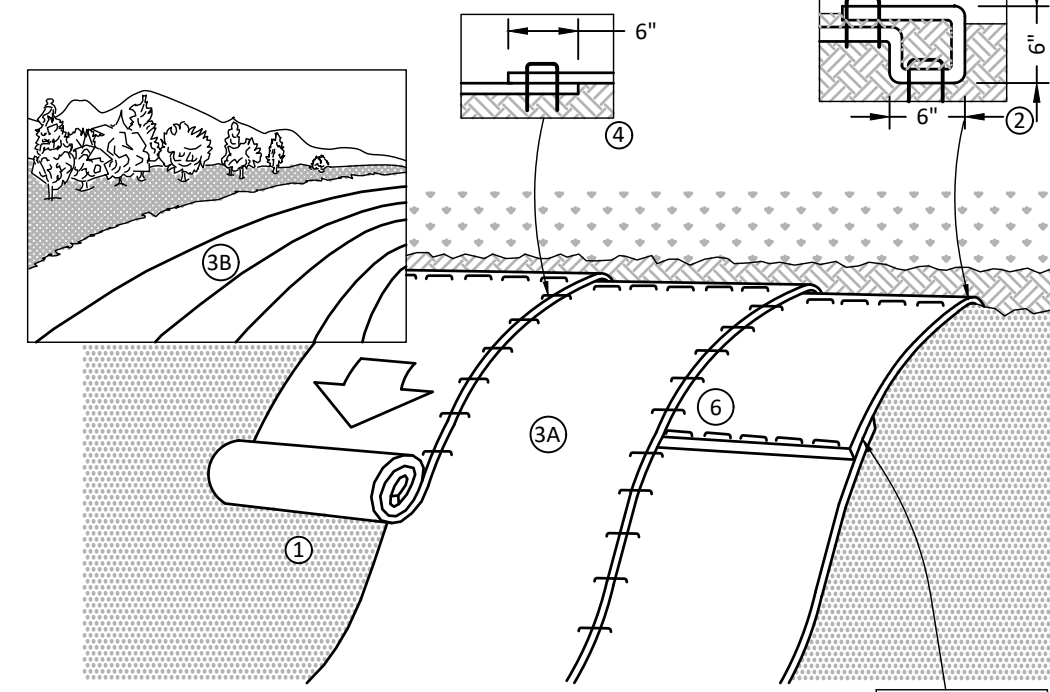
HEAVY DUTY	POSTS: (IF USED WITH SUPPORT FENCE)	WOOD 4" DIA. (MIN) @ 8' (MAX) SPACING	METAL 3.3 LB/FT (MIN.) @ 6" (MAX) SPACING
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NOTE:
DEPENDENT UPON CONFIGURATION, ATTACH TO WIRE MESH WITH HOG RINGS, STEEL POSTS WITH THE WIRES, OR WOOD POSTS WITH STAPLES

SILT FENCE HEAVY DUTY

NOT TO SCALE

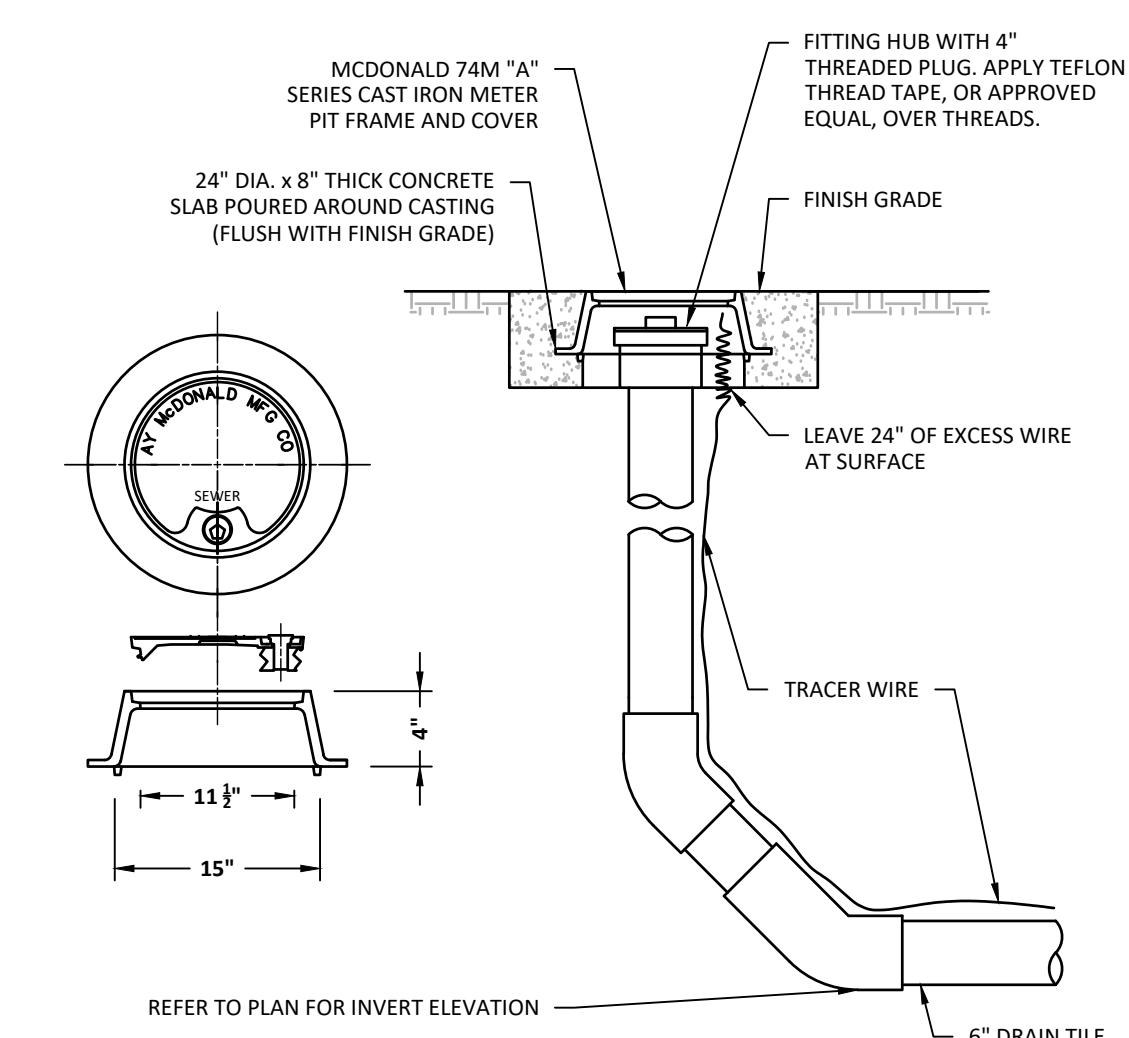


NOTE: *IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY SECURE THE BLANKETS.

- PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIPE, FERTILIZER, AND SEED.
- BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" DEEP X 6" WIDE TRENCH WITH APPROXIMATE 12" OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE BLANKET.
- ROLL THE BLANKETS (A.) DOWN OR (B.) HORIZONTALLY ACROSS THE SLOPE. BLANKETS SHALL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING OPTIONAL DOT SYSTEM, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
- THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 6" OVERLAP DEPENDING ON BLANKET TYPE. TO ENSURE PROPER SEAM ALIGNMENT, PLACE THE EDGE OF THE OVERLAPPING BLANKET (BLANKET BEING INSTALLED ON TOP) EVEN WITH THE COLORED SEAM STITCH ON THE PREVIOUSLY INSTALLED BLANKET.
- CONSECUTIVE BLANKETS SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 6" OVERLAP. STAPLE THROUGH OVERLAP AREA, APPROXIMATELY 12" APART ACROSS ENTIRE BLANKET WIDTH.
- BLANKET SHALL BE STAPLED AS PER MANUFACTURER'S RECOMMENDATION.

EROSION CONTROL BLANKET

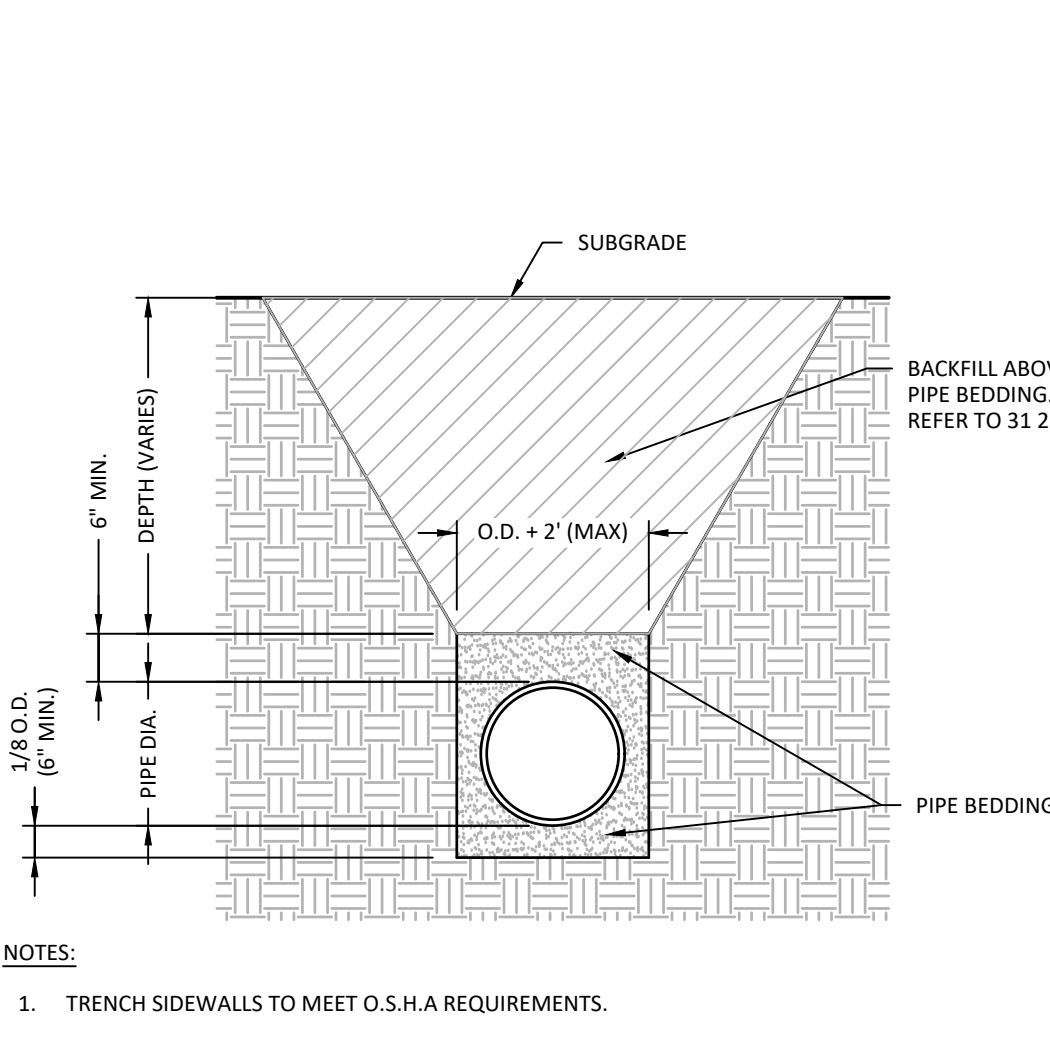
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NOTE:
ATTACH TRACER WIRE WITH BROWN STRIPE TO PIPE AT 3' O.C. WITH PLASTIC ZIP-TIES (OR APPROVED EQUIV.)

CLEANOUT ASSEMBLY

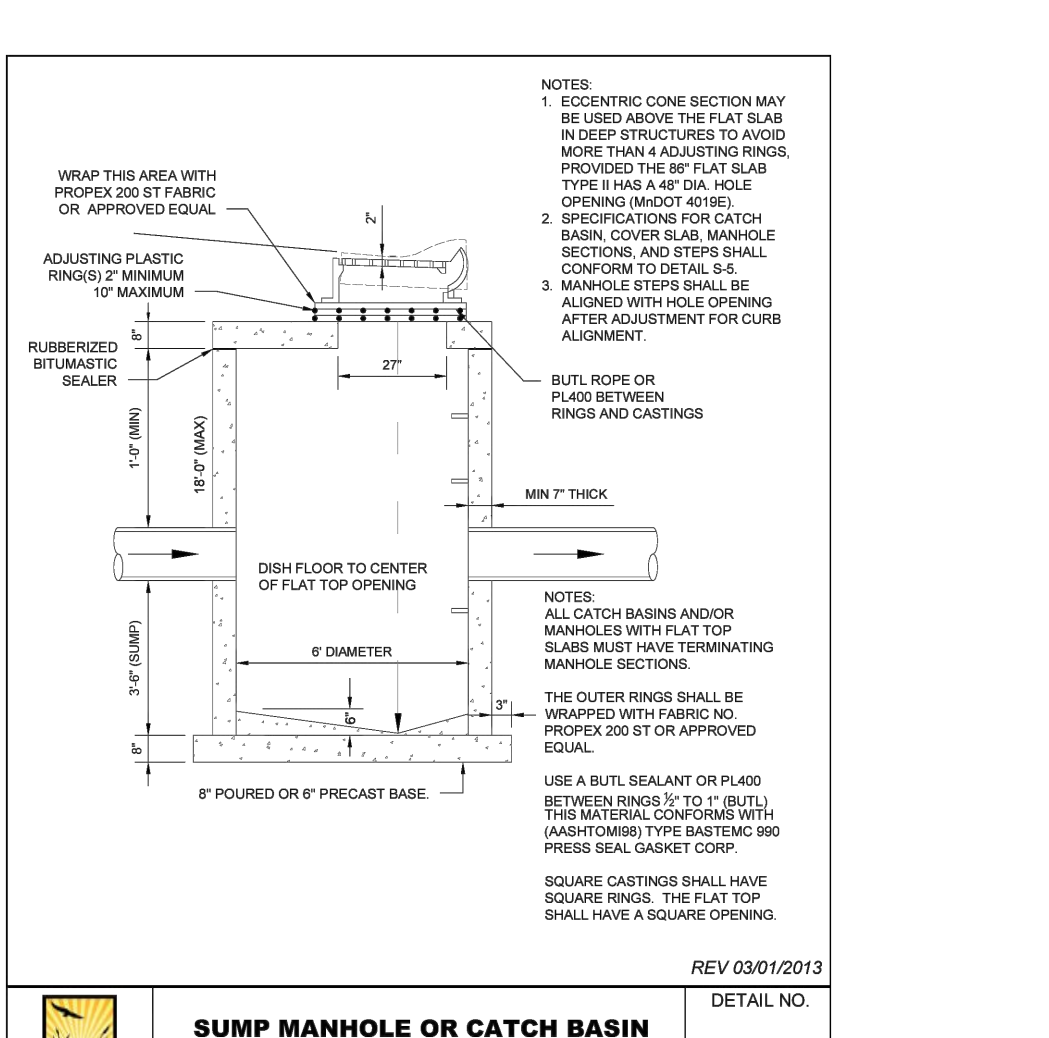
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NOTES:
1. TRENCH SIDEWALLS TO MEET O.S.H.A. REQUIREMENTS.
2. UPPER 3 FT. OF BACKFILL SHALL BE COMPACTED TO AT LEAST 100% STANDARD PROCTOR DRY DENSITY. BELOW THIS ELEVATION, BACKFILL SHALL BE COMPACTED TO AT LEAST 95% STANDARD PROCTOR DRY DENSITY.
3. INSTALLATION SHALL BE IN ACCORDANCE WITH ASTM D3231.

PIPE BEDDING PVC

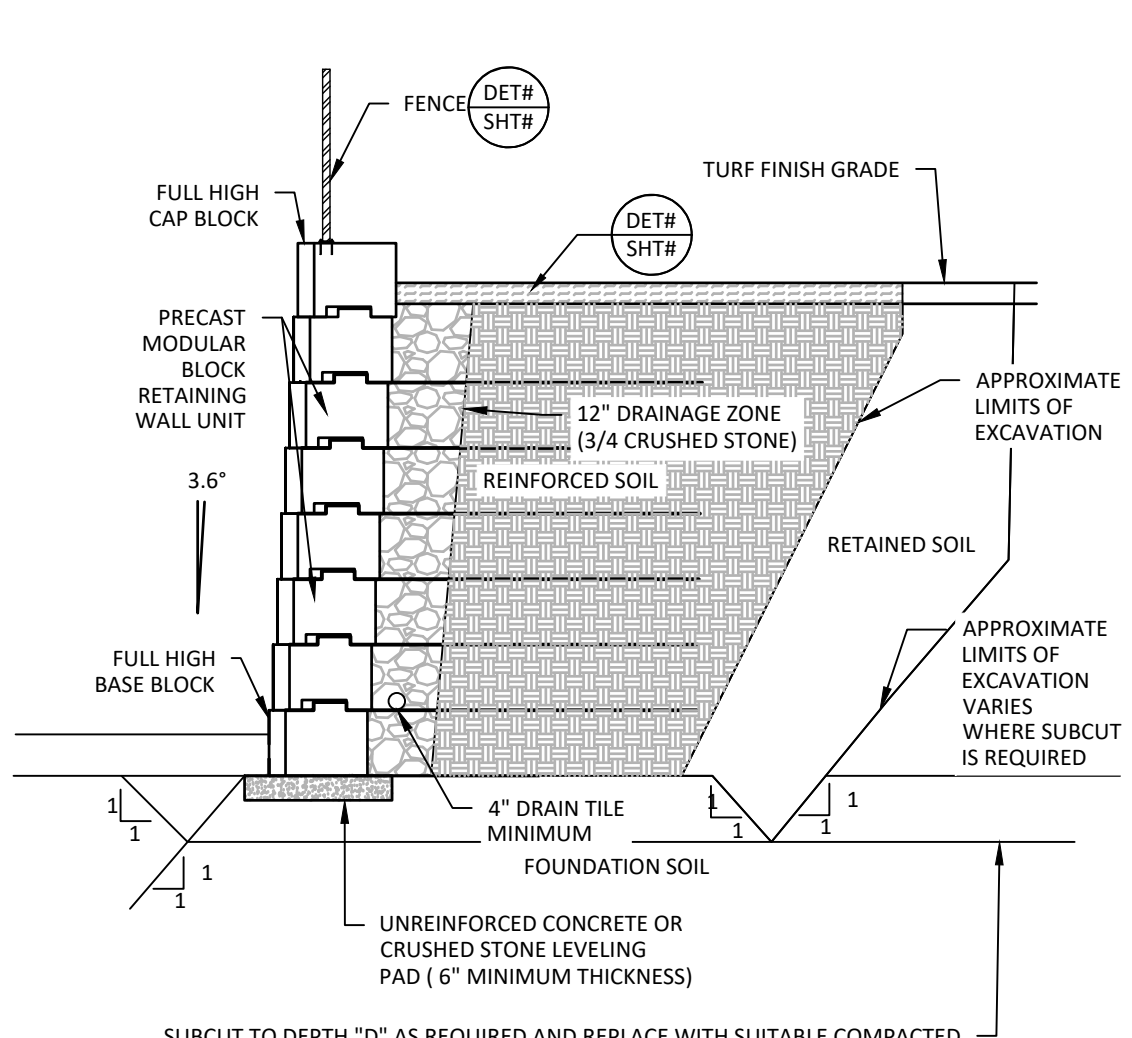
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NOTE:
ALL CATCH BASINS AND/OR PRECAST CONCRETE SECTIONS SHALL BE INSTALLED ON A 4" MINIMUM THICKNESS OF UNREINFORCED CONCRETE OR CRUSHED STONE LEVELING PAD (6" MINIMUM THICKNESS).
SUBJECT TO DEPTH "D" AS REQUIRED AND REPLACE WITH SUITABLE COMPACTED STRUCTURAL FILL TO ACHIEVE THE REQUIRED BEARING CAPACITY AND SLIDING RESISTANCE AS DETERMINED BY THE CONTRACTOR'S STRUCTURAL ENGINEER. ALL STRUCTURAL FILL IS TO BE COMPACTED TO A MINIMUM 98% STANDARD PROCTOR DENSITY.

SUMP MANHOLE OR CATCH BASIN

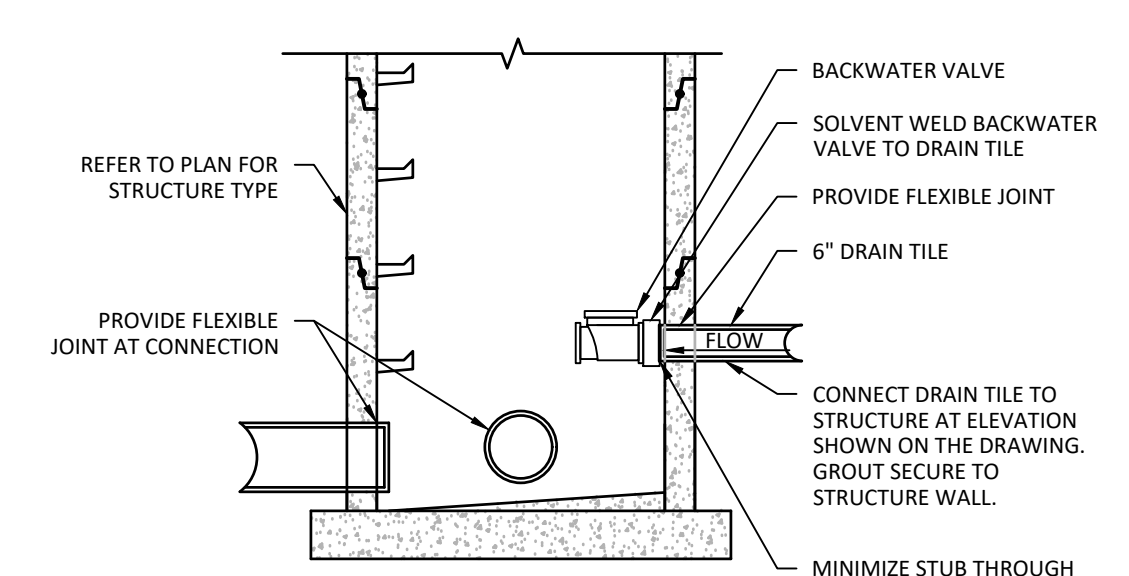
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NOTE:
SUBJECT TO DEPTH "D" AS REQUIRED AND REPLACE WITH SUITABLE COMPACTED STRUCTURAL FILL TO ACHIEVE THE REQUIRED BEARING CAPACITY AND SLIDING RESISTANCE AS DETERMINED BY THE CONTRACTOR'S STRUCTURAL ENGINEER. ALL STRUCTURAL FILL IS TO BE COMPACTED TO A MINIMUM 98% STANDARD PROCTOR DENSITY.

TYPICAL PRECAST MODULAR BLOCK WALL SECTION

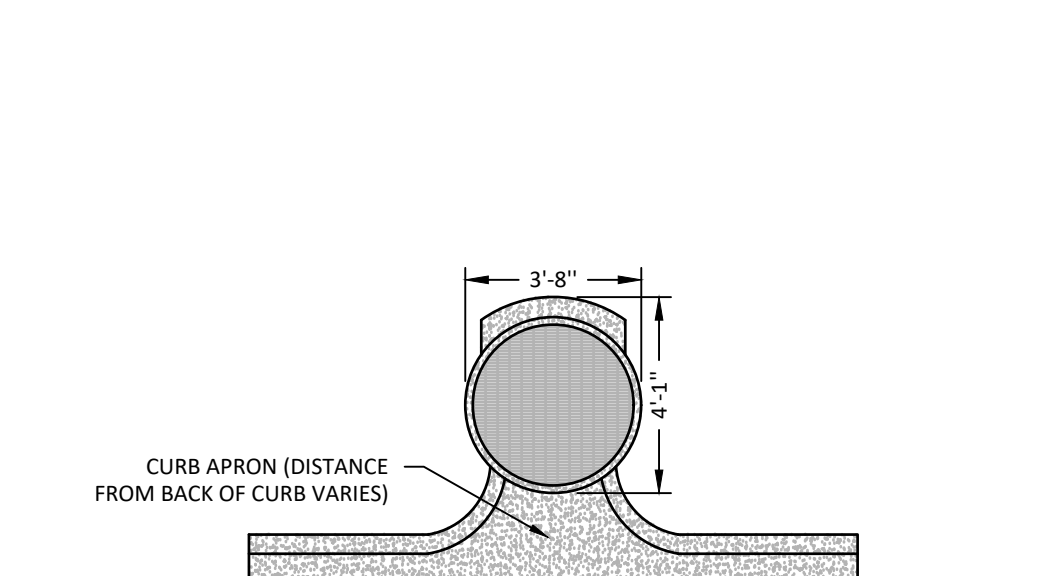
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NOTE:
MINIMIZE STUB THROUGH WALL. STUB ONLY AS REQUIRED TO ALLOW BACKWATER VALVE TO BE CONNECTED TO DRAIN TILE.

BACKWATER VALVE

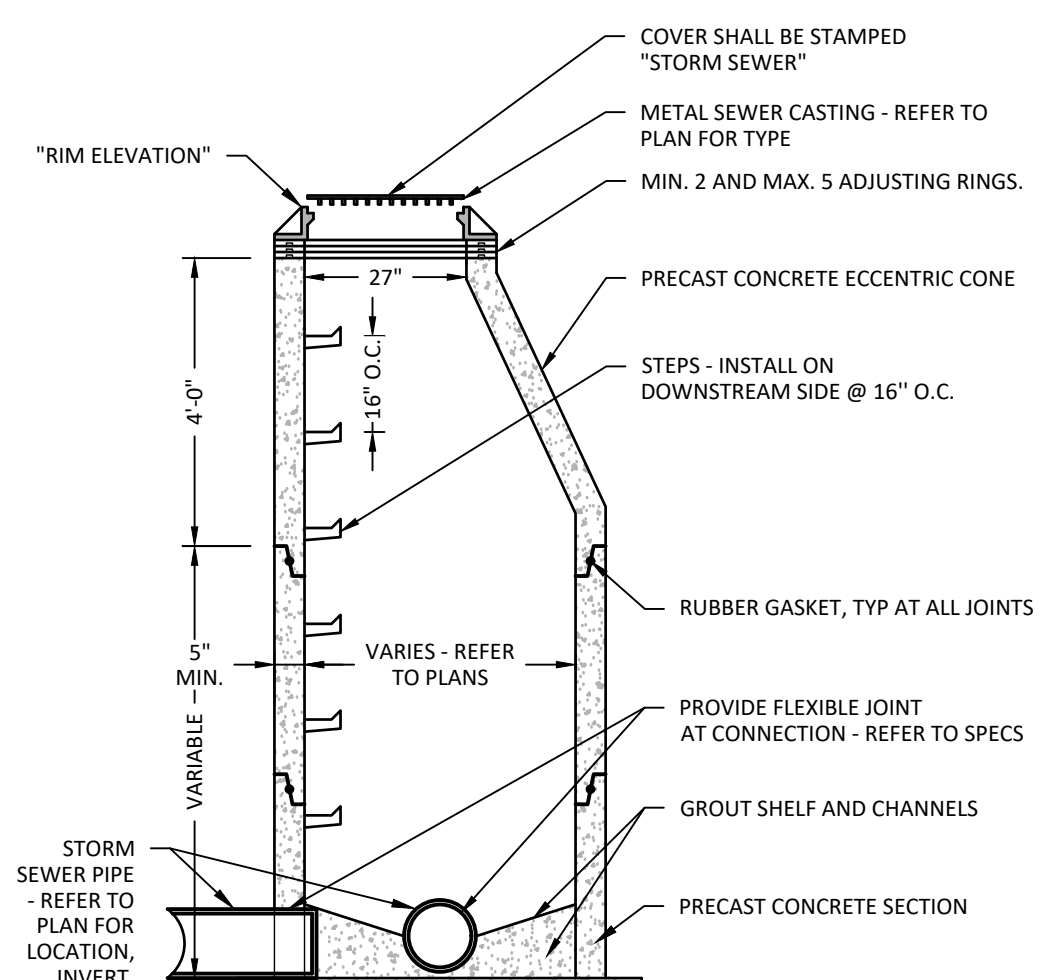
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NOTE:
BASES SHALL BE 8" STANDARD PRECAST WITH 2" LEAN GROUT, OR POURED 2" SLAB REINFORCED WITH 6" X 6" 10/10 MESH.

STORM SEWER MANHOLE

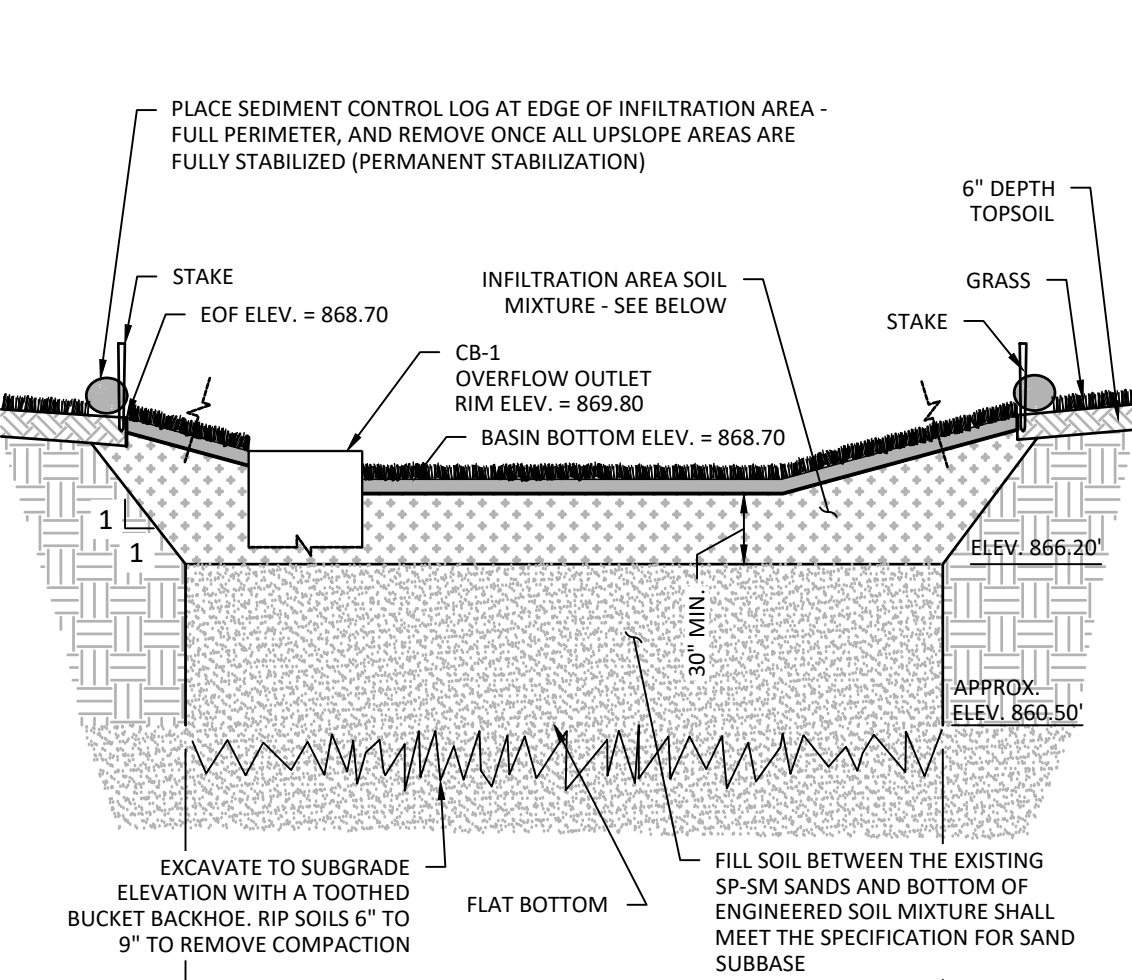
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NOTE:
SEE X OF xx / (Sheet#) FOR ENGINEERED SOIL MIXTURE

INFILTRATION AREA SECTION

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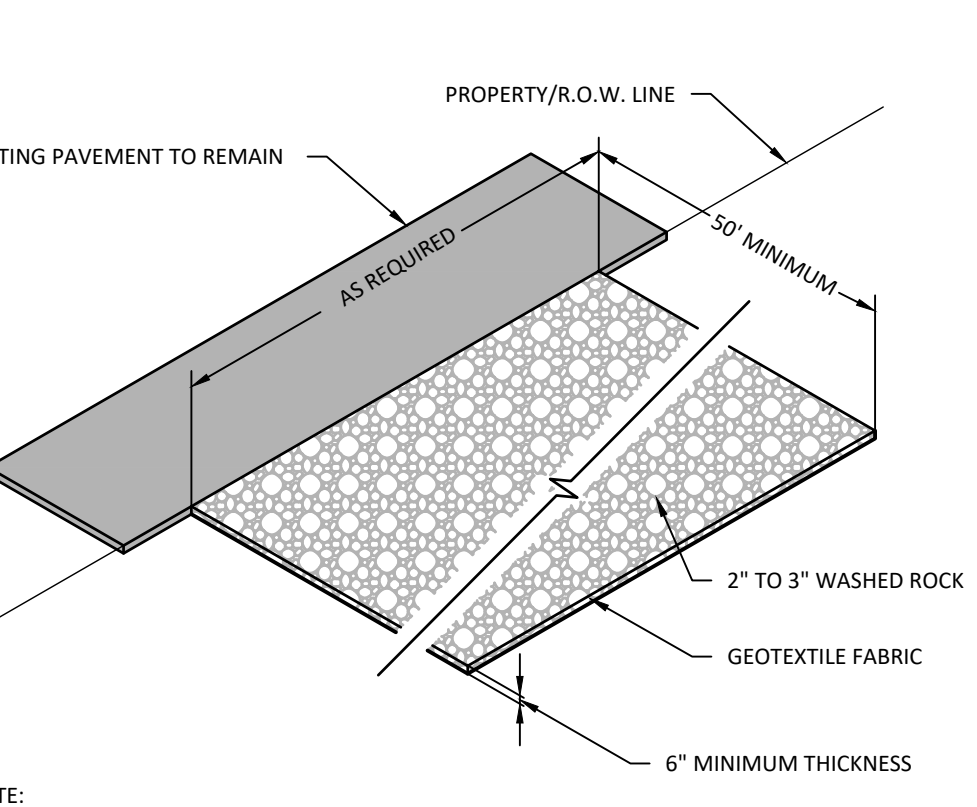
NOTE:
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INFILTRATION AREA SECTION

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INFILTRATION AREA CONSTRUCTION SHALL COMPLY WITH THE FOLLOWING:

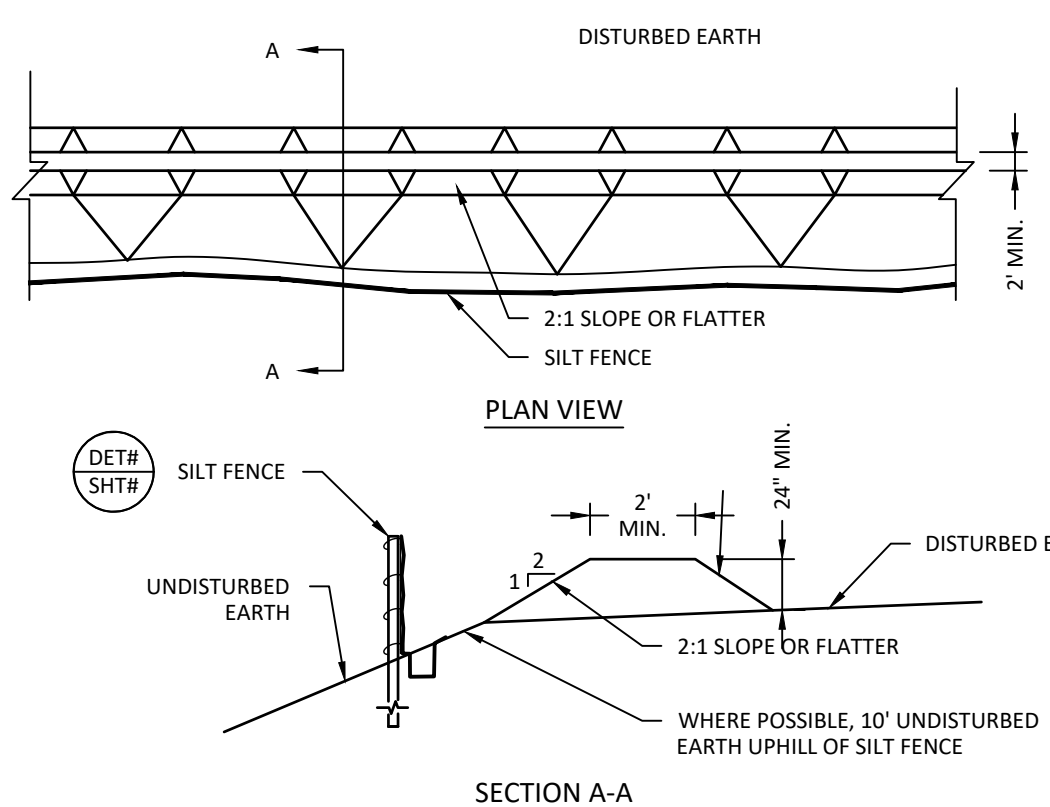
- INFILTRATION AREA LIMITS SHALL BE SURVEYED AND A VISUAL BARRIER, SUCH AS ORANGE SNOW FENCE, SHALL BE PLACED AROUND THE FULL PERIMETER TO KEEP ALL CONSTRUCTION TRAFFIC, EQUIPMENT AND MATERIAL STOCKPILES OUT OF THE PROPOSED INFILTRATION AREAS. THE VISUAL BARRIER MUST BE INSTALLED BEFORE NEW CONSTRUCTION BEGINS AND SHALL BE MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT.
- DELIVER SAMPLE MATERIALS ON SITE FOR APPROVAL. PRIOR TO BEGINNING THE INSTALLATION, SUFFICIENT MATERIAL QUANTITIES SHALL BE ON SITE TO COMPLETE THE INSTALLATION. EXPOSED SOIL AREAS WITHOUT DELAY.
- CARE MUST BE TAKEN TO AVOID CONTAMINATION OF ENGINEERED SOILS WITH SEDIMENT, IN SITU OR TOPSOIL DURING AND AFTER INSTALLATION. MATERIALS MUST BE SEGREGATED.
- INSTALLATION WITH DRY SOIL CONDITIONS IS CRITICAL TO PREVENT SMEARING AND COMPACTION. SCHEDULE WORK FOR PERIODS OF DRY WEATHER. DO NOT WORK IF SOIL CONDITIONS ARE WET. EXCAVATION, SOIL PLACEMENT AND HARD STABILIZATION OF PERIMETER SLOPES WITH TURF SOIL MUST COMPLETED BEFORE THE NEXT PRECIPITATION EVENT. TURF SOIL SHOULD BE PLACED IN ROWS WITH AT LEAST 5 STAPLES PER SQUARE YARD. PLACE STAPLES ALONG UPHELL SEAM EDGES TO PREVENT UNDERMINING FLOWS UNTIL SOIL ROOTS ESTABLISHED.
- DO NOT LEAVE STORMWATER AREAS AND / OR PERIMETER SLOPES EXPOSED OVERNIGHT. SECURE THE SITE FROM RISK OF PRECIPITATION DAMAGES AT THE END OF EVERY WORK DAY. IN THE EVENT OF RAIN, TAKE ACTION TO DIVERT STORMWATER AWAY FROM THE WORK AREA AND TEMPORARILY COVER OF ALL EXPOSED SOILS WITH WOVEN GEOTEXTILE FABRIC OR IMPERMEABLE SHEETING.
- HOLD OBSERVATION OF EXCAVATION AND SOIL PLACEMENT IS REQUIRED. NOTIFY GEOTECHNICAL ENGINEER PRIOR TO DIGGING. USE BACKHOE WITH TOOTH BUCKET FOR CELL EXCAVATION TO AVOID COMPACTING OR SMEARING OF SOILS. DO NOT USE SAND STEER FOR EXCAVATION WITHIN THE CELL. USE "TOOTH BUCKET" TO SCARP RIMP UNDERLYING SOILS TO 1" DEPTH TO REMOVE COMPACTION. GENTLY MIX THE PROF OF ENGINEERED SOILS IN THE LOWER UNDERLYING SOILS TO AVOID STRATIFICATION AND PROMOTE PERMEABILITY. USE EXCAVATOR BUCKET TO PLACE MATERIALS. CONSTRUCTION EQUIPMENT SHALL NOT BE ALLOWED INTO THE STORMWATER AREAS. LEVELING AND FINAL GRADING WITHIN THE CELL MUST BE COMPLETED BY HAND.
- INFILTRATION AREA SOIL MIX SHALL BE MINNESOTA STORMWATER MANUAL 4.1.2 MIX B. ENHANCED FILTRATION BLEND (WELL BLEND) MIXTURE OF 70% ASTM C-31 CORNER WHOLE SAND (MAYNOT 3.25) AND 30% #10/20 200 GRAD 2 LEAF LUTER COMPOST. THE MATERIAL SUPPLIER SHALL PROVIDE DOCUMENTATION THAT THE COMPOST HAS BEEN SAMPLED AND TESTED AS REQUIRED BY THE SEAL OF TESTING ASSISTANCE (STA) PROGRAM OF THE UNITED STATES COMPOSTING COUNCIL (USCC) AND A GRADATION SEIVE ANALYSIS FOR THE WASHED SAND. THE ENGINEERED SOIL SHALL NOT CONTAIN ANY TOPSOIL OR FILL AGGREGATE WITH FINES.
- INSTALL PLANTINGS BY HAND.
- INSTALLED SOIL AND PLANTINGS REQUIRE A TOTAL OF 1" OF WATER PER WEEK AND ACTIVE WET MANAGEMENT UNTIL WELL ESTABLISHED. INCLUDE ALL WATERING COSTS IN THE BID. CONSTRUCT A TEMPORARY IRRIGATION SYSTEM, CONSISTING OF ABOVE GRADE MAINS, PIPING, VALVES, ETC., TO IRRIGATE THE AREAS. SOILS SHOULD NOT BE USED AS A WATER TRUCK AS THE FORCE OF THE WATER WILL ADVERSELY AFFECT THE STORMWATER AREA SOILS.
- REMOVAL OF ACCUMULATED SEDIMENT AND DEBRIS SHALL BE DONE BY HAND OR, IF SELF-PROPELLED EQUIPMENT IS REQUIRED, FROM OUTSIDE THE PERIMETER OF THE INFILTRATION AREAS.



NOTE:
PROVIDE WHERE CONSTRUCTION TRAFFIC ENTERS OR EXITS THE CONSTRUCTION SITE

ROCK CONSTRUCTION ENTRANCE

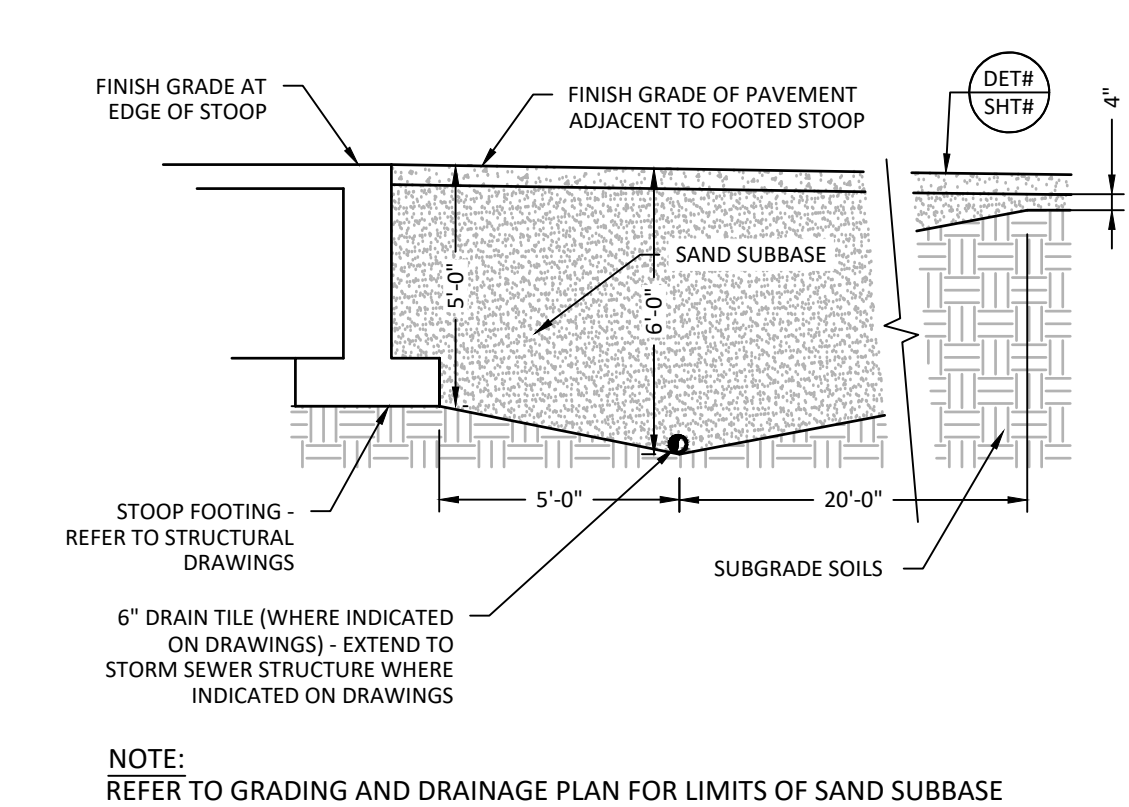
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NOTE:
REFER TO GRADING AND DRAINAGE PLAN FOR LIMITS OF SAND SUBBASE

TEMPORARY DIVERSION BERM

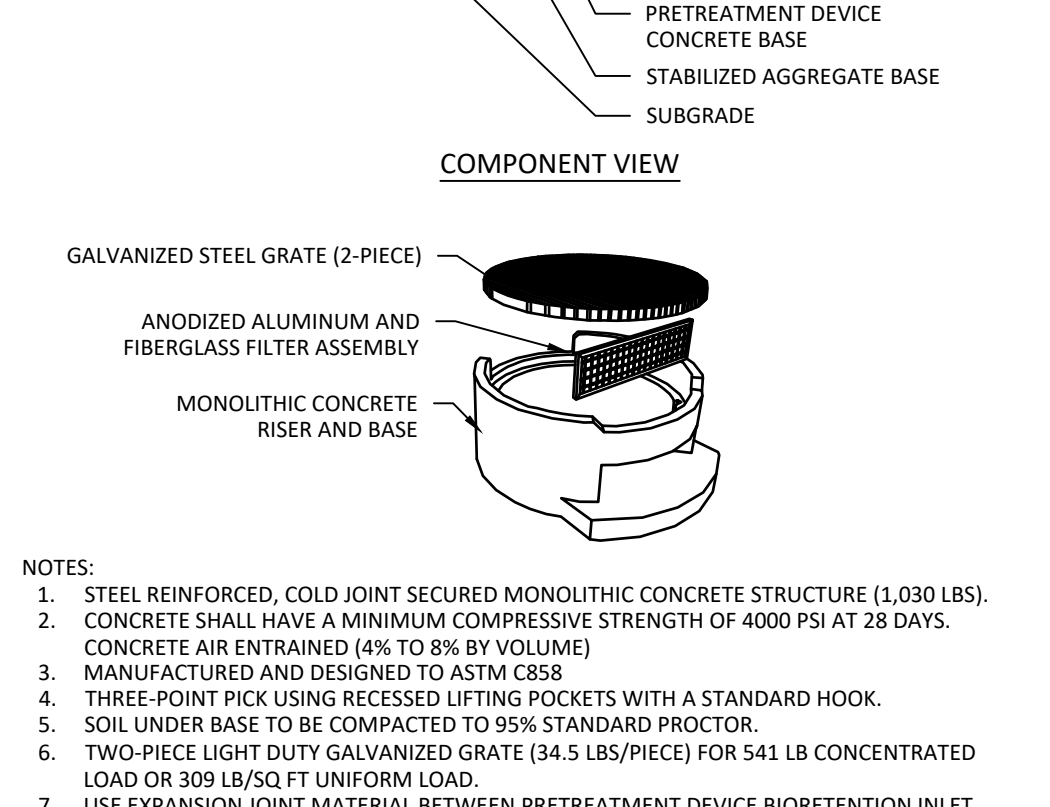
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NOTE:
REFER TO GRADING AND DRAINAGE PLAN FOR LIMITS OF SAND SUBBASE

SAND SUBBASE / DRAIN TILE AT DOORS & FROST FOOTED STOOPS

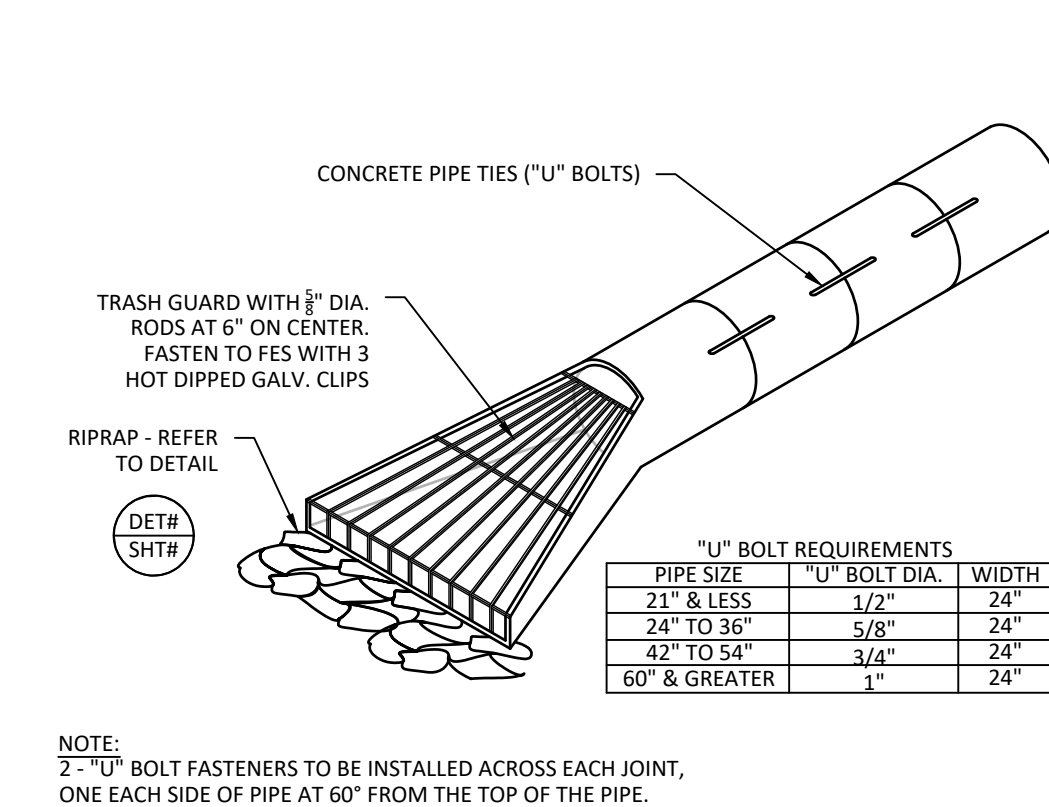
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NOTE:
1. STEEL REINFORCED, COLD JOINT SECURED MONOLITHIC CONCRETE STRUCTURE (1,030 LBS).
2. CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS.
3. CONCRETE AIR ENTRAINMENT (4% TO 8% BY VOLUME).
4. MANUFACTURED AND DESIGNED TO ASTM C889.
5. THREE-JOINT PICK USING RESIN TO SETTING POCKETS WITH A STANDARD HOOK.
6. SOIL UNDER BASE TO BE COMPACTED TO 95% STANDARD PROCTOR.
7. TWO-PIECE LIGHT DUTY GALVANIZED GRATE (34.5 LBS/PIECE) FOR 54 L CONCENTRATED LOAD OR 300 LB/5 FT UNIFORM LOAD.
8. USE EXPANSION JOINT MATERIAL BETWEEN PRE-TREATMENT DEVICE BI-ORIENTATION INLET

STORMWATER PRE-TREATMENT DEVICE

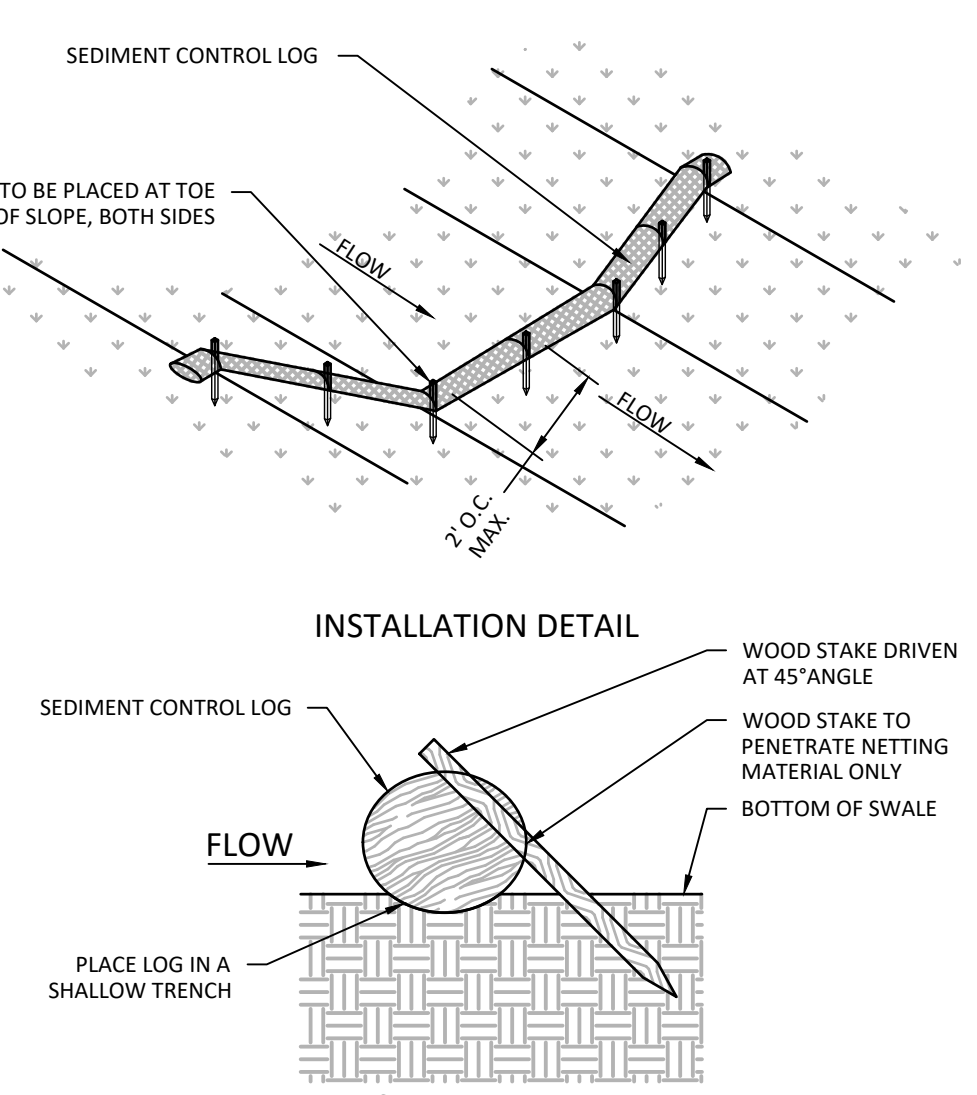
NOT TO SCALE



NOTE:
2" X 1/2" BOLT FASTENERS TO BE INSTALLED ACROSS EACH JOINT, ONE EACH SIDE OF PIPE AT 60" FROM THE TOP OF THE PIPE. FASTEN THREE JOINTS AS SHOWN.

RCP FLARED END SECTION (FES)

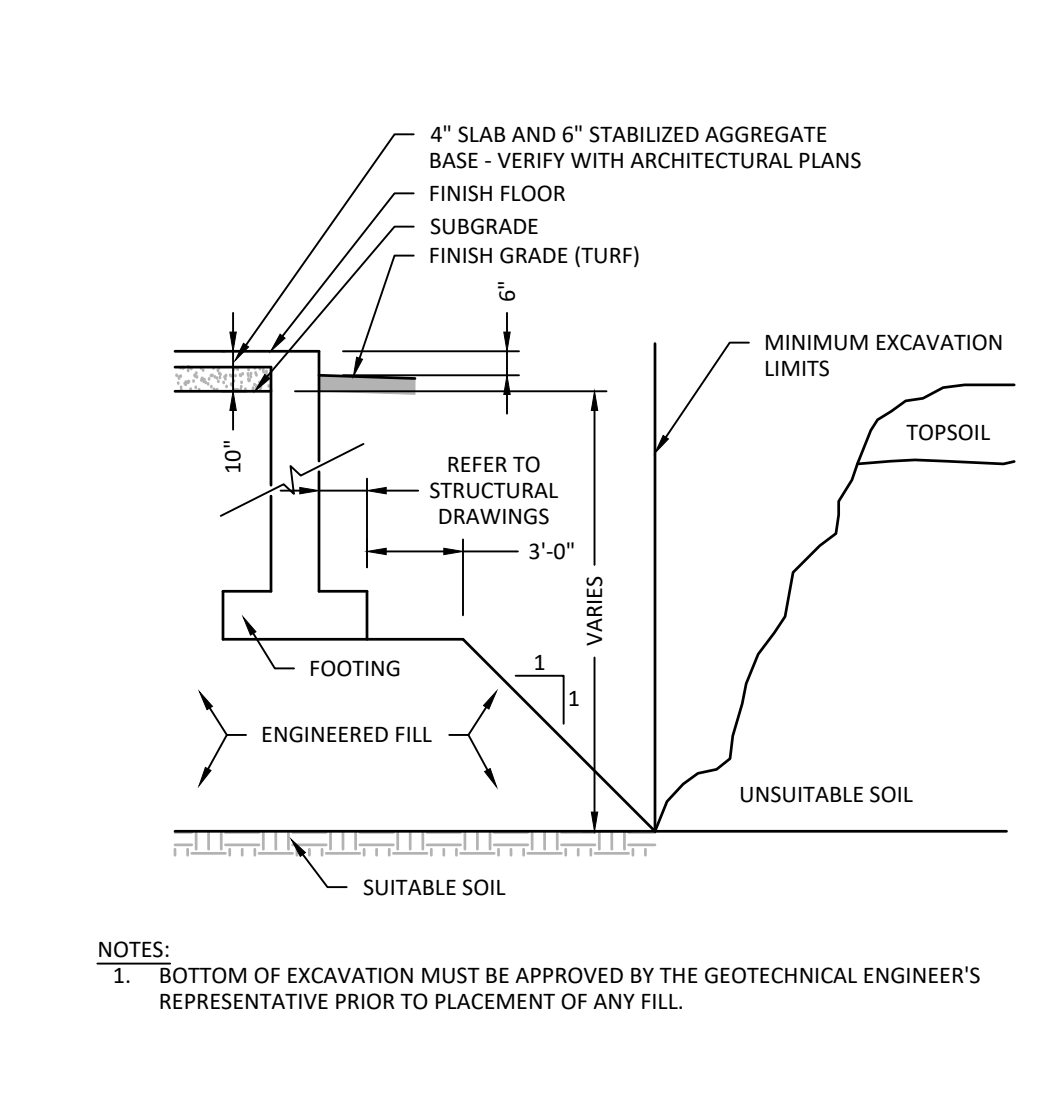
NOT TO SCALE



NOTE:
PLACE LOG IN A SHALLOW TRENCH

SEDIMENT CONTROL LOG

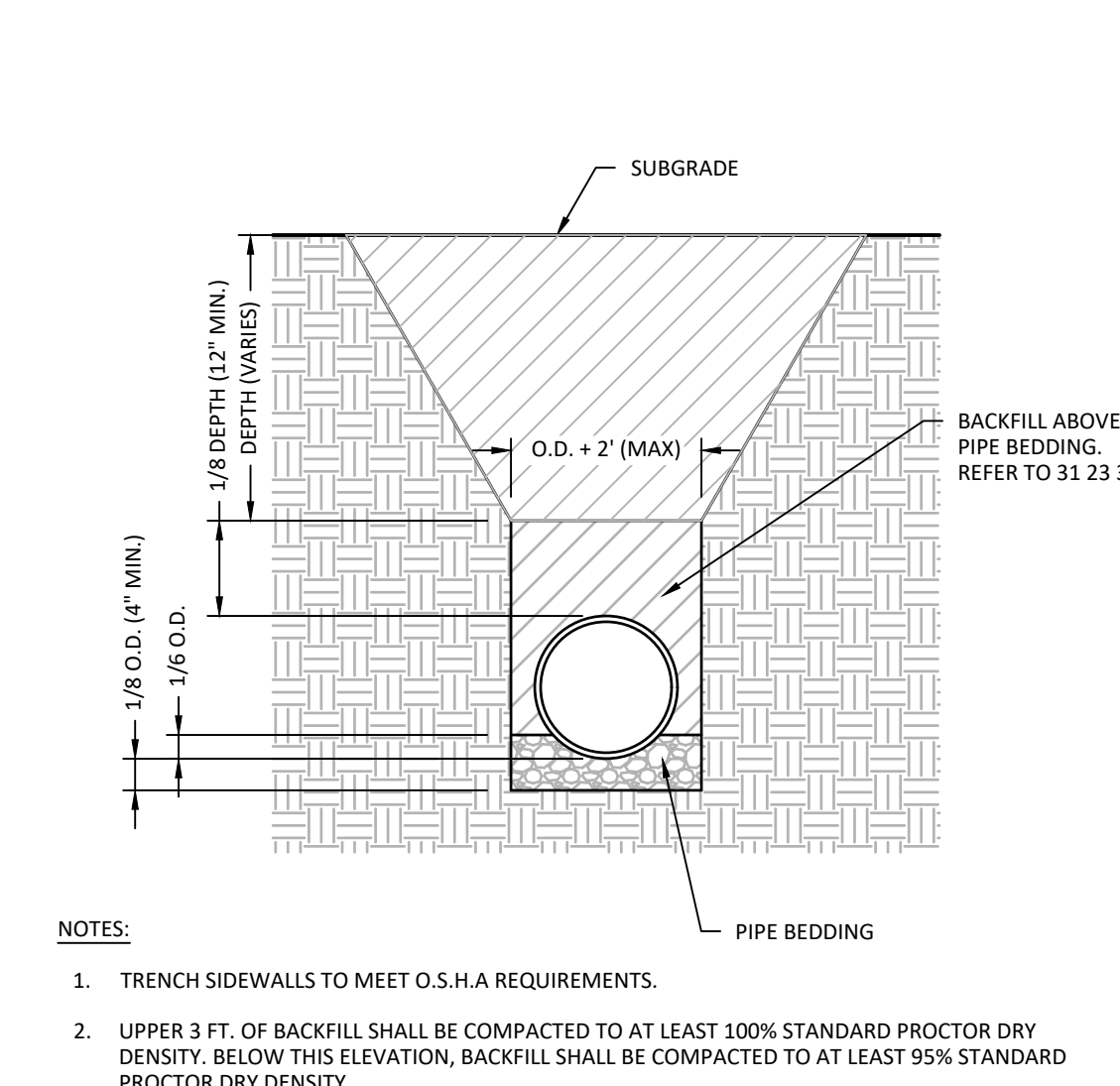
NOT TO SCALE



NOTE:
BOTTOM OF EXCAVATION MUST BE APPROVED BY THE GEOTECHNICAL ENGINEER'S REPRESENTATIVE PRIOR TO PLACEMENT OF ANY FILL.

BUILDING PAD

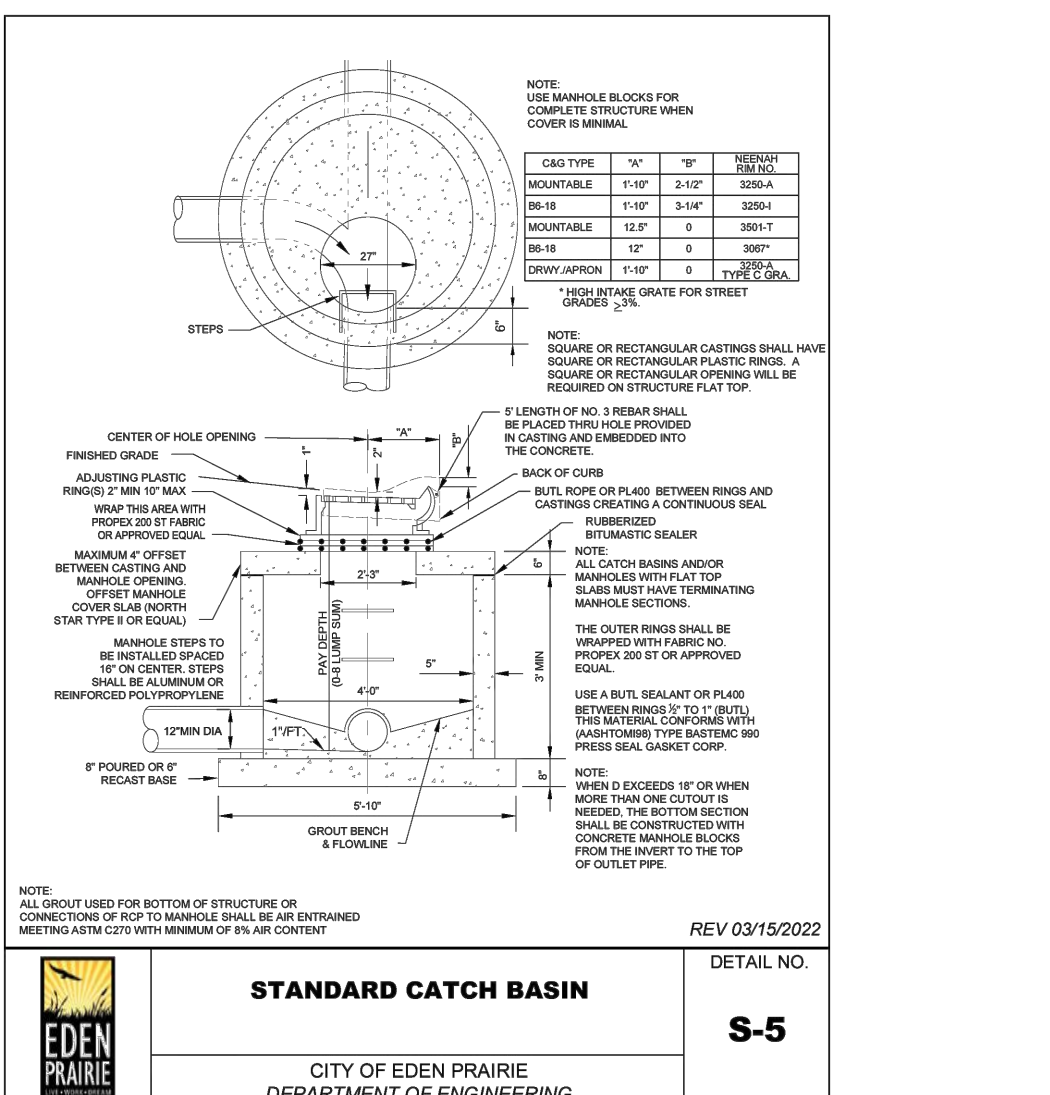
NOT TO SCALE



NOTE:
1. TRENCH SIDEWALLS TO MEET O.S.H.A. REQUIREMENTS.
2. UPPER 3 FT. OF BACKFILL SHALL BE COMPACTED TO AT LEAST 100% STANDARD PROCTOR DRY DENSITY. BELOW THIS ELEVATION, BACKFILL SHALL BE COMPACTED TO AT LEAST 95% STANDARD PROCTOR DRY DENSITY.

PIPE BEDDING - RCP & DIP

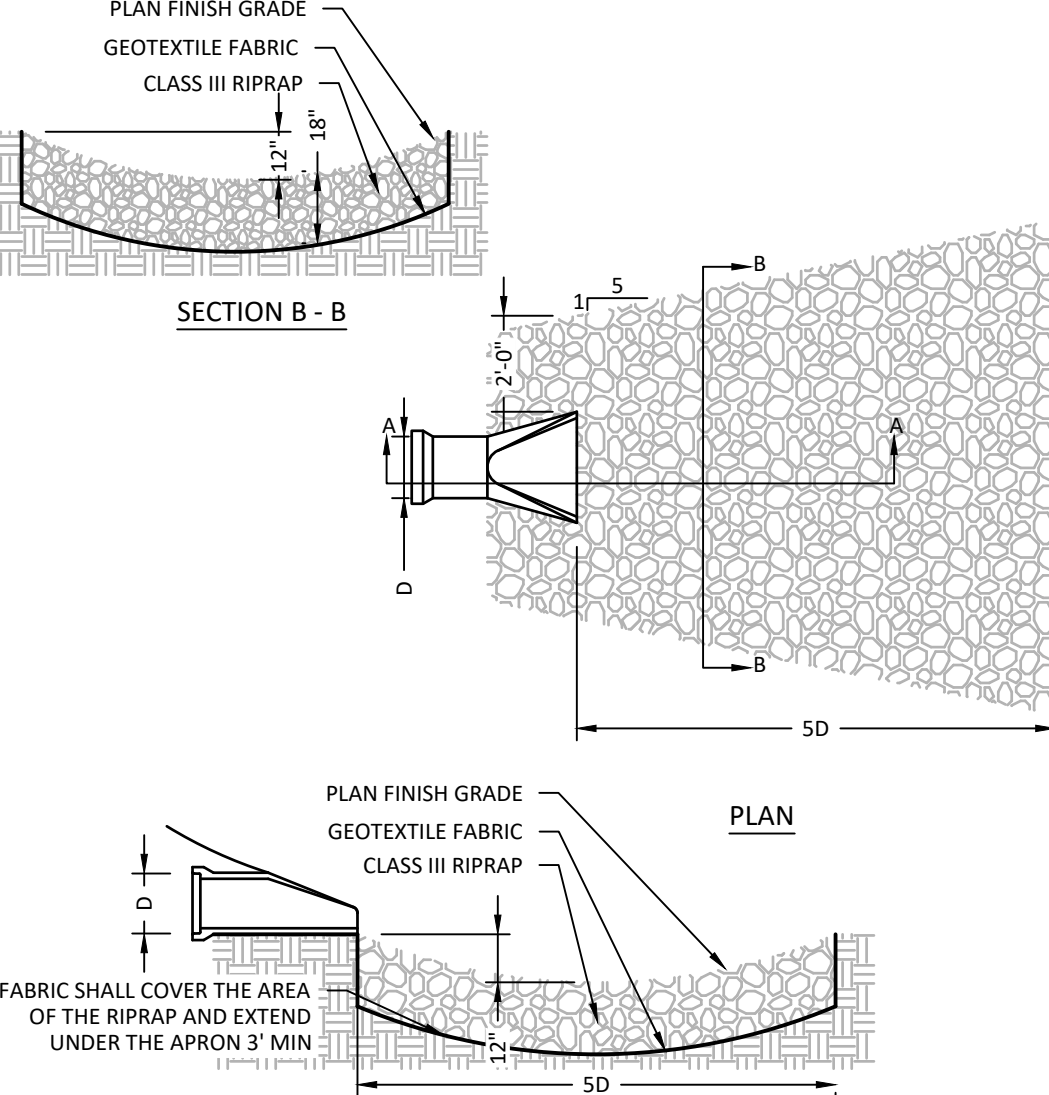
NOT TO SCALE



NOTE:
ALL CATCH BASINS AND/OR PRECAST CONCRETE SECTIONS SHALL BE INSTALLED ON A 4" MINIMUM THICKNESS OF UNREINFORCED CONCRETE OR CRUSHED STONE LEVELING PAD (6" MINIMUM THICKNESS).
SUBJECT TO DEPTH "D" AS REQUIRED AND REPLACE WITH SUITABLE COMPACTED STRUCTURAL FILL TO ACHIEVE THE REQUIRED BEARING CAPACITY AND SLIDING RESISTANCE AS DETERMINED BY THE CONTRACTOR'S STRUCTURAL ENGINEER. ALL STRUCTURAL FILL IS TO BE COMPACTED TO A MINIMUM 98% STANDARD PROCTOR DENSITY.

STANDARD CATCH BASIN

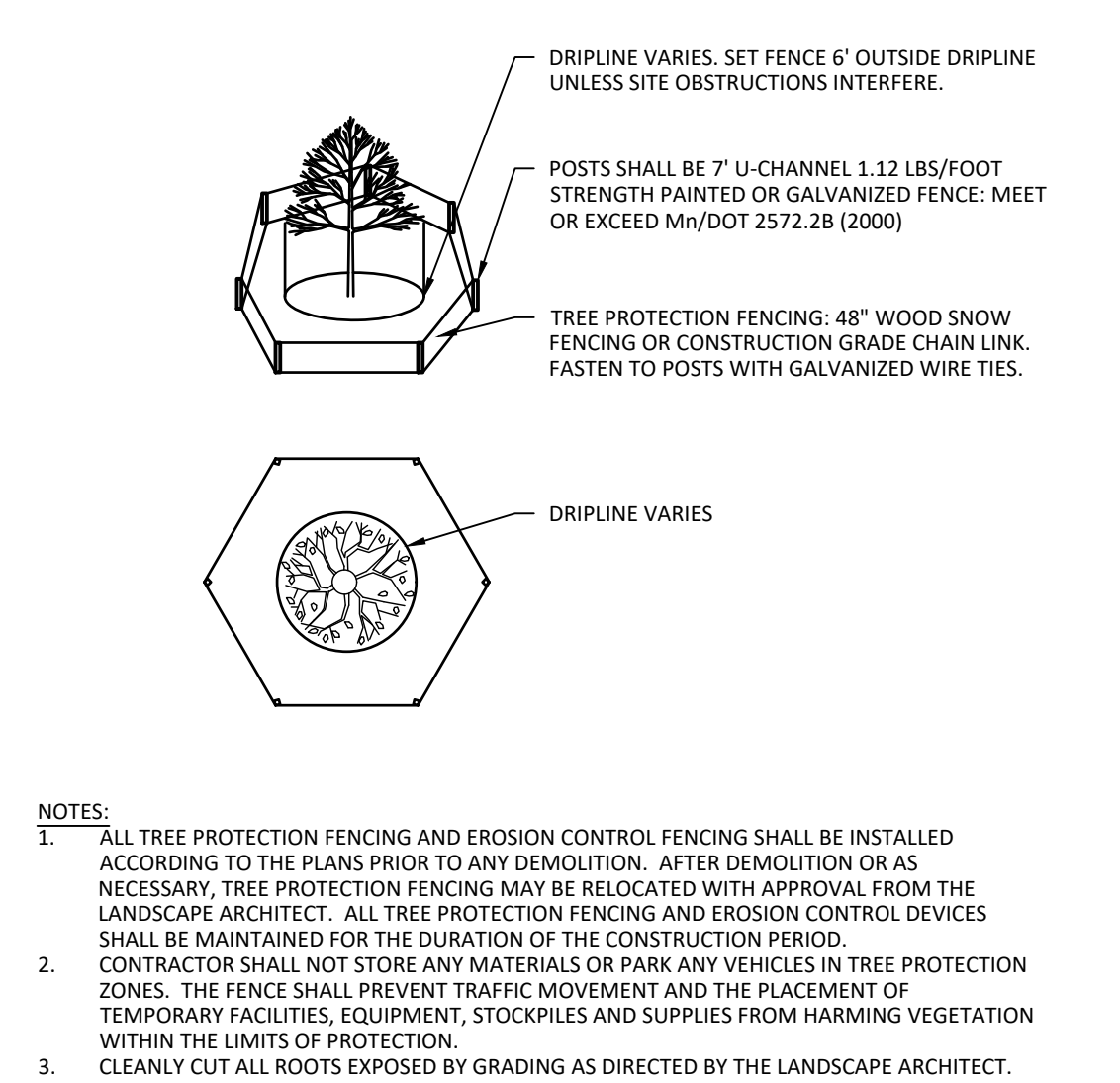
NOT TO SCALE



NOTE:
FABRIC SHALL COVER THE AREA OF THE RIPRAP AND EXTEND UNDER THE APRON 3' MIN

RIPRAP AT FLARED END SECTION

NOT TO SCALE



NOTE:
1. ALL TREE PROTECTION FENCING AND EROSION CONTROL FENCING SHALL BE INSTALLED ACCORDING TO THE PLANS PRIOR TO ANY DEMOLITION. AFTER DEMOLITION OR AS NECESSARY, TREE PROTECTION FENCING MAY BE RELOCATED WITH APPROVAL FROM THE LANDSCAPE ARCHITECT. ALL TREE PROTECTION FENCING AND EROSION CONTROL DEVICES SHALL BE MAINTAINED FOR THE DURATION OF THE CONSTRUCTION PERIOD.
2. CONTRACTOR SHALL NOT STORE ANY MATERIALS OR PARK ANY VEHICLES IN TREE PROTECTION ZONES. THE FENCE SHALL PREVENT TRAFFIC MOVEMENT AND THE PLACEMENT OF TEMPORARY FACILITIES, EQUIPMENT, STOCKPILES OR CONSTRUCTION GRADE CHAIN LINK WITHIN THE LIMITS OF PROTECTION.
3. CLEANLY CUT ALL ROOTS EXPOSED BY GRADING AS DIRECTED BY THE LANDSCAPE ARCHITECT. USE DESIGNATED CONSTRUCTION ENTRANCES AND STAGING AREAS.

TREE PROTECTION FENCE

NOT TO SCALE

CERTIFICATION

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

Date: 11/06/2024 Reg. No. 56532

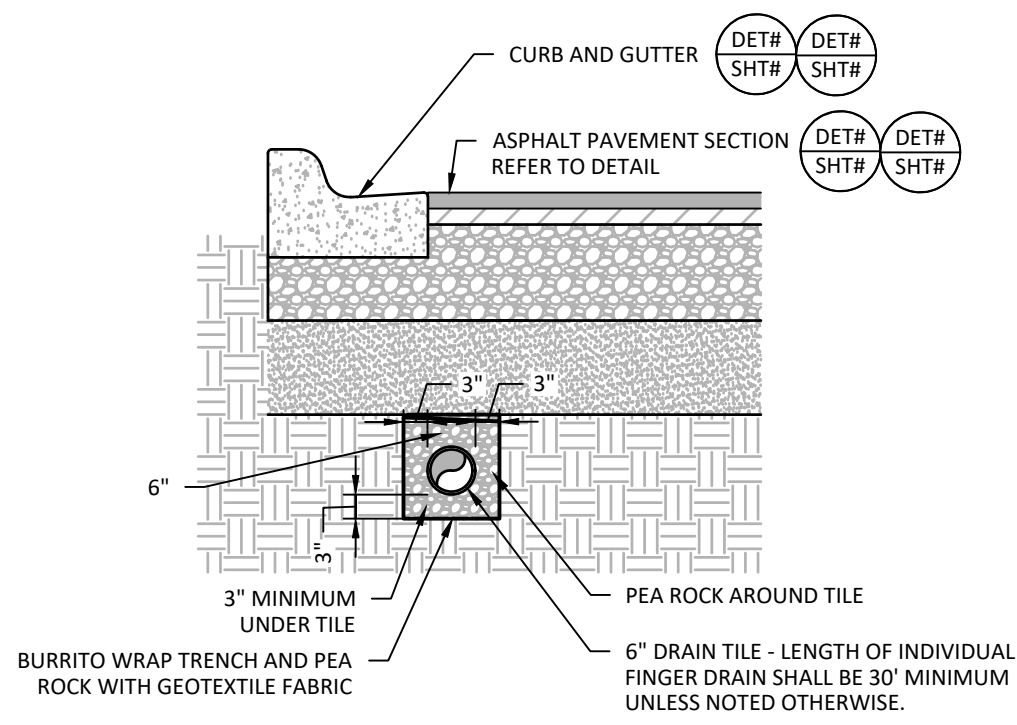
William J. Diede

DRAWN BY: WJD
CHECKED BY: DAR
COMMISSION NUMBER: 2653-01
SHEET TITLE:

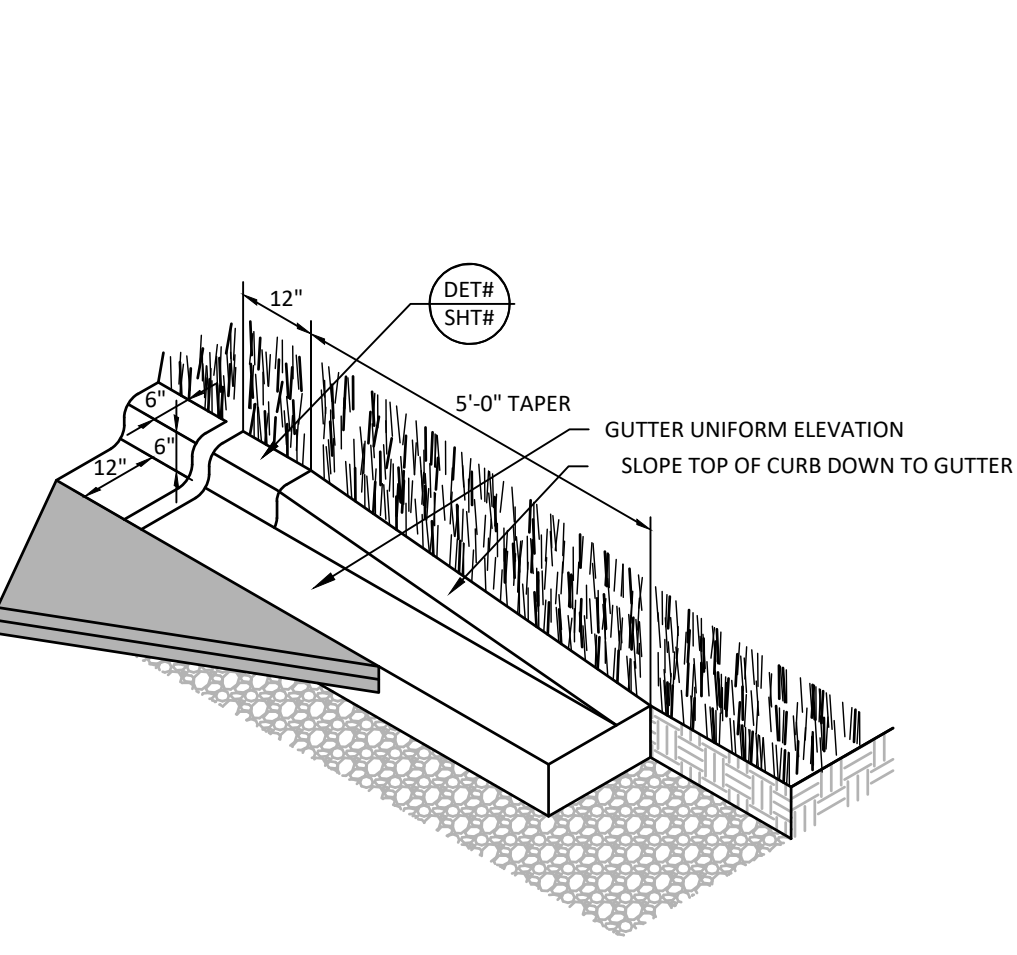
SITE DETAILS

SHEET NUMBER

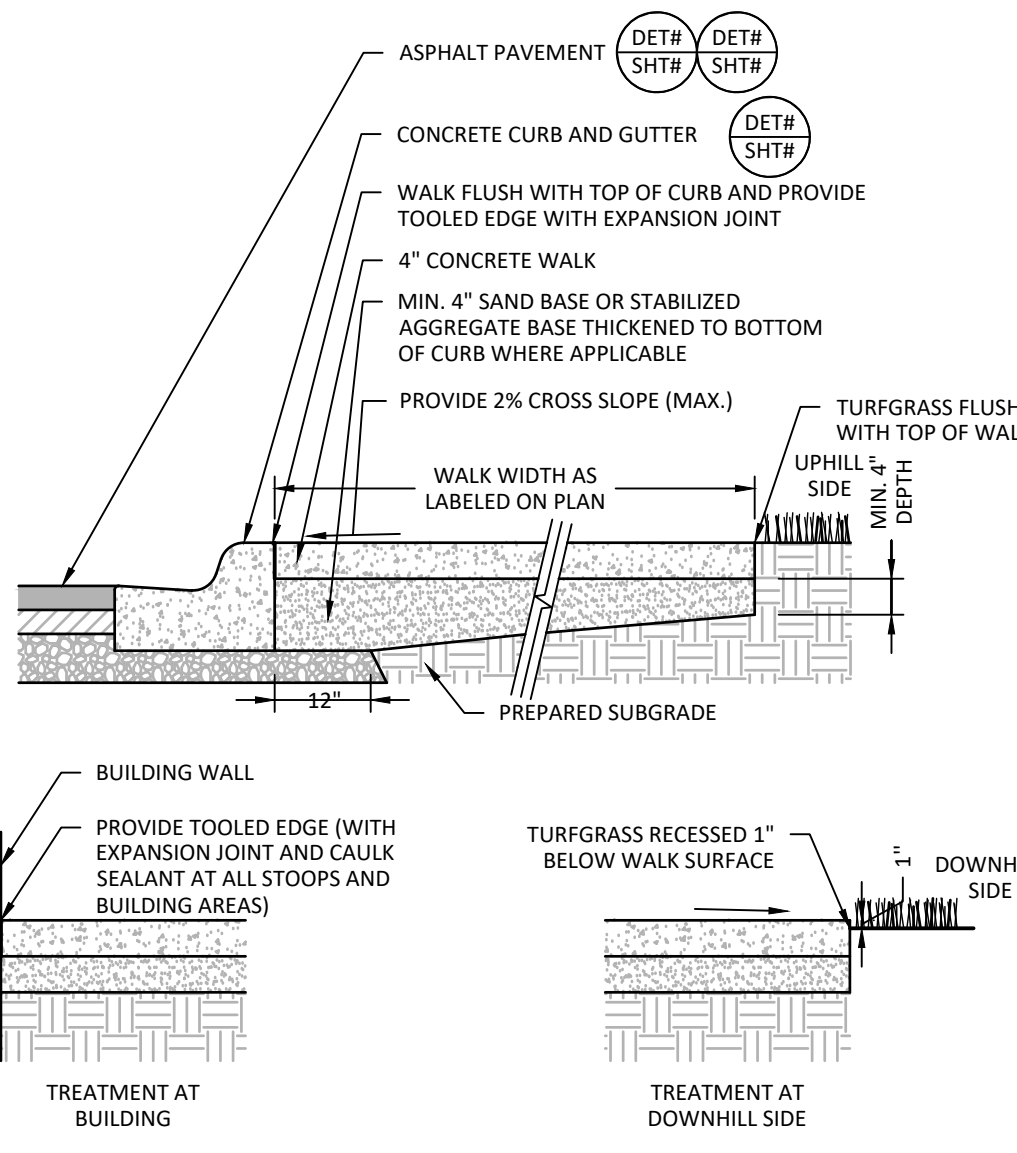
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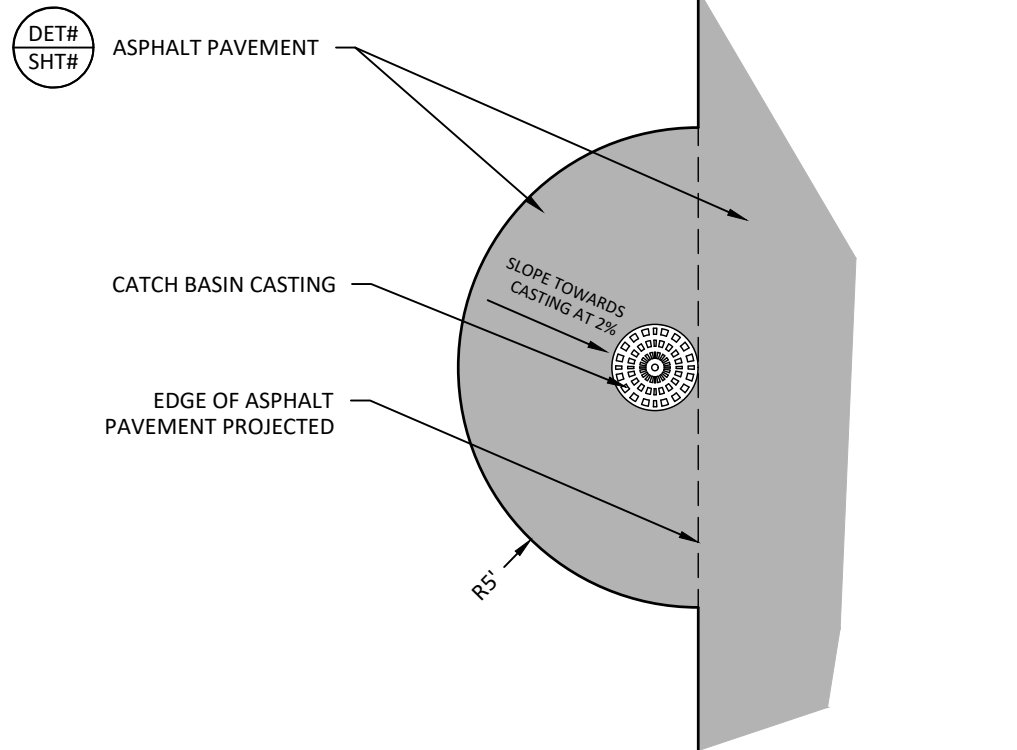
DETH SHT# SUBSURFACE DRAIN
NOT TO SCALE



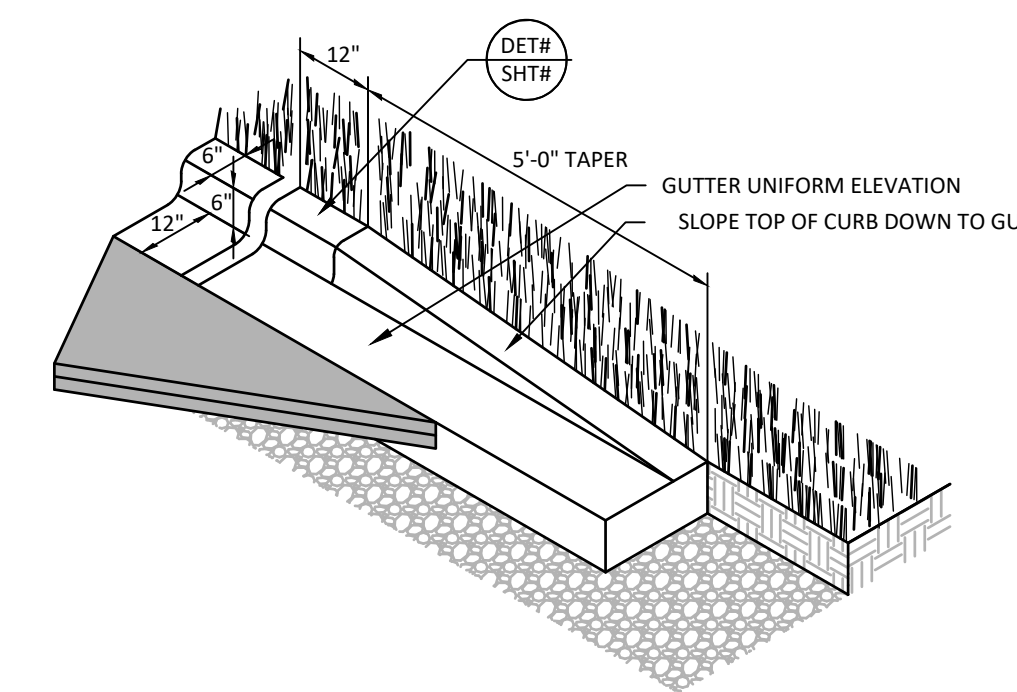
DETH SHT# B-612 CURB TERMINATOR
NOT TO SCALE



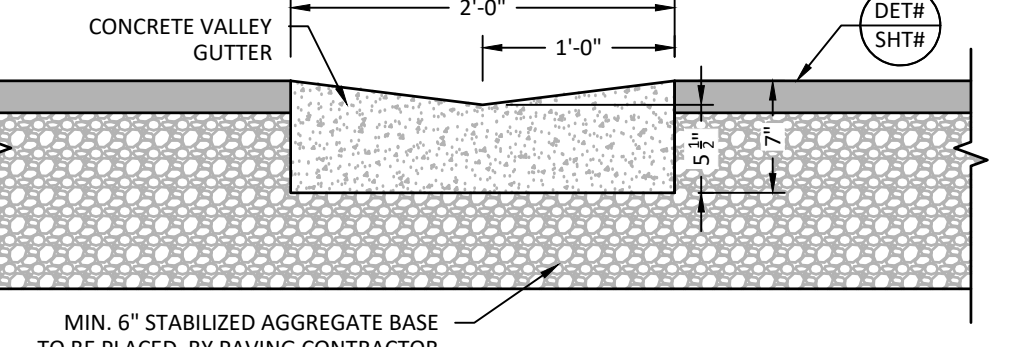
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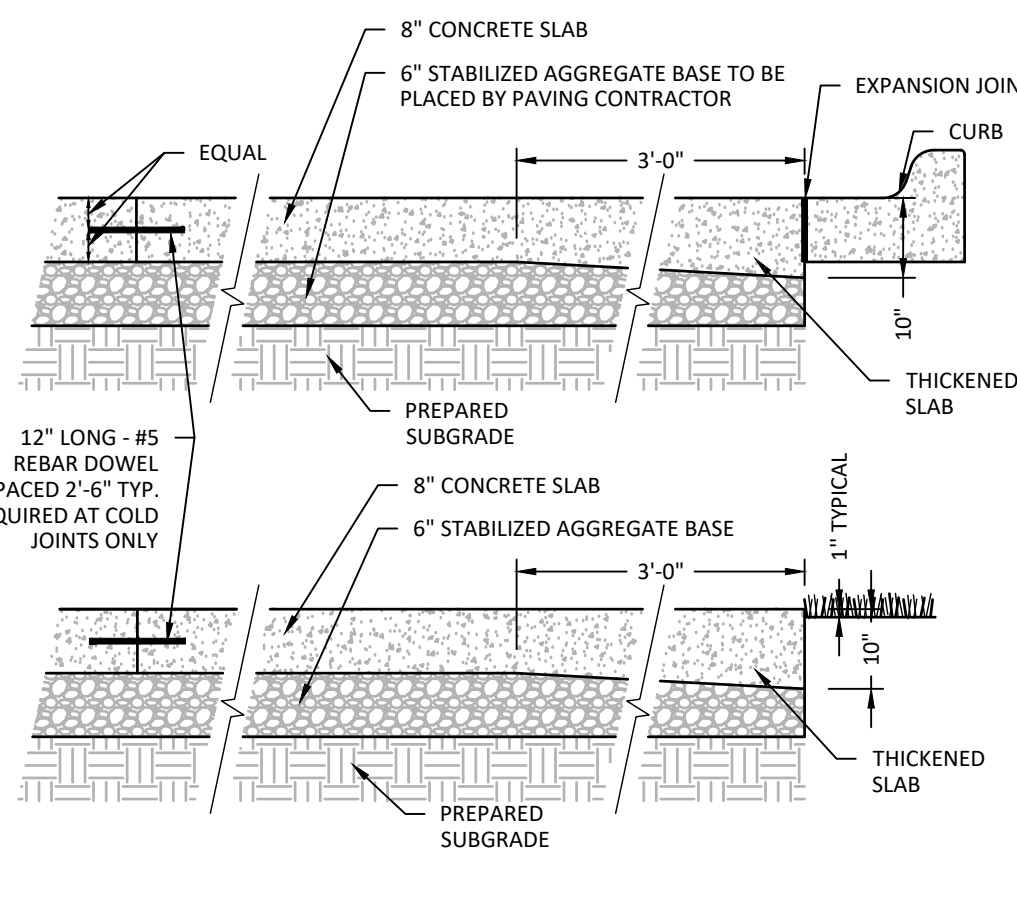
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NOT TO SCALE



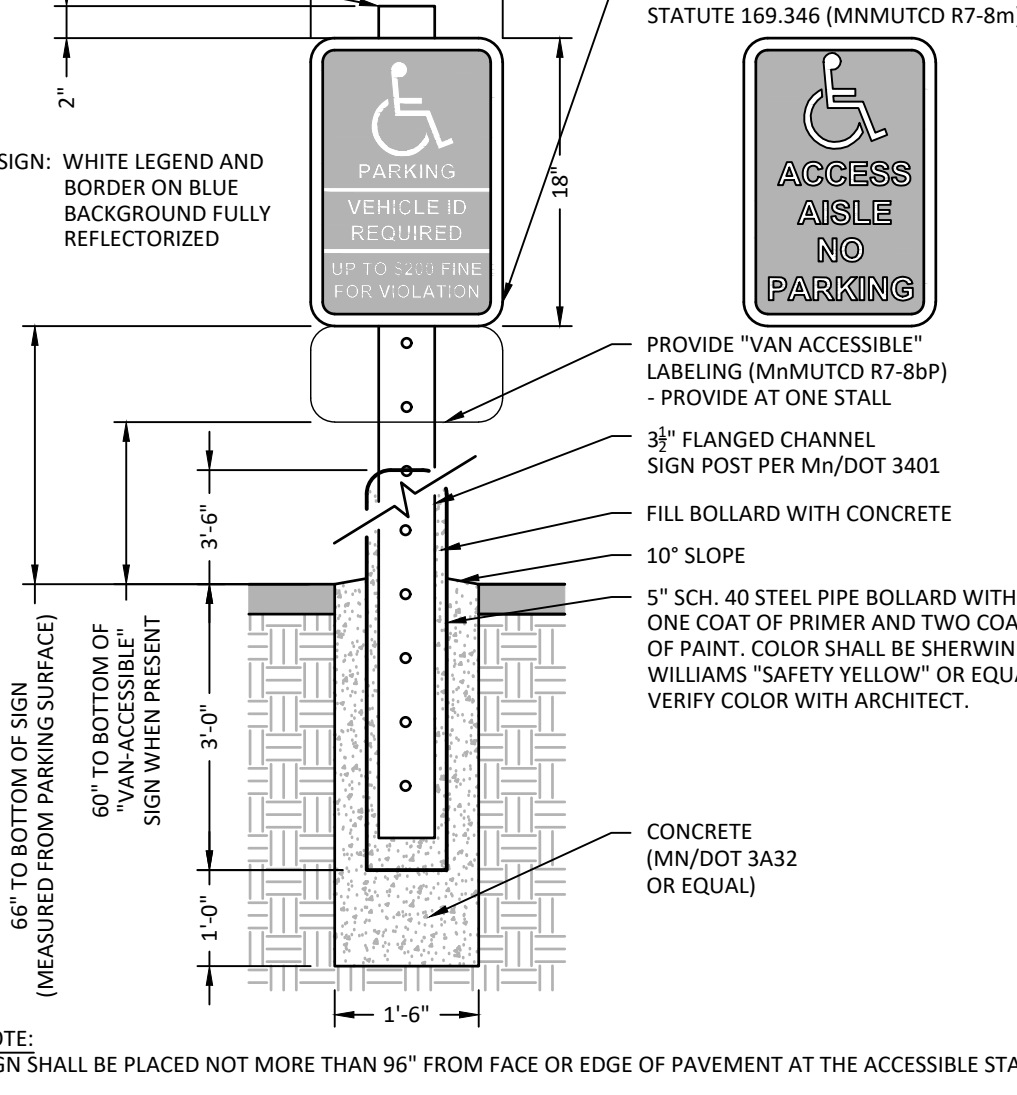
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NOT TO SCALE



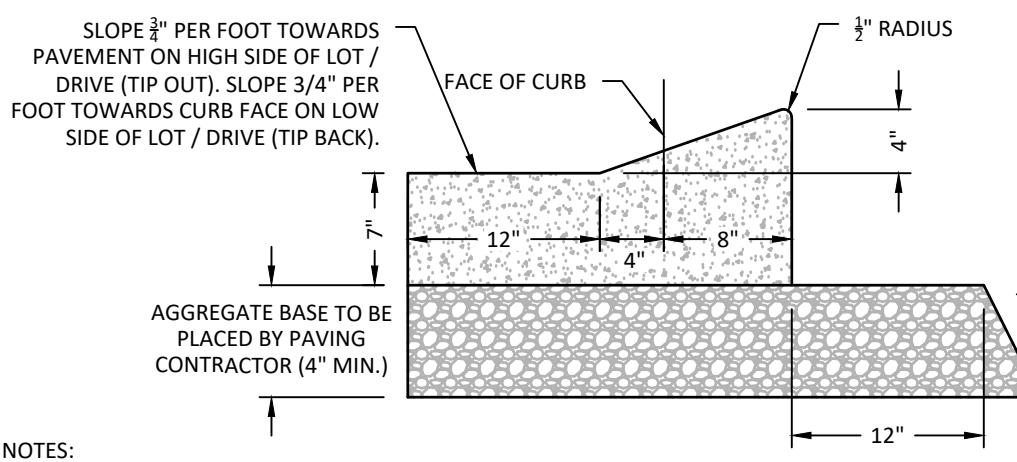
DETH SHT# CONCRETE VALLEY GUTTER
NOT TO SCALE



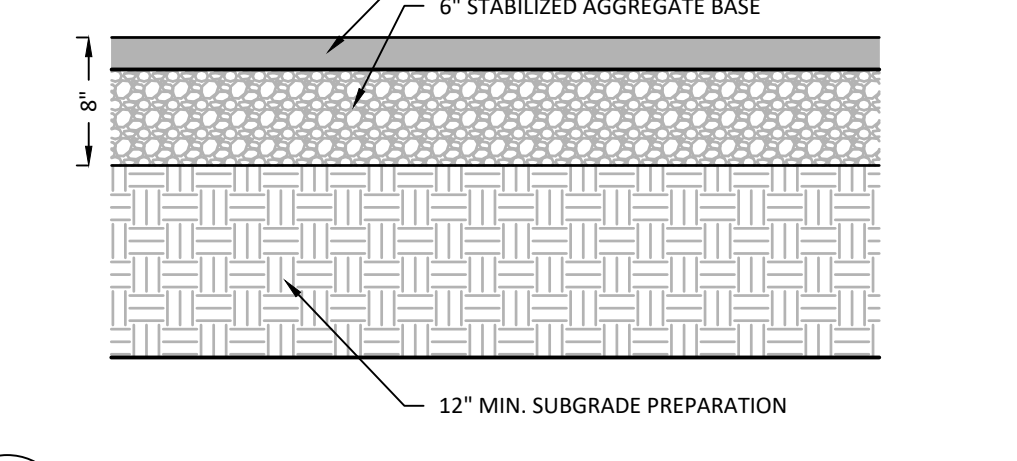
DETH SHT# CONCRETE SLAB
NOT TO SCALE



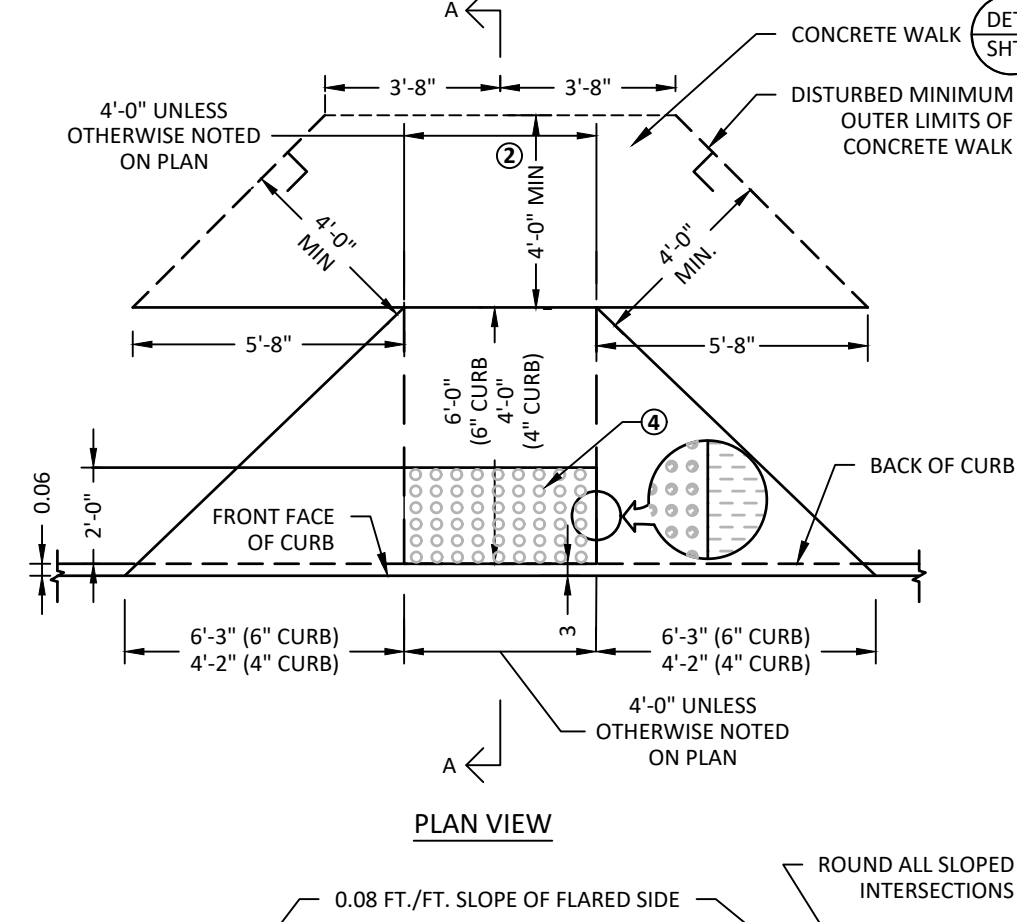
DETH SHT# ACCESSIBLE PARKING SIGN AND POST WITH BOLLARD
NOT TO SCALE



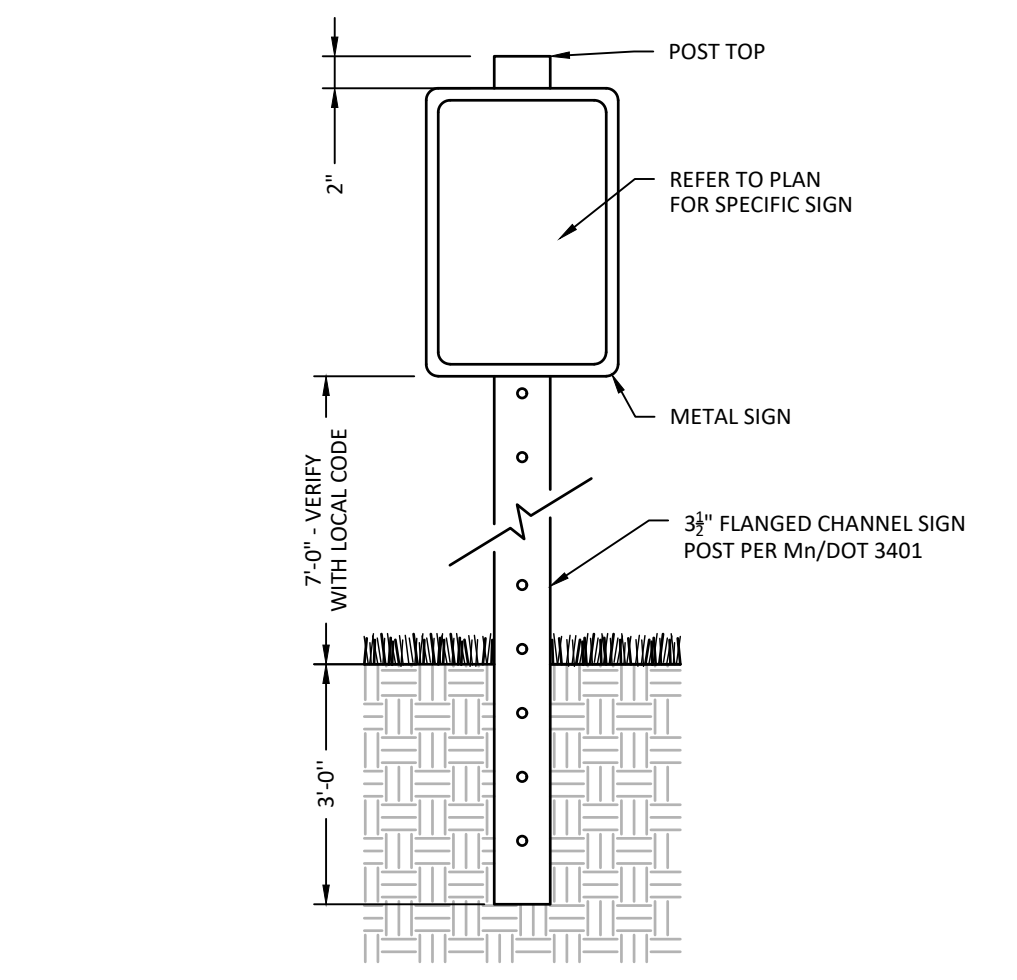
DETH SHT# D-412 CURB & GUTTER
NOT TO SCALE



DETH SHT# mill and overlay
NOT TO SCALE



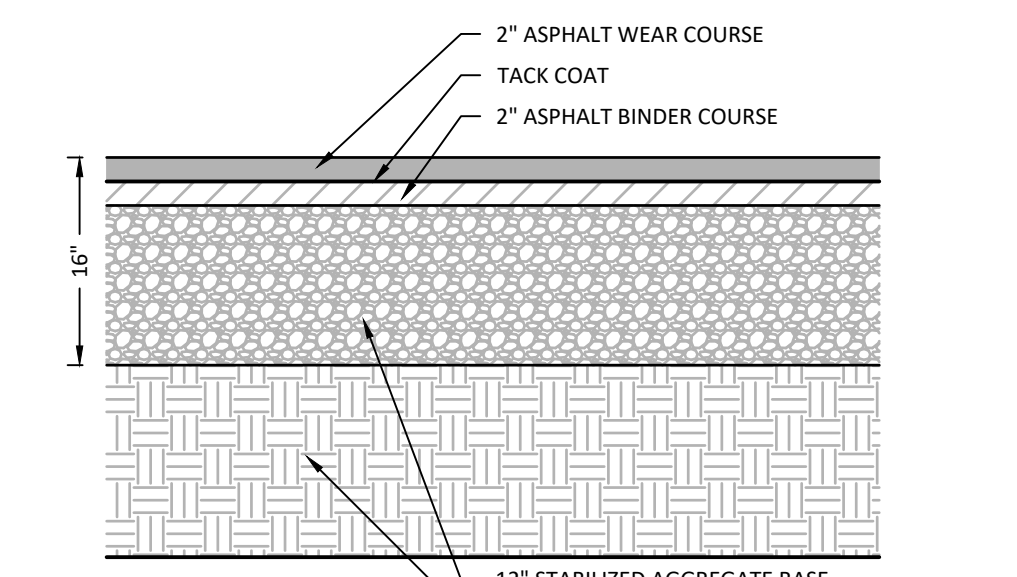
DETH SHT# PEDESTRIAN CURB RAMP
NOT TO SCALE



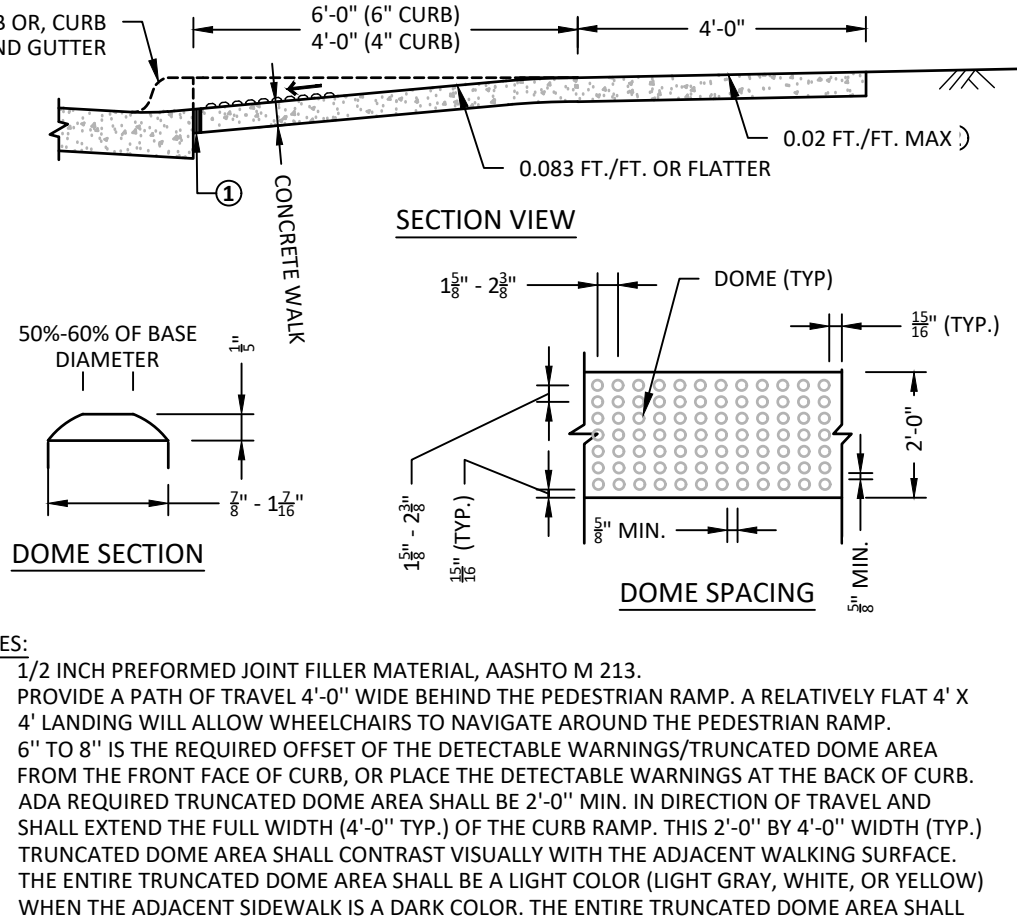
DETH SHT# TRAFFIC SIGN AND POST IN GRASS
NOT TO SCALE



DETH SHT# HEAVY DUTY ASPHALT PAVEMENT
NOT TO SCALE



DETH SHT# HEAVY DUTY ASPHALT PAVEMENT
NOT TO SCALE



DETH SHT# WETLAND BUFFER SIGN
NOT TO SCALE

ISSUE #	DATE	DESCRIPTION

CERTIFICATION

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

Date: 11/06/2024 Reg. No. 59532
Signed: *William J. Diede*
William J. Diede

DRAWN BY: WJD
CHECKED BY: DAR
COMMISSION NUMBER: 2653-01
SHEET TITLE

SITE DETAILS

SHEET NUMBER
C5.02

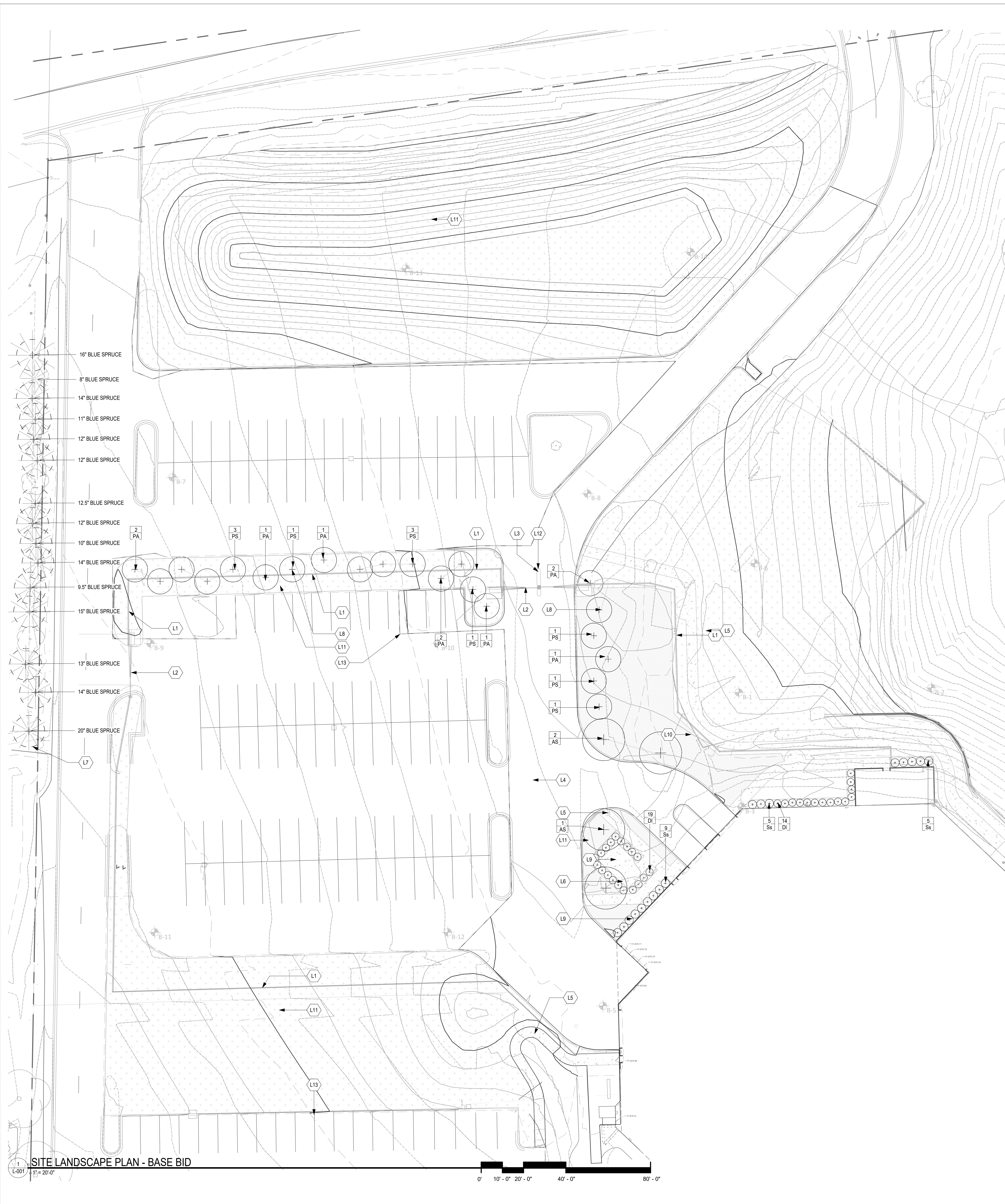
CONSULTANTS

PROJECT TITLE

**EDEN PRAIRIE
POLICE**

ISSUE #	DATE	DESCRIPTION
	10-22-2024	90% CD SET
	11-20-2024	CONTRACT SET

11.	HAND TRENCHING REQUIRED WITHIN ROOT ZONE OF ANY EXISTING TREE.
12.	CONTRACTOR SHALL CONFIRM MIN. STATIC WATER PRESSURE OF 60psi.



PROJECT SUMMARY:

- BUILDING FLOOR AREA = 600 SF
- REQUIRED TREE PLANTINGS EQUAL 1 CALIPER INCH PER 320 SF = 600/320 = 2.06
- PROPOSED TREE CALIPER INCHES = >3"

TREE REPLACEMENT SUMMARY:

- A. SIGNIFICANT TREES PROPOSED TO BE REMOVED - TOTAL CALIPER INCHES = 233.5
- B. SIGNIFICANT TREES EXISTING ON SITE - TOTAL CALIPER INCHES = 834.5
- C. TREE REPLACEMENT CONSTANT = 0.5
- D. REPLACEMENT TREES CALIPER INCHES REQUIRED [(A/B) x C] x A = D [(233.5/834.5) x 5] x A = 33 CAL INCHES

GENERAL NOTES:

- LANDSCAPE CONTRACTOR SHALL INSPECT THE SITE AND BECOME FAMILIAR WITH EXISTING CONDITIONS RELATING TO THE NATURE AND SCOPE OF WORK.
- LANDSCAPE CONTRACTOR SHALL VERIFY PLAN LAYOUT AND DIMENSIONS SHOWN AND BRING TO THE ATTENTION OF THE LANDSCAPE ARCHITECT DISCREPANCIES WHICH MAY COMPROMISE THE DESIGN AND/OR INTENT OF THE PROJECT'S LAYOUT.
- LANDSCAPE CONTRACTOR SHALL ASSURE COMPLIANCE WITH APPLICABLE CODES AND REGULATIONS GOVERNING THE WORK AND/OR MATERIALS SUPPLIED.
- LANDSCAPE CONTRACTOR SHALL PROTECT EXISTING ROADS, CURBS/GUTTERS, TRAILS, TREES, LAWNS AND SITE ELEMENTS DURING CONSTRUCTION OPERATIONS. DAMAGE TO SAME SHALL BE REPAIRED AT NO ADDITIONAL COST TO THE OWNER.
- LANDSCAPE CONTRACTOR SHALL VERIFY ALIGNMENT AND LOCATION OF UNDERGROUND AND ABOVE GRADE UTILITIES AND PROVIDE THE NECESSARY PROTECTION FOR SAME BEFORE CONSTRUCTION MATERIAL INSTALLATION BEGINS (MINIMUM 10'-0" CLEARANCE).
- UNDERGROUND UTILITIES SHALL BE INSTALLED SO THAT TRENCHES DO NOT CUT THROUGH ROOT SYSTEMS OF ANY EXISTING TREES TO REMAIN.
- EXISTING CONTOURS, TRAILS, VEGETATION, CURB/GUTTER AND OTHER ELEMENTS ARE BASED UPON INFORMATION SUPPLIED TO THE LANDSCAPE ARCHITECT BY OTHERS. LANDSCAPE CONTRACTOR SHALL VERIFY DISCREPANCIES PRIOR TO CONSTRUCTION AND NOTIFY LANDSCAPE ARCHITECT OF SAME.
- ALIGNMENT AND GRADES OF THE PROPOSED WALKS, TRAILS AND/OR ROADWAYS ARE SUBJECT TO FIELD ADJUSTMENT REQUIRED TO CONFORM TO LOCALIZED TOPOGRAPHIC CONDITIONS AND TO MINIMIZE TREE REMOVAL AND GRADING. CHANGES IN THE ALIGNMENT AND GRADES MUST BE APPROVED BY THE LANDSCAPE ARCHITECT.
- LANDSCAPE CONTRACTOR SHALL REVIEW THE SITE FOR DEFICIENCIES IN THE PLANT MATERIAL SELECTIONS AND OTHER SITE CONDITIONS WHICH MIGHT NEGATIVELY AFFECT PLANT ESTABLISHMENT, SURVIVAL OR WARRANTY. UNDESIRABLE PLANT MATERIAL SELECTIONS OR SITE CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT PRIOR TO BEGINNING OF WORK.
- LANDSCAPE CONTRACTOR SHALL PREPARE AND SUBMIT REPRODUCIBLE AS-BUILT DRAWING(S) OF LANDSCAPE INSTALLATION, IRRIGATION AND SITE IMPROVEMENTS UPON COMPLETION OF CONSTRUCTION INSTALLATION AND PRIOR TO PROJECT ACCEPTANCE.
- NO PLANTS WILL BE INSTALLED UNTIL FINAL GRADING AND CONSTRUCTION HAS BEEN COMPLETED IN THE IMMEDIATE AREA.
- SOD AREAS DISTURBED DUE TO GRADING SHALL BE REPLACED, UNLESS NOTED OTHERWISE.
- WHERE SOD ADJUTS PAVED SURFACES, FINISHED GRADE OF SOD/SEED SHALL BE HELD 1" BELOW SURFACE ELEVATION OF TRAIL, SLAB, CURB, ETC.
- SOD SHALL BE LAID PARALLEL TO THE CONTOURS AND SHALL HAVE STAGGERED JOINTS. ON SLOPES STEEPER THAN 3:1 OR IN DRAINAGE SWALES, SOD SHALL BE STAKED SECURELY.
- PROPOSED PLANT MATERIAL SHALL COMPLY WITH THE LATEST EDITION OF THE AMERICAN STANDARD FOR NURSERY STOCK, ANSI Z60.1. UNLESS NOTED OTHERWISE, DECIDUOUS SHRUBS SHALL HAVE AT LEAST 5 CANES AT THE SPECIFIED HEIGHT. ORNAMENTAL TREES SHALL HAVE NO Y-CROTCHES AND SHALL BEGIN BRANCHING NO LOWER THAN 9' FEET ABOVE THE ROOT BALL. STREET AND BOULEVARD TREES SHALL BEGIN BRANCHING NO LOWER THAN 6' ABOVE FINISHED GRADE.
- LANDSCAPE CONTRACTOR SHALL ASSURE COMPLIANCE WITH APPLICABLE CODES AND REGULATIONS GOVERNING THE WORK AND/OR MATERIALS SUPPLIED.
- LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR ONGOING MAINTENANCE OF NEWLY INSTALLED MATERIALS UNTIL TIME OF OWNER ACCEPTANCE. ACTS OF VANDALISM OR DAMAGE WHICH MAY OCCUR PRIOR TO OWNER ACCEPTANCE SHALL BE THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR.
- LANDSCAPE CONTRACTOR SHALL WARRANT NEW PLANT MATERIAL THROUGH ONE CALENDAR YEARS FROM THE DATE OF THE OWNER ACCEPTANCE. NO PARTIAL ACCEPTANCE WILL BE CONSIDERED.
- PLANTING AREAS (NOT OVER STRUCTURE) RECEIVING GROUND COVER, PERENNIALS, ANNUALS, AND/OR WINES SHALL RECEIVE A MINIMUM OF 12" DEPTH OF PLANTING SOIL CONSISTING OF AT LEAST 45 PARTS TOPSOIL, 45 PARTS SCREENED COMPOST OR MANURE AND 10 PARTS SAND.
- ANNUAL AND PERENNIAL PLANTING BEDS TO RECEIVE 3" DEEP SHREDDED HARDWOOD MULCH WITH NO WEED BARRIER.
- SHRUB BED MASSINGS TO RECEIVE 3" DEEP SHREDDED HARDWOOD MULCH WITH FIBER MAT WEED BARRIER.
- STEEL EDGER TO BE USED TO CONTAIN SHRUBS, PERENNIALS AND ANNUALS WHERE PLANTING BED MEETS SOD UNLESS OTHERWISE NOTED.
- REFER TO CIVIL FOR SITE DEMOLITION INFORMATION.
- REFER TO CIVIL FOR ADDITIONAL SITE GRADING AND UTILITY INFORMATION.
- IF A DISCREPANCY EXISTS BETWEEN THE NUMBER OF PLANTS SHOWN IN THE PLANT MATERIALS SCHEDULE AND THE PLANS, THE PLANS SHALL GOVERN.
- CONTRACTOR SHALL STAKE OUT LOCATION OF ALL PROPOSED TREES FOR APPROVAL BY LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.

KEY NOTES:

- L1 SECURITY FENCE: 8' TALL, 3-RAIL, 'MONTAGE II' BY AMERISTAR WITH CAST IN PLACE CONCRETE FOOTINGS, BASIS OF DESIGN
- L2 VERTICAL SWING GATE, 8' TALL, 3-RAIL, 'MONTAGE' BY AMERISTAR BASIS OF DESIGN
- L3 DIGITAL CARD READER
- L4 BITUMINOUS PAVEMENT; SEE CIVIL
- L5 NEW CAST IN-PLACE CONCRETE PAVING; SEE CIVIL FOR PROFILE
- L6 CAST IN PLACE CONCRETE STAFF BREAK PATIO
- L7 EXISTING TREES, PRERESERVE AND PROTECT
- L8 NEW TREE PLANTING; INSTALL DRIP IRRIGATION AT ALL NEW TREE PLANTINGS
- L9 NEW MASS PLANTING BED; MIN. 12" DEPTH PLANTING SOIL, MIN. 3" DEPTH SHREDDED HARDWOOD MULCH, DRIP IRRIGATION, STEEL EDGER WHEREVER MASS PLANTING BEDS MEET TURF LAWN OR NATIVE SEEDED AREAS
- L10 SOD, IRRIGATE WITH POP-UP ROTARY STYLE SPRAY HEADS
- L11 NATIVE SEED PLUGS: 'NAIL POLLINATOR MIX' BY MINNESOTA NATIVE LANDSCAPES; SEED ALL AREAS DISTURBED BY CONSTRUCTION; SEE CIVIL FOR CONSTRUCTION LIMITS.
- L12 CONCRETE-FILLED STEEL BOLLARD
- L13 LIMIT OF DISTURBANCE

PROPOSED PLANT SCHEDULE:

QTY	SYM	COMMON NAME	SCIENTIFIC NAME	PLANTING SIZE	COMMENTS
TREES					
28	EX	EXISTING TREES (SEE CIVIL)		N/A	
DECIDUOUS SHRUBS					
52	DI	DWARF BUSH HONEYSUCKLE	Diervilla lonicera	#5 CONT.	
26	Ss	SEM FALSE SPIREA	Sorbaria sorbifolia 'Sem'(PP16.336)	#5 CONT.	
DECIDUOUS CANOPY TREES					
6	AS	SUGAR MAPLE	Acer saccharum 'Green Mountain'	2.5" CAL.	
CONIFEROUS TREES					
17	PA	NORWAY SPRUCE	Picea abies	8' B&B	
19	PS	WHITE PINE	Pinus strobus	8' B&B	
ALT DUPLICATES - DO NOT COUNT					
2	AS-A	SUGAR MAPLE	Acer saccharum 'Green Mountain'	2.5" CAL.	
14	DI-A	DWARF BUSH HONEYSUCKLE	Diervilla lonicera	#5 CONT.	
3	PA-A	NORWAY SPRUCE	Picea abies	8' B&B	
3	PS-A	WHITE PINE	Pinus strobus	8' B&B	
8	Ss-A	SEM FALSE SPIREA	Sorbaria sorbifolia 'Sem'(PP16.336)	#5 CONT.	

CERTIFICATION

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

Brady Halverson
Brady Halverson
LA 41727
License Number
Date

DRAWN BY
CHECKED BY
COMMISSION NUMBER

2653.01
2653.01

SHEET TITLE

**LANDSCAPE
PLAN - BASE BID**

SHEET NUMBER

L-001

CONSULTANTS

PROJECT TITLE

**EDEN PRAIRIE
POLICE**

ISSUE #	DATE	DESCRIPTION
1	11-20-2024	CONTRACT SET



1 SITE LANDSCAPE PLAN - ALTERNATE
L-002 1" = 20'-0"

PROJECT SUMMARY:

- BUILDING FLOOR AREA = 4860 SF
- REQUIRED TREE PLANTINGS EQUAL 1 CALIPER INCH PER 320 SF = 4860/320 = 16
- PROPOSED TREE CALIPER INCHES = >16"

TREE REPLACEMENT SUMMARY:

- A. SIGNIFICANT TREES PROPOSED TO BE REMOVED - TOTAL CALIPER INCHES = 233.5
- B. SIGNIFICANT TREES EXISTING ON SITE - TOTAL CALIPER INCHES = 834.5
- C. TREE REPLACEMENT CONSTANT = 0.5
- D. REPLACEMENT TREES CALIPER INCHES REQUIRED [(A/B) x C] x A = D [(233.5/834.5) x 0.5] x A = 33 CAL. INCHES

KEY NOTES:

- L1 SECURITY FENCE; 8' TALL, 3-RAIL, MONTAGE IT BY AMERISTAR WITH CAST IN PLACE CONCRETE FOOTINGS; BASIS OF DESIGN
- L2 VERTICAL SWING GATE; 8' TALL, 3-RAIL, MONTAGE BY AMERISTAR BASIS OF DESIGN
- L3 DIGITAL CARD READER
- L4 BITUMINOUS PAVEMENT; SEE CIVIL
- L5 NEW CAST IN PLACE CONCRETE PAVING; SEE CIVIL FOR PROFILE
- L6 CAST IN PLACE CONCRETE STAFF BREAK PATIO
- L7 EXISTING TREES; PRESERVE AND PROTECT
- L8 NEW TREE PLANTING; INSTALL DRIP IRRIGATION AT ALL NEW TREE PLANTINGS
- L9 NEW MASS PLANTING BED; MIN. 12" DEPTH PLANTING SOIL, MIN. 3" DEPTH SHREDDED HARDWOOD MULCH, DRIP IRRIGATION, STEEL EDGER WHEREVER MASS PLANTING BEDS MEET TURF LAWN OR NATIVE SEEDED AREAS
- L10 SOD; IRRIGATE WITH POP-UP ROTARY STYLE SPRAY HEADS
- L11 NATIVE SEEDPLUSS; "MINI POLLINATOR MIX" BY MINNESOTA NATIVE LANDSCAPES; SEED ALL AREAS DISTURBED BY CONSTRUCTION; SEE CIVIL FOR CONSTRUCTION LIMITS.
- L12 CONCRETE-FILLED STEEL BOLLARD
- L13 LIMIT OF DISTURBANCE

PROPOSED PLANT SCHEDULE:

QTY	SYM	COMMON NAME	SCIENTIFIC NAME	PLANTING SIZE	COMMENTS
TREES					
26	EX	EXISTING TREES (SEE CIVIL)	-	N/A	
DECIDUOUS SHRUBS					
52	DI	DWARF BUSH HONEYSUCKLE	Diervilla tonica	#5 CONT.	
26	Ss	SEM FALSE SPIREA	Sorbaria sorbifolia 'Sem' (PP16.336)	#5 CONT.	
DECIDUOUS CANOPY TREES					
6	AS	SUGAR MAPLE	Acer saccharum 'Green Mountain'	2.5" CAL.	
CONIFEROUS TREES					
17	PA	NORWAY SPRUCE	Picea abies	8' B&B	
19	PS	WHITE PINE	Pinus strobus	8' B&B	
ALT DUPLICATES - DO NOT COUNT					
2	AS-A	SUGAR MAPLE	Acer saccharum 'Green Mountain'	2.5" CAL.	
14	DI-A	DWARF BUSH HONEYSUCKLE	Diervilla tonica	#5 CONT.	
3	PA-A	NORWAY SPRUCE	Picea abies	8' B&B	
3	PS-A	WHITE PINE	Pinus strobus	8' B&B	
8	Ss-A	SEM FALSE SPIREA	Sorbaria sorbifolia 'Sem' (PP16.336)	#5 CONT.	

CERTIFICATION

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Brady Halverson
LA 41727
License Number

11-20-2024
Date

DRAWN BY
CHECKED BY BH
COMMISSION NUMBER 2663.01

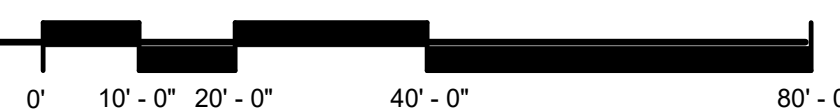
SHEET TITLE

**LANDSCAPE
PLAN -
ALTERNATE**

SHEET NUMBER

L-002

1 SITE LANDSCAPE PLAN - ALTERNATE
L-002 1" = 20'-0"





TREE REPLACEMENT SUMMARY:

- A. SIGNIFICANT TREES PROPOSED TO BE REMOVED - TOTAL CALIPER INCHES = 233.5
- B. SIGNIFICANT TREES EXISTING ON SITE - TOTAL CALIPER INCHES = 834.5
- C. TREE REPLACEMENT CONSTANT = 0.5
- D. REPLACEMENT TREES CALIPER INCHES REQUIRED (A/B) x C x A = D [(233.5/834.5) x .5] x A = 33 CAL. INCHES

X → TREE TO BE REMOVED

Eden Prairie Police Department Tree Datasheet								
FID	Tag	Species	DBH	Height Range	Condition*	Significant Tree	Heritage Tree	
0	11	Cherry, Black	30	30'-60'	2	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
1	27	Cherry, Black	13.5	30'-60'	3	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
2	12	Cherry, Black	15	30'-60'	3	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
3	6	Cherry, Black	14.5	30'-60'	1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
4	38	Cherry, Black	17.5	30'-60'	2	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
5	22	Cherry, Black	16.5	30'-60'	2	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
6	32	Cherry, Black	15	30'-60'	3	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
7	35	Walnut, Black	20	30'-60'	3	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
8	8	Cherry, Black	14	30'-60'	2	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
9	36	Cedar, Eastern Red	13.5	15'-30'	3	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
10	3	Cedar, Eastern Red	9.5	15'-30'	3	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
X	11	Walnut, Black	12	30'-60'	3	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
X	12	18	Oak, Northern Pin	19.5	30'-60'	3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13	2	Cherry, Black	14	30'-60'	3	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
14	56	Cedar, Eastern Red	9	15'-30'	3	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
15	50	Walnut, Black	12.5	30'-60'	3	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
16	58	Cedar, Eastern Red	14	30'-60'	3	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
17	59	Cedar, Eastern Red	8	15'-30'	3	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
18	34	Cherry, Black	25.5	30'-60'	2	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
19	24	Cherry, Black	18	30'-60'	3	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
20	57	Cherry, Black	15	30'-60'	3	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
21	19	Cedar, Eastern Red	10	15'-30'	3	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
22	54	Cedar, Eastern Red	14	15'-30'	3	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
23	17	Cedar, Eastern Red	8	15'-30'	3	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
24	42	Cedar, Eastern Red	10.5	15'-30'	3	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
25	33	Cedar, Eastern Red	9.5	15'-30'	3	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
26	46	Cedar, Eastern Red	10	15'-30'	3	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
27	39	Cedar, Eastern Red	9	15'-30'	3	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
28	41	Cedar, Eastern Red	9	15'-30'	3	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
29	40	Cherry, Black	12	15'-30'	2	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
X	30	31	Cedar, Eastern Red	13	15'-30'	3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
X	31	29	Spruce, Blue	14	15'-30'	3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
X	32	55	Cedar, Eastern Red	17	15'-30'	3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
X	33	20	Spruce, Blue	8	15'-30'	3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
X	34	13	Spruce, Blue	14	30'-60'	3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
X	35	15	Cedar, Eastern Red	16	15'-30'	3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
X	36	43	Cedar, Eastern Red	13.5	15'-30'	3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
X	37	30	Cedar, Eastern Red	14.5	15'-30'	3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
X	38	9	Pine, Austrian	13.5	15'-30'	3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
X	39	61	Cedar, Eastern Red	14	15'-30'	3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
X	40	49	Cherry, Black	12	5'-15'	3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
X	41	4	Crabapple, sp.	12	15'-30'	3	<input checked="" type="checkbox"/>	<input type="checkbox"/>

X	42	16	Pine, Austrian	14	15'-30'	3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
X	43	51	Pine, Austrian	15	15'-30'	3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
X	44	60	Spruce, Blue	11.5	15'-30'	3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
X	45	21	Ash, Green	21	30'-60'	3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
X	46	62	Spruce, Blue	20	15'-30'	3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
X	47	45	Spruce, Blue	14	15'-30'	3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
X	48	48	Spruce, Blue	13	15'-30'	3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
X	49	53	Spruce, Blue	15	15'-30'	3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
X	50	47	Spruce, Blue	14	15'-30'	3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
X	51	52	Spruce, Blue	9.5	15'-30'	3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
X	52	14	Spruce, Blue	10	15'-30'	3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
X	53	37	Spruce, Blue	12	15'-30'	3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
X	54	10	Spruce, Blue	12.5	15'-30'	3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
X	55	5	Spruce, Blue	12	15'-30'	3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
X	56	/	Spruce, Blue	12	15'-30'	3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
X	57	26	Spruce, Blue	11	15'-30'	3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
X	58	23	Spruce, Blue	14	15'-30'	3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
X	59	44	Spruce, Blue	8	15'-30'	3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
X	60	28	Spruce, Blue	16	15'-30'	3	<input checked="" type="checkbox"/>	<input type="checkbox"/>

*Tree Condition: 1 = Poor, 2 = Fair, 3 = Good

CONSULTANTS

PROJECT TITLE

**EDEN PRAIRIE
POLICE**

ISSUE #	DATE	DESCRIPTION
	10-30-2024	SITE DEVELOPMENT APPLICATION
	11-20-2024	CONTRACT SET

CERTIFICATION

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

Brady Halverson
LA 41727
License Number
Date 11-20-2024
DRAWN BY
CHECKED BY BH
COMMISSION NUMBER 2653.01

SHEET TITLE

TREE REMOVALS

SHEET NUMBER

L-003

