



STAFF REPORT

Date: 5/27/2025

Item#: 4b – Public Hearing
Regular/Motion

TO: Planning Commission
FROM: Ashley Monterusso, City Planner
AGENDA ITEM: **Primrose Daycare Conditional Use Permit**
REVIEWED BY: Sophia Jensen, Senior City Planner
Jason Stopa, CD Director

CORE STRATEGIES:

- Vibrant, inclusive, connected community
- Responsive, transparent, adaptive governance
- Managed Growth
- Efficient, reliable, innovative services
- Balanced Finances now and future

INTRODUCTION:

Primrose Schools Franchise Corporation has submitted a conditional use permit application for a new daycare facility at 11899 Upper 40th Street North (PID: 1202921440027). The facility would be located on Block 2 Lot 1 which is a vacant commercial lot in the newly constructed Bridgewater Village. Daycare facilities are a conditional use within the commercial zoning district.

The current property owner and developer, Bridgewater Bancshares, has been constructing the public infrastructure and stormwater improvements, irrigation re-use, and utility improvements up to the property boundary of the proposed day care site. The daycare facility will connect to the stormwater reuse system. They will also be providing additional landscaping and a hydrant internal to the site.

The 2-story building is to have 12 classrooms divided by student age. At full occupancy there will be approximately 192 children and 28 staff members. The facility will have an indoor play area for use during the colder seasons. The facility will also have outdoor playground areas on the east and south sides. Proposed hours of operation are 6 AM – 6:30 PM Monday through Friday. Morning drops-off occurs between 6AM -9:30 AM and evening pick-up is between 3:30 PM - 6:30 PM. Occasionally, special events will be held in the evenings and weekends.

REQUEST DETAILS:

Applicant: Primrose Schools Franchise Corporation, Marvin Wensman
Property Owner: Bridgewater Bancshares
Location: 11899 Upper 40th St N (PID: 12.029.21.44.0027)
Request: Conditional Use Permit for daycare center
Site Area: 1.7 acres

<i>Existing Land Use:</i>	Vacant
<i>Existing Zoning:</i>	Commercial
<i>Surrounding:</i>	North: Village Medium Density Residential Stormwater Pond (V-MDR) South: Stillwater Blvd and Rural Transitional (RT) East: Commercial (C) West: Village Medium Density Residential Stormwater Pond (V-MDR)
<i>Comprehensive Plan:</i>	Commercial
<i>Deadline for Action:</i>	Application Complete – 4/14/2025 60 Day Deadline – 6/16/2025
<i>Regulations:</i>	Chapter 105.12 Zoning Code ARTICLE XV Commercial Districts

ISSUE BEFORE PLANNING COMMISSION:

The Planning Commission is being asked to hold a public hearing, review, and make a recommendation on the requests for a conditional use permit request.

REVIEW COMMENTS

This request was distributed to several departments and agencies for review on April 11th, 2025. The following departments provided comments on the applications. Conditions of approval have been added where applicable:

- MN DNR- No comment provided.
- WA County – Comment Letter dated 4/25/2025
- VBWD – Provided comments that VBWD permit is in process.
- MACMSP - 5/1/25 Provided comments that no permits were required and provided FAA guidance
- Fire Dept- Provided a memo dated 4/23/25 noting their standard comments regarding drive lanes, parking, fire suppression, lock boxes, and fire alarms.
- Landscape Architect- Provided a memo dated 4/23/2025 requesting plan revisions on the landscape plan around meeting parking lot landscaping and additional trees.
- City Engineer– Provided a memo dated 4/23/2025 summarizing that while the plans submitted with the application are substantially compliant with the intended Bridgewater Village infrastructure improvements, Civil Site Plans may be revised which will require review and approval by the City once the Bridgewater Village Subdivision Improvements have been constructed and accepted.
- Planning Department – 5/7/25 Provided memo requesting minor revisions to plans and noting sign and fence permitting requirements.
- Public Works – 4/28/25, Provided comments regarding encroachment agreements for any improvements in drainage and utility easements

RECOMMENDED FINDINGS:

LEC 105.12.290 has twelve required findings that conditional use permits must meet before they are reviewed for approval. Staff has determined compliance with the following criteria:

1. The proposed use will not be detrimental to or endanger the public health, safety, comfort, convenience or general welfare of the neighborhood or the city.
2. The use or development conforms to the city comprehensive plan.

3. The use or development is compatible with the existing neighborhood.
4. The proposed use meets all specific development standards for such use listed in the zoning code.
5. If the proposed use is in a floodplain management or shoreland area, the proposed use meets all the specific standards for such use listed in LEC 105.04, LEC 105.12.1230 and LEC title 100.
6. The proposed use will be designed, constructed, operated and maintained so as to be compatible in appearance with the existing or intended character of the general vicinity and will not change the essential character of that area.
7. The proposed use will not be hazardous or create a nuisance, as defined under this chapter, to existing or future neighboring structures.
8. The proposed use will be served adequately by essential public facilities and services, including streets, police and fire protection, drainage structures, refuse disposal, water and sewer systems and schools or will be served adequately by such facilities and services provided by the persons or agencies responsible for the establishment of the proposed use.
9. The proposed use will not create excessive additional requirements at public cost for public facilities and services and will not be detrimental to the economic welfare of the community.
10. The proposed use will not involve uses, activities, processes, materials, equipment and conditions of operation that will be detrimental to any persons, property or the general welfare because of excessive production of traffic, noise, smoke, fumes, glare or odors.
11. Vehicular approaches to the property, where present, will not create traffic congestion or interfere with traffic on surrounding public thoroughfares.
12. The proposed use will not result in the destruction, loss or damage of a natural or scenic feature of major importance.

FISCAL IMPACT:

None

RECOMMENDED CONDITIONS OF APPROVAL

1. The applicant must obtain all other necessary City, State, and other governing body permits and approvals before the commencement of any construction activity on the site. These include, but not limited to, City of Lake Elmo permits, Minnesota Pollution Control Agency stormwater permit, Valley Branch Watershed District permit, approval of revised plans from the City Engineer, and building and zoning permits.
2. If substantial construction has not taken place within 12 months of the City's approval, the conditional use permit shall become void.
3. The Applicant shall fully address all comments in the following review memos, or any subsequently revised memo, to the satisfaction of the City:
 - a. City Engineer's memos dated 4/23/2025
 - b. City Landscape Architect's memo dated 4/23/2025

- c. City Fire Chief's memo dated 4/23/2025
- d. City Planning memo dated 5/7/2025
4. Bridgewater Village Subdivision Improvements must be constructed and accepted by the City before a building permit is issued.
5. The Applicant is required to enter into a Site Improvement Agreement in a form acceptable to the City and shall be executed and recorded.
6. If applicable, Applicant is required to enter into a stormwater maintenance and easement agreement in a form acceptable to the City and shall be executed and recorded.
7. The Applicant is required to enter into an encroachment agreement in a form acceptable to the City and shall be executed and recorded for the parking lot improvements. Any improvements in the Drainage and Utility easement will not be allowed to restrict surface water drainage or flow through that area.
8. No deviations are provided for signage. When construction of the sign(s) are desired, the Applicant must apply for a sign permit with the City and meet requirements.
9. Any expansion or modification of the building, outdoor play area, or parking lot shall require a conditional use permit amendment. This does not apply to typical maintenance.
10. Any portion of the improvements within a city or county access, drainage or utility easement are subject to removal or modification by the holder of said easement subject to any applicable easement agreements.

PUBLIC COMMENT:

A public hearing notice was sent to surrounding property owners on April 29th, 2025 and published in the Stillwater Gazette on May 2nd, 2025. Staff have not received any public comments at this time.

OPTIONS:

The Planning Commission may:

- Recommend approval of the requests.
- Recommend approval of the requests with conditions.
- Recommend denial of the requests, citing findings of fact for denial.

RECOMMENDATION:

Staff recommends that the Planning Commission recommend approval of the requests from Primrose Schools Franchise Corporation for a daycare facility. Suggested Motion:

“Move to recommend approval of the request from Primrose Schools Franchise Corporation, for a conditional use permit to construct and establish a daycare facility at property described as 11899 Upper 40th St. based on the findings of fact and with the conditions listed in the staff report”

ATTACHMENTS:

- 1) Application narrative

- 2) Project Plans
- 3) City Engineer Memo (4/23/25)
- 4) Fire Department Memo (4/23/25)
- 5) Landscape Architect Memo (4/23/25)
- 6) VBWD Email (4/26/2025)
- 7) Washington County Memo (4/25/25)
- 8) Metropolitan Airport Commission Memo (4/28/25)
- 9) Public Works email (4/28/2025)
- 10) Planning memo (5/7/2025)

**Conditional Use Permit Application
City of Lake Elmo, Minnesota
Primrose Schools**

A. Contact Information

Applicant

Primrose School Franchising Company LLC
Marvin Wensman - Development Manager
3200 Windy Hill Rd, Suite 320, Atlanta, GA 30339
320-815-4225
Mwensman@primroseschools.com

Property Owner of Record

Bridgewater Bancshares, Inc.
Ben Klocke – Senior Vice President General Counsel
4450 Excelsior Boulevard, Suite 100, St. Louis Park, MN 55416
952-893-6866
Ben.Klocke@bwbn.com

Architect of Record

CASCO Diversified Corporation
Aaron Becker - Associate Principal / Director of Project Management
12 Sunnen Dr., Suite 100, St. Louis, MO 63143
314-238-2031
Aaron.Becker@thecdcompanies.com

Civil Engineer

Stantec Consulting Services, Inc.
Adam Daughtery - Land Development Civil Engineer
1 Carlson Pkwy N, Plymouth, MN 55447
262-643-9007
Adam.Daughtery@stantec.com

Surveyor

Egan, Field & Novak, Inc.
Chris Terwedo - Project Manager
475 Old Highway 8 NW, Suite 200, New Brighton, MN 55112
612-466-3368
cterwedo@efnsurvey.com

B. Site Information

Address

Address not available – 1.70 acres located at Lot 1, Block 2 of Bridgewater Village in the City of Lake Elmo, County of Washington, State of Minnesota

Current Zoning

Commercial (C)

Parcel Size

74,018 square feet or 1.7018 acres

Property Identification Number

1202921440027

Current Legal Description

Lot 1, Block 2, Bridgewater Village, according to the recorded plat thereof Washington County, Minnesota

C. History of Property

Use

The subject property was historically agricultural land from at least 1936 until 2024, when grading operations began for the future development of Bridgewater Village. The property is currently vacant, graded land.

Discussions with Staff

Primrose Schools and team have had a few discussions with Sophia Jensen and Ashley Monterusso at the City of Lake Elmo, which included reviews of our use, draft concept plan, and the city entitlement process. Most recently, we conducted a virtual Pre-Application Meeting on February 25, 2025, where we discussed the city approval process, schedule timing, draft concept plan, draft elevations, and draft landscape plan.

D. Use Description

Proposed Primrose School

Primrose School Franchising Company is the pre-eminent provider of educational based private preschools and childcare centers in the United States with over 500 locations in 34 states. Primrose Schools, along with our local Franchise Owners, Steve and Gina Dahlblom, are excited to bring Primrose to Lake Elmo.

We are proposing to construct a 2-story childcare building on 1.7 acres within the Bridgewater Village Development. The building is to have 12 classrooms where the children are separated by age. Most classrooms will have 2 teachers at capacity with a maximum shift of 24. A unique feature of this Primrose School, given the colder climate, is an indoor play area, which is accompanied by outdoor playground areas on the east and south side

of the building. Each playground will have age-appropriate equipment, and the children are encouraged to have free playtime.

The site is in the Bridgewater Village development on the northwest quadrant of Manning Ave N and Stillwater Blvd. Parents will access the Primrose School via internal roads, making traffic circulation safe, easy, and convenient.

With the property owner delivering us a pad ready site, managing all the public street infrastructure, stormwater improvements, irrigation re-use system and utility improvements up to our property boundary, we plan to develop our 2-story prototype building. We paid close attention to the requirements in Chapter 3: Commercial Development of the Design Standards Manual, adhering to the City's site and building design standards. Working with CASCO, our preferred architect, and Stantec, local civil engineer, and the staff at the City of Lake Elmo, we have worked together to determine the optimal position for the Primrose building, playgrounds, and parking. This site plan allows us to use the preferred site access point given the drainage easement to the west and Bridgewater Bank's access point to the east. The building is oriented as far north as possible, to front the internal public road, given this access point. Parents will be able to easily navigate the access drive and parking lot with 22-foot-wide drive aisles and a circular flow layout. Parking requirements, building setbacks, parking setbacks, greenspace and landscape requirements all meet City requirements.

Operational/Development Details

At full occupancy there will be approximately 192 children and 28 staff members. Hours of operation are 6 AM – 6:30 PM Monday through Friday. Occasionally, special events will be held in the evenings and weekends. AM drop off occurs between 6-9:30 AM (peak hour is typically 7:30-8:30 AM). PM pickup is between 3:30-6:30 PM (peak hour is typically 4:30-5:30 PM). Please note, Primrose Schools do not offer drop-off stalls or lanes, we have all parents park their cars and walk their children inside the building for the maximum amount of safety.

The development schedule hinges upon approval timelines, but our goal is to have all permits by fall or early winter of 2025, with the goal of grading and getting the foundations in before the frost.

E. Use Justification

Commitment to safety, comfort, convenience, and general welfare of the City

Primrose Schools is a national system of accredited private preschools that provides premier early education and childcare experiences for children and families. Franchise Owners, leadership teams and school staff partner with parents to help children develop the right foundation for continual learning in life.

As a childcare facility, the proposed project will comply with all state and local childcare licensing requirements. This includes state licensure with regular required inspections from the state. A few safety highlights provided at each facility include fully fenced playground spaces, access control at all exterior building entrances, staffed reception desk at main entry and a communication system throughout the building.

The 2-story Primrose School takes local design guidelines into consideration and the classic, yet modern look works well with the Bridgewater Village and City of Lake Elmo. The childcare use will be designed, constructed, operated, and maintained so it will not change the essential character of that area. Vehicular approaches to the property will not create traffic congestion or interfere with traffic on surrounding public thoroughfares. The proposed use will not be hazardous or create a nuisance to existing or future neighboring structures. The proposed childcare use will not create excessive additional requirements at public cost for public facilities and services and will not be detrimental to the economic welfare of the community.

Conforming with Comprehensive Plan

The Comprehensive Plan emphasizes enhancing community services and amenities to support a growing population. Introducing a high-quality early childhood education center like Primrose School would address the increasing demand for educational services, contributing positively to the community's development objectives.

The establishment of a Primrose School would create employment opportunities and attract families seeking quality education, thereby stimulating local economic activity. This initiative aligns with the Plan's goals of fostering economic development through diversified services. By providing reputable early childhood education, Primrose School would enhance the range of community services available in Lake Elmo, supporting the Plan's vision of a well-rounded and family-friendly community.

The proposed Primrose School aligns with Lake Elmo's 2040 Comprehensive Plan by enhancing educational services, contributing to economic development, and enriching community amenities.

Compatibility with neighborhood

A Primrose School is an ideal addition to Bridgewater Village in Lake Elmo, seamlessly integrating into the mixed-use community that blends residential and commercial spaces. With housing situated toward the rear of the development and commercial users positioned at the front, this location provides a strategic and convenient setting for a high-quality childcare facility. Positioned at the intersection of Manning Ave N and Stillwater Blvd, Primrose School offers parents easy access for drop-off and pick-up, enhancing daily convenience for local families. Additionally, Primrose's strong brand and reputation would increase the development's appeal to prospective homebuyers and renters, reinforcing the City as a family-friendly, well-rounded community.



Real People. Real Solutions.

MEMORANDUM

Date: April 23, 2025

To: Sophia Jensen, Senior City Planner
Jason Stopa, Community Development Director
Marty Powers, Public Works Director
Nate Stanley, City Engineer
Chad Isakson, Assistant City Engineer
From: Jack Griffin, Sr. Project Manager
Re: Primrose School CUP

An engineering review has been completed for the Primrose School CUP application received on April 11, 2025. This review consisted of the following documentation:

- Primrose School Civil Site Plans dated April 10, 2025.
 - Stormwater Compliance Memo dated April 4, 2025.
 - ALTA Survey dated January 6, 2025.
-

STATUS/FINDINGS: Approval of the Primrose School CUP must be contingent upon the Civil Site Plans being reviewed and approved by the City, once the Bridgewater Village Subdivision Improvements have been constructed and accepted by the City.

The Civil Site Plans submitted with this application appear substantially compliant with the intended Bridgewater Village infrastructure improvements. However, these improvements are not constructed at the time of this application and are subject to change. The Civil Site Plans must be revised to reflect the as-built conditions of the Bridgewater Village infrastructure improvements and resubmitted for City review.

PRIMROSE SCHOOL CIVIL SITE PLANS

1. The ALTA Survey must be revised and resubmitted once the City approved as-built conditions are available for the Bridgewater Village infrastructure improvements.
2. All Civil Site Plan sheets must be revised to reflect the City approved as-built conditions for Bridgewater Village. All proposed improvements must be revised to connect into the as-built infrastructure components.
3. The Stormwater Compliance memo is incomplete. Stormwater reuse is a requirement of the Bridgewater Village subdivision including all commercial lots. Therefore, the Primrose School CUP approval must be contingent upon the implementation of Stormwater Reuse in perpetuity, and in accordance with the Bridgewater Village approved Stormwater Management Plan.
4. G-001. Add plan note to identify the standard of care guideline for the collection and depiction of existing subsurface utility data per CI/ASCE 38-02.
5. G-001. Add plan note that *"All construction parking and staging, including the loading and unloading of equipment and supplies, and including storage of materials, during the construction*

of the Site Improvements and buildings must be completed interior to the project site and is not allowed to occur on the adjacent public streets or within any public right-of-way. The Developer and contractors shall be responsible for the repair and restoration of any damage to the street, curb, trail, sidewalk, and boulevard caused by the construction activities. Such corrective work shall meet all City standards and specifications and be completed under City inspection."

6. C-101. The commercial driveway access location is shown as approved in the Bridgewater Subdivision Improvements.
7. C-301. Site grading will be required to maintain the drainage plan as approved by the VBWD and City for the Bridgewater Subdivision Improvements, including key emergency overflow elevations and flow paths. All emergency overflow elevations must be shown and labeled on the plans.
8. C-401. The proposed hydrant location must be reviewed and approved by the Lake Elmo Fire Department. Additional utility easements are needed to provide a minimum 30-ft wide easement over all public owned watermain and hydrants.
9. C-401. A 6-inch gate valve must be placed immediately after the hydrant location, at the start of the private water service line. The plans must be revised to label the public owned watermain and the private water service line.
10. C-401. Connection to public water and sanitary sewer are required as shown on the Plans. Connections shall be made to the existing service stubs installed as part of the subdivision improvements.

LAKE ELMO FIRE DEPARTMENT – OFFICE OF THE FIRE MARSHAL

Fire Prevention, Code Enforcement, and Public Education



April 23, 2025

Ashley Monterusso, City Planner
City of Lake Elmo

Re: PRIMROSE SCHOOL CONDITIONAL USE PERMIT

Prepared by: Anthony Svoboda, Fire Marshal

Approved by: Dustin Kalis, Fire Chief

Applicable Codes:

- 2020 Minnesota State Fire Code
- 2020 Minnesota State Building Code
- Lake Elmo Fire Department Fire Code Policies
- NFPA 13, 2016 edition
- NFPA 13D, 2016 edition

Fire Department Comments:

- 1) All roads and drive lanes shall meet the Lake Elmo Fire Department requirements for widths and turning radiuses.
- 2) Project construction phasing shall always accommodate emergency access to the entire construction zone.
- 3) An approved signage and marking plan shall be determined for all No Parking and Fire Lane access roads.
- 4) Fire hydrants and watermains shall be provided in approved locations following review by Engineering and Public Works.
- 5) Building address numbers shall be plainly visible from the street fronting the property and shall be contrasting color from the background. Size and placement of address numbers shall be approved by the fire and planning departments.
 - a. *APPROVED ADDRESS: 11899 UPPER 40TH ST N*
- 6) Street names and addressing shall be consistent with the Washington County Uniform Street Naming and Property Numbering System. Street names shall be approved by the City of Lake Elmo.
- 7) A fire sprinkler system shall be installed in commercial buildings in accordance with the Minnesota State Fire Code and Chapter 1306 of the Minnesota State Building Code. A permit is required prior to work.
 - a. *Fire Department sprinkler connection locations shall be approved prior to installation.*
- 8) A fire alarm system shall be installed in commercial buildings in accordance with the Minnesota State Fire Code (907.2.3) and Lake Elmo Ordinances. A permit is required prior to work.

LAKE ELMO FIRE DEPARTMENT – OFFICE OF THE FIRE MARSHAL

Fire Prevention, Code Enforcement, and Public Education

- 9) An emergency responder radio coverage amplifier shall be installed throughout the building if the fire department determines that signal strength is not reliable.
- 10) A KNOX rapid access lockbox shall be installed *in an approved location*, on all commercial buildings.
 - a. Multiple KNOX rapid access lockboxes may be required as determined by the fire department.
- 11) KNOX locking Fire Department Connection Caps shall be installed on all fire department connections.
- 12) All gates, whether manual or electric, shall be accompanied by either a KNOX lock or KNOX gate control switch for rapid access.
- 13) All parking areas shall be capable of supporting the imposed load of fire apparatus weighing up to 75,000 pounds.
- 14) Locations of all EV charging stations or Electric Vehicle Supply Equipment shall be reviewed and installed in approved locations if applicable.

Questions, clarifications, or the request to provide code documents can be made using the contact information listed below.

Respectfully,

Anthony Svoboda



Anthony Svoboda | Assistant Chief
Lake Elmo Fire Department
Fire Station #1 - 3510 Laverne Ave N. | Lake Elmo, MN | 55042
651-747-3907 office | www.lakeelmo.org

Memorandum

April 23, 2025

TO: ASHLEY MONTERUSSO
FROM: SARAH EVENSON, PLA
RE: PRIMROSE DAYCARE CUP- LANDSCAPE AND TREE PRESERVATION PLAN REVIEW

SUBMITTALS

1. CUP Submittal, dated April 10, 2025, received April 11, 2025.

REVIEW HISTORY

1. April 23, 2025 – Primrose Daycare CUP- Landscape and Tree Preservation Plan Review

LOCATION: West of Manning Avenue N, south of Stillwater Way N, north Stillwater Blvd N.

CURRENT LAND USE CATEGORY: V-MDR

ADJACENT AND SURROUNDING LAND USE: Commercial to the east, V-MDR to the north, and west and south

SPECIAL LANDSCAPE PROVISIONS: none

TREE PRESERVATION PLAN: [105.12.470](#)

Tree preservation was addressed as part of the Bridgewater Village project.

LANDSCAPE PLAN: [105.12.480](#)

- The landscape plan will need to be revised in order to better meet code. Note the following items:
 - Show the location of a topsoil stockpile on the civil plans
 - Interior parking lot landscaping is required, consisting of planting islands, medians, and borders. Per code, “At least five percent of the interior area of parking lots with more than 30 spaces shall be devoted to landscape planting areas. Areas may consist of islands or corner planting beds.”
 - Planned landscaping around the parking lot does not appear to meet the 5% minimum threshold. This could be remedied by adding low shrub or perennial plantings to the interior parking lot islands and additional planting around the trash enclosure.
 - Per code, the six shade trees required for the parking lot are intended to be provided in islands or corner planting beds, but are currently peppered throughout the site.
 - There appears to be room outside of the drainage and utility easements to locate some additional trees, if not all six around the parking lot. Please revise planting plans in an effort to better shade the parking lot where possible.
 - In addition to the parking lot trees, 5 trees are required to be planted per acre of land disturbed. The 1.7 acres of disturbance necessitate the addition of 9 more trees.

- If all 15 required trees are not able to be located outside of the drainage and utility easements, please provide a graphic that demonstrates where space is available to plant trees and how many can be reasonably accommodated on site.
- Ensure that with the addition of trees, the plan still meets the minimum tree composition requirements (at least 25% of evergreen and deciduous species).

RECOMMENDATION:

The landscape plans must be revised and resubmitted to address the items in this memo.

A handwritten signature in black ink that reads "Sarah Evenson".

Sarah Evenson, PLA (MN)

City of Lake Elmo Municipal Landscape Architect
P: (262) 391-7653 E: sarah@hkgi.com

RE: Land Use Review Requests | City of Lake Elmo

From John P. Hanson <jhanson@barr.com>
Date Tue 4/22/2025 2:40 PM
To Sophia Jensen <SJensen@lakeelmo.gov>
Cc Ashley Monterusso <AMonterusso@lakeelmo.gov>

Caution: This email originated outside our organization; please use caution.

Hi Ashley,
The project proponents for the Primrose School have submitted an incomplete Valley Branch Watershed District (VBWD) permit and have been notified. Once we receive a complete permit application, we will review it for conformance to the VBWD rules and regulations.
Thank you,
John

John P. Hanson, PE
Valley Branch Watershed District Engineer
Barr Engineering Co.
4300 MarketPointe Drive
Bloomington, MN 55435
952.832.2622
JHanson@barr.com | www.barr.com | www.vbwd.org

From: Ashley Monterusso <AMonterusso@lakeelmo.gov>
Sent: Friday, April 11, 2025 10:26 AM
To: daniel.scollan@state.mn.us; John P. Hanson <jhanson@barr.com>; Anthony Svoboda <ASvoboda@lakeelmo.gov>; Dustin Kalis <DKalis@lakeelmo.gov>; Jack Griffin <jack.griffin@bolton-menk.com>; Nathan Stanley <nathan.stanley@bolton-menk.com>; Sarah Evenson <sarah@hkgi.com>; Daniel Elder <Daniel.Elder@co.washington.mn.us>; eric.gilles@mspmac.org
Cc: Sophia Jensen <SJensen@lakeelmo.gov>; Nathan Fuerst <nathan.fuerst@bolton-menk.com>; Jason Stopa <JStopa@lakeelmo.gov>
Subject: Land Use Review Requests | City of Lake Elmo

CAUTION: This email originated from outside of your organization.

Hello,

You are being asked to review the following applications as a stakeholder in the area of a pending land use applications:

1. CONCEPT PLAN – CLEAR LAKE, TWIN CITIES LAND DEVELOPMENT: TCLD Land Holdings LLC has submitted a concept plan application for a 22-unit single family open space planned unit development (OP PUD) for the property located at 5139 Keats (PID 0202921330001, 0202921340003, and 0202921310001).

Reviewers: MN DNR, VBWD, Fire Dept, City Engineer, Landscape Architect.

Please have feedback to Sophia Jensen (sjensen@lakeelmo.gov) by noon on Friday, April 25th, 2025.
Linked here: [Clear Lake Concept Plans](#)

2. CONDITIONAL USE PERMIT – PRIMROSE DAYCARE: Primrose School Franchising Company has submitted a Conditional Use Permit application for a daycare facility in Bridgewater Village, located at 11899 Upper 40th St N (PID 1202921440027).

Reviewers: VBWD, Fire Dept, City Engineer, Landscape Architect, WA County DOT, Metropolitan Airport Commission .

Please have feedback to Sophia Jensen (sjensen@lakeelmo.gov) by noon on Friday, April 25th, 2025.
Linked here: [Primrose Daycare - Conditional Use Permit](#)

Thank you for your attention to this matter and please reach out if you have any questions.

Thank you,



Ashley Monterusso

City Planner

3880 Lavern Ave N | Lake Elmo, MN | 55042

amonterusso@lakeelmo.gov

P:(651) 747-3913 | www.lakeelmo.gov

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PUBLIC WORKS

Wayne Sandberg, P.E., Director, County Engineer
Frank D. Ticknor, P.E., Deputy Director

April 25, 2025

Sophia Jensen
City Planner
City of Lake Elmo
3880 Laverne Avenue
Lake Elmo, MN 55042

Comments on the CUP for Primrose Daycare

Dear Sophia Jensen,

Thank you for the opportunity to review and comment on the CUP for Primrose Daycare. We are grateful for the City of Lake Elmo's partnership on this project. Our development review team has reviewed the plans and offers the following comments:

As part of the comments for the Bridgewater Plat the County offered the following comments

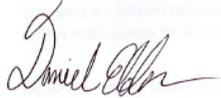
The overall development plan showed a trail along the north boulevard of CSAH 14. While the trail is depicted in their drawings, the County would like to thank the city for their support to see this critical trail connection made with the development.

The County wishes to reiterate the comment regarding the need for a trail along CSAH 14. Additionally, the plans show curbing for the parking lot within the County's drainage and utility easement. The County reserves the right to remove the curb at any point in the future to accommodate future drainage.

Washington County's policy is to assist local governments in promoting compatibility between land use and highways. Residential uses located adjacent to highways often result in complaints about traffic noise. Traffic noise from this highway could exceed noise standards established by the Minnesota Pollution Control Agency (MPCA), the U.S. Department of Housing and Urban Development, and the U.S. Department of Transportation. Minnesota Rule 7030.0030 states that municipalities are responsible for taking all reasonable measures to prevent land use activities listed in the MPCA's Noise Area Classification (NAC), where the establishment of the land use would result in violations of established noise standards. Minnesota Statute 116.07, Subpart 2a exempts County Roads and County State Aid Highways from noise thresholds. County policy regarding development adjacent to existing highways prohibits the expenditure of highway funds for noise mitigation measures. The developer should assess the noise situation and take any action outside of County right of way deemed necessary to minimize the impact of any highway noise.

Thank you again for the opportunity to provide comments on the CUP for Primrose Daycare. We look forward to continuing to work with you and the City of Lake Elmo to ensure that development in this area is successful and well-served by the transportation network. Thank you again for this opportunity to comment on the plans for the project. If you have any questions, please get in touch with me at 651-430-4307 or daniel.elder@co.washington.mn.us

Sincerely,

A handwritten signature in black ink that reads "Daniel Elder". The signature is written in a cursive style with a horizontal line at the end.

Daniel Elder
Planner II

Cc (email only):

Wayne Sandberg, Public Works Director/County Engineer
Frank Ticknor, Deputy Director Public Works
Lyssa Leitner, Public Works Planning Director
Joe Gustafson, Traffic Engineer
Kevin Peterson, Design Engineer

A great place to live, work and play...today and tomorrow

Government Center | 14949 62nd Street North | P. O. Box 6 | Stillwater, MN 55082-0006
P: 651-430-6001 | F: 651-430-6017 | TTY: 651-430-6246
www.co.washington.mn.us

Washington County is an equal opportunity organization and employer

RE: Land Use Review Requests | City of Lake Elmo

From Gilles, Eric <Eric.Gilles@mspmac.org>
Date Mon 4/28/2025 9:47 AM
To Ashley Monterusso <AMonterusso@lakeelmo.gov>

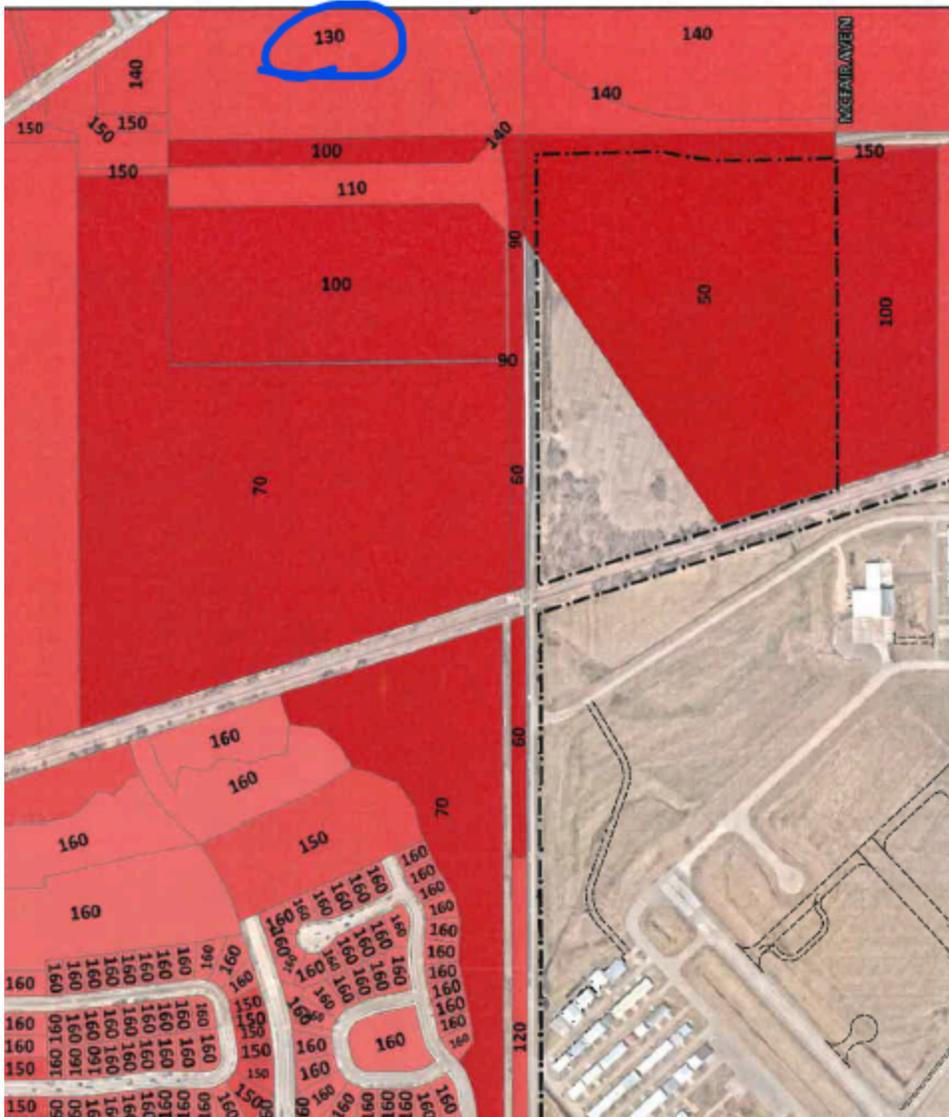
Caution: This email originated outside our organization; please use caution.

Ashley,

Very helpful. Thank you. Based on site location, a variance is not required from our zoning ordinance if temporary construction equipment remains at or below 130 feet (screen grab of the ordinance height limitations graphic (PDF page 79).

The permanent structure top elevation appears to be at its highest at 34 feet, which also does not require a variance or permit from the zoning ordinance.

However, it should be noted the FAA still requires two airspace submittals when near an airport: 1) review of the permanent structure and 2) use of temporary equipment/cranes near an airport: <https://oeaaa.faa.gov/oeaaa/external/portal.jsp>. This is regardless of potential zoning implications.



ERIC GILLES, C.M., ACE

Senior Airport Planner, Planning and Development
Metropolitan Airports Commission

6040 28th Avenue South
Minneapolis, MN 55450

O: 612-725-4694

M: 763-229-8057

www.MetroAirports.org

[Facebook](#) [twitter](#) [Instagram](#)

From: Ashley Monterusso <AMonterusso@lakeelmo.gov>

Sent: Monday, April 28, 2025 9:22 AM

To: Gilles, Eric <Eric.Gilles@mspmac.org>

Subject: Re: Land Use Review Requests | City of Lake Elmo

This message came from outside your organization.

I have attached the title page and site plan for the civils. The site is on the west side of the intersection of Manning and north of Stillwater Blvd.

Thanks again,



Ashley Monterusso

City Planner

3880 Lavern Ave N | Lake Elmo, MN | 55042

amonterusso@lakeelmo.gov

P:(651) 747-3913 | www.lakeelmo.gov

From: Gilles, Eric <Eric.Gilles@mspmac.org>
Sent: Monday, April 28, 2025 9:17 AM
To: Ashley Monterusso <AMonterusso@lakeelmo.gov>
Subject: RE: Land Use Review Requests | City of Lake Elmo

Caution: This email originated outside our organization; please use caution.

Ashley,

I received this drawing. Do you also have a location drawing? Is it at the intersection of Upper 40th and Stillwater Blvd (near Manning) and what corner of the intersection? I just need the location drawing to back check against potential airport zoning impacts.

Thank you,

ERIC GILLES, C.M., ACE

Senior Airport Planner, Planning and Development

Metropolitan Airports Commission

6040 28th Avenue South

Minneapolis, MN 55450

O: 612-725-4694

M: 763-229-8057

www.MetroAirports.org

[Facebook](#) [twitter](#) [Instagram](#)

From: Ashley Monterusso <AMonterusso@lakeelmo.gov>
Sent: Monday, April 28, 2025 9:06 AM
To: Gilles, Eric <Eric.Gilles@mspmac.org>
Subject: Re: Land Use Review Requests | City of Lake Elmo

This Message Is From an External Sender

[Report Suspicious](#)

This message came from outside your organization.

Morning Eric,

Attached is a page from the set for the proposed day care center at 11899 Upper 40th. This shows elevations. Is there anything else you'd like to review? If so, I can separate sheets in the civil plans.

Thanks,

 **Ashley Monterusso**
City Planner
3880 Lavern Ave N | Lake Elmo, MN | 55042
amonterusso@lakeelmo.gov
P:(651) 747-3913 | www.lakeelmo.gov

From: Gilles, Eric <Eric.Gilles@mspmac.org>
Sent: Friday, April 25, 2025 8:48 PM
To: Ashley Monterusso <AMonterusso@lakeelmo.gov>
Subject: Re: Land Use Review Requests | City of Lake Elmo

Caution: This email originated outside our organization; please use caution.

Ashley,

Might be running into some issues with IT. I am not getting the emails. If there are large file attachments they won't come through. I can usually grab from external OneDrive accounts if you can do that. I apologize for the difficulty. Our IT has some tight restrictions on things.

From: Ashley Monterusso <AMonterusso@lakeelmo.gov>
Sent: Friday, April 25, 2025 4:19:46 PM
To: Gilles, Eric <Eric.Gilles@mspmac.org>
Subject: Re: Land Use Review Requests | City of Lake Elmo

This Message Is From an Untrusted Sender

You have not previously corresponded with this sender.

[Report Suspicious](#)

Hi Eric,

Checking in again to see if you received the plans I sent over. It is to the same email address. If you have comments by Monday, that would be welcomed.

Thanks again,



From: Gilles, Eric <Eric.Gilles@mspmack.org>
Sent: Friday, April 25, 2025 1:25 PM
To: Ashley Monterusso <AMonterusso@lakeelmo.gov>
Cc: Sophia Jensen <SJensen@lakeelmo.gov>
Subject: RE: Land Use Review Requests | City of Lake Elmo

Caution: This email originated outside our organization; please use caution.

Hi,

I am not getting anything on my end. I do not have either of the responses.

Best,

ERIC GILLES, C.M., ACE
Senior Airport Planner, Planning and Development
Metropolitan Airports Commission
6040 28th Avenue South
Minneapolis, MN 55450
O: 612-725-4694
M: 763-229-8057
www.MetroAirports.org
[Facebook](#) [twitter](#) [Instagram](#)

From: Ashley Monterusso <AMonterusso@lakeelmo.gov>
Sent: Friday, April 25, 2025 8:11 AM
To: Gilles, Eric <Eric.Gilles@mspmack.org>
Cc: Sophia Jensen <SJensen@lakeelmo.gov>
Subject: Re: Land Use Review Requests | City of Lake Elmo

This Message Is From an External Sender

This message came from outside your organization.

[Report Suspicious](#)

Hi Eric,

I responded to your 4/14 email and just forwarded it again in case you may have missed it previously. Can you please confirm that you received the plans for review.

Thank you,

Ashley Monterusso

From: Gilles, Eric <Eric.Gilles@mspmac.org>

Sent: Thursday, April 24, 2025 6:21:14 PM

To: Ashley Monterusso <AMonterusso@lakeelmo.gov>; daniel.scollan@state.mn.us
<daniel.scollan@state.mn.us>; Daniel Elder <Daniel.Elder@co.washington.mn.us>

Cc: Sophia Jensen <SJensen@lakeelmo.gov>; Nathan Fuerst <nathan.fuerst@bolton-menk.com>

Subject: RE: Land Use Review Requests | City of Lake Elmo

Caution: This email originated outside our organization; please use caution.

Hi Ashley,

I sent a note on 4/14 that MAC has site access restrictions to google servers and I cannot access the material. If you want MAC to review the materials, can you please share a different way for me to access them?

Thank you,

ERIC GILLES, C.M., ACE

Senior Airport Planner, Planning and Development

Metropolitan Airports Commission

6040 28th Avenue South

Minneapolis, MN 55450

O: 612-725-4694

M: 763-229-8057

www.MetroAirports.org

[Facebook](#) [twitter](#) [Instagram](#)

From: Ashley Monterusso <AMonterusso@lakeelmo.gov>

Sent: Thursday, April 24, 2025 10:47 AM

To: daniel.scollan@state.mn.us; Daniel Elder <Daniel.Elder@co.washington.mn.us>; Gilles, Eric
<Eric.Gilles@mspmac.org>

Cc: Sophia Jensen <SJensen@lakeelmo.gov>; Nathan Fuerst <nathan.fuerst@bolton-menk.com>

Subject: Re: Land Use Review Requests | City of Lake Elmo

This Message Is From an Untrusted Sender

[Report Suspicious](#)

You have not previously corresponded with this sender.

Good morning,

Following up as a reminder that the land use review for the Clear Lake Concept plan and the Primrose Daycare CUP are due tomorrow at noon. If you have already sent your reviews, please disregard.

Thank you kindly,



Ashley Monterusso

City Planner

3880 Lavern Ave N | Lake Elmo, MN | 55042

amonterusso@lakeelmo.gov

P:(651) 747-3913 | www.lakeelmo.gov

From: Ashley Monterusso <AMonterusso@lakeelmo.gov>

Sent: Friday, April 11, 2025 10:26 AM

To: daniel.scollan@state.mn.us <daniel.scollan@state.mn.us>; John P. Hanson <jhanson@barr.com>; Anthony Svoboda <ASvoboda@lakeelmo.gov>; Dustin Kalis <DKalis@lakeelmo.gov>; Jack Griffin <jack.griffin@bolton-menk.com>; Nathan Stanley <nathan.stanley@bolton-menk.com>; Sarah Evenson <sarah@hkgi.com>; Daniel Elder <Daniel.Elder@co.washington.mn.us>; eric.gilles@mspmac.org <eric.gilles@mspmac.org>

Cc: Sophia Jensen <SJensen@lakeelmo.gov>; Nathan Fuerst <nathan.fuerst@bolton-menk.com>; Jason Stopa <JStopa@lakeelmo.gov>

Subject: Land Use Review Requests | City of Lake Elmo

Hello,

You are being asked to review the following applications as a stakeholder in the area of a pending land use applications:

1. CONCEPT PLAN – CLEAR LAKE, TWIN CITIES LAND DEVELOPMENT: TCLD Land Holdings LLC has submitted a concept plan application for a 22-unit single family open space planned unit development (OP PUD) for the property located at 5139 Keats (PID 0202921330001, 0202921340003, and 0202921310001).

Reviewers: MN DNR, VBWD, Fire Dept, City Engineer, Landscape Architect.

Please have feedback to Sophia Jensen (sjensen@lakeelmo.gov) by noon on Friday, April 25th, 2025.

Linked here: [Clear Lake Concept Plans](#)

2. CONDITIONAL USE PERMIT – PRIMROSE DAYCARE: Primrose School Franchising Company has submitted a Conditional Use Permit application for a daycare facility in Bridgewater Village, located at 11899 Upper 40th St N (PID 1202921440027).

Reviewers: VBWD, Fire Dept, City Engineer, Landscape Architect, WA County DOT, Metropolitan Airport Commission .

Please have feedback to Sophia Jensen (sjensen@lakeelmo.gov) by noon on Friday, April 25th, 2025.

Linked here: [Primrose Daycare - Conditional Use Permit](#)

Thank you for your attention to this matter and please reach out if you have any questions.

Thank you,



Ashley Monterusso

City Planner

3880 Lavern Ave N | Lake Elmo, MN | 55042

amonterusso@lakeelmo.gov

P:(651) 747-3913 | www.lakeelmo.gov

RE: Primrose School Encroachment Agreement

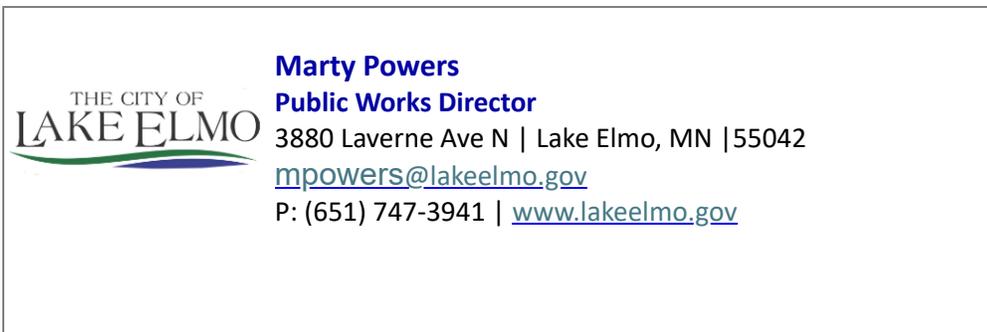
From Marty Powers <MPowers@lakeelmo.gov>
Date Mon 4/28/2025 1:43 PM
To Ashley Monterusso <AMonterusso@lakeelmo.gov>
Cc Jack Griffin <jack.griffin@bolton-menk.com>

 1 attachment (29 MB)
5. Civil and LA Set - Primrose.pdf;

Hello Ashley,

An Encroachment agreement will be required for parking lot improvements in the D & U. Any improvements in the D & U will not be allowed to restrict surface water drainage or flow through that area

Respectfully



From: Ashley Monterusso <AMonterusso@lakeelmo.gov>
Sent: Monday, April 28, 2025 1:31 PM
To: Marty Powers <MPowers@lakeelmo.gov>
Subject: Primrose School Encroachment Agreement

See attached regarding easements.





MEMO

Date: 5/7/2025

To: Marvin Wensmen, Primrose School

From: Ashley Monterusso, City Planner

Re: Primrose CUP, located at 11899 Upper 40th, Bridgewater Village

** This memo is intended to serve as general guidances and does not represent a comprehensive listing of all applicable codes, regulations or requirements. The City reserves the right to modify or supplement this information as necessary.*

A general planning review as been completed for the Primrose CUP application for plans dated: 4/10/2025

1. Site Plan (C-101): Provide breakdown of calculations for impervious surfaces on site
2. Photometric Plan: t@22.5 fixture on West side of property doesn't meet code, 105.04.070 as footcandle is over .4 from property line, please revise
3. Trash Enclosure: materials used for trash enclosure screening need to be submitted for review
4. Signage: Please note there is a separate review process for wall and monument signs. [105.12.430 Sign Regulations](#)
5. Fencing: Please note there is a separate review process for fencing. [105.12.400 Fencing Regulations](#)

Items #1-3 must be revised and resubmitted to address the items in this memo.

Thank you,

ashley monterusso

Ashley Monterusso | City Planner
amonterusso@lakelmo.gov

Date Received: _____
Received By: _____
Permit #: _____



651-747-3900
3880 Laverne Avenue North
Lake Elmo, MN 55042

CONDITIONAL USE PERMIT APPLICATION

Property Owner: Bridgewater Bancshares, Inc.
Address: 4450 Excelsior Boulevard, Suite 100, St. Louis Park, MN 55416
Phone #: 952-893-6866
Email Address: Ben.Klocke@bwbm.com

Fee Owner: _____
Address: _____
Phone #: _____
Email Address: _____

Property Address: 1.70 acres located at Lot 1, Block 2 of Bridgewater Village
PID#: 1202921440027

Engineer Name and Email: Adam Daughtery (Stantec) - 262-643-9007 Adam.Daughtery@stantec.com

Detailed Reason for Request: Submitting conditional use approval for a Primrose School - childcare use

In signing this application, I hereby acknowledge that I have read and fully understand the applicable provisions of the Zoning ordinance and current administrative procedures. I further acknowledge the fee explanation as outlined in the application procedures and hereby agree to pay all statements received from the City pertaining to additional application expense.

Signature of applicant: Marvin Wensman Date: 4/4/25

Signature of property owner: [Signature] Date: 4/4/25

SITE PERMIT PLANS

FOR

PRIMROSE SCHOOL - LAKE ELMO

LAKE ELMO, MINNESOTA 55042

APRIL 2025

DEVELOPER



PRIMROSE SCHOOL FRANCHISING COMPANY
 3200 WINDY HILL ROAD, SUITE 1200 E
 ATLANTA, GA 30339
 (E) - MWENSMAN@PRIMROSESCHOOLS.COM
 CONTACT: MARVIN WENSMAN

ENGINEER

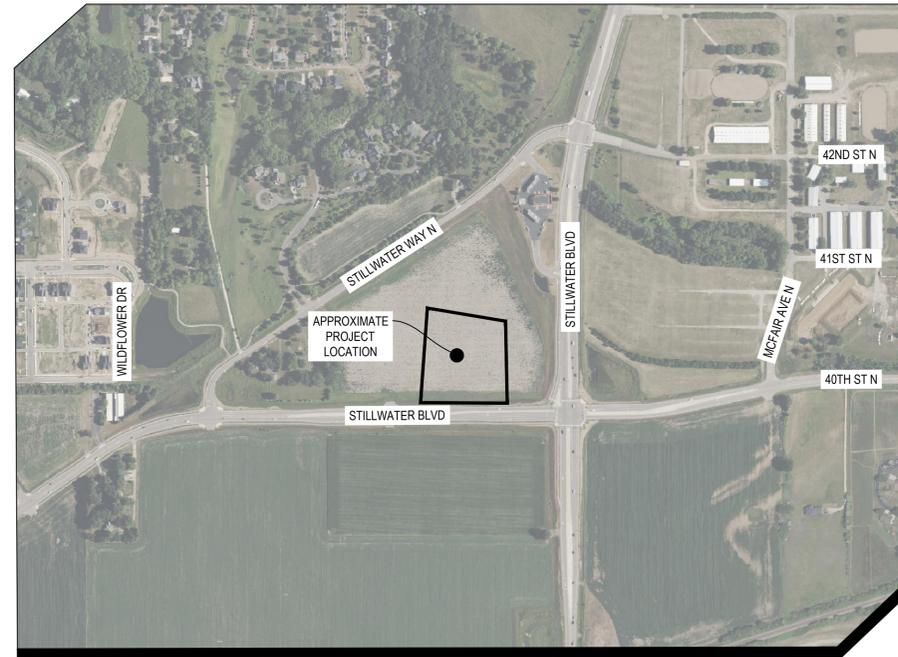


STANTEC CONSULTING SERVICES, INC.
 1 CARLSON PKWY N
 PLYMOUTH, MN 55447
 (E) - JACK.AMMERMAN@STANTEC.COM
 CONTACT: JACK AMMERMAN, P.E.

LANDSCAPE ARCHITECT



STANTEC CONSULTING SERVICES, INC.
 1 CARLSON PKWY N
 PLYMOUTH, MN 55447
 (E) - MARK.FLICKE@STANTEC.COM
 CONTACT: MARK FLICKER



VICINITY MAP
NOT TO SCALE



PROJECT LOCATION
 CITY: LAKE ELMO
 COUNTY: WASHINGTON

THIS PLANSET CONTAINS 24 SHEETS

SHEET INDEX	
Sheet Number	Sheet Title
G-001	COVER SHEET
G-002	GENERAL NOTES
G-003	GENERAL NOTES
G-004	EXISTING CONDITIONS
G-005	REMOVALS AND PRECONSTRUCTION EROSION CONTROL PLAN
C-101	SITE PLAN
C-201	POST-CONSTRUCTION STABILIZATION PLAN
C-202	SWPPP
C-301	GRADING PLAN
C-401	UTILITY PLAN
C-402	WATERMAIN PLAN AND PROFILE
C-501	STORM SEWER PLAN
C-801	DETAILS
C-802	DETAILS
C-803	DETAILS
C-804	DETAILS
C-805	DETAILS
L-101	LANDSCAPE PLAN
L-801	LANDSCAPE DETAILS
L-802	LANDSCAPE DETAILS
I-101	IRRIGATION PLAN
I-801	IRRIGATION DETAILS
I-802	IRRIGATION DETAILS
I-803	IRRIGATION DETAILS

WARNING:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CALLING FOR LOCATIONS OF ALL EXISTING UTILITIES. THEY SHALL COOPERATE WITH ALL UTILITY COMPANIES IN MAINTAINING THEIR SERVICE AND/OR RELOCATION OF LINES.

THE CONTRACTOR SHALL CONTACT GOPHER STATE ONE CALL AT 651-454-0002 AT LEAST 48 HOURS IN ADVANCE (EXCLUDING THE DAY OF THE REQUEST AND EXCLUDING HOLIDAYS AND WEEKENDS) FOR THE LOCATIONS OF ALL UNDERGROUND WIRES, CABLES, CONDUITS, PIPES, MANHOLES, VALVES OR OTHER BURIED STRUCTURES BEFORE DIGGING. THE CONTRACTOR SHALL REPAIR OR REPLACE THE ABOVE WHEN DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.

GOPHER STATE ONE CALL

TWIN CITY AREA: 651-454-0002
 TOLL FREE 1-800-252-1166



CLIENT:



PRIMROSE SCHOOL - LAKE ELMO
 LAKE ELMO, WASHINGTON COUNTY, MINNESOTA

PROJECT TITLE:

ISSUE NO.:

1

DESCRIPTION:

DATE:

04/10/2025

PROJECT NO.: 190300279

DWN BY: KRM CHKD BY: AWD APP'D BY: JRA

ISSUE DATE: 04/10/2025

ISSUE NO.: 1

SHEET TITLE:

COVER SHEET

SHEET NO.:

G-001

GOVERNING SPECIFICATIONS

- CITY OF LAKE ELMO (CITY) STANDARD SPECIFICATIONS AND REQUIREMENTS.
- WASHINGTON COUNTY STANDARD SPECIFICATIONS AND REQUIREMENTS.
- VALLEY BRANCH WATERSHED STANDARD SPECIFICATIONS AND REQUIREMENTS.
- CITY/UTILITY PROVIDER SPECIFICATIONS, CITY ENGINEERS ASSOCIATION OF MINNESOTA (CEAM) STANDARD SPECIFICATIONS FOR UTILITIES (LATEST EDITION), MPCAMCES REQUIREMENTS, AND MINNESOTA PLUMBING CODE (MINNESOTA RULES CHAPTER 4714)
- APPLICABLE FEDERAL, STATE, AND LOCAL LAWS AND ORDINANCES

GENERAL NOTES

- UNTIL REVISION BLOCK STATES "ISSUED FOR CONSTRUCTION", THE PLAN SET IS NOT CERTIFIED FOR CONSTRUCTION AND CONTRACTOR IS BUILDING AT THEIR OWN RISK.
- EXISTING CONDITIONS SHOWN ARE FROM A TOPOGRAPHIC SURVEY COMPLETED BY EGAN, FIELD & NOWAK, INC., DATED JULY 2024. EXISTING FEATURES MAY NOT BE EXACT TO THEIR LOCATION. CONTRACTOR RESPONSIBLE FOR VERIFYING THE CONDITIONS OF THE SITE AND MUST IMMEDIATELY NOTIFY THE ENGINEER IN WRITING OF DISCREPANCIES OR VARIATIONS FROM THE DRAWINGS.
- SUBSURFACE UTILITY INFORMATION IN THIS PLAN IS UTILITY QUALITY LEVEL D. THIS QUALITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF CIWASCE 38-2 ENTITLED "STANDARD GUIDELINES FOR THE COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA". EXACT LOCATION/DEPTH OF SUBSURFACE UTILITIES SUCH AS GAS, TELEPHONE, FIBER OPTIC, SEWER, WATER, PIPELINES, ELECTRICAL, AND CABLE TV ARE UNKNOWN AND THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE.
- CONTRACTOR RESPONSIBLE FOR CONTACTING GOPHER STATE ONE CALL (811 OR 1-800-252-1166) A MINIMUM OF 48 HOURS IN ADVANCE (NOT INCLUDING THE DAY OF THE REQUEST AND EXCLUDING HOLIDAYS AND WEEKENDS) BEFORE STARTING WORK FOR LOCATIONS OF UNDERGROUND UTILITIES.
- QUANTITIES ARE APPROXIMATE, AND MAY VARY TO ALLOW COMPLETION OF WORK.
- WORK AND MATERIALS MUST COMPLY WITH CITY, COUNTY, STATE, AND FEDERAL (INCLUDING OSHA) REGULATIONS AND CODES.
- CONTRACTOR SHALL COORDINATE AND MAINTAIN ACCESS TO ADJACENT PROPERTIES THROUGHOUT CONSTRUCTION.
- CONTRACTOR SHALL COORDINATE AND MAINTAIN MAIL, GARBAGE, AND RECYCLING SERVICES TO PROPERTIES THROUGHOUT CONSTRUCTION. COORDINATE WITH LOCAL POSTMASTER, GARBAGE AND RECYCLING SERVICES.
- CONTRACTOR SHALL COORDINATE AND MAINTAIN STORMWATER DRAINAGE CONVEYANCE THROUGHOUT CONSTRUCTION (BOTH PIPED AND OVERLAND FLOW).
- CONTRACTOR SHALL COORDINATE AND MAINTAIN WATER AND SANITARY FLOW TO AND FROM PROPERTIES. PROVIDE BYPASS AND TEMPORARY SYSTEMS, AS NECESSARY.
- CONTRACTOR SHALL COORDINATE AND MAINTAIN UTILITY SERVICES TO ADJACENT PROPERTIES AT ALL TIMES. UTILITY SERVICE MUST NOT BE INTERRUPTED WITHOUT APPROVAL FROM OWNER, CITY, AND ADJACENT PROPERTIES.
- CONSTRUCTION LIMITS ARE TO PROPERTY LINE UNLESS SHOWN OR NOTED OTHERWISE. CONTRACTOR SHALL RESTRICT CONSTRUCTION ACTIVITIES TO AREAS DESIGNATED ON PLANS WITHIN THE CONSTRUCTION LIMITS.
- CONTRACTOR SHALL PRESERVE AND PROTECT EXISTING PAVEMENT, SITE FEATURES, UTILITIES, TREES, ETC., UNLESS NOTED OR SHOWN OTHERWISE.
- CONTRACTOR SHALL PHOTO OR VIDEO DOCUMENT EXISTING CONDITIONS OF TREES AND PLANTINGS, ADJOINING CONSTRUCTION, SURFACES, AND SITE IMPROVEMENTS, ETC. TO REMAIN THAT MIGHT BE MISCONSTRUED AS DAMAGE CAUSED BY CONSTRUCTION OPERATIONS. SUBMIT TO ENGINEER AND OWNER BEFORE CONSTRUCTION BEGINS. USE ADEQUATELY DETAILED PHOTOGRAPHS OR VIDEO RECORDINGS. INCLUDE PLANS AND NOTATIONS TO INDICATE SPECIFIC EXISTING DAMAGE CONDITIONS OF ITEMS DESIGNATED TO REMAIN. ANY DAMAGE TO THE EXISTING PAVEMENT, CURBING, STRIPING, OR OTHER SITE FEATURE TO REMAIN MUST BE REPLACED BY THE CONTRACTOR, TO OWNER'S SATISFACTION, AT NO ADDITIONAL COST TO THE OWNER.
- CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO AVOID PROPERTY DAMAGE TO ADJACENT PROPERTIES DURING CONSTRUCTION AND WILL BE HELD SOLELY RESPONSIBLE FOR ANY DAMAGES.
- CONTRACTOR MUST IMMEDIATELY NOTIFY THE OWNER AND ENGINEER IN WRITING OF DISCREPANCIES OR CONFLICTS IN THE CONTRACT DOCUMENTS BEFORE COMMENCING WORK. NO FIELD CHANGES OR DEVIATIONS ARE TO BE MADE WITHOUT PRIOR WRITTEN APPROVAL FROM THE ENGINEER. FAILURE TO NOTIFY OWNER AND ENGINEER OF AN IDENTIFIABLE CONFLICT BEFORE PROCEEDING WITH INSTALLATION RELIEVES OWNER AND ENGINEER OF ANY OBLIGATION TO PAY FOR A RELATED CHANGE ORDER.
- CONTRACTOR SHALL HAVE ONE COPY OF EACH REQUIRED CONSTRUCTION PERMIT AND ONE COPY OF THE MOST CURRENT AND COMPLETE SET OF CONSTRUCTION DOCUMENTS (INCLUDING PLANS, SPECIFICATIONS, GEOTECHNICAL REPORT, SPECIAL CONDITIONS AND PROVISIONS, ETC.) AVAILABLE AT THE PROJECT SITE AT ALL TIMES.
- CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR IMPLEMENTATION AND ENFORCEMENT OF SAFE WORK PRACTICES, INCLUDING BUT NOT LIMITED TO PERSONNEL MONITORING, USE OF TRENCHING, SHEETING, AND SHORING, SCAFFOLDING; MATERIALS HANDLING AND DRILLING; OPERATION OF EQUIPMENT; AND SAFETY OF PUBLIC DURING PROGRESS OF WORK.
- CONTRACTOR SHALL PLAN FOR AND ENSURE PERSONNEL COMPLY WITH PROVISIONS OF OSHA SAFETY AND HEALTH STANDARDS (29 CFR 1910) AND GENERAL CONSTRUCTION STANDARDS (29 CFR 1926) AS APPROPRIATE.
- CONTRACTOR SHALL BE RESPONSIBLE FOR INITIATING, MAINTAINING, AND SUPERVISING SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH WORK. CONTRACTOR SHALL TAKE NECESSARY PRECAUTIONS FOR SAFETY OF EMPLOYEES ON PROJECT SITE AND OTHER PERSONS AND ORGANIZATIONS WHO MAY BE AFFECTED BY THE PROJECT. CONTRACTOR'S DUTIES AND RESPONSIBILITIES FOR SAFETY IN CONNECTION WITH WORK SHALL CONTINUE UNTIL SUCH TIME AS ALL WORK IS COMPLETED, AND ENGINEER HAS ISSUED NOTICE TO CONTRACTOR THAT WORK IS COMPLETE.
- HAZARDOUS MATERIALS, INCLUDING BUT NOT LIMITED TO OIL, GASOLINE, PAINT AND OTHER HAZARDOUS SUBSTANCES MUST BE PROPERLY STORED, BY THE CONTRACTOR, INCLUDING SECONDARY CONTAINMENTS, TO PREVENT SPILLS, LEAKS OR OTHER DISCHARGE. RESTRICTED ACCESS TO STORAGE AREAS MUST BE PROVIDED TO PREVENT VANDALISM. STORAGE AND DISPOSAL OF HAZARDOUS WASTE MUST BE IN COMPLIANCE WITH LOCAL/STATE/FEDERAL REGULATIONS. CONTRACTOR SHALL REMOVE SPILL OF FUELS, OILS, OR OTHER CHEMICALS IMMEDIATELY UPON DETECTION.
- IF CONSTRUCTION IS ANTICIPATED TO OCCUR DURING COLD WEATHER, IN THE EVENT THAT SNOWICE REMOVAL IS REQUIRED FOR SITE ACCESS AND CONSTRUCTION ACTIVITIES, CONTRACTOR SHALL REMOVE SNOWICE AND COORDINATE WITH OWNER FOR ACCEPTABLE SNOWICE STORAGE AREAS ONSITE. SNOWICE REMOVAL AND STORAGE IS INCIDENTAL TO THE CONTRACT.
- CONTRACTOR SHALL DOCUMENT AND MAINTAIN AS-BUILT INFORMATION AS CONSTRUCTION PROGRESSES AND IS RESPONSIBLE FOR PROVIDING AS-BUILT DRAWINGS TO THE OWNER AS REQUIRED BY JURISDICTIONAL AGENCIES FOR CERTIFICATION. ALL AS-BUILT DATA MUST BE COLLECTED BY A LICENSED PROFESSIONAL LAND SURVEYOR REGISTERED IN THE PROJECT'S STATE WHOSE SERVICES ARE ENGAGED AND PAID FOR BY THE CONTRACTOR.

REMOVAL/DEMOLITION NOTES

- SEE GENERAL NOTES FOR ADDITIONAL PROJECT AND SITE INFORMATION.
- CONTRACTOR SHALL OBTAIN PERMITS REQUIRED FOR DEMOLITION, REMOVAL AND DISPOSAL.
- CONTRACTOR SHALL REVIEW FEATURES NOT SPECIFICALLY IDENTIFIED ON PLAN FOR SALVAGE OR REMOVAL THAT CONFLICT WITH CONSTRUCTION WITH THE ENGINEER.
- MATERIALS REMOVED/DEMOLISHED BY CONTRACTOR BECOME PROPERTY OF THE CONTRACTOR, UNLESS OTHERWISE NOTED. CONTRACTOR SHALL LOAD AND HAUL MATERIAL OFF-SITE AND PROPERLY DISPOSE OF MATERIALS IN ACCORDANCE WITH APPLICABLE REGULATIONS. CONTRACTOR MUST LEAVE THE SITE IN A CONDITION TO THE SATISFACTION OF THE OWNER AND ENGINEER.
- CONTRACTOR SHALL SAWCUT FULL DEPTH AT PAVEMENT REMOVAL LIMITS AND AS NECESSARY TO CREATE A SMOOTH FIT/TRANSITION ALONG MATCHING PAVEMENT AREAS.

REMOVAL/DEMOLITION NOTES (CONT.)

- CONTRACTOR SHALL COORDINATE UTILITY REMOVAL WORK WITH APPROPRIATE UTILITY OWNER.
- CONTRACTOR SHALL SALVAGE AND REINSTALL STREET AND TRAFFIC SIGNS IN CONFLICT WITH CONSTRUCTION ACTIVITIES AS NOTED OR AS DIRECTED BY ENGINEER. IF SIGNS ARE DAMAGED DURING CONSTRUCTION, CONTRACTOR REQUIRED TO PROVIDE NEW SIGNS AT NO ADDITIONAL COST TO THE OWNER.
- CONTRACTOR SHALL SALVAGE AND REINSTALL FENCE IN CONFLICT WITH CONSTRUCTION ACTIVITIES AS NOTED OR AS DIRECTED BY ENGINEER. IF FENCE IS DAMAGED DURING CONSTRUCTION, CONTRACTOR REQUIRED TO PROVIDE NEW FENCE, TO OWNER'S SATISFACTION, AT NO ADDITIONAL COST TO THE OWNER.
- IN THE EVENT THAT UNKNOWN CONTAINERS OR TANKS ARE ENCOUNTERED, THE CONTRACTOR MUST CONTACT THE ENGINEER IMMEDIATELY. ALL CONTAINERS OR TANKS MUST BE DISPOSED OF PROPERLY AT A REGULATED/PERMITTED FACILITY.
- UNLESS OTHERWISE NOTED, CONTRACTOR IS RESPONSIBLE FOR REMOVAL/DEMOLITION WITHIN ALL AREAS OF PROPOSED IMPROVEMENTS. REMOVAL LIMITS ARE IDENTIFIED ON THE DRAWINGS IN ANTICIPATED LOCATIONS. CONTRACTOR RESPONSIBLE FOR REMOVALS AS NECESSARY TO CONSTRUCT NEW IMPROVEMENTS AND CONFORM TO DESIGN REQUIREMENTS. ALL FACILITIES TO BE REMOVED MUST BE UNDERCUT TO SUITABLE MATERIAL AND BROUGHT TO GRADE WITH SUITABLE FILL MATERIAL IN ACCORDANCE WITH THE SPECIFICATIONS AND AS DIRECTED BY THE ENGINEER

SITE NOTES

- SEE GENERAL NOTES FOR ADDITIONAL PROJECT AND SITE INFORMATION.
- REFER TO THE ARCHITECTURAL, STRUCTURAL, LANDSCAPE, AND MEP PLANS FOR EXACT LOCATIONS OF AND DIMENSIONS OF BUILDINGS, VESTIBULES, STOOPS, OVERHANGS, COLUMNS, RAMPS, SIDEWALKS, TRASH ENCLOSURES, TRAFFIC GATES, MONUMENT SIGNS, LANDSCAPING, PLANTINGS, TREES, SITE LIGHTING, EXTERIOR ELECTRICAL, BACKFLOW PREVENTORS AND BUILDING UTILITY ENTRANCE LOCATIONS.
- BUILDING LINES SHOWN ARE APPROXIMATE OUTSIDE LINES OF BUILDINGS AT GRADE, MAY NOT ACCOUNT FOR EXTRUSIONS (I.E. BALCONIES, OVERHANGS, LIGHTING, ETC.) ABOVE GRADE, AND ARE BASED ON INFORMATION PROVIDED TO STANTEC BY THE ARCHITECT. CONTRACTOR SHALL VERIFY FINAL BUILDING PLANS WITH ARCHITECT.
- CONTRACTOR AND SURVEYOR SHALL FIELD VERIFY THE BUILDING FOOTPRINT/OUTLINE AND OUTER MOST EXTRUSIONS PRIOR TO CONSTRUCTION TO REVIEW POTENTIAL CONFLICTS WITH ADJACENT WORK, EXISTING SITE FEATURES, PROPERTY LINES, SETBACKS, ETC.
- CONCRETE GUTTER PAN TO TIP IN THE SAME DIRECTION AS THE ADJACENT PAVEMENT.
- DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
- TOLERANCES:
 - RETAINING WALL TOLERANCES: VERTICAL ALIGNMENT: +/- 1.5 INCHES OVER ANY 10-FT DISTANCE. HORIZONTAL ALIGNMENT: +/- 1.5 INCHES OVER ANY 10-FT DISTANCE. WALL BATTER: WITHIN 2 DEGREES OF DESIGN BATTER. OVERALL WALL BATTER SHALL BE GREATER THAN 0 DEGREES. CORNERS AND CURVES: +/- 1 FT TO THEORETICAL LOCATION. MAX HORIZONTAL GAP BETWEEN UNITS: LESS THAN OR EQUAL TO 0.5 INCHES.

PAVING, PAVEMENT MARKING, AND SIGNAGE NOTES

- SEE GENERAL NOTES FOR ADDITIONAL PROJECT AND SITE INFORMATION.
- CONTRACTOR SHALL MAINTAIN STREET AND TRAFFIC SIGNS AT ALL TIMES DURING CONSTRUCTION.
- SIGNS, PAVEMENT MARKINGS, AND OTHER TRAFFIC CONTROL DEVICES MUST BE IN ACCORDANCE WITH THE STATE'S MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND THE APPLICABLE ROAD AUTHORITY STANDARDS.
- THE PAVEMENT SURFACE SHALL BE CLEANED AT THE DIRECTION OF THE APPLICABLE ROAD AUTHORITY AND THE ENGINEER JUST PRIOR TO APPLICATION OF PAVEMENT MARKINGS. PAVEMENT CLEANING SHALL CONSIST OF AT LEAST BRUSHING WITH A ROTARY BROOM (NON-METALLIC) OR AS RECOMMENDED BY THE MATERIALS MANUFACTURER AND ACCEPTABLE TO THE APPLICABLE ROAD AUTHORITY AND THE ENGINEER.
- THE PAVEMENT MARKING APPLICATION SHALL IMMEDIATELY FOLLOW THE PAVEMENT CLEANING.
- PAVEMENT MARKING EDGE LINES ARE TO BE BROKEN ONLY AT INTERSECTION WITH PUBLIC ROADS AND PRIVATE ENTRANCES IF THEY ARE CONTROLLED BY A YIELD SIGN, STOP SIGN OR TRAFFIC SIGNAL. THE BREAK POINT IS TO BE AT THE START OF THE RADIUS FOR THE INTERSECTION OR AT MARKED STOP LINES.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PAVEMENT MARKING RELATED ACTIVITIES, SUCH AS, BUT NOT LIMITED TO, COLLECTING DATA FROM IN PLACE LANE LINES, MARKING PERMANENT MARKING ALIGNMENTS, NECESSARY "SPOTTING" AT APPROPRIATE POINTS AND TO DETERMINE NECESSARY STARTING AND CUTOFF POINTS. EXACT LOCATION OF PAVEMENT MARKINGS TO BE FIELD LOCATED BY THE ENGINEER.
- THE CONTRACTOR SHALL HAVE A MINIMUM OF 2 PEOPLE WITH CURRENT ACI CONCRETE FLATWORK TECHNICIAN OR FLATWORK FINISHER CERTIFICATION, AND AT LEAST ONE OF THEM MUST BE ONSITE FOR ALL CONCRETE POURS.
- PROTECT CONCRETE PAVING FROM DAMAGE. EXCLUDE TRAFFIC FROM PAVING FOR A MINIMUM OF 14 DAYS AFTER PLACEMENT. WHEN CONSTRUCTION TRAFFIC IS PERMITTED, MAINTAIN PAVING AS CLEAN AS POSSIBLE BY REMOVING SURFACE STAINS AND SPILLAGE OF MATERIALS AS THEY OCCUR. MAINTAIN CONCRETE FREE OF STAINS, DISCOLORATION, DIRT, AND OTHER FOREIGN MATERIALS. SWEEP PAVING NOT MORE THAN TWO DAYS BEFORE DATE SCHEDULED FOR SUBSTANTIAL COMPLETION INSPECTIONS. REPAIR OR REPLACE STAINED/DISCOLORED CONCRETE TO THE SATISFACTION OF THE OWNER AT NO COST TO THE OWNER.
- CONSTRUCTION AND MATERIALS WITHIN PUBLIC RIGHT-OF-WAY MUST BE IN ACCORDANCE WITH APPLICABLE ROAD AUTHORITY'S SPECIFICATIONS AND STANDARDS. DOT SPECIFICATIONS AND STANDARDS APPLY IF NOT COVERED BY LOCAL OR COUNTY REGULATIONS. PAVING, PAVEMENT MARKINGS, AND SIGNAGE WITHIN THE SITE SHALL MEET THE FOLLOWING REQUIREMENTS:
 - BITUMINOUS: CONFORM TO MNDOT SPEC 2360
 - WEARING COURSE MIX DESIGN: SPWEA3408
 - NON-WEARING COURSE MIX DESIGN: SPNWB3308
 - RECYCLED MATERIALS: WEARING COURSES - 10% MAX RAP, NO RAS ALLOWED. NON-WEARING COURSES - 20% MAX RAP
 - TACK COAT: MNDOT SPEC 2357, EMULSIFIED ASPHALT, CATIONIC, CSS-1 OR CSS-1H
 - MAXIMUM ALLOWABLE BITUMINOUS LIFT THICKNESS SHALL NOT EXCEED 3 INCHES. MINIMUM LIFT THICKNESS SHALL BE IN ACCORDANCE WITH THE FOLLOWING: 1.5 INCHES FOR MIXES WITH 0.5 INCH MAX AGGREGATE SIZE (SP 9.5); 2 INCHES FOR MIXES WITH 0.75 INCH MAX AGGREGATE SIZE (SP 12.5); 0.75 INCHES FOR MIXES WITH 0.375 INCH MAX AGGREGATE SIZE (SP 4.75)
 - PLACE TACK COAT BETWEEN NEW SURFACE AND EACH NEW LIFT AT A RATE OF 0.05 GALLONS PER SQUARE YARD.
 - CONCRETE SIDEWALK/DRIVEWAYS/SLABS MATERIALS: MNDOT SPEC 2461
 - MANUAL PLACEMENT MIX DESIGN: MNDOT MIX 3F52A
 - FLY ASH: CLASS F
 - CONCRETE CURB AND GUTTER MATERIALS: MNDOT SPEC 2461
 - MANUAL PLACEMENT: MNDOT 3F52
 - SLIP FORM PLACEMENT: MNDOT 3F32
 - CONCRETE METAL REINFORCEMENT:
 - REINFORCING BARS: DEFORMED GRADE 60 BARS CONFORMING TO ASTM A615 AND A996. COATING: EPOXY COATED IN ACCORDANCE WITH ASTM A775 OR ASTM A934.
 - TIE WIRE: PLASTIC OR NYLON-COATED TIE WIRES IN CONFORMANCE WITH MNDOT SPEC 2472.
 - BAR SUPPORTS: CONFORM TO "BAR SUPPORT SPECIFICATIONS AND STANDARD NOMENCLATURE", CRSI MANUAL OF STANDARD PRACTICE.

PAVING, PAVEMENT MARKING, AND SIGNAGE NOTES (CONT.)

- CONCRETE ISOLATION/EXPANSION JOINT MATERIAL: MNDOT SPEC 3702, TYPE D-1 OR D-2 FROM MNDOT'S APPROVED PRODUCT LIST. PROVIDE SINGLE COMPONENT, GUN GRADE POLYURETHANE JOINT SEALANT IN ACCORDANCE WITH ASTM C920, LIGHT GRAY COLOR TO MATCH CONCRETE COLOR. PROVIDE BACKER ROD AS RECOMMENDED BY JOINT MANUFACTURER.
- CONCRETE CURING MATERIALS: MNDOT SPEC 3754 (POLY-AMS MEMBRANE)
 - SILANE/SILOXANE CONCRETE SEALER: SILOXA-TEK 8500, OKON S40, ARMOR SX5000, OR APPROVED EQUAL. SHALL BE APPLIED PER MANUFACTURER INSTRUCTIONS. SHALL BE APPLIED ON A CLEAN, DRY, AND ABSORBENT SURFACE THAT HAS BEEN CURED FOR AT LEAST 28 DAYS PRIOR TO APPLICATION. SHALL BE APPLIED TO A SURFACE THAT IS ABOVE 40 DEGREES FAHRENHEIT AND WILL NOT FREEZE FOR AT LEAST 24 HOURS. APPLICATION RATE SHALL BE MONITORED AND BE GREATER THAN MANUFACTURERS RECOMMENDATIONS.
 - CONCRETE CURING AND SEALER ALTERNATE: TK PRODUCTS ONE-STEP CURING AND SEALING PRODUCT OR EQUAL. SHALL BE APPLIED PER MANUFACTURER INSTRUCTIONS. SHALL BE APPLIED TO A SURFACE THAT IS ABOVE 40 DEGREES FAHRENHEIT AND WILL NOT FREEZE FOR AT LEAST 24 HOURS. APPLICATION RATE SHALL BE MONITORED AND BE GREATER THAN MANUFACTURERS RECOMMENDATIONS.
 - CONCRETE PLACING, FINISHING, CURING, AND PROTECTION: CONFORM TO MNDOT SPECS 2461, 2521, AND 2531, AND APPLICABLE ACI STANDARDS.
 - FOR HOT WEATHER PLACEMENT, COMPLY WITH ACI 305 HOT WEATHER CONCRETING (LATEST EDITION).
 - FOR COLD WEATHER PLACEMENT, COMPLY WITH ACI 306 COLD WEATHER CONCRETING (LATEST EDITION). DO NOT PLACE CONCRETE IN AIR TEMPERATURE LESS THAN 40 DEGREES F WITHOUT APPROVAL OF THE ENGINEER.
 - PRIOR TO POURING ANY EXTERIOR CONCRETE FLATWORK/SLAB, CONTRACTOR MUST VERIFY THE PREDICTED COMBINATION OF AIR TEMPERATURE, RELATIVE HUMIDITY, CONCRETE TEMPERATURE AND WIND VELOCITY WILL NOT EXCEED AN EVAPORATION RATE OF 0.20 POUNDS PER SQUARE FOOT OF SURFACE AREA PER HOUR IN ACCORDANCE WITH ACI 305 (LATEST EDITION). THE WEATHER MUST ALSO BE LESS THAN 30% CHANGE OF PRECIPITATION FOR THE ENTIRE PLACEMENT WINDOW, AND 2 HOURS FOLLOWING EXPECTED COMPLETION. IF EITHER OF THESE CONDITIONS ARE NOT MET, THE POUR MUST BE POSTPONED UNTIL IT CAN MEET THESE REQUIREMENTS.
 - INSTALLATION FORM: CONTRACTOR OR INDEPENDENT TESTING AGENCY IS REQUIRED TO FILL OUT AND SUBMIT THE ENGINEER'S EXTERIOR CONCRETE INSTALLATION FORM AT THE END OF THE DAY OF EACH POUR. CONTACT THE ENGINEER TO OBTAIN THE FORM.
 - APPLY CURING COMPOUND AT A MINIMUM RATE OF 1 GALLON PER 150 SQ FT SURFACE CURING AREA OR MANUFACTURER RECOMMENDED APPLICATION RATE, WHICHEVER IS GREATER.
 - CONSTRUCT TEMPORARY WIND BREAKS AS NECESSARY TO REDUCE WIND VELOCITY/DRYING/EXPOSURE.
 - CONSTRUCT TEMPORARY SUNSHADES AS NECESSARY TO REDUCE CONCRETE TEMPERATURES/EXPOSURE.
 - CONTRACTOR SHALL PROTECT ALL CONCRETE SLABS THROUGHOUT CONSTRUCTION FROM HEAVY EQUIPMENT, VIBRATIONS, ADJACENT WORK, ETC. CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONCRETE DAMAGED DURING CONSTRUCTION AND SHALL REPLACE AT NO ADDITIONAL COST TO THE OWNER.
 - AGGREGATE BASE: SEE DETAILS.
 - PAVEMENT MARKINGS: MNDOT SPEC 2582
 - PAVEMENT STRIPES: MNDOT SPEC 3591 (WATER-BASED TRAFFIC PAINT) WITH DROP ON GLASS BEADS IN ACCORDANCE WITH MNDOT SPEC 3592.
 - PAVEMENT MESSAGES (ARROWS): MNDOT SPEC 3591 (WATER-BASED TRAFFIC PAINT) WITH DROP ON GLASS BEADS IN ACCORDANCE WITH MNDOT SPEC 3592.
 - INSTALLERS OF THERMOPLASTIC MUST CARRY A CARD CERTIFYING THAT THEY HAVE ATTENDED A TRAINING SESSION THAT ADDRESSES SURFACE PREPARATIONS AND ALL APPLICATION REQUIREMENTS AND TECHNIQUES NECESSARY FOR SUCCESSFUL APPLICATIONS.
 - PRIOR TO APPLYING PAVEMENT MARKINGS, ALLOW NEW PAVEMENT TO CURE A MINIMUM OF 14 DAYS OR FOLLOW MANUFACTURER'S SPECIFICATION FOR PAVEMENT CURE TIME, WHICHEVER IS GREATER.
 - SIGNAGE: CONFORM TO MNDOT SPECS 2564, 3352 (SIGNS, DELINEATORS, AND MARKERS), AND 3402 (SQUARE TUBULAR SIGN POSTS). ALL SIGNS/POSTS SHALL MEET CRASHWORTHY REQUIREMENTS OF MASH-16. SIGNS SHALL INCLUDE NUMBER AND SIZE OF POSTS IN ACCORDANCE WITH MNDOT WIND LOADING CHART FOR SIGNS ON SQUARE TUBE POSTS. MOUNT SIGNS IN ACCORDANCE WITH SQUARE TUBE SIGN MOUNTING MNDOT STANDARD PLANS AND DETAIL SHEETS. SEE MNDOT STANDARD SIGNS MANUAL FOR PUNCHING CODE AND DETAILED DRAWINGS OF TYPE "C" AND "D" SIGNS PANELS. SEE MNDOT MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES PART II FOR DETAILS OF TRAFFIC SIGN INSTALLATION. MINIMUM VERTICAL CLEARANCE IS 7 FOOT. SEE MUTCD FOR DETAILS.
- CONTRACTOR SHALL PROVIDE CONCRETE JOINTS AS FOLLOWS:
 - CONTROL JOINTS - MAINTAIN AN ASPECT RATIO (LENGTH TO WIDTH) BETWEEN CONTROL JOINTS AS CLOSE TO 1:1 AS FEASIBLE. DO NOT EXCEED ASPECT RATIO GREATER THAN 1.5:1. MATCH EXISTING PATTERN WHERE APPLICABLE. VERIFY WITH OWNER. MAXIMUM CONTROL JOINT SPACING SHALL BE 24 TIMES THE SLAB THICKNESS UP TO A MAXIMUM OF 12 FEET (I.E. 4-INCH-THICK SLAB = 96 INCH (8 FOOT) MAXIMUM CONTROL JOINT SPACING IN ANY DIRECTION, 8-INCH-THICK SLAB IS 12 FEET)
 - JOINT INTERSECTION ANGLES LESS THAN 60 DEGREES WILL NOT BE ALLOWED
 - PANEL WIDTHS LESS THAN 6 INCHES AT ANY POINT WILL NOT BE ALLOWED
 - JOINTING MUST ACCOMMODATE IN-PAVEMENT STRUCTURES THROUGH JOINTING AND BOXOUTS
 - CONTRACTOR MUST SUBMIT A JOINTING PLAN FOR ENGINEER ACCEPTANCE.
 - EXPANSION/ISOLATION JOINTS - PROVIDE AT THE FOLLOWING:
 - JOINT INTERSECTION ANGLES LESS THAN 60 DEGREES WILL NOT BE ALLOWED
 - LOCATIONS WHERE CHANGES IN WIDTH OCCUR
 - LOCATIONS WHERE ADJOINING EXISTING CONCRETE
 - LOCATIONS THAT ABUT THE BUILDING AND OTHER SITE FEATURES INCLUDING RAMPS, STAIRS, LANDINGS, CONCRETE APRONS, ARCHITECTURAL AND LANDSCAPE FEATURES, ETC.
 - LOCATIONS IN CHANGES IN DEPTH (INCLUDING PAVEMENT ADJACENT TO CURB).
 - WHEREVER POSSIBLE MATCH JOINTS OF ADJACENT CONCRETE WORK.
- FIELD QUALITY CONTROL:
 - AGGREGATE BASE TESTING REQUIREMENTS AND FREQUENCY: TEST SUBGRADE AND AGGREGATE BASE IN ACCORDANCE WITH MNDOT SPECS, MNDOT SCHEDULE OF MATERIALS CONTROL, AND GEOTECHNICAL REPORT RECOMMENDATIONS.
 - CONCRETE TESTING REQUIREMENTS AND FREQUENCY: TEST CONCRETE AIR CONTENT (ASTM C231), CONCRETE SLUMP (ASTM C143), AIR AND CONCRETE TEMPERATURE, AND 7- AND 28-DAY COMPRESSIVE STRENGTH (ASTM C31, C93, AND C172), WHERE APPLICABLE. TEST IN ACCORDANCE WITH MNDOT SCHEDULE OF MATERIALS CONTROL.
 - BITUMINOUS TESTING REQUIREMENTS AND FREQUENCY: ALL BITUMINOUS PAVEMENT DENSITY SHALL CONFORM TO MNDOT SPEC 2360.3.D.2 - ORDINARY COMPACTION METHOD. CONTRACTOR SHALL ESTABLISH A ROLL PATTERN FOR EACH COURSE OF PAVING EACH DAY. TEST EXTRACTION/GRADATION/AIR VOIDS, ONE EACH PER BITUMINOUS PAVING DAY PER MIX DESIGN.
 - GRANULAR BASE TESTING REQUIREMENTS AND FREQUENCY: GRANULAR BASE (PARKING LOT) - ONE DCP DENSITY TEST AND ONE MOISTURE TEST PER 1000 SQ FT OF PARKING LOT
- TOLERANCES:
 - BITUMINOUS PAVEMENT: CONFORM TO MNDOT SPEC 2360.3.E, EXCEPT AS MODIFIED HEREIN: DEVIATIONS ALONG ADA ACCESSIBLE ROUTES THAT EXCEED THE MAXIMUM SLOPES WILL BE CONSIDERED UNACCEPTABLE. HORIZONTAL/LINE DEVIATIONS IN LOCATION GREATER THAN ±1/2 INCH WILL BE CONSIDERED UNACCEPTABLE. ANY SURFACE AREA ALLOWING ENTRAPMENT OF WATER AT A DEPTH OF 1/4 INCH OR GREATER WILL BE CONSIDERED UNACCEPTABLE. REMOVE AND REPLACE UNACCEPTABLE WORK AS DIRECTED BY THE ENGINEER AT NO ADDITIONAL COST TO THE OWNER.

PAVING, PAVEMENT MARKING, AND SIGNAGE NOTES (CONT.)

- CONCRETE PAVEMENT: CONFORM TO MNDOT SPEC 2521.3.D.3, EXCEPT AS MODIFIED HEREIN: VERTICAL DEVIATIONS IN SURFACE GREATER THAN ±3/16 INCH WILL BE CONSIDERED UNACCEPTABLE. DEVIATIONS ALONG ADA ACCESSIBLE ROUTES THAT EXCEED THE MAXIMUM SLOPES WILL BE CONSIDERED UNACCEPTABLE. HORIZONTAL/LINE DEVIATIONS IN LOCATION GREATER THAN ±1/2 INCH WILL BE CONSIDERED UNACCEPTABLE. ANY SURFACE AREA ALLOWING ENTRAPMENT OF WATER AT A DEPTH OF 1/8 INCH OR GREATER WILL BE CONSIDERED UNACCEPTABLE. RANDOM AND UNCONTROLLED CRACKING WILL BE CONSIDERED UNACCEPTABLE. REPLACE CONCRETE PAVEMENT AS DIRECTED BY ENGINEER AND OWNER. PERFORM PAVEMENT REPLACEMENT AT NO ADDITIONAL COST TO THE OWNER. REMOVE AND REPLACE UNACCEPTABLE WORK AS DIRECTED BY THE ENGINEER AT NO ADDITIONAL COST TO THE OWNER.
- CONCRETE CURB AND GUTTER: CONFORM TO MNDOT SPEC 2531.3. DEVIATIONS ALONG ADA ACCESSIBLE ROUTES THAT EXCEED THE MAXIMUMS WILL BE CONSIDERED UNACCEPTABLE.
- PAVEMENT MARKINGS: CONFORM TO MNDOT SPEC 2582.3.C, EXCEPT AS MODIFIED HEREIN: LINE WIDTH DEVIATIONS LESS THAN OR EQUAL TO ±1/4 INCH FROM THE SPECIFIED WIDTH WILL BE ALLOWED FOR STRIPING PROVIDED THE VARIATION IS GRADUAL AND DOES NOT DETRACT FROM THE GENERAL APPEARANCE. BROKEN LINE SEGMENTS LESS THAN OR EQUAL TO ±1/4 FOOT FROM THE SPECIFIED LENGTHS WILL BE ALLOWED FOR STRIPING. ALIGNMENT DEVIATIONS FROM THE CONTROL GUIDE SHALL NOT EXCEED 2 INCHES. MATERIAL SHALL NOT BE APPLIED OVER LONGITUDINAL JOINTS. ESTABLISHMENT OF APPLICATION TOLERANCES SHALL NOT RELIEVE THE CONTRACTOR OF THEIR RESPONSIBILITY TO COMPLY AS CLOSELY AS PRACTICABLE WITH THE PLANNED DIMENSIONS.
- CONTRACTOR SHALL INSTALL A MINIMUM OF 6 INCHES AGGREGATE BASE PAST THE BACK OF CURB, SEE DETAILS.

WATERMAIN PLANS - 200A

- ALL WATERMAIN AND ACCESSORIES MUST BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF LAKE ELMO STANDARD SPECIFICATIONS AND DETAILS.
- MANIPULATION OF EXISTING VALVES SHALL BE PERFORMED ONLY BY CITY PERSONNEL.
- WATERMAIN SHALL BE DUCTILE IRON PIPE, ENCASED IN POLYETHYLENE, CLASS-52.
- ALL FITTINGS SHALL COMPLY WITH CEAM SPEC. 2611.2.A1. ALL FITTINGS SHALL BE INSTALLED UTILIZING COR-BLUE NUTS & BOLTS. POLYETHYLENE ENCASEMENT, ALL CONNECTIONS SHALL BE INSTALLED UTILIZING COR-BLUE NUTS & BOLTS.
- USE GATE VALVES FOR ALL APPLICATIONS UP THROUGH 12 INCHES.
- GATE VALVES SHALL BE RESISANT WEDGE AMERICAN FLOW CONTROL SERIES 2500 OR APPROVED EQUAL. GATE VALVES MUST COMPLY WITH CEAM SPEC 2611.2.C.2.
- USE BUTTERFLY VALVES FOR ALL APPLICATIONS GREATER THAN 12 INCHES.
- BUTTERFLY VALVES SHALL BE MUELLER LINESEAL III, OR APPROVED EQUAL. BUTTERFLY VALVES SHALL COMPLY WITH CEAM SPEC. 2112.C3.
- BOLTS AND NUTS ON ALL VALVES AND HYDRANTS SHALL BE STAINLESS STEEL.
- ALL HYDRANTS SHALL BE INSTALLED 5.0 FEET BACK OF CURB.
- HYDRANTS SHALL BE WATEROUS "PACER," MODEL WB-67 OR APPROVED EQUAL, FITTED WITH FH 800 SERIES FLEX STAKE AND PAINTED RED.
- HYDRANTS SHALL HAVE TWO OUTLET NOZZLES FOR 2-1/2 (I.D.) HOSE CONNECTIONS AND ONE 5" STORZ NOZZLE (MODEL WB-67) AND PENTAGON NUT END CAP.
- THE CURB STOP SERVICE ASSEMBLY SHALL HAVE A MINIMUM 1-FT ADJUSTMENT RANGE AND SHALL EXTEND 6 INCHES ABOVE FINISHED GRADE FULLY EXTENDED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING WATER TO HOMES AND BUSINESSES WHOSE WATER SUPPLY IS DISRUPTED DURING THE COURSE OF THE PROJECT.
- THE CONTRACTOR MUST PROVIDE THE FOLLOWING WATER SYSTEM SUPPLIES TO THE CITY:
 - ONE EXTRA NEW SIX-INCH HYDRANT EXTENSION PER PROJECT.
 - ONE EXTRA HYDRANT FLEX STAKE MARKER FOR EACH 10 HYDRANTS, MINIMUM ONE PER PROJECT.
 - ONE HYDRANT STORZ WRENCH OR REPAIR KIT PER PROJECT.
 - ONE 12-FOOT GATE VALVE KEY PER PROJECT.

GRADING AND EROSION CONTROL - 600A,B

- THE CONTRACTOR SHALL CONDUCT OPERATIONS AND IMPLEMENT MINNESOTA POLLUTION CONTROL AGENCY (MPCA) BEST MANAGEMENT PRACTICES (BMP) TO CONTROL SITE SILTATION AND EROSION INTO DRAINAGE WAYS. THE CONTRACTOR SHALL COMPLY WITH ALL CONDITIONS AND COMPLETION DATES RELATIVE TO ALL PERMITS ISSUED FOR THE WORK TO BE COMPLETED. THE ENGINEER MAY ISSUE A STOP WORK ORDER FOR ALL DEVELOPMENT WORK AND BUILDING CONSTRUCTION FOR NONCOMPLIANCE WITH THESE MEASURES.
- SEQUENCING. ALL SILT FENCE AND OTHER EROSION CONTROL MEASURES SHALL BE IN PLACE AND APPROVED BY ENGINEER PRIOR TO ANY REMOVALS, EXCAVATION OR CONSTRUCTION AND SHALL BE MAINTAINED UNTIL VIABLE TURF OR GROUND COVER HAS BEEN ESTABLISHED AND APPROVED BY THE ENGINEER.
- SILT FENCE. THE CONTRACTOR SHALL INSTALL SILT FENCE AT THE LOCATIONS SHOWN ON THE PLANS AND IN ACCORDANCE WITH THE CITY STANDARD DETAILS. SILT FENCE DAMS AND INTERIM SUMPS SHALL BE PLACED TO INTERCEPT SILT FROM CONCENTRATED RUNOFF FROM OPEN GRADED AREAS. ADDITIONAL SILT FENCE SHALL BE REQUIRED AS DIRECTED BY THE ENGINEER.
- STOCKPILES. ALL STOCKPILE AREAS SHALL HAVE SILT FENCE OR SEDIMENT TRAPPING SYSTEMS PLACED AROUND THE ENTIRE PERIMETER.
- INLET PROTECTION. THE CONTRACTOR SHALL INSTALL INLET PROTECTION ON ALL EXISTING STORM SEWER INLETS IN ACCORDANCE WITH THE CITY STANDARD DETAILS. INLET PROTECTION SHALL ALSO BE PROVIDED ON ALL PROPOSED STORM SEWER INLETS IMMEDIATELY FOLLOWING CONSTRUCTION OF THE INLET. INLET PROTECTION MUST BE INSTALLED IN A MANNER THAT WILL NOT IMPOUND WATER FOR EXTENDED PERIODS OF TIME OR IN A MANNER THAT PRESENTS A HAZARD TO VEHICULAR OR PEDESTRIAN TRAFFIC.
- TEMPORARY SEDIMENT BASINS. THE CONTRACTOR SHALL INCORPORATE TEMPORARY SEDIMENT BASINS THROUGHOUT THE CONSTRUCTION SITE TO CAPTURE RUNOFF AND SLOW THE FLOW OF WATER AND ALLOW SEDIMENT TO SETTLE OUT. TEMPORARY SEDIMENT BASINS SHALL BE INSTALLED AS DIRECTED BY THE CITY ENGINEER.
- ROCK CONSTRUCTION ENTRANCE. A ROCK ENTRANCE SHALL BE CONSTRUCTED AND MAINTAINED AS SHOWN ON THE PLAN TO REDUCE TRACKING OF SILT AND DIRT ONTO THE PUBLIC STREETS. A GEOTEXTILE FABRIC SHALL BE PLACED UNDERNEATH THE ROCK. THE ROCK SHALL BE PERIODICALLY REPLISHED TO MAINTAIN THE INTENDED PERFORMANCE. MUD AND DEBRIS SHALL BE REMOVED OR SCRAPPED FROM TIRES AND VEHICLE UNDERCARRIAGE PRIOR TO LEAVING THE SITE.
- STREET SWEEPING. ALL STREETS USED FOR ACCESS TO THE SITE AND HAUL ROUTES USED FOR CONSTRUCTION EQUIPMENT AND MATERIAL SUPPLIES SHALL BE CLEANED AT THE END OF EACH WORKING DAY. THE CITY OR ENGINEER MAY ORDER ADDITIONAL SWEEPING OF THE STREETS AS DEEMED REQUIRED AT DEVELOPER/CONTRACTOR EXPENSE.
- DEWATERING. EACH EXCAVATION SHALL BE KEPT DRY DURING THE COURSE OF ALL WORK HEREIN, INCLUDING SUBGRADE CORRECTION, PIPE INSTALLATION, STRUCTURE CONSTRUCTION AND BACKFILLING, TO THE EXTENT THAT NO DAMAGE FROM HYDROSTATIC PRESSURE, FLOATAION OR OTHER DAMAGE RESULTS. ALL EXCAVATIONS SHALL BE DEWATERED TO A DEPTH OF AT LEAST 3 INCHES BELOW THE BOTTOM OF THE CONCRETE SLAB OR PIPE TO BE INSTALLED THEREIN. THE CONTRACTOR MAY USE ANY METHOD OR COMBINATION OF METHODS FOR DEWATERING HE CHOOSES; HOWEVER, ALL DEWATERING METHODS AND EQUIPMENT WHICH IN THE OPINION OF THE ENGINEER, ARE INEFFECTIVE SHALL BE ABANDONED, IMPROVED, REPLACED OR THERWISE ALTERED TO OBTAIN EFFECTIVE DEWATERING. THE CONTRACTOR SHALL PROVIDE ALL POWER, PUMPS, MATERIALS AND APPARATUS NECESSARY, AND SHALL BE RESPONSIBLE FOR DISPOSING OF THE WATER PUMPED FROM THE EXCAVATION IN A MANNER WHICH WILL NOT INTERFERE WITH OTHER WORK WITHIN THE AREA AND NOT TO DAMAGE PUBLIC OR PRIVATE PROPERTY. THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR THE CONDITION OF ANY PIPE, CONDUIT, DITCH, CHANNEL OR NATURAL WATERCOURSE UTILIZED FOR DRAINAGE PURPOSES, AND ALL EROSION, SEDIMENT OR OTHER ADVERSE RESULTS OF THEIR USE SHALL BE REPAIRED.
- POSITIVE DRAINAGE AND PROTECTION. THE CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE THROUGHOUT THE SITE AT ALL TIMES. LOW POINTS WITHIN AND ALONG ROADWAYS ARE EXPRESSLY PROHIBITED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TEMPORARY DITCHES, PIPING OR OTHER MEANS TO FACILITATE PROPER DRAINAGE DURING CONSTRUCTION. TO PROTECT PREVIOUSLY GRADED AREAS FROM EROSION, WOOD FIBER BLANKET SHALL BE PLACED IMMEDIATELY ON STEEP SLOPES (1:3 OR GREATER) AND EMBANKMENTS, PERMANENT AND TEMPORARY PONDS, AND OUTLETS AND OVERFLOWS TO PROTECT THE COMPLETED GRADE AND MINIMIZE SILT IN THE RUNOFF.
- DRAINAGE DITCHES. THE NORMAL WETTED PERIMETER OF ANY TEMPORARY OR PERMANENT DRAINAGE DITCH OR SWALE THAT DRAINS WATER FROM ANY PORTION OF THE CONSTRUCTION SITE OR DIVERTS WATER AROUND THE SITE, MUST BE STABILIZED WITHIN 200 LINEAL FEET FROM THE PROPERTY EDGE, OR FROM THE POINT OF DISCHARGE INTO ANY SURFACE WATER. STABILIZATION OF THE LAST 200 LINEAL FEET MUST BE COMPLETED WITHIN 24 HOURS AFTER CONNECTING TO A SURFACE WATER. STABILIZATION OF THE REMAINING PORTIONS OF ANY TEMPORARY OR PERMANENT DITCHES OR SWALES MUST BE COMPLETED WITHIN 14 DAYS AFTER CONNECTING TO A SURFACE WATER AND CONSTRUCTION. IN THAT PORTION OF THE DITCH HAS TEMPORARILY OR PERMANENTLY CEASED. TEMPORARY OR PERMANENT DITCHES OR SWALES THAT ARE BEING USED AS A SEDIMENT CONTAINMENT SYSTEM (WITH PROPERLY DESIGNED ROCK DITCH CHECKS, BIO ROLLERS, SILT DIKES, ETC.) DO NOT NEED TO BE STABILIZED. THESE AREAS MUST BE STABILIZED WITHIN 24 HOURS AFTER NO LONGER BEING USED AS A SEDIMENT CONTAINMENT SYSTEM.



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CLIENT:



PRIMROSE SCHOOL -
LAKE ELMO
LAKE ELMO, WASHINGTON COUNTY,
MINNESOTA

PROJECT TITLE

ISSUE NO.:

1

DESCRIPTION:

SITE PERMIT PLANS

DATE:

4/10/2025

PROJECT NO.:

190300279

DWN BY:

CHKD BY:

APPD BY:

KRM

AWD

JRA

ISSUE DATE:

04/10/2025

ISSUE NO.:

1

SHEET TITLE:

GENERAL NOTES

SHEET NO.:

G-002

GRADING AND EROSION CONTROL - 600C (CONT.)

12. TURF ESTABLISHMENT. ALL EXPOSED SOIL AREAS MUST BE STABILIZED AS SOON AS POSSIBLE TO LIMIT SOIL EROSION BUT IN NO CASE LATER THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED.
13. MAINTENANCE AND INSPECTION. EROSION CONTROL MEASURES SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION AND UNTIL SATISFACTORY ESTABLISHMENT OF PERMANENT GROUND COVER IS OBTAINED. ALL EROSION AND SEDIMENTATION CONTROL MEASURES, AND STORMWATER OUTFALLS MUST BE INSPECTED WEEKLY, AND WITHIN 24 HOURS OF THE SITE RECEIVING 0.5 INCHES OF RAIN. REPAIRS MUST BE MADE ON THE SAME DAY OR FOLLOWING DAY OF THE INSPECTION. UNSATISFACTORY CONDITIONS NOT REPAIRED OR CLEANED UP WITHIN 48-HOURS OF NOTIFICATION SHALL RESULT IN A STOP WORK ORDER, AND/OR SAID WORK SHALL BE COMPLETED AT CONTRACTOR'S EXPENSE..
14. REMOVAL. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL TEMPORARY EROSION CONTROL MEASURES, STRUCTURES AND DEVICES ONLY AFTER RECEIVING ENGINEER APPROVAL. ALL DEBRIS, STAKES, AND SILTS ALONG SILT FENCES SHALL BE REMOVED AND DISPOSED OFF SITE. THE CONTRACTOR SHALL HAND RAKE SILTED AREAS ALONG THE FENCE LOCATIONS TO PROVIDE A SMOOTH FINAL GRADE AND SHALL RESTORE THE GROUND SURFACE WITH SEED OR SOD, AS REQUIRED, TO MATCH THE FINISHED GRADE TO THE ADJACENT AREA.
15. FINAL STORM SEWER SYSTEM. AT THE COMPLETION OF THE WORK AND BEFORE THE FINAL WALK THROUGH, THE CONTRACTOR SHALL REMOVE STORM SEWER INLET PROTECTION MEASURES AND THOROUGHLY FLUSH THE STORM SEWER SYSTEM. SEDIMENT AND DEBRIS SHALL BE COMPLETELY REMOVED AND CLEANED AT THE INLETS, OUTLETS, AND DOWNSTREAM OF EACH OUTLET. RIPRAP AND GEOTEXTILE FABRIC MAY REQUIRE REPLACEMENT AS DIRECTED BY THE ENGINEER TO OBTAIN A LIKE NEW INSTALLATION ACCEPTABLE TO THE CITY.
16. DITCH CHECK (BIOROLL BLANKET SYSTEM). BIOROLL AND BLANKET SYSTEMS SHALL BE INSTALLED AS DITCH CHECKS ONLY IN SPECIFIED LOCATIONS AS APPROVED BY THE CITY ENGINEER. BIOROLLS ARE NOT TO BE UTILIZED IN AREAS WHERE VEHICLE AND CONSTRUCTION TRAFFIC OCCUR.
17. FLOTATION SILT CURTAIN. FLOTATION SILT CURTAIN SHALL BE UTILIZED WHEN CONSTRUCTION ACTIVITIES OCCUR DIRECTLY ADJACENT TO LAKES, STREAMS OR WETLANDS IN ORDER TO CONTAIN SEDIMENTS NEAR THE BANKS OF WORKING AREAS. THE INSTALLATION OF FLOTATION SILT CURTAINS WILL BE REQUIRED AS DIRECTED BY THE CITY ENGINEER.
18. CONCRETE WASHOUT ONSITE. ALL LIQUID AND SOLID WASTES GENERATED BY CONCRETE WASHOUT OPERATIONS MUST BE CONTAINED IN A LEAK-PROOF CONTAINMENT FACILITY OR IMPERMEABLE LINER. A COMPACTED CLAY LINER THAT DOES NOT ALLOW WASHOUT LIQUIDS TO ENTER GROUND WATER IS CONSIDERED AN IMPERMEABLE LINER. THE LIQUID AND SOLID WASTES MUST NOT CONTACT THE GROUND, AND THERE MUST NOT BE RUNOFF FROM THE CONCRETE WASHOUT OPERATIONS OR AREAS. LIQUID AND SOLID WASTES MUST BE DISPOSED OF PROPERLY AND IN COMPLIANCE WITH MPCA REGULATIONS. A SIGN MUST BE INSTALLED ADJACENT TO EACH WASHOUT FACILITY TO INFORM CONCRETE EQUIPMENT OPERATORS TO UTILIZE THE PROPER FACILITIES.

SITE RESTORATION - 600D

- RESTORE ALL DISTURBED AREAS WITH 6 INCHES OF TOPSOIL CONFORMING TO MNDOT 3877.
- PROTECT ALL STORM SEWER INLETS AS SPECIFIED HEREIN AND MAINTAIN UNTIL STREET CONSTRUCTION IS COMPLETED.
- MAINTAIN ALL SILT FENCE AND REPAIR OR REPLACE AS NEEDED OR REQUIRED UNTIL TURF HAS BEEN ESTABLISHED.
- RESTORATION WORK SHALL BEGIN WITHIN 7 DAYS OF FINAL GRADING.
- BOULEVARD AND DITCH RESTORATION INCLUDES FINE GRADING, WHICH INCLUDES THE REMOVAL OF ROCKS, DEBRIS AND SOIL CHUNKS, WHILE MAINTAINING POSITIVE DRAINAGE.

UTILITY NOTES

- SEE GENERAL NOTES FOR ADDITIONAL PROJECT AND SITE INFORMATION.
- WATERMAIN WILL BE INSTALLED IN STRICT ACCORDANCE WITH THE MOST CURRENT EDITION OF THE CITY ENGINEERS ASSOCIATION OF MINNESOTA (CEAM) SPECIFICATIONS.
- CONTRACTOR SHALL COMPLY WITH THE SPECIFICATIONS AND REQUIREMENTS OF CITY/UTILITY PROVIDER SPECIFICATIONS, CITY ENGINEERS ASSOCIATION OF MINNESOTA (CEAM) STANDARD SPECIFICATIONS FOR UTILITIES (LATEST EDITION), MPCA/MCES REQUIREMENTS, AND MINNESOTA PLUMBING CODE (MINNESOTA RULES CHAPTER 4714) FOR MATERIALS, INSTALLATION, AND TESTING OF WATER AND SANITARY UTILITIES.
- CONTRACTOR SHALL MAINTAIN A MINIMUM OF 7 FEET 6 INCHES COVER ON ALL WATERLINES, UNLESS OTHERWISE NOTED. PROVIDE HYDRANT EXTENSIONS AND GATE VALVE NUT EXTENSIONS IF WATERLINE IS DEEPER THAN MINIMUM COVER. PROVIDE INSULATION OVER WATERMAIN AND SERVICES WITH PROPOSED ELEVATIONS LESS THAN MINIMUM BURY DEPTH PER PROJECT DETAILS AND UTILITY PROVIDER REQUIREMENTS.
- CONTRACTOR SHALL MAINTAIN A MINIMUM OF 7 FEET 6 INCHES COVER ON ALL SANITARY SEWER AND SERVICES, UNLESS OTHERWISE NOTED. PROVIDE INSULATION OVER SANITARY SEWER AND SERVICES WITH PROPOSED ELEVATIONS LESS THAN MINIMUM BURY DEPTH PER PROJECT DETAILS AND UTILITY PROVIDER REQUIREMENTS.
- CONTRACTOR SHALL PROVIDE 10 FEET MINIMUM HORIZONTAL SEPARATION (OUTSIDE EDGE OF PIPE TO OUTSIDE EDGE OF PIPE/STRUCTURE) BETWEEN WATER LINES AND SANITARY OR STORM LINES AND STRUCTURES
- CONTRACTOR SHALL PROVIDE 18 INCH MINIMUM VERTICAL SEPARATION (OUTSIDE EDGE OF PIPE TO OUTSIDE EDGE OF PIPE) BETWEEN WATER LINES AND OTHER UTILITY LINE CROSSINGS. PROVIDE INSULATION WHERE WATER, SANITARY OR STORM UTILITIES CROSS. OFFSET WATERMAIN AND SERVICES AS NECESSARY.
- PIPE LENGTH INDICATED BETWEEN STRUCTURES IS FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE UNLESS NOTED OTHERWISE.
- PIPE SIZES SHOWN ON THE PLANS ARE INTERNAL PIPE DIAMETER.
- CONTRACTOR SHALL INSTALL TRACER WIRE ON ALL SEWER AND WATER MAINS, LATERALS, SERVICE PIPE AND CONNECTIONS TO RISERS, CURB BOXES, MANHOLES, VALVES, HYDRANTS PER CITY/UTILITY PROVIDER REQUIREMENTS AND PROJECT DETAILS AND SPECIFICATIONS.
- IN THE EVENT OF A VERTICAL CONFLICT BETWEEN WATER LINES, SANITARY LINES, STORM LINES AND GAS LINES (EXISTING AND PROPOSED), THE WATER LINE MUST INCLUDE ONE FULL LENGTH OF PIPE SO BOTH JOINTS ARE AS FAR FROM THE SEWER/UTILITY AS POSSIBLE AND SHALL HAVE MECHANICAL JOINTS WITH APPROPRIATE THRUST BLOCKING AS REQUIRED TO PROVIDE MINIMUM CLEARANCE.
- WATERMANS AND SERVICES SHALL NOT HAVE ANY INTERMITTENT HIGH POINTS, EXCEPT AT HYDRANTS OR AS NOTED AT SPECIFIC LOCATIONS ON THE PLANS.
- CONTRACTOR SHALL VERIFY PIPE SIZE, MATERIAL, AND ELEVATION FOR ALL CONNECTIONS. PROVIDE APPROPRIATE PIPES AND FITTINGS REQUIRED TO MAKE CONNECTIONS TO EXISTING INFRASTRUCTURE AS VERIFIED IN THE FIELD IN ACCORDANCE WITH CITY/UTILITY PROVIDER REQUIREMENTS.
- WATER AND SANITARY SEWER SERVICES ARE SHOWN TERMINATING AT THE BUILDING FOOTPRINT BUT ARE DESIGNED TO WITHIN 5 FEET OF THE BUILDING FOOTPRINT. VERIFY WITH MEP/PLUMBING PLANS/DESIGNER FOR EXACT LOCATIONS, ELEVATIONS, AND DIMENSIONS OF BACKFLOW DEVICES (DDCV AND PRZ ASSEMBLIES), METERS, AND BUILDING UTILITY ENTRANCE LOCATIONS. SERVICE DESIGNS AND INVERTS WITHIN 5 FEET OF THE BUILDING ARE FOR ILLUSTRATIVE AND REFERENCE PURPOSES ONLY. SEE MEP/PLUMBING PLANS FOR CONTINUATION. VERIFY LOCATIONS AND INVERT ELEVATIONS WITH MEP/PLUMBING PLANS. PROVIDE A RISER PIPE AS NEEDED TO MATCH PLUMBING PIPING.
- WATER AND SANITARY SEWER SERVICE SIZES AND ALIGNMENT ARE PRELIMINARY. CONTRACTOR TO DETERMINE FINAL SIZING AND ALIGNMENT W/ MEP DESIGN. IN THE EVENT THE FINAL SIZE OR ALIGNMENT IS DIFFERENT THAN PRELIMINARY, CONTRACTOR SHALL NOTIFY THE ENGINEER AND OWNER IN WRITING IMMEDIATELY.
- LINES UNDERGROUND SHALL BE INSTALLED, INSPECTED, AND APPROVED PRIOR TO BACKFILLING IN ACCORDANCE WITH CITY OF LAKE ELMO REQUIREMENTS.
- CONTRACTOR SHALL PLACE AND COMPACT SUITABLE FILL MATERIAL BEFORE INSTALLATION OF PROPOSED UTILITIES.

UTILITY NOTES (CONT.)

18. ANY EXISTING STRUCTURES (I.E. MANHOLES, VALVES, ETC.) WITHIN THE LIMITS OF DISTURBANCE SHALL HAVE RIMS ADJUSTED TO MATCH PROPOSED GRADES, UNLESS NOTED OTHERWISE. ADJUSTMENTS SHALL BE IN ACCORDANCE WITH CITY/AGENCY HAVING JURISDICTION REQUIREMENTS.
19. SANITARY SEWER MAIN, SERVICE PIPES, FITTINGS, AND STRUCTURES SHALL MEET THE FOLLOWING REQUIREMENTS:
- SANITARY SERVICE PIPE: PVC SCHEDULE 40 PER ASTM D1785
 - SANITARY PIPE FITTINGS: ASTM D2665 FOR SDR AND SCH 40 PVC PIPE, INJECTION MOLDED (GRAVITY LINES ONLY)
 - SANITARY PIPE JOINTS: ASTM F656 AND D2564 FOR SCHEDULE 40 PIPE
 - SANITARY SYSTEM TRACER WIRE: CITY REQUIREMENTS
20. WATERMAIN, SERVICE PIPES AND FITTINGS TO MEET THE FOLLOWING REQUIREMENTS:
- WATER SERVICE PIPING - 4 INCHES AND LARGER: DUCTILE IRON PIPE CLASS 52 PER AWWA C150, C151 AND C104
 - WATER SERVICE PIPE FITTINGS - 4 INCHES AND LARGER: AWWA C513, 250 PSI WORKING PRESSURE WITH INTERNAL AND EXTERNAL COATING PER AWWA C116 AND CITY REQUIREMENTS.
 - WATERMAIN AND SERVICE PIPE JOINTS: AWWA C111 WITH MECHANICAL JOINTS AND THRUST BLOCKING PER PROJECT DETAILS.
 - WATERMAIN STUBS: MECHANICALLY RESTRAINED JOINTS WITH THRUST BLOCKING PER PROJECT DETAILS.
 - WATER SYSTEM TRACER WIRE: CITY REQUIREMENTS
 - ENCASEMENT: POLYETHYLENE ENCASEMENT MATERIAL IN ACCORDANCE WITH AWWA C105 FOR TUBE TYPE INSTALLATION AND 8 MIL NOMINAL FILM THICKNESS.
 - JOINT RESTRAINT: PROVIDE AT ALL BENDS, TEES, AND DEAD-ENDS/STUBS IN ACCORDANCE WITH THE REQUIREMENTS OF CEAM AND EBAA IRON RESTRAINT LENGTH CALCULATOR.
 - THRUST BLOCKING: PROVIDE BLOCKING IN ACCORDANCE WITH CITY REQUIREMENTS.
 - HYDRANTS: PER CITY REQUIREMENTS
 - VALVES: PER CITY REQUIREMENTS
21. CONTRACTOR SHALL INSTALL AND PROVIDE BEDDING FOR PIPING/ STRUCTURES IN ACCORDANCE WITH CEAM, ASTM D 2321 AND ASTM F 1668 (FOR GRAVITY SEWER), ASTM D 2774 (FOR PRESSURE PIPE), ASTM C 1479 (FOR RC PIPE), AWWA C600 (FOR DIP PIPE), AWWA C605 (FOR PVC), ASTM A 798 (FOR CMP), AND PROJECT/MANUFACTURER DETAILS AND SPECIFICATIONS.
22. IF MANUFACTURER DETAILS SPECIFY DESIGN COMPONENTS TO BE DETERMINED BY SITE DESIGN ENGINEER, CONTRACTOR IS RESPONSIBLE FOR CONTACTING SITE DESIGN ENGINEER TO VERIFY SYSTEM REQUIREMENTS PRIOR TO CONSTRUCTION IF NOT NOTED IN THE DRAWINGS.
23. CONTRACTOR SHALL COMPACT EMBANKMENT/BEDDING/BACKFILL MATERIAL IN ACCORDANCE WITH UTILITY PROVIDER REQUIREMENTS, THE GEOTECHNICAL REPORT, AND SITE TESTING REQUIREMENTS.
24. CONTRACTOR SHALL MEET MOISTURE CONTENT/CONTROL REQUIREMENTS IN ACCORDANCE WITH CITY/UTILITY PROVIDER REQUIREMENTS, THE GEOTECHNICAL REPORT, AND SITE TESTING REQUIREMENTS.
25. FIELD QUALITY CONTROL, TESTING, INSPECTIONS, AND CERTIFICATIONS MUST COMPLY WITH THE FOLLOWING:
- ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY CODES, AGENCY HAVING JURISDICTION AND UTILITY PROVIDER COMPANIES.
 - SANITARY LINES AND STRUCTURES, INCLUDING BUT NOT LIMITED TO:
 - SERVICE PIPE AND STRUCTURES TESTING: MEET MN PLUMBING CODE CHAPTER 7 SECTIONS 712 AND 723 REQUIREMENTS
 - LEAKAGE TESTING: CEAM 2621.3.E (AIR TEST METHOD OR HYDROSTATIC TEST METHOD) AND AS REQUIRED BY THE MN PLUMBING CODE AND IN ACCORDANCE WITH THE AUTHORITY HAVING JURISDICTION.
 - DEFLECTION TESTING: CEAM 2621.3.F AND AS REQUIRED BY THE MN PLUMBING CODE. 5-PERCENT DEFLECTION ALLOWANCE.
 - TELEVISION: TELEVISION IN ACCORDANCE WITH CEAM 2621.3.G AND AUTHORITY HAVING JURISDICTION.
 - CONDUCTIVITY/TRACING TESTING: COMPLETE ON THE TRACER WIRE AFTER INSTALLATION OF ALL PROJECT UTILITIES AND PRIOR TO FINAL ACCEPTANCE. TRACER WIRE CONDUCTIVITY SHALL BE CONDUCTED IN THE PRESENCE OF THE ENGINEER AND OWNER. TEST ALL LINES INCLUDING HYDRANT LEADS, WATER SERVICES, SEWER SERVICES AND STUBS. TEST. PHYSICALLY LOCATE ALL PIPES WITH USE OF AN ELECTRONIC UTILITY LOCATING DEVICE SUCH AS A "METROTECH". CONTINUITY TESTING IN LIEU OF ACTUAL LINE TRACING SHALL NOT BE ACCEPTED.
 - WATER LINES AND STRUCTURES, INCLUDING BUT NOT LIMITED TO:
 - SERVICE PIPE AND STRUCTURES TESTING: MEET MN PLUMBING CODE CHAPTER 6 SECTIONS 603 AND 609 REQUIREMENTS AND CITY REQUIREMENTS
 - HYDROSTATIC PRESSURE TESTING: PER AWWA C600/C605 AND CITY REQUIREMENTS
 - DISINFECTION TESTING: DISINFECT IN ACCORDANCE WITH AWWA C651, CEAM 2611.3.E, AND MDH BACTERIOLOGIC QUALITY TEST AND CITY REQUIREMENTS.
 - CONDUCTIVITY/TRACING TESTING: MEET CITY REQUIREMENTS
 - SERVICE TRENCH COMPACTION TESTING: ONE DENSITY AND MOISTURE TEST PER EVERY OTHER SERVICE TRENCH UP TO 100 LINEAL FEET. ONE ADDITIONAL TEST FOR EACH 100 LINEAL FEET OR FRACTION THEREOF. RANDOM SAMPLING AT VARYING DEPTHS AND LOCATIONS ACROSS ALL TRENCHES (NOT ALL TESTS TO BE DONE AFTER THE 1ST OR 2ND LIFT IS PLACED).
 - SANITARY STRUCTURE COMPACTION TESTING: ONE DENSITY AND ONE MOISTURE TEST PER STRUCTURE. ONE ADDITIONAL TEST FOR EACH 10 FEET OF DEPTH OR FRACTION THEREOF. RANDOM SAMPLING AT VARYING DEPTHS AND LOCATION ACROSS ALL STRUCTURES.
 - WATERMAIN TRENCH COMPACTION TESTING: ONE DENSITY AND MOISTURE TEST PER 250 LINEAL FEET OF PIPE PER FOOT OF DEPTH. RANDOM SAMPLING AT VARYING DEPTHS AND LOCATIONS ACROSS ALL WATERMAIN PIPES.
 - WATER STRUCTURE/VALVE COMPACTION TESTING: ONE DENSITY AND ONE MOISTURE TEST PER STRUCTURE. ONE ADDITIONAL TEST FOR EACH 10 FEET OF DEPTH OR FRACTION THEREOF. RANDOM SAMPLING AT VARYING DEPTHS AND LOCATION ACROSS ALL STRUCTURES.
26. TOLERANCES:
- SANITARY PIPE HORIZONTAL: WITHIN 0.50 FEET OF ALIGNMENT
 - SANITARY PIPE VERTICAL: ZERO PLUS AND 0.08 FEET MINUS ELEVATION SHOWN WITH NO INTERMEDIATE HIGH POINTS, LEVEL SECTION, OR REVERSE INVERT SLOPE.
 - SANITARY PIPE JOINT DEFLECTION: NO MORE THAN 75% OF MAXIMUM ALLOWABLE, AS RECOMMENDED BY MANUFACTURERS OF PIPE AND JOINT MATERIAL
 - SANITARY STRUCTURE RIM ELEVATIONS: ZERO PLUS AND 0.08 FEET MINUS ELEVATION SHOWN
 - WATER PIPE HORIZONTAL: WITHIN 0.50 FEET OF ALIGNMENT
 - WATER PIPE VERTICAL: 0 FEET PLUS AND 1 FEET MINUS ELEVATION SHOWN, WHILE MEETING THE MINIMUM SEPARATION REQUIREMENTS AT CROSSINGS.
 - WATER PIPE JOINT DEFLECTION: NO MORE THAN 75% OF MAXIMUM ALLOWABLE, AS RECOMMENDED BY MANUFACTURERS OF PIPE AND JOINT MATERIAL
 - HYDRANT/VALVE/CASTING ELEVATION: WITHIN 0.05 FEET OF FINAL ELEVATION. VALVE/TRACER WIRE BOXES, CURB STOPS, AND CASTINGS SHALL NOT EXTEND ABOVE FINAL PAVED SURFACE ELEVATION

STORM SEWER NOTES

- SEE GENERAL NOTES FOR ADDITIONAL PROJECT AND SITE INFORMATION.
- CONTRACTOR SHALL COMPLY WITH THE SPECIFICATIONS OF THE CITY/UTILITY PROVIDER, CEAM, AND MINNESOTA PLUMBING CODE (MINNESOTA RULES CHAPTER 4714) FOR MATERIALS, INSTALLATION, AND TESTING OF STORM UTILITIES.
- CONTRACTOR SHALL PROVIDE 10 FEET SEPARATION (OUTSIDE EDGE OF PIPE TO OUTSIDE EDGE OF PIPE/STRUCTURE) BETWEEN WATER LINES AND SANITARY OR STORM LINES AND STRUCTURE.

STORM SEWER NOTES (CONT.)

- CONTRACTOR SHALL PROVIDE 18 INCH MINIMUM VERTICAL SEPARATION (OUTSIDE EDGE OF PIPE TO OUTSIDE EDGE OF PIPE/STRUCTURE) BETWEEN WATER LINES AND OTHER UTILITY LINES. PROVIDE INSULATION WHERE WATER, SANITARY, OR STORM UTILITIES CROSS. OFFSET WATERMAIN AND SERVICES AS NECESSARY.
- CONTRACTOR SHALL VERIFY PIPE SIZE, MATERIAL, AND ELEVATION FOR CONNECTIONS. PROVIDE APPROPRIATE PIPES AND FITTINGS REQUIRED TO MAKE CONNECTIONS TO EXISTING INFRASTRUCTURE AS VERIFIED IN THE FIELD.
- CONTRACTOR SHALL PLACE AND COMPACT SUITABLE FILL MATERIAL BEFORE INSTALLATION OF PROPOSED UTILITIES.
- CONTRACTOR IS RESPONSIBLE FOR PROPERLY LOCATING AND INSTALLING CATCH BASINS SO THAT THE INLET FRAME AND GRATE PROPERLY ALIGN WITH CURB AND GUTTER.
- DRAINTILE/SUBSOIL DRAIN AROUND BUILDING PERIMETER NOT SHOWN ON CIVIL DRAWINGS. CONTRACTOR SHALL VERIFY IF DRAINTILE REQUIRED WITH ARCHITECT/STRUCTURAL/MEP AND COORDINATE CONNECTION TO STORM SYSTEM WITH ENGINEER.
- LINES UNDERGROUND SHALL BE INSTALLED, INSPECTED, AND APPROVED PRIOR TO BACKFILLING IN ACCORDANCE WITH AGENCY HAVING JURISDICTION REQUIREMENTS.
- PIPE LENGTH INDICATED BETWEEN STRUCTURES IS FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE UNLESS NOTED OTHERWISE. PIPE LENGTH INDICATED BETWEEN STRUCTURE AND FLARED END SECTION IS FROM CENTER OF STRUCTURE TO END OF FLARED END SECTION.
- PIPE SIZES SHOWN ON THE PLANS ARE INTERNAL PIPE DIAMETER.
- IF MANUFACTURER DETAILS SPECIFY DESIGN COMPONENTS TO BE DETERMINED BY SITE DESIGN ENGINEER, CONTRACTOR IS RESPONSIBLE FOR CONTACTING SITE DESIGN ENGINEER TO VERIFY SYSTEM REQUIREMENTS PRIOR TO CONSTRUCTION IF NOT NOTED IN THE DRAWINGS.
- STORM SEWER MAINS, SERVICE PIPES, FITTINGS, AND STRUCTURES TO MEET THE FOLLOWING REQUIREMENTS:
 - HDPE/PP PIPE: CORRUGATED DUAL WALL HDPE WATER TIGHT PIPE PER AASHTO M 294 ASTM F2306, ASTM D3212, AND ASTM F477
 - PVC PIPE: PVC SCH 40 PER ASTM D1785 AND ASTM D2665. INJECTION MOLDED FITTINGS.
 - ROOF DRAIN PIPE AND FITTINGS: PVC SCH 40 PER ASTM D 1785 AND ASTM D 2665. INJECTION MOLDED FITTINGS.
 - PIPE JOINTS: JOINTS MUST BE CERTIFIED BY THE MANUFACTURER TO BE ABLE TO PASS THE AIR TEST OR INTERNAL HYDROSTATIC PRESSURE REQUIRED BY THE AGENCY HAVING JURISDICTION.
 - PIPE CONNECTION TO EXISTING PIPE: FOR DISSIMILAR PIPE CONNECTIONS USE MARMAC DISSIMILAR PIPE COUPLERS OR APPROVED EQUAL.
 - PIPE CONNECTION TO EXISTING STORM STRUCTURE: CONTRACTOR SHALL PROVIDE AND INSTALL A FLEXIBLE COMPRESSION JOINT TO MAKE WATERTIGHT CONNECTIONS TO MANHOLES IN ACCORDANCE WITH MINNESOTA PLUMBING CODE, SECTION 719.6. RESILIENT RUBBER JOINTS MEETING ASTM C923 MAY BE USED IF APPROVED BY AGENCY HAVING JURISDICTION. SEE PROJECT DETAILS.
 - STORM PRECAST STRUCTURES GENERAL: ASTM C478 AND DRAWING DETAILS.
 - STORM PRECAST STRUCTURE JOINTS: RUBBER O-RING GASKET MEETING ASTM C443
 - STORM PRECAST STRUCTURE STEPS: PER DETAILS
 - STORM PRECAST STRUCTURE DESIGN: DETAILED AND PREPARED BY A PROFESSIONAL ENGINEER EXPERIENCED IN PRECAST CONCRETE STRUCTURE DESIGN WHO IS LICENSED IN THE STATE OF MINNESOTA. DESIGN SHALL CONFORM TO A MINIMUM SAFETY FACTOR OF 1.3 FOR BUOYANCY AND FLOTATION WITH THE HYDROSTATIC LOADING (WATER TABLE ELEVATIONS) ASSUMED FROM THE TOP OF THE STRUCTURE. THE DESIGN OF THE BASE SLAB, WALLS, AND TOP SLAB SHALL BE DESIGNED FOR SHEAR STRENGTH, FLEXURAL STRENGTH, AND OTHER APPLICABLE STRENGTHS DUE TO HYDROSTATIC LOADING. THE DESIGN SHALL BE IN ACCORDANCE WITH THE MOST CURRENT ACI 318, AASHTO, AND MNDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION, EXCEPT AS NOTED.
 - STORM PRECAST STRUCTURE MORTAR MATERIALS: ASTM C270 AND ASTM C387 WITH AIR CONTENT OF AT LEAST 8 PERCENT.
 - STORM PRECAST STRUCTURE ADJUSTMENT RINGS: SIZE TO MATCH CONE OR OPENING IN TOP SLAB. CONCRETE WITH MINIMUM 3,000 PSI COMPRESSIVE STRENGTH, SINGLE HOOP 8-GAUGE STEEL WIRE REINFORCEMENT, AND 2 INCH THICKNESS EACH RING.
 - STORM PRECAST STRUCTURE ADHESION MATERIAL: BETWEEN TOP SLAB AND BARREL SECTION - RAM-NEK OR APPROVED EQUAL. FOR CONCRETE RINGS, USE MORTAR MATERIALS.
 - STORM PRECAST STRUCTURE INTERNAL/EXTERNAL SEAL: IN ACCORDANCE WITH CITY REQUIREMENTS
- STORM PIPE BEDDING: CONTRACTOR SHALL INSTALL AND PROVIDE BEDDING FOR PIPING/STORMWATER SYSTEMS/VAULTS/CHAMBERS/ STRUCTURES IN ACCORDANCE WITH CEAM, ASTM D 2321 AND ASTM F 1668 (FOR GRAVITY SEWER), ASTM D 2774 (FOR PRESSURE PIPE), ASTM C 1479 (FOR RC PIPE), AWWA C600 (FOR DIP PIPE), AWWA C605 (FOR PVC), ASTM A 798 (FOR CMP), AND PROJECT/MANUFACTURER DETAILS AND SPECIFICATIONS.
- STORM SYSTEM TRACER WIRE: CEAM 2611 AND CITY AND WATERSHED REQUIREMENTS
- CONTRACTOR SHALL COMPACT EMBANKMENT/BEDDING/BACKFILL MATERIAL IN ACCORDANCE WITH CITY REQUIREMENTS, IN ACCORDANCE WITH THE GEOTECHNICAL REPORT, AND SITE TESTING REQUIREMENTS.
- CONTRACTOR SHALL MEET MOISTURE CONTENT/CONTROL REQUIREMENTS IN ACCORDANCE WITH CITY REQUIREMENTS, THE GEOTECHNICAL REPORT, AND SITE TESTING REQUIREMENTS.
- FIELD QUALITY CONTROL, TESTING, INSPECTIONS, AND CERTIFICATIONS MUST COMPLY WITH THE FOLLOWING:
 - ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY CODES, AGENCY HAVING JURISDICTION AND UTILITY SERVICE COMPANIES.
 - STORM LINES AND STRUCTURES, INCLUDING BUT NOT LIMITED TO:
 - SERVICE PIPE AND ROOF DRAIN LEADERS TESTING TO COMPLY WITH MN PLUMBING CODE CHAPTER 7 SECTION 712 AND CHAPTER 11 SECTION 1107
 - ALL PORTIONS OF SYSTEM (PIPE AND STRUCTURES) THAT PASS WITHIN 10 FEET OF A WATER LINE, WITHIN 10 FEET OF A BUILDING, WITHIN 50 FEET OF WATER WELLS, OR THAT PASS THROUGH SOIL OR WATER IDENTIFIED AS BEING CONTAMINATED MUST BE TESTED IN ACCORDANCE WITH MN PLUMBING CODE CHAPTER 11 SECTION 1107.
 - STORM PIPE DEFLECTION TESTING: CEAM 2621.3.F AND AS REQUIRED BY THE MN PLUMBING CODE AND CITY AND WATERSHED REQUIREMENTS. 5-PERCENT DEFLECTION ALLOWANCE OF PIPE'S INTERNAL DIAMETER.
 - STORM PIPE LEAKAGE TESTING: CEAM 2621.3.E AND AS REQUIRED BY THE MN PLUMBING CODE AND CITY AND WATERSHED REQUIREMENTS.
 - STORM PIPE LAMPING: VERIFY INSTALLATION IS TRUE TO LINE AND GRADE. VERIFY INSTALLED PIPE IS STRUCTURALLY SOUND. VERIFY THERE ARE NO BROKEN OR DEFLECTIVE PIPES. VERIFY THAT JOINTS ARE ALL PUSHED HOME. VERIFY STRUCTURES CONFORM TO SPECIFIED REQUIREMENTS. PROVIDE VERIFICATION OF THE ABOVE IN WRITING TO THE OWNER AND ENGINEER.
 - STORM PIPE INFILTRATION TESTING: INFILTRATION: 1) TO DETERMINE THE AMOUNT OF GROUNDWATER INFILTRATION INTO THE SEWERS. 2) TEST WAIVED IF NO VISIBLE INFILTRATION IS OBSERVED DURING THE LAMPING INSPECTIONS. 3) MEASUREMENT MADE BY MEANS OF 90 DEGREE V-NOTCH WEIRS PLACED IN THE LINES AS DIRECTED BY THE ENGINEER. 4) MEASUREMENTS TAKEN AT THE POINTS WHERE IN THE ENGINEERS OPINION THE FLOW OF WATER IN THE SEWER IS GREATER THAN THE MAXIMUM ALLOWABLE LEAKAGE. 5) MAXIMUM ALLOWABLE RATE OF LEAKAGE: NOT MORE THAN 100 GALLONS PER MILE PER INCH DIAMETER PER DAY. 6) TESTS MAY BE TAKEN BETWEEN INDIVIDUAL MANHOLES AND THE INFILTRATION IN ANY GIVEN LINE MUST NOT EXCEED THE SPECIFIED MAXIMUM ALLOWABLE RATE. 7) METHOD OF MEASUREMENT: MEASUREMENT OF TIME FOR A PREDETERMINED VOLUME OF FLOW TO OCCUR.
 - STORM PIPE CONTINUITY TESTING: IN ACCORDANCE WITH CEAM 2611.3.F AND THE AUTHORITY HAVING JURISDICTION.
 - TELEVISION: CEAM 2621.3.G AND CITY AND WATERSHED REQUIREMENTS
 - STORM PIPE TRENCH COMPACTION TESTING: ONE DENSITY AND MOISTURE TEST PER 100 LINEAL FEET OF PIPE PER FOOT OF DEPTH. RANDOM SAMPLING AT VARYING DEPTHS AND LOCATIONS ACROSS ALL STORM PIPES.

STORM SEWER NOTES (CONT.)

- STORM STRUCTURE COMPACTION TESTING: ONE DENSITY AND ONE MOISTURE TEST PER STRUCTURE. ONE ADDITIONAL TEST FOR EACH 10 FEET OF DEPTH OR FRACTION THEREOF. RANDOM SAMPLING AT VARYING DEPTHS AND LOCATION ACROSS ALL STRUCTURES.
 - A COPY OF THE TEST RESULTS MUST BE PROVIDED TO THE OWNER, ENGINEER, UTILITY PROVIDER, AND AGENCY HAVING JURISDICTION.
- CONTRACTOR SHALL CLEAN STRUCTURES AND PIPING OF DEBRIS AND SEDIMENT DURING AND AT THE END OF CONSTRUCTION UNTIL ACCEPTED BY THE OWNER AND ENGINEER.
- REFER TO THE MEP PLANS FOR EXACT LOCATIONS, ELEVATIONS, AND DIMENSIONS OF BUILDING STORM UTILITY ENTRANCE LOCATIONS.
- TOLERANCES:
 - STORM PIPE HORIZONTAL TOLERANCE: WITHIN 0.50 FEET OF ALIGNMENT
 - STORM PIPE VERTICAL TOLERANCE: ZERO PLUS AND 0.08 FEET MINUS ELEVATION SHOWN WITH NO INTERMEDIATE HIGH POINTS, LEVEL SECTION, OR REVERSE INVERT SLOPE.
 - STORM PIPE JOINT DEFLECTION TOLERANCE: NO MORE THAN 75% OF MAXIMUM ALLOWABLE, AS RECOMMENDED BY MANUFACTURERS OF PIPE AND JOINT MATERIAL
 - STORM STRUCTURE RIM ELEVATION TOLERANCE: ZERO PLUS AND 0.08 FEET MINUS ELEVATION SHOWN

HORIZONTAL AND VERTICAL CONTROL NOTES

- SEE GENERAL NOTES FOR ADDITIONAL PROJECT AND SITE INFORMATION.
- THE HORIZONTAL CONTROL FOR THIS PLAN IS NAD 83 WASHINGTON COUNTY COORDINATES SYSTEM, US SURVEY FOOT
- THE VERTICAL CONTROL FOR THE PLAN IS NAVD88

TYPICAL PROJECT OBSERVATIONS

- SEE GENERAL NOTES FOR ADDITIONAL PROJECT AND SITE INFORMATION.
- CONTRACTOR MUST NOTIFY OWNER, ENGINEER, AND CITY IN WRITING A MINIMUM OF 2 BUSINESS DAYS IN ADVANCE OF THE FOLLOWING ACTIVITIES FOR ATTENDANCE AND OBSERVATION: PRE-CONSTRUCTION MEETING, UNDERGROUND PIPING AND UTILITIES INSTALLATION, UTILITY TESTING, STRUCTURES AND APPURTENANCES INSTALLATION, SUBGRADE PREPARATION, BASE INSTALLATION, CURB INSTALLATION, AND PAVEMENT INSTALLATION.

TEST REPORTS REQUIRED

- SEE GENERAL NOTES FOR ADDITIONAL PROJECT AND SITE INFORMATION.
- COPIES OF COMPACTION/MOISTURE, CONCRETE, AND OTHER TEST RESULTS ARE TO BE SENT TO THE OWNER DIRECTLY FROM THE INDEPENDENT TESTING LABORATORY.
- ONSITE/INPLACE GEOTECHNICAL/CONCRETE TESTING MUST BE COMPLETED BY THE CONTRACTOR'S INDEPENDENT TESTING LABORATORY. CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL REQUIRED IN-PLACE TESTS AND INSPECTIONS WITH THE ENGINEER/INDEPENDENT TESTING LABORATORY.
- TEST REPORTS REQUIRED MAY INCLUDE, BUT ARE NOT NECESSARILY LIMITED TO: DENSITY TESTS OF SOIL AND PAVEMENT COMPACTION, CONCRETE COMPRESSION, AIR, AND SLUMP TESTS, BACTERIOLOGICAL TESTS OF WATER SYSTEM, MANDREL TESTS OF SANITARY AND STORM SYSTEM, PRESSURE/LEAK TESTS OF WATER/SANITARY/STORM SYSTEM, AND OTHER TESTING REQUIRED BY AGENCY/MUNICIPALITY HAVING JURISDICTION.
- RE-WORK/RE-TESTING DUE TO FIELD TEST FAILURE ARE AT NO ADDITIONAL COST TO THE OWNER.



1 CARLSON PKWY N
PLYMOUTH, MN 55447
PHONE: 763-479-4200
WWW.STANTEC.COM

CLIENT:



PRIMROSE SCHOOL -
LAKE ELMO
LAKE ELMO, WASHINGTON COUNTY,
MINNESOTA

PROJECT TITLE

ISSUE NO.:

1

DESCRIPTION:

SITE PERMIT PLANS

DATE:

04/10/2025

PROJECT NO.:

190300279

DWN BY:

KRM

CHKD BY:

AWD

APPD BY:

JRA

ISSUE DATE:

04/10/2025

ISSUE NO.:

1

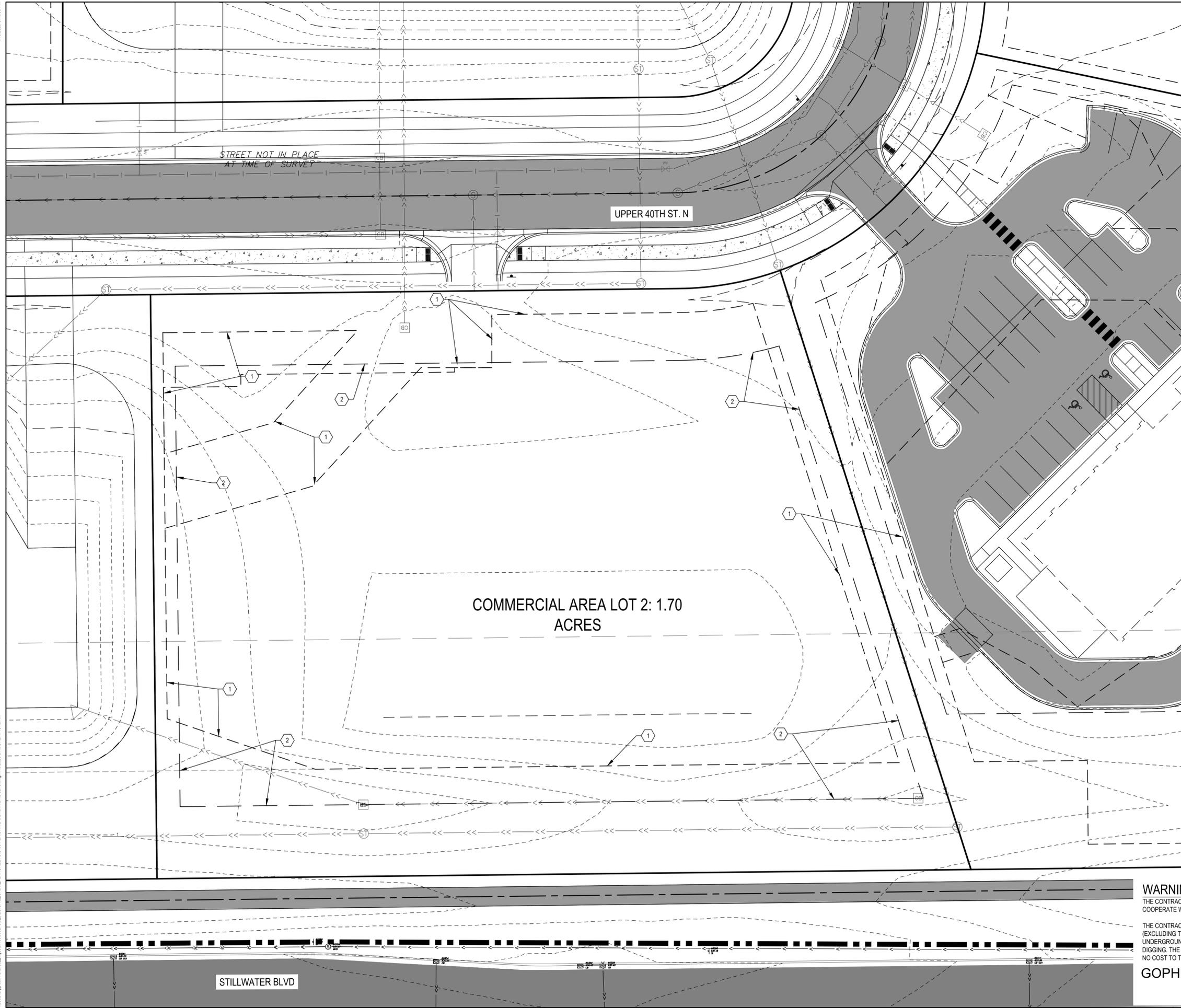
SHEET TITLE:

GENERAL NOTES

SHEET NO.:

G-003

4/10/2025 3:13:58 PM



STREET NOT IN PLACE
AT TIME OF SURVEY

UPPER 40TH ST. N

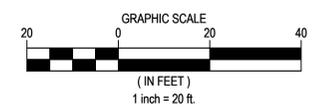
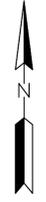
COMMERCIAL AREA LOT 2: 1.70
ACRES

STILLWATER BLVD

WARNING:
THE CONTRACTOR SHALL BE RESPONSIBLE FOR CALLING FOR LOCATIONS OF ALL EXISTING UTILITIES. THEY SHALL COOPERATE WITH ALL UTILITY COMPANIES IN MAINTAINING THEIR SERVICE AND/OR RELOCATION OF LINES.

THE CONTRACTOR SHALL CONTACT GOPHER STATE ONE CALL AT 651-454-0002 AT LEAST 48 HOURS IN ADVANCE (EXCLUDING THE DAY OF THE REQUEST AND EXCLUDING HOLIDAYS AND WEEKENDS) FOR THE LOCATIONS OF ALL UNDERGROUND WIRES, CABLES, CONDUITS, PIPES, MANHOLES, VALVES OR OTHER BURIED STRUCTURES BEFORE DIGGING. THE CONTRACTOR SHALL REPAIR OR REPLACE THE ABOVE WHEN DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.

GOPHER STATE ONE CALL
TWIN CITY AREA: 651-454-0002
TOLL FREE 1-800-252-1166



LEGEND

- PROPERTY BOUNDARY
- LOT LINE
- EASEMENT LINE
- RIGHT OF WAY LINE
- SECTION LINE
- QUARTER LINE
- EXISTING STORM SEWER
- EXISTING SANITARY SEWER
- F/O F/O EXISTING UNDERGROUND FIBER OPTIC LINE
- UE UE EXISTING UNDERGROUND ELECTRIC LINE
- EXISTING EDGE OF PAVEMENT
- EXISTING CONCRETE SURFACE
- EXISTING ASPHALT SURFACE
- EXISTING MINOR CONTOUR
- EXISTING MAJOR CONTOUR
- EXISTING SANITARY MANHOLE
- EXISTING STORM SEWER INLET
- EXISTING STOP LIGHT
- EXISTING SIGN
- EXISTING PEDESTRIAN POST
- EXISTING FLARED END SECTION

KEYNOTES

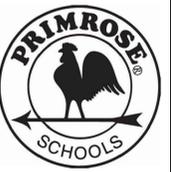
1. DRAINAGE & UTILITY EASEMENT
2. SETBACK

NOTES

1. SEE SHEET G-002 FOR ADDITIONAL PROJECT NOTES.
2. PRIMROSE SCHOOL - LAKE ELMO IS PART OF THE BRIDGEWATER VILLAGE MASTER DEVELOPMENT PLAN. EXISTING CONDITIONS OF PRIMROSE SCHOOL ARE BASED ON THE FINAL DESIGN LEVEL OF THE BRIDGEWATER VILLAGE MASTER DEVELOPMENT AND WILL REPRESENT THE SITE'S CONDITION BEFORE CONSTRUCTION BEGINS FOR PRIMROSE SCHOOL PROJECT.

Stantec
1 CARLSON PKWY N
PLYMOUTH, MN 55447
PHONE: 763-479-4200
WWW.STANTEC.COM

CLIENT:



**PRIMROSE SCHOOL -
LAKE ELMO**
LAKE ELMO, WASHINGTON COUNTY,
MINNESOTA

PROJECT TITLE

DATE	DESCRIPTION	ISSUE NO.
04/10/2025	SITE PERMIT PLANS	1

PROJECT NO.: 190300279

DWN BY: KRM	CHKD BY: AWD	APPD BY: JRA
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ISSUE DATE: 04/10/2025

ISSUE NO.: 1

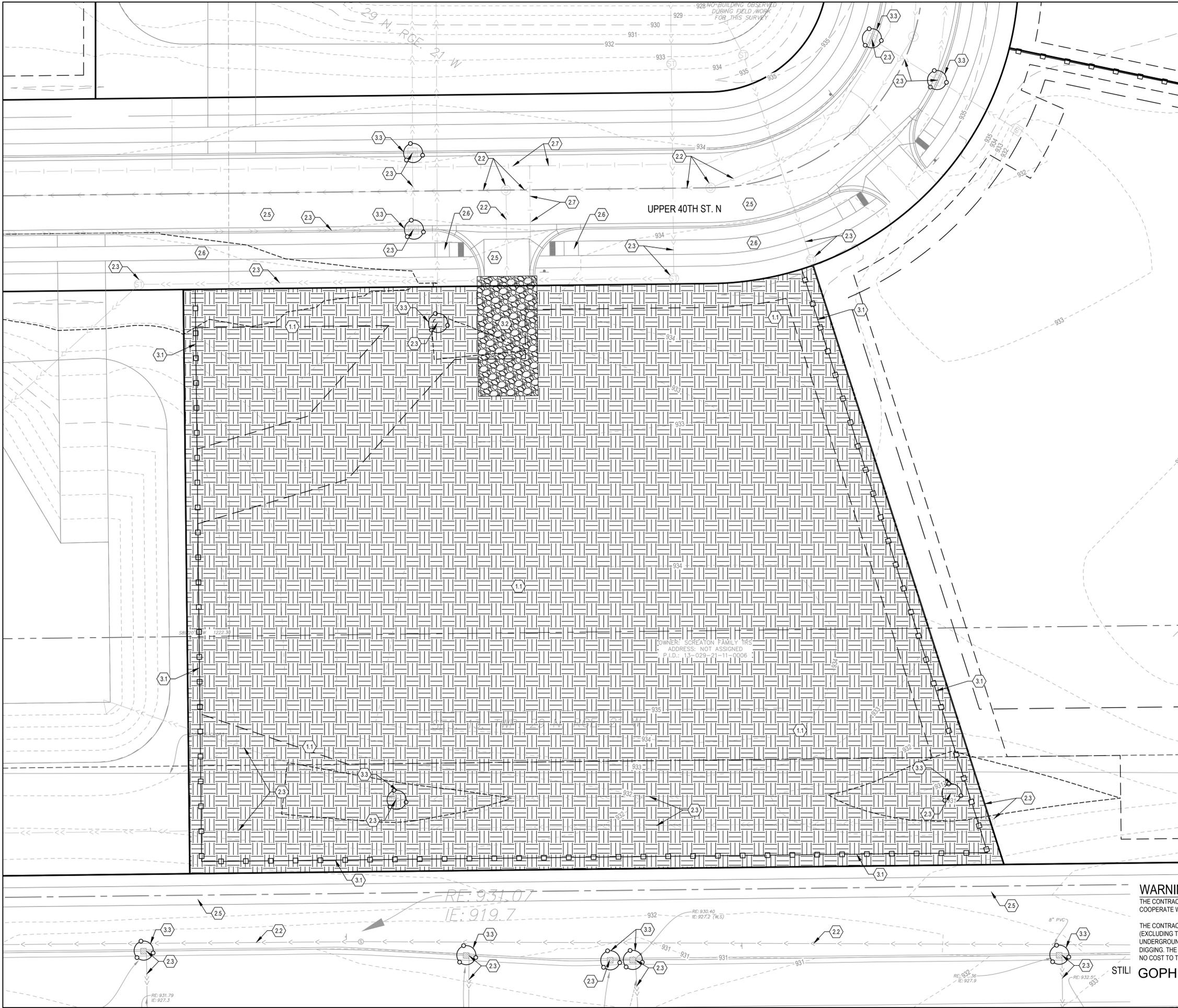
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EXISTING CONDITIONS

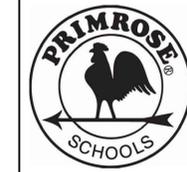
SHEET NO.:

G-004

\\na02-pj\bl\shared_projects\190300279\DESIGN\CADD_PLANSHEET\SG-04_EXISTING_CONDITIONS\0279.dwg 4/10/2025 DAUGHERTY, ADAM



CLIENT:



**PRIMROSE SCHOOL -
 LAKE ELMO**
 LAKE ELMO, WASHINGTON COUNTY,
 MINNESOTA

PROJECT TITLE

ISSUE NO.	1
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DESCRIPTION	SITE PERMIT PLANS
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DATE	04/10/2025
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PROJECT NO.	190300279
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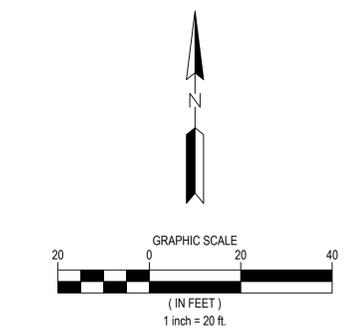
DWN BY:	CHKD BY:	APPD BY:
KRM	AWD	JRA

ISSUE DATE:	04/10/2025
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ISSUE NO.:	1
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SHEET TITLE:	REMOVALS AND PRECONSTRUCTION EROSION CONTROL PLAN
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SHEET NO.:	G-005
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LEGEND

- PROPERTY BOUNDARY
- LOT LINE
- EASEMENT LINE
- RIGHT OF WAY LINE
- SECTION LINE
- QUARTER LINE
- ROCK CONSTRUCTION ENTRANCE
- CLEAR AND GRUB AREA
- SILT FENCE
- CULVERT PROTECTION
- INLET PROTECTION
- CONSTRUCTION LIMITS

NOTES

1. SEE SHEET G-002 FOR ADDITIONAL PROJECT NOTES.
2. CONSTRUCTION SITE SHALL HAVE STABILIZED EXIT AT ALL TIMES THROUGHOUT THE DURATION OF THE PROJECT. CONTRACTOR IS ULTIMATELY RESPONSIBLE TO PROTECT DOWNSTREAM WATERS FROM CONSTRUCTION RUNOFF.
3. UNTRENCHED SILT FENCE OR ORANGE SNOW FENCE MAY BE USED FOR TREE PROTECTION.
4. CONSTRUCTION LIMITS AND SILT FENCE ARE SHOWN OFFSET FROM PROPERTY LINE FOR CLARITY, WHERE APPLICABLE.
5. CLEAR AND GRUB AS NEEDED WITHIN LIMITS OF DISTURBANCE.
6. EXISTING UTILITY SERVICE LINES MAY NOT BE SHOWN IN THEIR ENTIRETY ON PLANS. CONTRACTOR TO VERIFY LOCATIONS OF EXISTING UTILITY SERVICE LINES WITHIN THE LIMITS OF DISTURBANCE AND REMOVE EXISTING INFRASTRUCTURE AS NECESSARY TO INSTALL PROPOSED IMPROVEMENTS.
7. CONTRACTOR SHALL EVALUATE LIMITS OF REMOVAL FOR PROPOSED UTILITY INSTALLATION. IN THE EVENT THAT CURB AND PAVEMENT ARE IMPACTED CONTRACTOR SHALL REPLACE EXISTING CURB AND PAVEMENT TO MATCH EXISTING CONDITIONS PER CITY STANDARDS AND REQUIREMENTS AT NO ADDITIONAL COST TO THE OWNER.

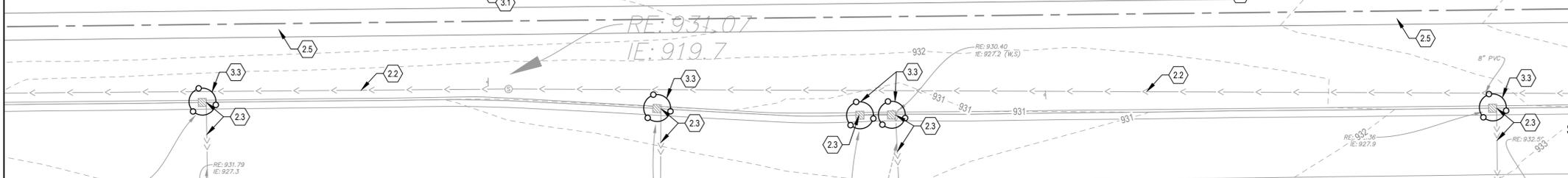
KEYNOTES

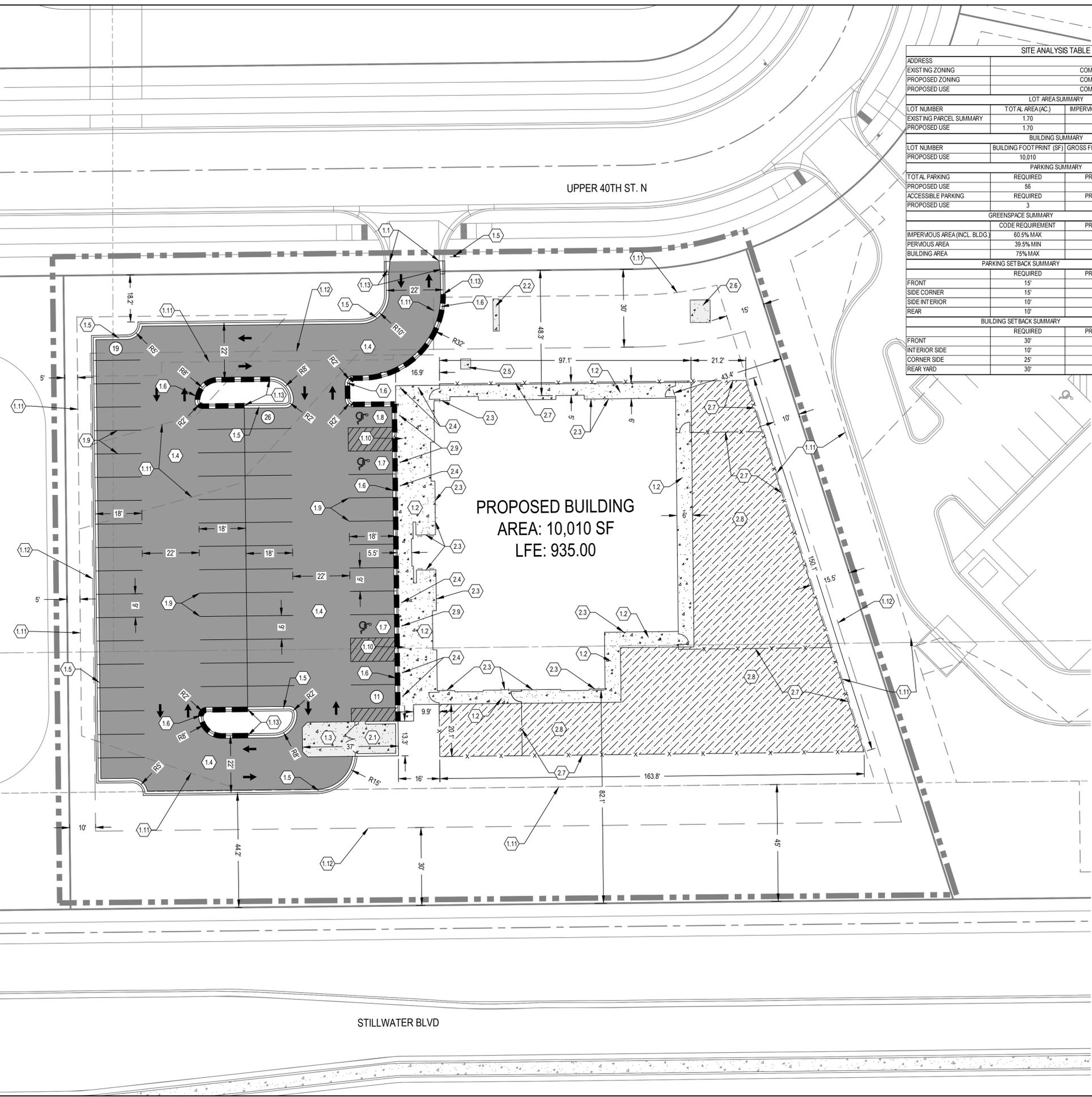
1. REMOVAL ITEM
 - 1.1. CLEAR AND GRUB
2. PROTECT ITEM
 - 2.1. PROTECT FIBER OPTIC UTILITY LINE
 - 2.2. PROTECT EXISTING SANITARY SEWER AND APPURTENANCES
 - 2.3. PROTECT EXISTING STORM SEWER AND APPURTENANCES
 - 2.4. PROTECT UNDERGROUND ELECTRIC AND APPURTENANCES
 - 2.5. PROTECT EXISTING BITUMINOUS PAVEMENT
 - 2.6. PROTECT EXISTING CONCRETE PAVEMENT
 - 2.7. PROTECT EXISTING WATER MAIN AND APPURTENANCES
3. EROSION CONTROL ITEM
 - 3.1. SILT FENCE - SEE DETAIL 601/C-801
 - 3.2. ROCK CONSTRUCTION ENTRANCE - SEE DETAIL 605/C-801
 - 3.3. SEDIMENT CONTROL AROUND STORM SEWER INLET - SEE DETAIL 604/C-801

WARNING:
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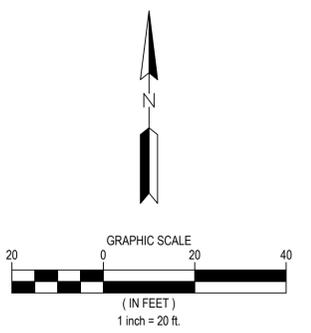
GOPHER STATE ONE CALL
 TWIN CITY AREA: 651-454-0002
 TOLL FREE 1-800-252-1166





**PROPOSED BUILDING
AREA: 10,010 SF
LFE: 935.00**

SITE ANALYSIS TABLE			
ADDRESS	TBD		
EXISTING ZONING	COMMERCIAL		
PROPOSED ZONING	COMMERCIAL		
PROPOSED USE	COMMERCIAL		
LOT AREA SUMMARY			
LOT NUMBER	TOTAL AREA (AC.)	IMPERVIOUS AREA (AC.)	PERVIOUS AREA (AC.)
EXISTING PARCEL SUMMARY	1.70	0.00	1.70
PROPOSED USE	1.70	1.00	0.70
BUILDING SUMMARY			
LOT NUMBER	BUILDING FOOTPRINT (SF)	GROSS FLOOR AREA (SF)	# OF STORIES
PROPOSED USE	10,010	17,332	2
PARKING SUMMARY			
TOTAL PARKING	REQUIRED	PROPOSED	
PROPOSED USE	56	56	
ACCESSIBLE PARKING	REQUIRED	PROPOSED	
PROPOSED USE	3	3	
GREENSPACE SUMMARY			
IMPERVIOUS AREA (INCL. BLDG.)	CODE REQUIREMENT	PROPOSED	
	60.5% MAX	59%	
PERVIOUS AREA	39.5% MIN	41%	
BUILDING AREA	75% MAX	14%	
PARKING SETBACK SUMMARY			
	REQUIRED	PROPOSED	
FRONT	15'	18'	
SIDE CORNER	15'	NA	
SIDE INTERIOR	10'	11'	
REAR	10'	44'	
BUILDING SETBACK SUMMARY			
	REQUIRED	PROPOSED	
FRONT	30'	48'	
INTERIOR SIDE	10'	43'	
CORNER SIDE	25'	NA	
REAR YARD	30'	82'	



LEGEND

- PROPERTY BOUNDARY
- LOT LINE
- EASEMENT LINE
- SETBACK LINE
- RIGHT OF WAY LINE
- CURB AND GUTTER
- ROAD CENTERLINE
- BITUMINOUS PAVEMENT
- CONCRETE SIDEWALK
- CONCRETE PAVEMENT
- PLAY AREA TURF
- FENCE
- CONSTRUCTION LIMITS
- TIP-OUT CURB AND GUTTER
- PROPOSED PARKING COUNT

KEYNOTES

1. DESIGNED BY STANTEC
 - 1.1. MATCH EXISTING
 - 1.2. CONCRETE SIDEWALK - SEE DETAIL 510/C-801
 - 1.3. CONCRETE PAVEMENT - SEE DETAIL 6/C-802
 - 1.4. BITUMINOUS PAVEMENT - SEE DETAIL 1/C-801
 - 1.5. B612 CURB AND GUTTER - SEE DETAIL 7/C-802
 - 1.6. B612 TIP-OUT CURB AND GUTTER - SEE DETAIL 7/C-802
 - 1.7. HANDICAP ACCESSIBLE PARKING STALL WITH ACCESS AISLE - SEE DETAILS 4.5/C-802
 - 1.8. VAN ACCESSIBLE PARKING STALL WITH ACCESS AISLE - SEE DETAILS ON SHEET 4.5/C-802
 - 1.9. 4" WHITE PAINT STRIPE (TYP.) - SEE DETAIL 3/C-802
 - 1.10. ADA PEDESTRIAN RAMP - SEE DETAIL 5-297.250/C-804, C-805
 - 1.11. DRAINAGE & UTILITY EASEMENT
 - 1.12. SETBACK LINE
 - 1.13. 5' CURB TRANSITION
 - 1.14. STOP SIGN - SEE DETAIL 2.8/C-802
2. DESIGNED BY OTHERS
 - 2.1. TRASH/RECYCLING ENCLOSURE - SEE ARCHITECTURAL PLANS
 - 2.2. MONUMENT SIGN - SEE ARCHITECTURAL PLANS
 - 2.3. DOOR LOCATION - SEE ARCHITECTURAL PLANS
 - 2.4. BOLT-DOWN BOLLARDS - SEE ARCHITECTURAL PLANS
 - 2.5. FLAG POLE BASE - DESIGN BY OTHERS
 - 2.6. TRANSFORMER AND CONCRETE PAD - DESIGN BY OTHERS
 - 2.7. FENCE - DESIGN BY OTHERS
 - 2.8. PLAYGROUND TURF - DESIGNED BY OTHERS
 - 2.9. BOLT-DOWN BOLLARDS WITH ATTACHED ADA SIGNAGE - SEE ARCHITECTURAL PLANS

NOTES

1. SEE SHEET G-002 FOR ADDITIONAL PROJECT NOTES.
2. ALL DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.

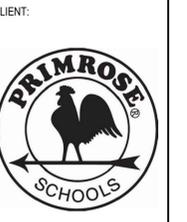
WARNING:

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GOPHER STATE ONE CALL

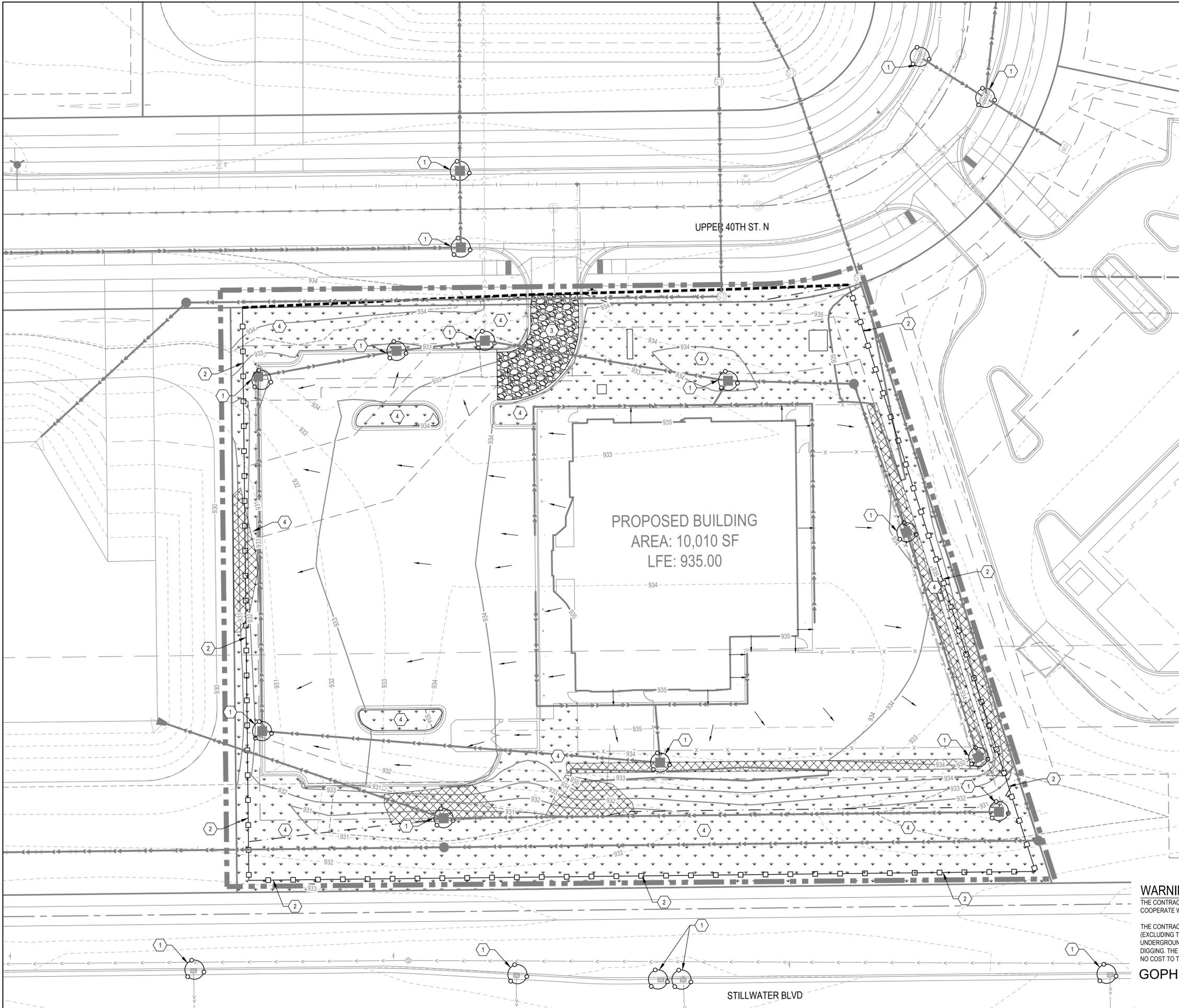
TWIN CITY AREA: 651-454-0002
TOLL FREE 1-800-252-1166



**PRIMROSE SCHOOL -
LAKE ELMO**
LAKE ELMO, WASHINGTON COUNTY,
MINNESOTA

PROJECT TITLE:	190300279
ISSUE NO.:	1
DESCRIPTION:	SITE PERMIT PLANS
DATE:	04/10/2025

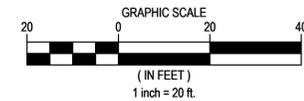
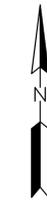
PROJECT NO.:	190300279
DWN BY:	KRM
CHKD BY:	AWD
APPD BY:	JRA
ISSUE DATE:	04/10/2025
ISSUE NO.:	1
SHEET TITLE:	SITE PLAN
SHEET NO.:	C-101



UPPER 40TH ST. N

PROPOSED BUILDING
AREA: 10,010 SF
LFE: 935.00

STILLWATER BLVD



LEGEND

- PROPERTY BOUNDARY
- LOT LINE
- EASEMENT LINE
- SETBACK LINE
- RIGHT OF WAY LINE
- SECTION LINE
- QUARTER LINE
- GRADING LIMITS
- CONSTRUCTION LIMITS
- ROCK CONSTRUCTION ENTRANCE
- PERMANENT STABILIZATION
- EROSION CONTROL BLANKET
- SILT FENCE
- INLET PROTECTION
- BIOLOG (OR DITCH CHECK)

NOTES

1. SEE SHEET G-002 FOR ADDITIONAL PROJECT NOTES.
2. CONSTRUCTION SHALL HAVE STABILIZED EXIT AT ALL TIME THROUGHOUT THE DURATION OF THE PROJECT. CONTRACTOR IS ULTIMATELY RESPONSIBLE TO PROTECT DOWNSTREAM WATERS FROM CONSTRUCTION RUNOFF.
3. UNTRENCHED SILT FENCE OR ORANGE SNOW FENCE MAY BE USED FOR TREE PROTECTION.
4. CONSTRUCTION LIMITS AND SILT FENCE SHOWN OFFSET TO THE PROPERTY LINE FOR CLARITY, WHERE APPLICABLE.
5. EROSION CONTROL BLANKET SHALL BE INSTALLED ON ALL SLOPES 4:1 OR STEEPER, UPON COMPLETION OF GRADING.

KEYNOTES

1. SEDIMENT CONTROL AROUND STORM SEWER INLET - SEE DETAIL 604/C-801
2. SILT FENCE - SEE DETAIL 601/C-801
3. ROCK CONSTRUCTION ENTRANCE - SEE DETAIL 605/C-801
4. PERMANENT STABILIZATION - SEE LANDSCAPE PLANS

WARNING:

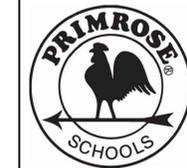
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GOPHER STATE ONE CALL

TWIN CITY AREA: 651-454-0002
TOLL FREE 1-800-252-1166

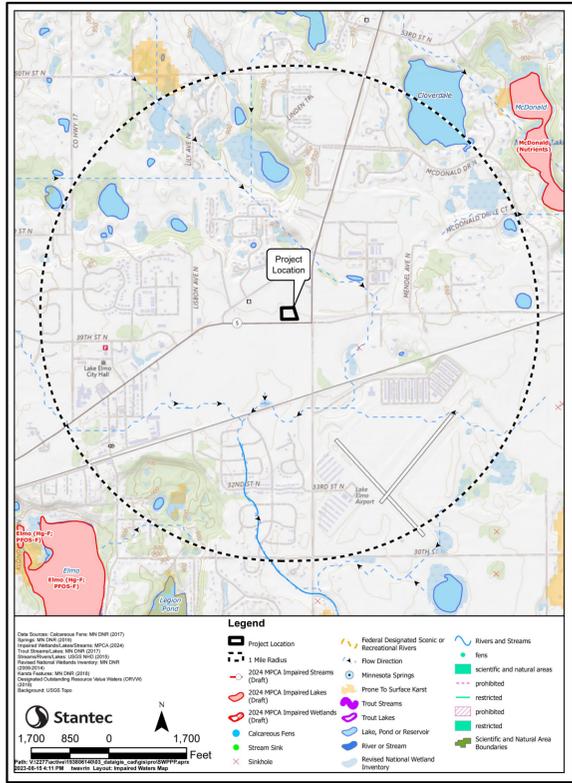
CLIENT:



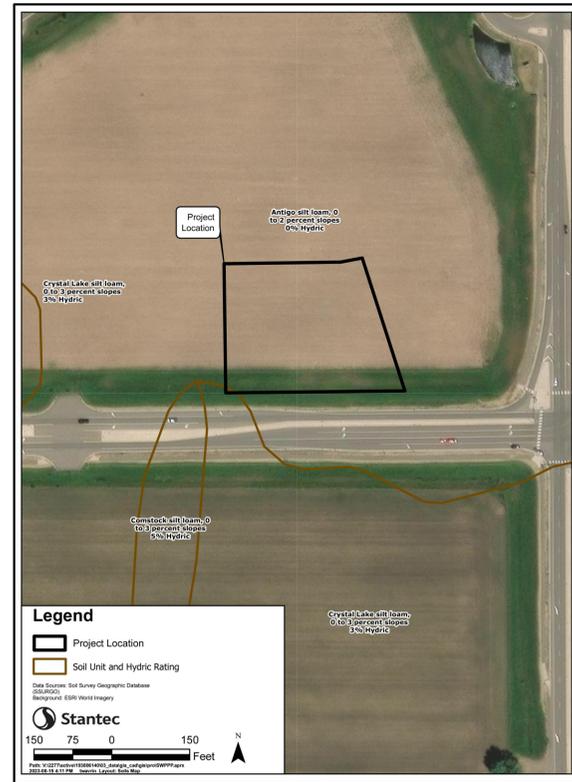
**PRIMROSE SCHOOL -
LAKE ELMO**
LAKE ELMO, WASHINGTON COUNTY,
MINNESOTA

PROJECT TITLE	PRIMROSE SCHOOL - LAKE ELMO		
ISSUE NO.	1		
DESCRIPTION	SITE PERMIT PLANS		
DATE	04/10/2025		
PROJECT NO.	190300279		
DWN BY:	KRM	CHKD BY:	AWD
		APPD BY:	JRA
ISSUE DATE:	04/10/2025		
ISSUE NO.:	1		
SHEET TITLE:	POST-CONSTRUCTION STABILIZATION PLAN		
SHEET NO.:	C-201		

IMPAIRED WATERS MAP



SOIL MAP



IMPAIRED WATERS, SPECIAL WATERS, AND WETLANDS

THIS PROJECT IS NOT LOCATED WITHIN ONE MILE OF AN IMPAIRED WATER. THE PROJECT ULTIMATELY DISCHARGES TO DOWNS LAKE THAT IS LOCATED SOUTH OF THE PROJECT LOCATION.

THE PROJECT SITE DISCHARGES TO AN INFILTRATION BASIN FOR STORMWATER MANAGEMENT PRIOR TO THE ULTIMATE DISCHARGE POINT ON-SITE. THE PROJECT WILL NOT IMPACT WETLANDS.

SITE SOILS - SITE SOILS ARE SHOWN ON THIS SHEET. THIS PROJECT IS NOT LOCATED IN A KARST AREA.

PROJECT INFORMATION

PROJECT NAME: PRIMROSE SCHOOL - LAKE ELMO
PROJECT LOCATION: LAKE ELMO, MINNESOTA, WASHINGTON COUNTY.
PROJECT TYPE: SCHOOL WITH ASSOCIATED PARKING LOTS, PROPOSED ROADS, BUILDINGS, STORMWATER POND AND INFILTRATION BASIN, AND UTILITIES.
TOTAL AREA DISTURBED BY CONSTRUCTION: APPROXIMATELY 1.7 ACRES. THE TOTAL SITE AREA IS APPROXIMATELY 1.7 ACRES.

ESTIMATED CONSTRUCTION DATES: FALL 2025 - SPRING 2026
CUMULATIVE IMPERVIOUS SURFACE/PERMANENT STORMWATER MANAGEMENT REQUIREMENTS:
THE PROPOSED PROJECT RESULTS IN A ±1.09 ACRE NET INCREASE IN IMPERVIOUS SURFACE WITHIN THE LIMITS OF DISTURBANCE. FUTURE DEVELOPMENT IS ANTICIPATED TO CONNECT LINDEN AVENUE TO STILLWATER WAY. THE FOUR COMMERCIAL LOTS WILL BE DEVELOPED INDIVIDUALLY. THE REMAINING AREA WILL BE DEVELOPED INTO VMDR USE.

THE SITE ULTIMATELY DRAINS TO, BUT IS NOT WITHIN 1 MILE OF, A LAKE THE SOUTH, WHICH IS LISTED AS AN IMPAIRED WATER FOR AQUATIC RECREATION. THERE ARE CURRENTLY NO TMDLS FOR THE WATERBODY FOR AQUATIC RECREATION.

THE PERMANENT STORMWATER SYSTEM WILL CONSIST OF A STORMWATER WET POND FOR IRRIGATION REUSE AND A STORMWATER INFILTRATION BASIN. THE WET POND WILL DISCHARGE TO THE STORMWATER INFILTRATION BASIN AS WELL AS THE EXISTING STORM NETWORK TO THE SOUTH OF THE SITE. THE INFILTRATION BASIN WILL DISCHARGE TO THE EXISTING STORM NETWORK TO THE SOUTH OF THE SITE. THE STORMWATER ULTIMATELY DISCHARGES TO DOWNS LAKE TO THE SOUTH OF THE SITE.

PARTY RESPONSIBLE FOR LONG TERM OPERATION AND MAINTENANCE OF THE SITE (OWNER): PRIMROSE SCHOOL FRANCHISING COMPANY
CONTACT: MARVIN WENSMAN
CONTACT EMAIL: MWENSMAN@PRIMROSESCHOOLS.COM
PARTY RESPONSIBLE FOR IMPLEMENTATION OF THE SWPPP (CONTRACTOR): TBD
CONTRACTOR: TBD
CONTRACTOR PHONE: TBD
CONTRACTOR EMAIL: TBD

CONTRACTOR SHALL PROVIDE A CHAIN OF RESPONSIBILITY WITH ALL OPERATORS ON THE SITE FOR INCORPORATION INTO THIS SWPPP DOCUMENT TO ENSURE THAT THE SWPPP WILL BE IMPLEMENTED AND STAY IN EFFECT UNTIL THE CONSTRUCTION PROJECT IS COMPLETE (THROUGH FINAL STABILIZATION AND NOT SUBMITTAL). CONTRACTOR SHALL ALSO PROVIDE DOCUMENTATION OF PERSONNEL TRAINING IN ACCORDANCE WITH THE PERMIT FOR INCORPORATION INTO THIS SWPPP DOCUMENT AS SOON AS THE PERSONNEL FOR THE PROJECT HAVE BEEN DETERMINED. CONTRACTOR IS RESPONSIBLE FOR KEEPING A FINAL SWPPP DOCUMENT, CONTAINING THE INFORMATION REQUIRED ABOVE, AT THE CONSTRUCTION SITE FOR THE DURATION OF THE PROJECT.

SWPPP DOCUMENTS

THE SWPPP IS COMPOSED OF, BUT NOT LIMITED TO, THE BELOW PROJECT DOCUMENTS. THESE DOCUMENTS SHALL BE KEPT ON THE PROJECT SITE AT ALL TIMES THROUGHOUT CONSTRUCTION. THE SWPPP SHALL BE AMENDED BY THE PERSON RESPONSIBLE TO INCLUDE ANY DOCUMENTS NECESSARY TO ENSURE ADHERENCE TO THE GENERAL PERMIT.

PRIMROSE PROJECT CIVIL CONSTRUCTION DRAWINGS BY STANTEC DATED APRIL, 2025
PRIMROSE PROJECT STORMWATER MANAGEMENT PLAN BY STANTEC DATED APRIL, 2025

RECORD RETENTION - THE SWPPP, ALL CHANGES TO IT, AND INSPECTION AND MAINTENANCE RECORDS MUST BE KEPT ON-SITE DURING CONSTRUCTION. THE CONSTRUCTION DRAWINGS ARE INCORPORATED HEREIN BY REFERENCE, AND A COPY OF THE PLAN SET SHOULD BE KEPT ON-SITE WITH THE SWPPP RECORDS. THE OWNER MUST RETAIN A COPY OF THE SWPPP ALONG WITH THE FOLLOWING RECORDS FOR THREE (3) YEARS AFTER SUBMITTAL OF THE NOTICE OF TERMINATION.
1. ANY OTHER PERMITS REQUIRED FOR THE PROJECT.
2. RECORDS OF ALL INSPECTION AND MAINTENANCE CONDUCTED DURING CONSTRUCTION.
3. ALL PERMANENT OPERATIONS AND MAINTENANCE AGREEMENTS THAT HAVE BEEN IMPLEMENTED, INCLUDING ALL RIGHT OF WAY, CONTRACT, COVENANTS AND OTHER BINDING REQUIREMENTS REGARDING PERPETUAL MAINTENANCE; AND
4. ALL REQUIRED CALCULATIONS FOR DESIGN OF THE TEMPORARY AND PERMANENT STORMWATER MANAGEMENT SYSTEMS.

INSPECTIONS

THE INSPECTION LOG WILL BE COMPLETED BY THE CONTRACTOR FOR THE CONSTRUCTION SITE. INSPECTOR(S): TBD - TRAINING DOCUMENTATION (PER SECTION 21.2 OF THE PERMIT) WILL BE INCORPORATED INTO THIS SWPPP AS SOON AS THE PERSONNEL FOR THE PROJECT HAVE BEEN DETERMINED. THE CONTRACTOR WILL MAKE CORRECTIONS OR REPAIRS REQUIRED TO COMPLY WITH THE PERMIT.

INSPECTIONS AT THE SITE WILL BE COMPLETED IN ACCORDANCE WITH THE PERMIT AS FOLLOWS: ONCE EVERY 7 DAYS DURING ACTIVE CONSTRUCTION AND, WITHIN 24 HOURS AFTER A RAINFALL EVENT GREATER THAN 0.5 INCHES IN 24 HOURS.

- THE INDIVIDUAL PERFORMING INSPECTIONS MUST BE TRAINED AS REQUIRED BY SECTION 21.3 OF THE PERMIT. TRAINING DOCUMENTATION SHALL BE PROVIDED BY THE CONTRACTOR FOR INCORPORATION INTO THE SWPPP. INSPECTIONS MUST INCLUDE STABILIZED AREAS, EROSION PREVENTION AND SEDIMENT CONTROL BMPs, AND INFILTRATION AREAS. CORRECTIVE ACTIONS MUST BE IDENTIFIED AND DATE OF CORRECTION MUST BE NOTED AS IDENTIFIED IN SECTION 11.11 OF THE PERMIT. ANY OFFSITE DISCHARGE MUST BE DOCUMENTED AS IDENTIFIED IN SECTION 11.11 OF THE PERMIT. ANY AMENDMENTS TO THE SWPPP PROPOSED AS A RESULT OF THE INSPECTION MUST BE DOCUMENTED WITHIN SEVEN (7) CALENDAR DAYS. AN INSPECTION LOG IS ALSO ATTACHED; THE INSPECTION LOG AND SWPPP MUST BE KEPT ON-SITE FOR THE DURATION OF THE CONSTRUCTION PROJECT.

AT A MINIMUM, THE FOLLOWING SHALL BE COMPLETED DURING EACH INSPECTION:

- RECORD DATE AND TIME OF INSPECTION.
- RECORD RAINFALL RECORDS SINCE THE MOST RECENT INSPECTION.
- INSPECT THE SITE FOR EXCESS EROSION AND SEDIMENTATION.
- INSPECT THE SITE FOR DEBRIS, TRASH, AND SPILLS.
- INSPECT TEMPORARY EROSION AND SEDIMENTATION CONTROL DEVICES.
- INSPECT CONSTRUCTION ENTRANCES FOR SEDIMENT TRACKING ONTO PUBLIC STREETS.
- RECORD RECOMMENDED REPAIRS AND MODIFICATIONS TO EROSION AND SEDIMENT CONTROLS.
- RECOMMEND ANY NECESSARY CHANGES TO THIS SWPPP.
- RECORD REPAIRS AND MODIFICATIONS IMPLEMENTED SINCE PREVIOUS INSPECTIONS.
- INSPECT THE ADJACENT STREETS AND CURB AND GUTTER FOR SEDIMENT, LITTER, AND CONSTRUCTION DEBRIS.

THE GENERAL CONTRACTOR MUST UPDATE THE SWPPP, INCLUDING THE JOBSITE BINDER AND SITE MAPS, TO REFLECT THE PROGRESS OF CONSTRUCTION ACTIVITIES AND GENERAL CHANGES TO THE PROJECT SITE. UPDATES SHALL BE MADE DAILY TO TRACK PROGRESS WHEN ANY OF THE FOLLOWING ACTIVITIES OCCUR: BMP INSTALLATION, MODIFICATION OR REMOVAL, CONSTRUCTION ACTIVITIES (E.G. PAVING, SEWER INSTALLATION, ETC), CLEARING, GRUBBING, GRADING, OR TEMPORARY AND PERMANENT STABILIZATION.

THE CONTRACTOR MAY UPDATE OR MODIFY THE SWPPP WITHOUT ENGINEER APPROVAL IN AN EMERGENCY SITUATION TO PREVENT SEDIMENT DISCHARGE OR PROTECT WATER QUALITY. THE CONTRACTOR IS ULTIMATELY RESPONSIBLE TO ENSURE COMPLIANCE WITH THE PERMIT AND PROTECTION OF DOWNSTREAM WATER QUALITY.

EROSION AND SEDIMENT CONTROL

PRIOR TO ANY SITE DISTURBANCE, AND AS REQUIRED AS CONSTRUCTION PROGRESSES, ANY PERMIT REQUIRED EROSION PREVENTION MEASURES AND THE SEDIMENT CONTROL DEVICES (INLET PROTECTION, CONSTRUCTION ENTRANCE, CULVERT END PROTECTION, EROSION CONTROL BLANKET, SILT FENCE) SHOWN ON THE CONSTRUCTION DRAWINGS WILL BE INSTALLED AT THE SITE.

ALL EXPOSED SOIL AREAS WITHIN THE CONSTRUCTION LIMITS WILL BE STABILIZED WITHIN 7/14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY (WILL NOT RESUME FOR A PERIOD EXCEEDING 7 CALENDAR DAYS) OR PERMANENTLY CEASED. STABILIZATION WILL BE INITIATED IMMEDIATELY. EXPOSED SOIL AREAS MUST HAVE TEMPORARY EROSION PROTECTION (SLASH MULCH, EROSION CONTROL BLANKET, SEED) OR PERMANENT COVER YEAR ROUND.

CONTRACTOR SHALL IMPLEMENT APPROPRIATE CONSTRUCTION PHASING, VEGETATIVE BUFFER STRIPS, HORIZONTAL SLOPE GRADING, AND OTHER CONSTRUCTION PRACTICES THAT MINIMIZE EROSION WHEN PRACTICAL. THE NORMAL WETTED PERIMETER OF ANY TEMPORARY OR PERMANENT DRAINAGE DITCH THAT DRAINS WATER FROM A CONSTRUCTION SITE, OR DIVERTS WATER AROUND A SITE, MUST BE STABILIZED WITHIN 200 LINEAL FEET FROM THE PROPERTY EDGE, OR FROM THE POINT OF DISCHARGE TO ANY SURFACE WATER. STABILIZATION MUST BE COMPLETED WITHIN 24 HOURS OF CONNECTING TO A SURFACE WATER. PIPE OUTLETS MUST BE PROVIDED WITH TEMPORARY OR PERMANENT ENERGY DISSIPATION WITHIN 24 HOURS OF CONNECTION TO A SURFACE WATER.

SWPPP IMPLEMENTATION, PHASING, AND SEQUENCE OF CONSTRUCTION:
BMP AND EROSION CONTROL INSTALLATION SEQUENCE SHALL BE AS FOLLOWS:

- CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE, CONCRETE WASHOUT PIT, AND INSTALL SILT FENCE.
- INSTALL INLET PROTECTION AT EXISTING STORMWATER CULVERTS AND INLETS.
- PREPARE TEMPORARY STORAGE, PARKING, AND PHASING AREAS.
- CONSTRUCT AND STABILIZE DIVERSIONS AND TEMPORARY SEDIMENT TRAPS/BASINS.
- PERFORM CLEARING AND GRUBBING OF THE SITE, IF APPLICABLE.
- PERFORM MASS GRADING, ROUGH GRADE TO ESTABLISH PROPOSED DRAINAGE PATTERNS.
- BEGIN EXCAVATION OF PERMANENT STORMWATER BASIN AREAS. SEE SEQUENCING BELOW FOR ADDITIONAL INFORMATION.
- START CONSTRUCTION OF THE BUILDING PAD AND STRUCTURES.
- INSTALL SMALL UTILITIES (GAS, ELECTRIC, PHONE, CABLE, ETC.).
- PAVE CURB AND GUTTER, SIDEWALK, AND PARKING LOT/ DRIVEWAYS.
- TEMPORARILY SEED WITH PURE LIVE SEED THROUGHOUT CONSTRUCTION. DISTURBED AREAS THAT WILL BE INACTIVE FOR 14 DAYS OR MORE AS REQUIRED BY NPDES OR PERMIT.

SEDIMENT CONTROL PRACTICES MUST MINIMIZE SEDIMENT FROM ENTERING SURFACE WATERS, INCLUDING CURB AND GUTTER SYSTEMS AND STORM SEWER INLETS. THE FOLLOWING MEASURES WILL BE TAKEN AS SEDIMENT CONTROL PRACTICES IN ORDER TO MINIMIZE SEDIMENTS FROM ENTERING SURFACE WATERS:

- INSTALLATION OF SEDIMENT CONTROL PRACTICES ON ALL DOWN GRADIENT PERIMETERS PRIOR TO LAND DISTURBING ACTIVITIES.
- SILT FENCING, BIOLOGS, OR OTHER SEDIMENT CONTROL SURROUNDING TEMPORARY SOIL STOCKPILES.
- VEHICLE TRACKING BMP AT CONSTRUCTION SITE ENTRANCE/EXIT. STREET SWEEPING SHALL BE PERFORMED IF VEHICLE TRACKING BMPs ARE NOT ADEQUATE TO PREVENT SEDIMENT TRACKING. TRACKED SEDIMENT MUST BE REMOVED FROM ALL PAVED SURFACES BOTH ON AND OFFSITE WITHIN 24 HOURS OF DISCOVERY PER THE PERMIT.
- STREET SWEEPING IS NOT TO BE USED AS A PRIMARY BMP FOR SEDIMENT TRACKING. IF SEDIMENT IS TRACKED OFFSITE, WORK WILL CEASE UNTIL PROPER EROSION CONTROL AND SEDIMENT CONTROL DEVICES ARE INSTALLED AND/OR BEING MAINTAINED TO PREVENT TRACKING BEYOND THE SITE'S PERIMETER (CONTAINMENT AREA). ALL STREET SWEEPING MUST BE PERFORMED UTILIZING A PICK-UP SWEEPER. IF NECESSARY WATER WILL ALSO BE USED TO CLEAN UP THE STREETS PRIOR TO BEING SWEEPED TO ENSURE THEY ARE FULLY CLEANED.

THE FOLLOWING GUIDELINES WILL BE USED TO DETERMINE IF POLLUTION CONTROL DEVICES REQUIRE MAINTENANCE, REPAIR, OR REPLACEMENT:

- IF SEDIMENT CONTROL DEVICES SUCH AS SILT FENCE ARE FILLED TO 1/3 THE HEIGHT OF THE FENCE, REMOVE ALL SEDIMENT WITHIN 24 HOURS OF DETECTION OR NOTIFICATION.
- IF INLET PROTECTION DEVICES APPEAR PLUGGED WITH SEDIMENT, ARE FILLED TO 1/3 CAPACITY, OR HAVE STANDING WATER AROUND THEM, REMOVE THE SEDIMENT AND CLEAN OR REPLACE THE FILTER WITHIN 24 HOURS OF DETECTION OR NOTIFICATION.
- IF THE GRAVEL CONSTRUCTION ENTRANCE(S) ARE FILLED WITH SEDIMENT EITHER REPLACE THE ENTRANCE OR ADD ADDITIONAL GRAVEL WITH 24 HOURS OF DETECTION OR NOTIFICATION.
- IF SEDIMENT FROM THE SITE IS OBSERVED ON ADJACENT STREETS OR OTHER PROPERTIES, THE INSPECTOR SHALL IDENTIFY THE SOURCE AND DISCHARGE LOCATION OF THE SEDIMENT AND INSTRUCT TO IMPLEMENT ADDITIONAL EROSION AND SEDIMENT CONTROLS AT THOSE LOCATIONS TO PREVENT FUTURE DISCHARGES.
- IF BUILDING MATERIALS, CHEMICALS, OR GENERAL REFUSE IS BEING USED, STORED, DISPOSED OF, OR OTHERWISE MANAGED INAPPROPRIATELY, CORRECT SUCH DEFECTS WITHIN 24 HOURS OF DETECTION OR NOTIFICATION.
- IF EXCESSIVE SEDIMENTS OR DEBRIS ARE OBSERVED AT THE FLARED END SECTION OUTFALLS, THE INSPECTOR SHALL DETERMINE THE SOURCE AND DISCHARGE LOCATIONS OF SUCH MATERIALS. IF THE DISCHARGE HAS OCCURRED ON THE PROPERTY, REMOVE THE SEDIMENTS AND DEBRIS WITHIN 24 HOURS OF NOTIFICATION AND CORRECT THE SOURCE OF SUCH MATERIALS AS DIRECTED BY THE INSPECTOR

POLLUTION PREVENTION MEASURES

SOLID WASTE:

SOLID WASTE, INCLUDING BUT NOT LIMITED TO, COLLECTED ASPHALT AND CONCRETE MILLINGS, FLOATING DEBRIS, PAPER, PLASTIC, FABRIC, CONSTRUCTION AND DEMOLITION DEBRIS AND OTHER WASTE, INCLUDING ALL TRASH ON-SITE, MUST BE REGULARLY DISPOSED OF PROPERLY AND MUST COMPLY WITH MPCA DISPOSAL REQUIREMENTS.

HAZARDOUS MATERIALS:

HAZARDOUS MATERIALS, INCLUDING BUT NOT LIMITED TO OIL, GASOLINE, PAINT AND ANY HAZARDOUS SUBSTANCE MUST BE PROPERLY STORED INCLUDING SECONDARY CONTAINMENTS, TO PREVENT SPILLS, LEAKS OR OTHER DISCHARGE. RESTRICTED ACCESS TO STORAGE AREAS MUST BE PROVIDED TO PREVENT VANDALISM. STORAGE AND DISPOSAL OF HAZARDOUS WASTE MUST BE IN COMPLIANCE WITH MPCA REGULATIONS.

CONSTRUCTION EQUIPMENT/VEHICLES:

EXTERNAL WASHING OF TRUCKS AND OTHER CONSTRUCTION VEHICLES MUST BE LIMITED TO A DEFINED AREA OF THE SITE. RUNOFF MUST BE CONTAINED AND WASTE PROPERLY DISPOSED OF. NO ENGINE DEGREASING IS ALLOWED ON SITE. REASONABLE STEPS TO PREVENT THE DISCHARGE OF SPILLED OR LEAKED CHEMICALS SHALL BE TAKEN. ADEQUATE SUPPLIES MUST BE AVAILABLE AT ALL TIMES TO CLEAN UP DISCHARGED MATERIALS; CONDUCT FUELING IN A CONTAINED AREA UNLESS INFEASIBLE.

CONCRETE WASHOUT AREA:

CONCRETE WASHOUT WILL BE PERMITTED ON-SITE; CONTRACTOR SHALL FOLLOW ALL PERMIT REQUIREMENTS FOR CONCRETE WASHOUT. THE CONTRACTOR SHALL PROVIDE EFFECTIVE CONTAINMENT FOR ALL LIQUID AND SOLID WASTES GENERATED BY WASHOUT OPERATIONS. LIQUID AND SOLID WASHOUT WASTES MUST NOT CONTACT THE GROUND AND THE CONTAINMENT MUST BE DESIGNED TO PROHIBIT RUNOFF FROM THE WASHOUT OPERATIONS/AREAS. LIQUID AND SOLID WASTES MUST BE DISPOSED OF PROPERLY AND IN COMPLIANCE WITH MPCA RULES. A SIGN MUST BE INSTALLED ADJACENT TO EACH WASHOUT FACILITY THAT REQUIRES SITE PERSONNEL TO UTILIZE THE PROPER FACILITIES FOR CONCRETE WASHOUT AND DISPOSAL OF WASHOUT WASTES. CONTRACTOR SHALL REVISE SWPPP TO INDICATE WASHOUT LOCATION ONCE THE LOCATION HAS BEEN DETERMINED.

FERTILIZERS AND LANDSCAPE MATERIALS MUST BE UNDER COVER TO PREVENT THE DISCHARGE OF POLLUTANTS OR PROTECTED BY SIMILARLY EFFECTIVE MEANS DESIGNED TO MINIMIZE CONTACT WITH STORMWATER.

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.

INFILTRATION BASIN SEQUENCING NOTES

- CONTRACTOR SHALL STAGE CONSTRUCTION APPROPRIATELY AND INSTALL ALL NECESSARY EROSION CONTROL TO PREVENT SEDIMENT WASHING INTO THE INFILTRATION BASIN.
- FINAL GRADING OF THE BASIN SHALL BE ACCOMPLISHED USING LOW-IMPACT EARTH MOVING EQUIPMENT TO PREVENT COMPACTION. SMALL TRACKED DOZERS AND SKID STEERS ARE RECOMMENDED.
- IN THE EVENT THAT SEDIMENT IS INTRODUCED INTO THE INFILTRATION BASIN, THIS MATERIAL WILL NEED TO BE REMOVED PRIOR TO PROCEEDING WITH CONSTRUCTION.
- INFILTRATION BASIN SHALL BE FREE AND CLEAR OF SEDIMENT UPON FINAL COMPLETION OF CONSTRUCTION.
- ALL SLOPES WITHIN PERMANENT STORMWATER SYSTEM (INCLUDING SWALES, BASINS, AND PONDS) SHALL BE STABILIZED WITH AN EROSION CONTROL BLANKET.
- THE PROJECT AREA MUST BE STAKED OFF AND MARKED TO KEEP ALL CONSTRUCTION TRAFFIC, EQUIPMENT AND MATERIAL STOCKPILES OUT OF THE PROPOSED INFILTRATION AREAS.
- INFILTRATION PRACTICES SHALL NOT BE EXCAVATED UNTIL THE CONTRIBUTING DRAINAGE AREAS WITH EXPOSED SOIL HAVE BEEN FULLY STABILIZED AND BITUMINOUS BASE COURSE INSTALLED ON CONTRIBUTING PAVEMENT AREAS. DIVERT UPLAND DRAINAGE AREAS TO PREVENT RUNOFF FROM ENTERING THE EXCAVATED CELL OR INTO THE WORK AREA.
- CARE MUST BE TAKEN TO AVOID CONTAMINATION OF INFILTRATION BASIN SOILS WITH SEDIMENT, IN-SITU OR TOPSOIL DURING AND AFTER INSTALLATION. MATERIALS MUST BE SEGREGATED.
- KEEP INFILTRATION SYSTEMS OFF-LINE BY RESTRICTING STORM WATER INFLOW UNTIL VEGETATION IS WELL ESTABLISHED IN THE CELL AND ALL UP GRADIENT AREAS HAVE BEEN STABILIZED AND IMPERVIOUS SURFACES CLEARED OF CONSTRUCTION SEDIMENT.
- PROVIDE TOPSOIL IN ACCORDANCE WITH DETAILS AND SPECIFICATIONS. PROVIDE SEED IN ACCORDANCE WITH THE EROSION CONTROL PLAN, LANDSCAPE PLAN, AND NPDES PERMIT.

GENERAL SWPPP NOTES

DEWATERING IS NOT ANTICIPATED TO BE REQUIRED DURING TRENCHING FOR UTILITY CONSTRUCTION. IN THE EVENT THAT DEWATERING IS NECESSARY CONTRACTOR SHALL COMPLY WITH PERMIT SECTION 10.1 REQUIREMENTS FOR DEWATERING.

THIS SWPPP SHALL BE AMENDED BY THE CONTRACTOR IN ACCORDANCE WITH THE PERMIT AS NECESSARY TO INCLUDE ADDITIONAL REQUIREMENTS, TO CORRECT PROBLEMS IDENTIFIED, OR TO ADDRESS SITUATIONS PER SECTION 6.1 OF THE PERMIT.

THE PROJECT WILL NOT DISTURB MORE THAN 10 ACRES THAT PROMOTE DRAINAGE TO A COMMON LOCATION, THEREFORE A TEMPORARY SEDIMENT BASIN WILL NOT BE REQUIRED. THIS SWPPP SHALL BE AMENDED BY THE CONTRACTOR IN ACCORDANCE WITH THE GENERAL PERMIT TO INCLUDE ADDITIONAL TEMPORARY SEDIMENTATION BASINS, IF THEY BECOME NECESSARY. BASINS, IF DESIGNED BY THE CONTRACTOR, SHALL ACCOMMODATE NO LESS THAN 3,600 CUBIC FEET OF LIVE STORAGE PER ACRE OF CONTRIBUTING DRAINAGE AREA. BASIN OUTLETS SHALL BE DESIGNED TO WITHDRAW WATER FROM THE SURFACE OF THE BASIN. PREVENT SHORT-CIRCUITING AND THE DISCHARGE OF FLOATING DEBRIS. BASINS SHALL HAVE A STABILIZED EMERGENCY OVERFLOW LOCATION AND BE DESIGNED TO PREVENT THE DISCHARGE OF POLLUTANTS TO THE EXTENT PRACTICAL.

FINAL STABILIZATION:

ALL PVIOUS AREAS DISTURBED BY CONSTRUCTION AS DESIGNATED WILL RECEIVE VEGETATIVE COVER ACCORDING TO THE PLANS AND SPECIFICATIONS AND WITHIN THE SPECIFIED VEGETATIVE TIME SCHEDULE. FINAL STABILIZATION WILL OCCUR WHEN THE SITE HAS A UNIFORM VEGETATIVE COVER WITH A DENSITY OF 70% OVER THE RESTORED PVIOUS AREAS. ALL TEMPORARY SYNTHETIC EROSION PREVENTION AND SEDIMENT CONTROL BMPs (SUCH AS SILT FENCE) MUST BE REMOVED AS PART OF THE SITE FINAL STABILIZATION. ALL SEDIMENT MUST BE CLEANED OUT OF CONVEYANCES AND TEMPORARY SEDIMENTATION BASINS IF APPLICABLE. NOTICE OF TERMINATION (NOT) MUST BE SUBMITTED WITHIN 30 DAYS OF FINAL STABILIZATION.

ESTIMATED BMP QUANTITIES AND INSTALLATION SCHEDULE

THE ADJACENT TABLE INDICATES THE ESTIMATED MATERIAL QUANTITIES NECESSARY TO IMPLEMENT THE TEMPORARY AND PERMANENT EROSION PREVENTION AND SEDIMENT CONTROL BMPs IDENTIFIED IN THIS SWPPP AND ON THE CONSTRUCTION DRAWINGS. TEMPORARY AND PERMANENT EROSION PREVENTION AND SEDIMENT CONTROL BMPs WILL BE INSTALLED/CONSTRUCTED WHEN NECESSARY AS CONSTRUCTION ACTIVITIES PROGRESS AND IN ACCORDANCE WITH THE NPDES PERMIT REQUIREMENTS.

MAINTAIN AND REPLACE BMPs DURING THE EXECUTION OF THE PROJECT AS REQUIRED TO CONTINUE SWPPP COVERAGE DURING CONSTRUCTION

ESTIMATED BMP QUANTITIES		
ITEM	QUANTITY	UNIT
INLET PROTECTION	19	EA
TURF ESTABLISHMENT	0.72	AC
SILT FENCE	825	LF
BIOLOG	255	LF
EROSION CONTROL BLANKET	3370	SF
CONSTRUCTION EXIT	1	EA

NOTE: QUANTITIES ON PLAN SUPERCEDES LIST QUANTITIES IN A DISCREPANCY

CERTIFICATION

IN ACCORDANCE WITH SECTION 21 OF THE GENERAL PERMIT AUTHORIZATION TO DISCHARGE STORMWATER ASSOCIATED WITH CONSTRUCTION ACTIVITY UNDER THE NPDES, THE PREPARER OF THIS DOCUMENT WAS TRAINED UNDER THE UNIVERSITY OF MINNESOTA EROSION AND SEDIMENT CONTROL CERTIFICATION PROGRAM. THOMAS RASMUSSEN'S CERTIFICATION IN DESIGN OF SWPPP IS VALID THROUGH MAY 31, 2026.

Thomas A. Rasmussen



1 CARLSON PKWY N
PLYMOUTH, MN 55447
PHONE: 763-479-4200
WWW.STANTEC.COM

CLIENT:



BRIDGEWATER VILLAGE

LAKE ELMO MINNESOTA, WASHINGTON COUNTY

PROJECT TITLE:

DATE:	DESCRIPTION:	ISSUE NO.:
09/22/2023	65% DESIGN FOR CITY SUBMITTAL	1
03/19/2024	85% CITY RESUBMITTAL	2
07/15/2024	PERMIT SET	3
10/25/2024	VMDR AND CITY RESUBMITTAL	9
12/04/2024	WATER MAIN REVISION	10

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.

Jack Amos

LICENSE NO.: 59296

DATE: 04/09/2025

PROJECT NO.: 193806140

DWN BY: SAG CHKD BY: MJS APPD BY: JRA

ISSUE DATE: 04/09/2025

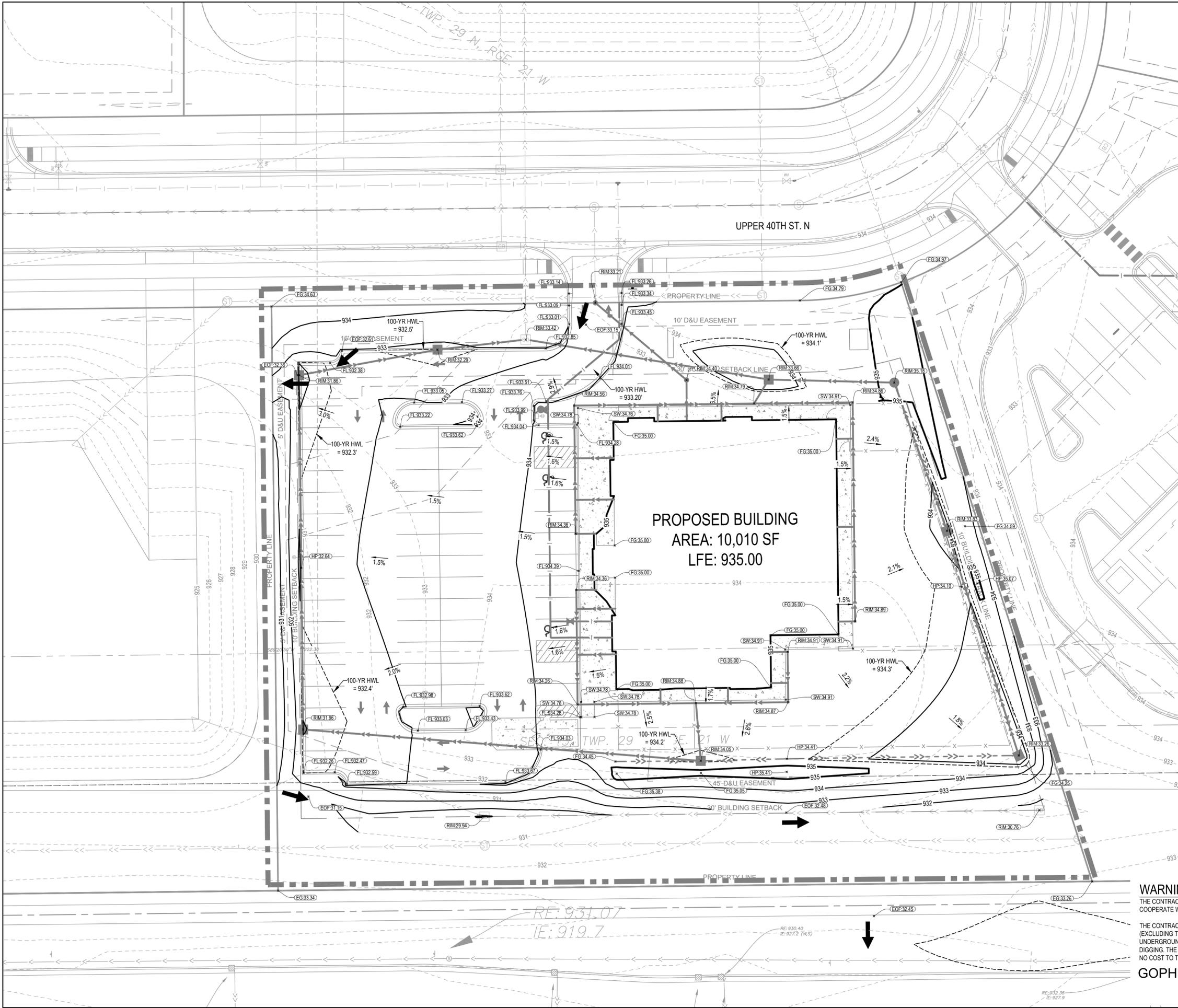
ISSUE NO.: 10

SHEET TITLE:

SWPPP

SHEET NO.:

C-202



LEGEND

- PROPERTY BOUNDARY
- LOT LINE
- - - EASEMENT LINE
- - - SETBACK LINE
- - - RIGHT OF WAY LINE
- - - SECTION LINE
- - - QUARTER LINE
- - - EXISTING EASEMENT LINE
- - - EXISTING PROPERTY LINE
- - - EXISTING MINOR CONTOUR
- - - EXISTING MAJOR CONTOUR
- - - PROPOSED MINOR CONTOUR
- - - PROPOSED MAJOR CONTOUR
- - - GRADING LIMITS
- - - CONSTRUCTION LIMITS
- - - SWALE LINE
- FG=9XX.XX → FINISHED GRADE ELEVATION
- EOF=9XX.XX → EMERGENCY OVERFLOW ELEVATION
- RIM=9XX.XX → STRUCTURE RIM SPOT ELEVATION
- SW=9XX.XX → SIDEWALK ELEVATION
- FL=9XX.XX → FLOW LINE ELEVATION
- TC=9XX.XX → TOP OF CURB ELEVATION
- 1.00% → SURFACE GRADE & FLOW DIRECTION
- → → EMERGENCY OVERFLOW DIRECTION

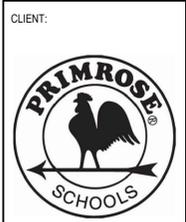
NOTES

- SEE SHEET G-002 FOR ADDITIONAL PROJECT NOTES.
- EXISTING SPOT ELEVATIONS AT MATCH POINTS ARE BASED ON INTERPOLATED POINT TO POINT SURVEY DATA. CONTRACTOR IS RESPONSIBLE FOR VERIFYING CONNECTION POINTS PRIOR TO INSTALLATION OF IMPROVEMENTS. CONTRACTOR SHALL NOTIFY ENGINEER IN WRITING IMMEDIATELY OF ANY FIELD DISCREPANCIES. CONTRACTOR IS RESPONSIBLE FOR MAKING NECESSARY ADJUSTMENTS IN THE FIELD FOR CONSTRUCTABILITY, REGULATORY COMPLIANCE (ADA), POSITIVE DRAINAGE, AND TO ENSURE SMOOTH TRANSITIONS TO FIELD CONDITIONS. CONTRACTOR IS RESPONSIBLE FOR REWORK OF A DISCREPANCY THAT IS NOT COMMUNICATED TO THE ENGINEER IN WRITING.
- CONTRACTOR MUST IMMEDIATELY NOTIFY THE OWNER AND ENGINEER IN WRITING OF DISCREPANCIES OR CONFLICTS IN THE CONTRACT DOCUMENTS BEFORE COMMENCING WORK. NO FIELD CHANGES OR DEVIATIONS ARE TO BE MADE WITHOUT PRIOR WRITTEN APPROVAL FROM THE ENGINEER. FAILURE TO NOTIFY OWNER AND ENGINEER OF AN IDENTIFIABLE CONFLICT BEFORE PROCEEDING WITH INSTALLATION RELIEVES OWNER AND ENGINEER OF ANY OBLIGATION TO PAY FOR A RELATED CHANGE ORDER.

WARNING:
 THE CONTRACTOR SHALL BE RESPONSIBLE FOR CALLING FOR LOCATIONS OF ALL EXISTING UTILITIES. THEY SHALL COOPERATE WITH ALL UTILITY COMPANIES IN MAINTAINING THEIR SERVICE AND/OR RELOCATION OF LINES.

THE CONTRACTOR SHALL CONTACT GOPHER STATE ONE CALL AT 651-454-0002 AT LEAST 48 HOURS IN ADVANCE (EXCLUDING THE DAY OF THE REQUEST AND EXCLUDING HOLIDAYS AND WEEKENDS) FOR THE LOCATIONS OF ALL UNDERGROUND WIRES, CABLES, CONDUITS, PIPES, MANHOLES, VALVES OR OTHER BURIED STRUCTURES BEFORE DIGGING. THE CONTRACTOR SHALL REPAIR OR REPLACE THE ABOVE WHEN DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.

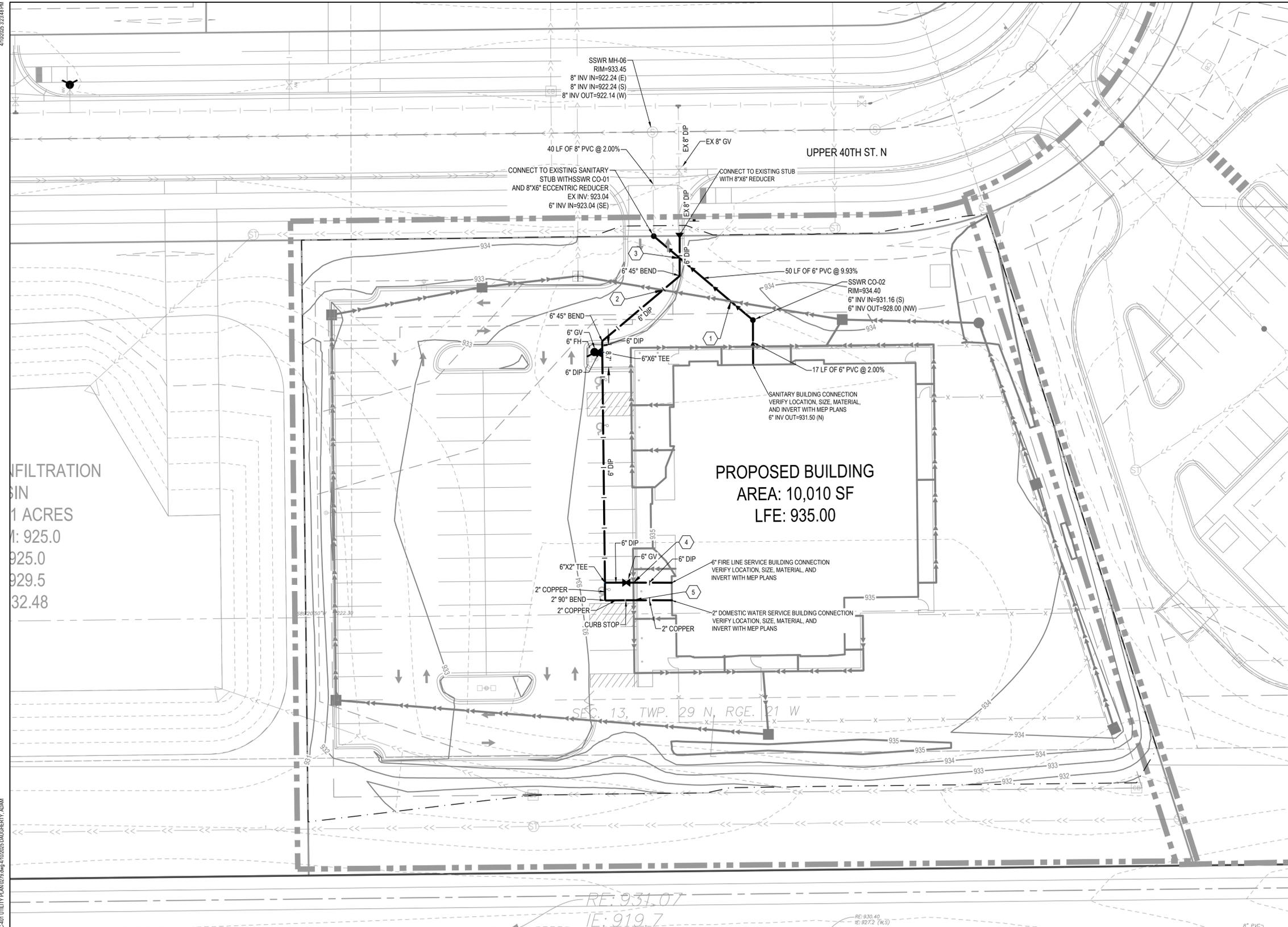
GOPHER STATE ONE CALL
 TWIN CITY AREA: 651-454-0002
 TOLL FREE 1-800-252-1166



**PRIMROSE SCHOOL -
 LAKE ELMO**
 LAKE ELMO, WASHINGTON COUNTY,
 MINNESOTA

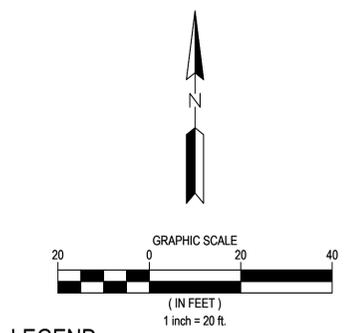
PROJECT TITLE:	PRIMROSE SCHOOL - LAKE ELMO		
PROJECT NO.:	190300279		
DWN BY:	CHKD BY:	APPD BY:	
KRM	AWD	JRA	
ISSUE DATE:	04/10/2025		
ISSUE NO.:	1		
SHEET TITLE:	GRADING PLAN		
SHEET NO.:	C-301		

4/10/2025 3:23:48 PM



FILTRATION
IN
1 ACRES
1: 925.0
925.0
929.5
32.48

PROPOSED BUILDING
AREA: 10,010 SF
LFE: 935.00

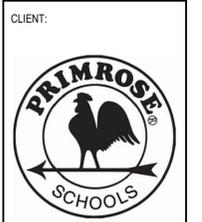


LEGEND

- PROPERTY BOUNDARY
- LOT LINE
- EASEMENT LINE
- SETBACK LINE
- RIGHT OF WAY LINE
- EXISTING EASEMENT LINE
- EXISTING PROPERTY LINE
- EXISTING MINOR CONTOUR
- EXISTING MAJOR CONTOUR
- EXISTING STORM SEWER
- EXISTING SANITARY SEWER
- EXISTING WATERMAIN
- STORM SEWER
- SANITARY SEWER
- WATERMAIN
- SANITARY MANHOLE
- CLEANOUT
- HYDRANT
- GATE VALVE
- REDUCER
- FIRE DEPARTMENT CONNECTION

NOTES

1. SEE SHEET G-002 FOR ADDITIONAL PROJECT NOTES.
2. CONTRACTOR SHALL VERIFY LOCATION, SIZE, INVERT AND MATERIAL OF UTILITY CONNECTIONS TO BUILDING WITH MEP PLANS.
3. SMALL UTILITY ROUTING IS NOT SHOWN ON CIVIL PLANS. CONTRACTOR TO COORDINATE ROUTING WITH APPLICABLE UTILITY PROVIDERS.
4. WATER AND SANITARY SEWER CONNECTIONS WILL NOT BE PERMITTED UNTIL ALL WATER AND SANITARY SUBDIVISION IMPROVEMENTS HAVE BEEN ACCEPTED BY THE CITY AND DETERMINED TO BE READY TO BE PLACED INTO OPERATION.



**PRIMROSE SCHOOL -
LAKE ELMO**
LAKE ELMO, WASHINGTON COUNTY,
MINNESOTA

PROJECT TITLE:	PRIMROSE SCHOOL - LAKE ELMO		
ISSUE NO.:	1		
DESCRIPTION:	SITE PERMIT PLANS		
DATE:	04/10/2025		

PROJECT NO.:	190300279
DWN BY:	KRM
CHKD BY:	AWD
APPD BY:	JRA
ISSUE DATE:	04/10/2025
ISSUE NO.:	1
SHEET TITLE:	UTILITY PLAN
SHEET NO.:	C-401

MDH STATEMENT OF QUANTITIES

ITEM	SIZE	QUANTITY	UNIT
DIP WATERMAIN	6" Ø	175	LF
DIP WATERMAIN	2" Ø	33	LF
GATE VALVE	6" Ø	1	EACH
DIP TEE	6"x6" Ø	1	EACH
DIP TEE	6"x2" Ø	1	EACH
DIP 45° BEND	6" Ø	2	EACH
DIP 90° BEND	6" Ø	1	EACH
REDUCER	8" X 6" Ø	1	EACH
HYDRANT	6" Ø	1	EACH

NOTE: QUANTITIES ON PLAN SUPERCEDE LIST QUANTITIES IN A DISCREPANCY

SANITARY STRUCTURE SCHEDULE

STRUCTURE ID	SIZE*	STRUCTURE	CASTING
CO 1	6" Ø	SEE DETAIL 1/C-804	-
CO 2	6" Ø	SEE DETAIL 1/C-804	-

* STRUCTURE SIZES ARE APPROXIMATE. PRECAST MANUFACTURER TO CONFIRM SIZES AND ADJUST AS NECESSARY, PRIOR TO BID OPENING
* NEENAH OR APPROVED EQUAL

PIPE CROSSING SCHEDULE

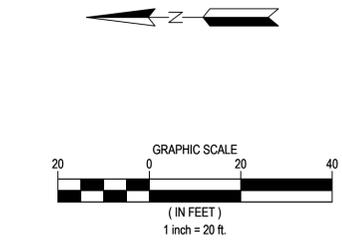
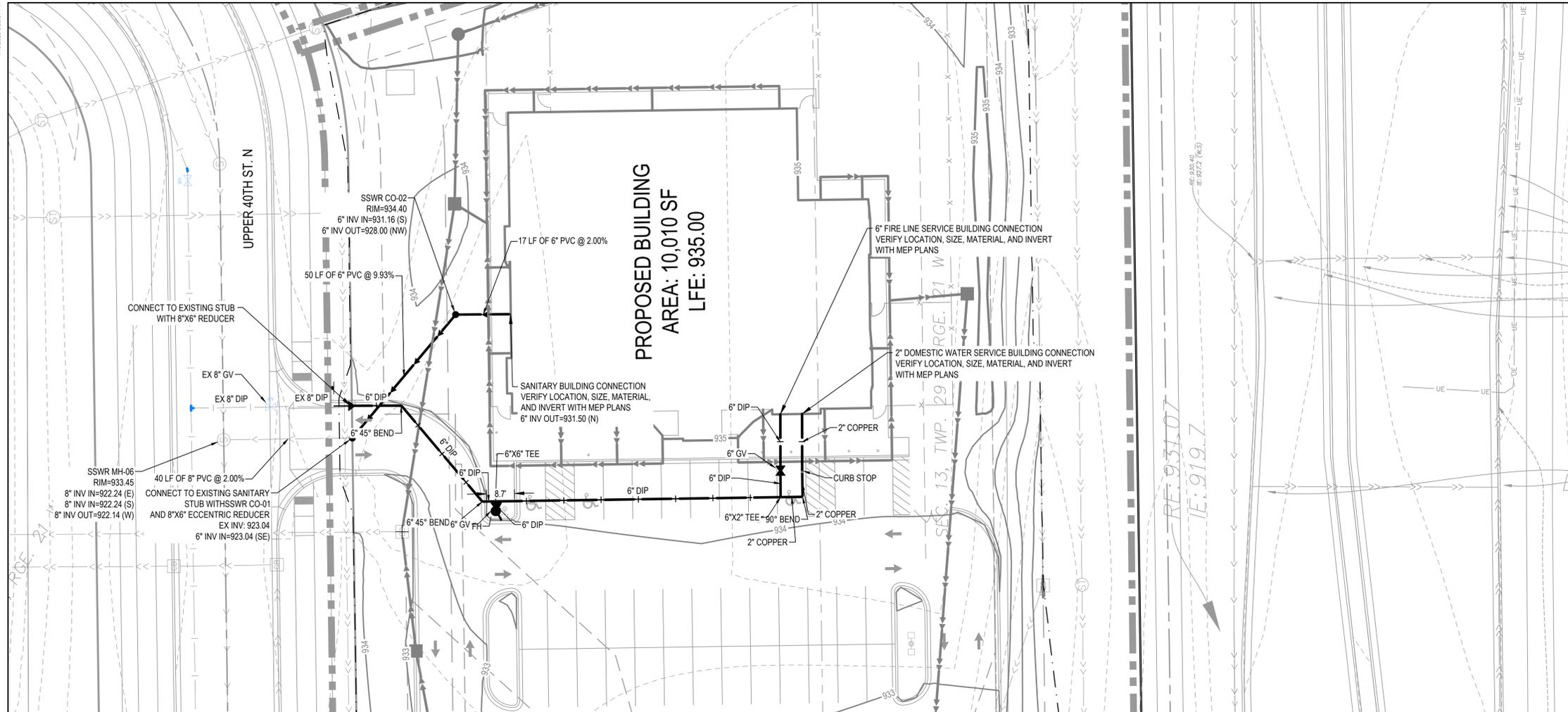
	STORM			SANITARY			WATER ^A	
	SIZE	MATERIAL	INVERT	SIZE	MATERIAL	INVERT	SIZE	TOP OF PIPE
1	12" Ø	RCP	928.17	6" Ø	PVC	926.88	-	-
2	12" Ø	PVC	927.98	-	-	-	6" Ø	DIP 922.94
3	-	-	-	6" Ø	PVC	924.34	6" Ø	DIP 922.74
4	6" Ø	PVC	931.73	-	-	-	6" Ø	DIP 926.00
5	6" Ø	PVC	931.66	-	-	-	2" Ø	COPPER 926.00
6	6" Ø	PVC	929.85	6" Ø	PVC	931.36	-	-

^A MAINTAIN 18" SEPARATION AT ALL WATER CROSSINGS, WITH 4" RIGID INSULATION AS REQUIRED. SEE DETAIL PLATE D-10C-803

WARNING:
THE CONTRACTOR SHALL BE RESPONSIBLE FOR CALLING FOR LOCATIONS OF ALL EXISTING UTILITIES. THEY SHALL COOPERATE WITH ALL UTILITY COMPANIES IN MAINTAINING THEIR SERVICE AND/OR RELOCATION OF LINES.

THE CONTRACTOR SHALL CONTACT GOPHER STATE ONE CALL AT 651-454-0002 AT LEAST 48 HOURS IN ADVANCE (EXCLUDING THE DAY OF THE REQUEST AND EXCLUDING HOLIDAYS AND WEEKENDS) FOR THE LOCATIONS OF ALL UNDERGROUND WIRES, CABLES, CONDUITS, PIPES, MANHOLES, VALVES OR OTHER BURIED STRUCTURES BEFORE DIGGING. THE CONTRACTOR SHALL REPAIR OR REPLACE THE ABOVE WHEN DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.

GOPHER STATE ONE CALL
TWIN CITY AREA: 651-454-0002
TOLL FREE 1-800-252-1166

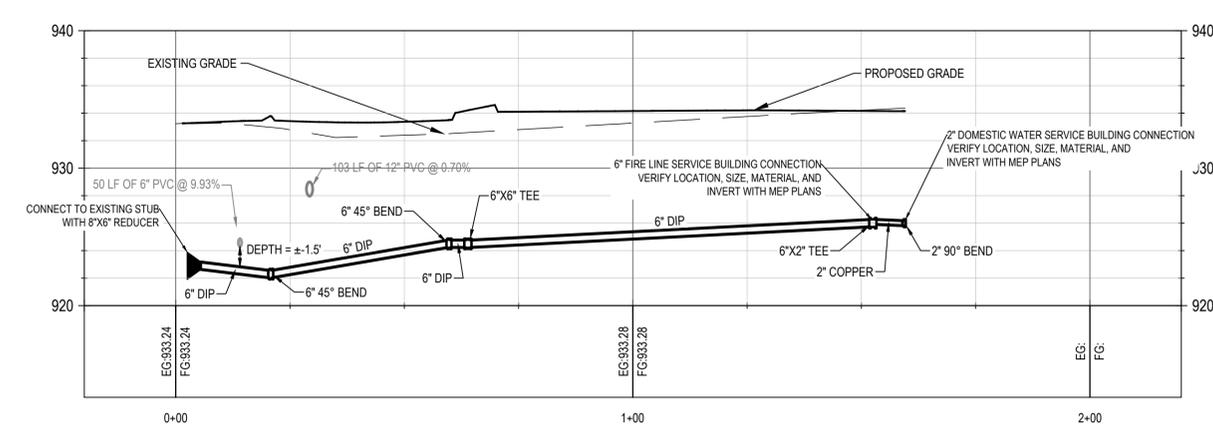


LEGEND

	PROPERTY BOUNDARY
	LOT LINE
	EASEMENT LINE
	SETBACK LINE
	RIGHT OF WAY LINE
	EXISTING EASEMENT LINE
	EXISTING PROPERTY LINE
	EXISTING MINOR CONTOUR
	EXISTING MAJOR CONTOUR
	EXISTING STORM SEWER
	EXISTING SANITARY SEWER
	EXISTING WATERMAIN
	STORM SEWER
	SANITARY SEWER
	WATERMAIN
	SANITARY MANHOLE
	CLEANOUT
	HYDRANT
	GATE VALVE
	REDUCER
	FIRE DEPARTMENT CONNECTION

- NOTES**
- SEE SHEET G-002 FOR ADDITIONAL PROJECT NOTES.
 - CONTRACTOR SHALL VERIFY LOCATION, SIZE, INVERT AND MATERIAL OF UTILITY CONNECTIONS TO BUILDING WITH MEP PLANS.
 - SMALL UTILITY ROUTING IS NOT SHOWN ON CIVIL PLANS. CONTRACTOR TO COORDINATE ROUTING WITH APPLICABLE UTILITY PROVIDERS.

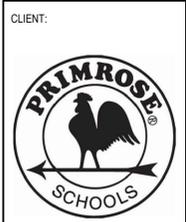
WATERMAIN PROFILE



WARNING:
 THE CONTRACTOR SHALL BE RESPONSIBLE FOR CALLING FOR LOCATIONS OF ALL EXISTING UTILITIES. THEY SHALL COOPERATE WITH ALL UTILITY COMPANIES IN MAINTAINING THEIR SERVICE AND/OR RELOCATION OF LINES.

THE CONTRACTOR SHALL CONTACT GOPHER STATE ONE CALL AT 651-454-0002 AT LEAST 48 HOURS IN ADVANCE (EXCLUDING THE DAY OF THE REQUEST AND EXCLUDING HOLIDAYS AND WEEKENDS) FOR THE LOCATIONS OF ALL UNDERGROUND WIRES, CABLES, CONDUITS, PIPES, MANHOLES, VALVES OR OTHER BURIED STRUCTURES BEFORE DIGGING. THE CONTRACTOR SHALL REPAIR OR REPLACE THE ABOVE WHEN DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.

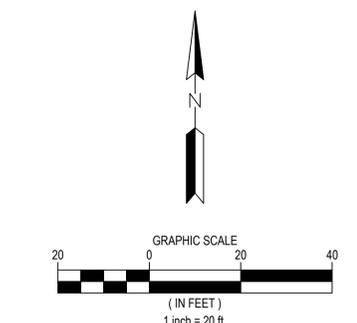
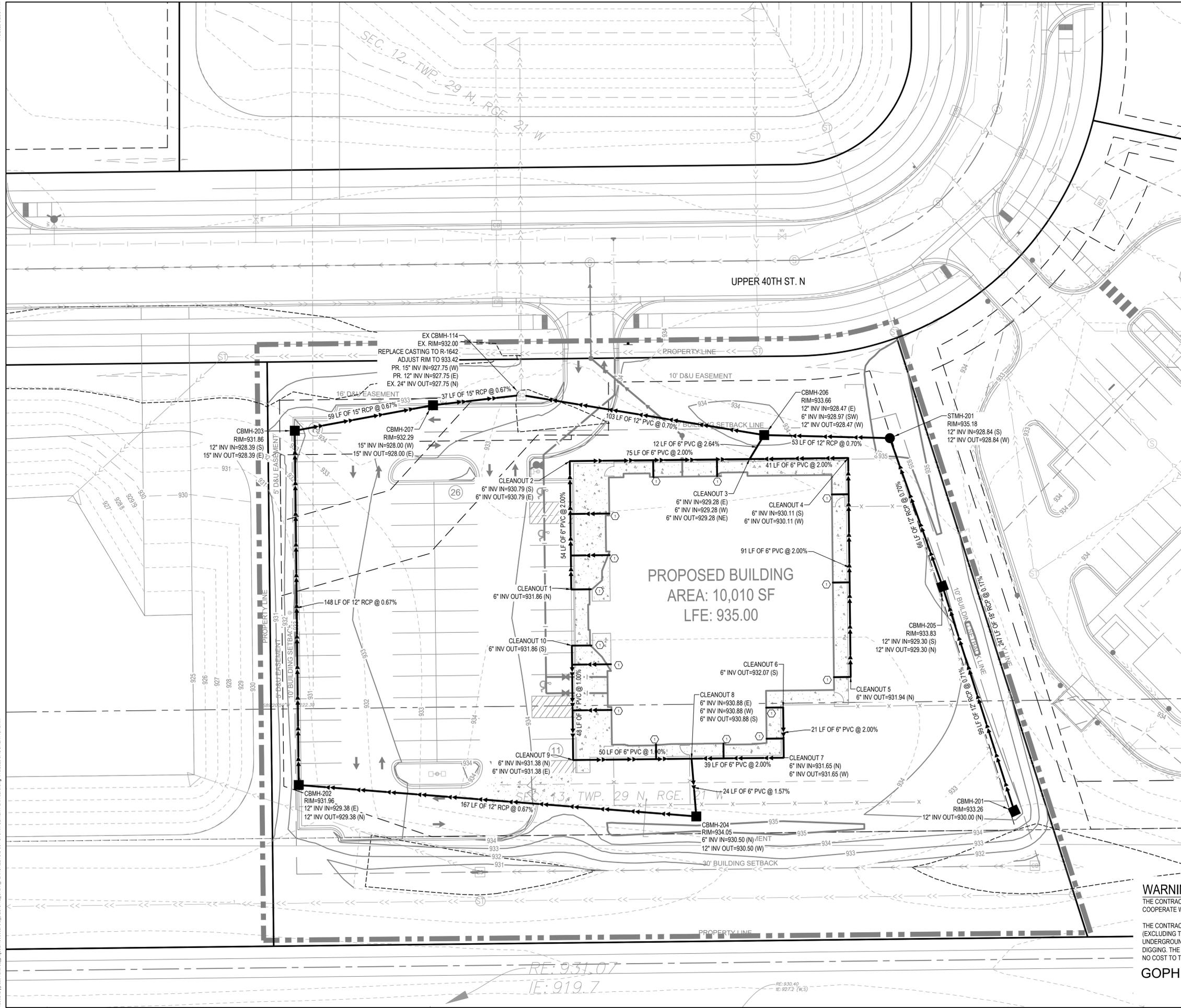
GOPHER STATE ONE CALL
 TWIN CITY AREA: 651-454-0002
 TOLL FREE 1-800-252-1166



PRIMROSE SCHOOL - LAKE ELMO
 LAKE ELMO, WASHINGTON COUNTY, MINNESOTA

PROJECT TITLE:	PRIMROSE SCHOOL - LAKE ELMO	
ISSUE NO.:	1	
DATE:	04/10/2025	
DESCRIPTION:	SITE PERMIT PLANS	

PROJECT NO.:	190300279				
DWN BY:	KRM	CHKD BY:	AWD	APPD BY:	JRA
ISSUE DATE:	04/10/2025				
ISSUE NO.:	1				
SHEET TITLE:	WATERMAIN PLAN AND PROFILE				
SHEET NO.:	C-402				



LEGEND

- PROPERTY BOUNDARY
- LOT LINE
- EASEMENT LINE
- SETBACK LINE
- RIGHT OF WAY LINE
- SECTION LINE
- QUARTER LINE
- EXISTING EASEMENT LINE
- EXISTING PROPERTY LINE
- EXISTING STORM SEWER
- EXISTING SANITARY SEWER
- EXISTING WATERMAIN
- EXISTING SANITARY MANHOLE
- EXISTING STORM SEWER INLET
- STORM SEWER
- 4" PERFORATED DRAIN TILE
- SANITARY SEWER
- WATERMAIN
- STORM CATCH BASIN
- STORM MANHOLE
- STORM CLEANOUT

NOTES

1. SEE SHEET G-002 FOR ADDITIONAL PROJECT NOTES.
2. CONTRACTOR SHALL VERIFY LOCATION, SIZE, INVERT AND MATERIAL OF UTILITY CONNECTIONS TO BUILDING WITH MEP PLANS.
3. SMALL UTILITY ROUTING IS NOT SHOWN ON CIVIL PLANS. CONTRACTOR TO COORDINATE ROUTING WITH APPLICABLE UTILITY PROVIDERS.

KEYNOTES

1. 6" PVC DOWNSPOUT DRAINS. VERIFY INVERTS AND LOCATIONS WITH ARCHITECTURAL PLANS.

STORM STRUCTURE SCHEDULE

STRUCTURE ID	SIZE*	DETAIL	
		STRUCTURE	CASTING*
CBMH 01	48" Ø	406/C-803	R-3067-V
CBMH 02	48" Ø	406/C-803	R-3067-V
CBMH 03	48" Ø	406/C-803	R-3067-V
CBMH 04	48" Ø	406/C-803	R-3067-V
CBMH 05	48" Ø	406/C-803	R-3067-V
CBMH 06	48" Ø	406/C-803	R-3067-V
CBMH 07	48" Ø	406/C-803	R-3067-V
STMH 201	48" Ø	407/C-803	R-1642
CO 1 - 10	6" Ø	2/C-804	-

* STRUCTURE SIZES ARE APPROXIMATE. PRECAST MANUFACTURER TO CONFIRM SIZES AND ADJUST AS NECESSARY, PRIOR TO BID OPENING

* NEENAH OR APPROVED EQUAL

WARNING:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CALLING FOR LOCATIONS OF ALL EXISTING UTILITIES. THEY SHALL COOPERATE WITH ALL UTILITY COMPANIES IN MAINTAINING THEIR SERVICE AND/OR RELOCATION OF LINES.

THE CONTRACTOR SHALL CONTACT GOPHER STATE ONE CALL AT 651-454-0002 AT LEAST 48 HOURS IN ADVANCE (EXCLUDING THE DAY OF THE REQUEST AND EXCLUDING HOLIDAYS AND WEEKENDS) FOR THE LOCATIONS OF ALL UNDERGROUND WIRES, CABLES, CONDUITS, PIPES, MANHOLES, VALVES OR OTHER BURIED STRUCTURES BEFORE DIGGING. THE CONTRACTOR SHALL REPAIR OR REPLACE THE ABOVE WHEN DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.

GOPHER STATE ONE CALL
TWIN CITY AREA: 651-454-0002
TOLL FREE 1-800-252-1166

CLIENT:



PRIMROSE SCHOOL - LAKE ELMO
LAKE ELMO, WASHINGTON COUNTY, MINNESOTA

PROJECT TITLE

ISSUE NO:

1

DESCRIPTION: SITE PERMIT PLANS

DATE: 04/10/2025

PROJECT NO.: 190300279

DWN BY: KRM

CHKD BY: AWD

APPD BY: JRA

ISSUE DATE: 04/10/2025

ISSUE NO: 1

SHEET TITLE: STORM SEWER PLAN

SHEET NO: C-501

MnDOT B612
CONCRETE CURB AND GUTTER

MnDOT B618
CONCRETE CURB AND GUTTER

SURMOUNTABLE
CONCRETE CURB AND GUTTER

NOTE: CONSTRUCT B618 CURB & GUTTER AT INTERSECTION RADI FROM P.C. TO P.T. PROVIDE 10-FOOT TRANSITION FROM SURMOUNTABLE CURB & GUTTER TO B618 CURB & GUTTER AT INTERSECTIONS AND CATCH BASINS.

CONCRETE CURB & GUTTER

JANUARY 2022

CITY OF LAKE ELMO

STANDARD DRAWING NO. 501A
LAKE ELMO

5" CONCRETE
5" AGGREGATE BASE, CL. 6,
100% CRUSHED STONE AGGREGATE PER
MNDOT SPEC. 3138 AND CITY SPEC 3210
SUBGRADE (APPROVED BY CITY)

NOTE
1. SIDEWALKS SHALL HAVE CONCRETE PED RAMPS AT ALL STREET INTERSECTIONS.
2. PROVIDE 2% CROSS-SLOPE TO MAINTAIN POSITIVE DRAINAGE AWAY FROM SIDEWALK THROUGHOUT LENGTH OF WALK.

CONCRETE SIDEWALK

JANUARY 2022

CITY OF LAKE ELMO

STANDARD DRAWING NO. 510
LAKE ELMO

5' T-SHAPED METAL FENCE POST
(NEAR VEHICLE/CONSTRUCTION TRAFFIC)
OR 2"x2" WOOD POST

6" MIN. TRENCH

2.0' MIN. FOR TYPES MS/HI
1.5' MIN. FOR TYPE PA

NOTE : -SILT FENCE INSTALLATION SHALL CONFORM TO MNDOT2573.3, TYPE MS/HI NEAR VEHICLE/CONSTRUCTION TRAFFIC, TYPE PA AT ALL OTHER LOCATIONS.
-MATERIALS SHALL CONFORM TO MNDOT 3886.

SILT FENCE

JANUARY 2022

CITY OF LAKE ELMO

STANDARD DRAWING NO. 601
LAKE ELMO

NOTE: MAINTAIN AND CLEAN OUT DEVICES AS NECESSARY TO ACHIEVE PROPER FLOW OF STORM WATER INTO STORM SYSTEM.

POLYESTER SLEEVE
FILTER ASSEMBLY
MANHOLE COVER ASSEMBLY

WIMCO RD-23 OR APPROVED EQUAL

DEFLECTOR PLATE
OVERFLOW ① - CENTER OF FILTER ASSEMBLY
OVERFLOW ② - TOP OF CURB BOX
10" FILTER ASSEMBLY
CURB
CG-23 HIGH-FLOW
HIGH-FLOW FABRIC

WIMCO CG-23 HIGH-FLOW OR APPROVED EQUAL

SEDIMENT CONTROL AROUND STORM SEWER INLET

JANUARY 2022

CITY OF LAKE ELMO

STANDARD DRAWING NO. 604
LAKE ELMO

HARD SURFACE PUBLIC ROAD

50' MIN.

40' RAD.

12" MIN.

1" - 2" WASHED ROCK

20' MIN.

GEOTEXTILE FABRIC UNDERNEATH ROCK

NOTES:
① MAXIMUM WIDTH OF CONSTRUCTION ENTRANCE IS 24 FEET.
② A MNDOT 3733 TYPE V GEOTEXTILE FABRIC SHALL BE USED UNDER THE ROCK TO PREVENT MIGRATION OF THE UNDERLYING SOIL INTO THE STONE.
③ CONSTRUCTION ENTRANCE IS REQUIRED FOR ALL NEW HOME CONSTRUCTION AND NEW STREET CONSTRUCTION.
④ CONSTRUCTION ENTRANCE SHALL BE MAINTAINED TO PREVENT TRACKING OF MUD ONTO ROADWAYS THAT ADJOIN THE PROJECT. THIS WILL REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL ROCK OR REMOVAL AND REINSTALLATION OF THE ROCK ENTRANCE.
⑤ REMOVE MUD AND DEBRIS FROM TIRES AND VEHICLE UNDERCARRIAGE PRIOR TO LEAVING THE SITE.

ROCK CONSTRUCTION ENTRANCE

JANUARY 2022

CITY OF LAKE ELMO

STANDARD DRAWING NO. 605
LAKE ELMO

SET STANDARD PAVING COVER 1/2" BELOW HARD SURFACES, FLUSH IN TURF AREAS

CURB

GATE VALVE BOX

INSTALL VALVE BOX ADAPTER (SEE DETAIL 204)

GATE VALVE

1 1/2" WASHED ROCK ALL AROUND. MIN. 1/3 C.Y. (MIN. 1 C.Y. IN IMPERVIOUS SOILS)

USE "MEGA LUG" BRAND MECHANICAL JOINT THRUST RETAINER GLANDS AT ALL JOINTS. SUPPLEMENT MEGA LUGS WITH 2-3/4" STAINLESS STEEL TIE RODS AS DIRECTED BY ENGINEER.

MNDOT 3733 TYPE 3 GEOTEXTILE FABRIC MIN. 1 LAYER ATTACH TO TOP OF BONNET

CONCRETE MANHOLE BLOCK

NOTES:
1. SUPPLY ONE GATE VALVE KEY PER PROJECT, AS DIRECTED BY THE ENGINEER. EXTRA KEYS SHALL BE DELIVERED TO THE PUBLIC WORKS BUILDING.
2. MAXIMUM DEPTH OF OPERATING NUT ON VALVE TO BE 10 FT.

GATE VALVE INSTALLATION

JANUARY 2022

CITY OF LAKE ELMO

STANDARD DRAWING NO. 203
LAKE ELMO

"INFI-SHIELD" SEAL OR EQUAL

NEENAH CASTING R-1642 TYPE "B" SOLID COVER WITH CONCEALED PICKHOLES

1/2" MORTAR BETWEEN RINGS, CASTING & MANHOLE. FINISH SMOOTH ON INSIDE AND OUTSIDE.

RINGS (2 MIN., 1.0" MAX. OF RINGS & SPEC MIX MORTAR).

SECTION A-A

"INFI-SHIELD" 12" WIDE EXTERNAL SEAL WRAP, OR EQUAL.

CEMENT MORTAR

6" PRECAST BASE SLAB

ELEVATION

NO WOOD SHALL BE USED FOR ADJUSTING CASTING; CEMENT MORTAR ONLY.
CAST IRON MANHOLE FRAME & COVER AS PER SPECIFICATIONS.
MANHOLE STEPS SHALL BE CAST IRON, ALUMINUM OR STEEL REINFORCED PLASTIC PER ASTM C478. LOCATION SHALL BE AS NOTED IN THE SPECIFICATIONS.
PRECAST REINFORCED CONCRETE MANHOLE SECTIONS & BASE SLAB PER ASTM C478.
FURNISH PRECAST MANHOLE SECTIONS WITH O-RING GASKETS & LUBRICANT EXCEPT AS OTHERWISE SPECIFIED. PROVIDE BITUMASTIC SEAL STRIP AT ALL MANHOLE SECTION JOINTS.
A 12" OR 18" BARREL SECTION SHALL BE INSTALLED UNDER THE CONE WHENEVER POSSIBLE.
FILL OPENING BETWEEN PIPE & MH WALL WITH CEMENT MORTAR. INSIDE SURFACE SHALL BE FINISHED SMOOTH.

STORM SEWER MANHOLE, TYPE 407
(PIPES 27" OR LESS)

JANUARY 2022

CITY OF LAKE ELMO

STANDARD DRAWING NO. 407
LAKE ELMO

EXISTING CONCRETE CURB & GUTTER / EDGE OF PAVEMENT

TOOLED CONSTRUCTION JOINT

CONCRETE SPLASH PAD

HYDRANT FLAG
FLEX STAKE - FH 800 SERIES OR APPROVED EQUAL

WATEROUS PACER HYDRANT WITH STORZ NOZZLE (MODEL WB-67) AND PENTAGON NUT END CAP

CONNECT TRACER WIRE AND GROUNDING ROD WIRE TO TRACER WIRE ACCESS BOX & FLANGE (COPPER HEAD #12R-FLPKG-5/8)

18" LONG 1" PVC CONDUIT (TRACER WIRE ONLY)

TRACER WIRE (WHEN APPLICABLE)

POLYETHYLENE ENCASUREMENT AROUND FULL LENGTH OF HYDRANT

COVER WITH GEOTEXTILE FABRIC MNDOT 3733 TYPE 3

CONCRETE BLOCK REACTION BACKING TO VIRGIN SOIL

USE "MEGA LUG" BRAND MECHANICAL JOINT THRUST RETAINER GLANDS AT ALL JOINTS.

SEE STD. DWG. 203

MANHOLE BLOCK

1 1/2" WASHED ROCK ALL AROUND MIN. 1 C.Y.

DRIVE-IN MAGNESIUM GROUNDING ANODE ROD PER CITY SPEC 3310

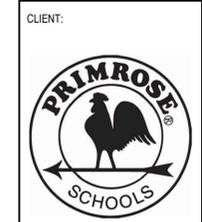
NOTES:
1. USE MEGA LUGS ON ALL JOINTS. PROVIDE CONCRETE BLOCKING BEHIND HYDRANT AND TEE. USE COR-BLUE T BOLTS ON ALL FITTINGS.
2. PLUG WEEP HOLES IF GROUNDWATER IS PRESENT.
3. IF WEEP HOLES ARE PLUGGED, PUMPER NOZZLE CAP MUST BE PAINTED GREEN AND A TAG SHALL BE ATTACHED TO THE HYDRANT STATING "DRAIN HOLES PLUGGED".
4. SUPPLY 1 EXTRA FLEX STAKE FOR EVERY 10 HYDRANTS INSTALLED. MINIMUM ONE PER PROJECT.
5. SUPPLY 1 HYDRANT STORZ WRENCH OR HYDRANT REPAIR KIT PER PROJECT.
6. SUPPLY 1 6" HYDRANT EXTENSION AS DIRECTED BY THE ENGINEER.
7. ALL HYDRANTS NOT IN SERVICE SHALL BE COVERED WITH BLACK POLY PLASTIC.
8. CONCRETE SPLASH PAD SURFACE SHALL HAVE BROOMED FINISH.
**EXTRA STAKES AND REPAIR KITS ARE TO BE DELIVERED TO THE PUBLIC WORKS BUILDING.

TYPICAL HYDRANT LAYOUT
(VALVE IN BOULEVARD)

JANUARY 2022

CITY OF LAKE ELMO

STANDARD DRAWING NO. 201
LAKE ELMO



PRIMROSE SCHOOL - LAKE ELMO
LAKE ELMO, WASHINGTON COUNTY, MINNESOTA

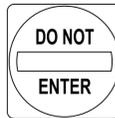
PROJECT TITLE	PRIMROSE SCHOOL - LAKE ELMO		
ISSUE NO.	1		
DESCRIPTION	SITE PERMIT PLANS		
DATE	04/10/2025		
PROJECT NO.	190300279		
DWN BY:	KRM	CHKD BY:	AWD
ISSUE DATE:	04/10/2025		
ISSUE NO.:	1		
SHEET TITLE:	DETAILS		
SHEET NO.:	C-801		



R1-1
30"x30"



R7-8m ACCESSIBLE PARKING - 12"x18"
R7-8P VAN ACCESSIBLE - 12"x6"

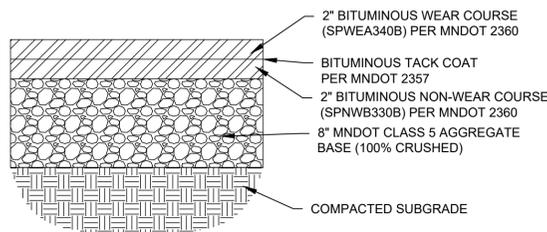


R5-1
30"x30"

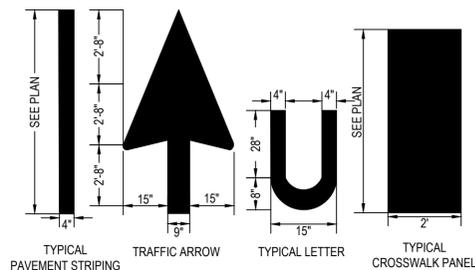


R7-1 MODIFIED NO PARKING ANY TIME
EXCLUDE ARROW - 12"x18"

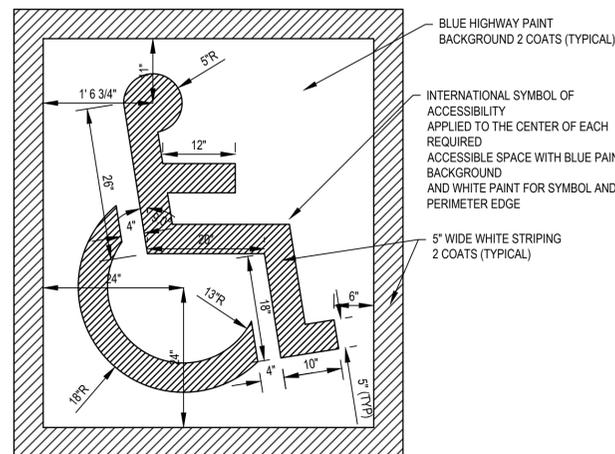
2 STANDARD PARKING LOT SIGNS
C-802 NOT TO SCALE



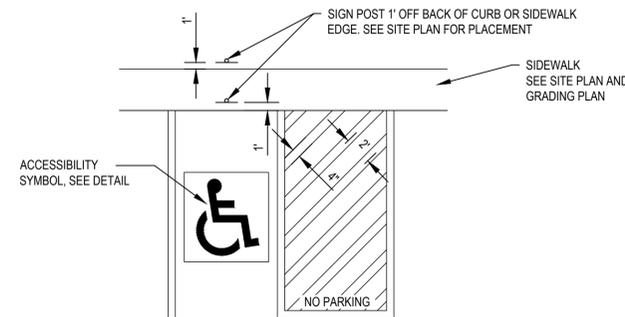
1 MEDIUM DUTY BITUMINOUS PAVEMENT
C-802 NOT TO SCALE



3 TYPICAL PAVEMENT MARKINGS
C-802 NOT TO SCALE

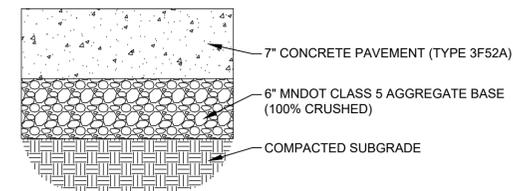


4 ACCESSIBILITY SYMBOL
C-802 NOT TO SCALE

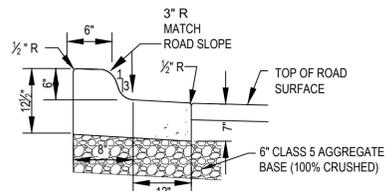


- NOTES:
1. STRIPING ADJACENT TO HANDICAP PARKING SHALL BE BLUE.
 2. DIMENSION HANDICAP SYMBOLS PER INTERNATIONAL SYMBOL OF ACCESSIBILITY DETAIL.
 3. SEE PLAN FOR STALL DIMENSIONS.
 4. DIMENSION "NO PARKING" TO BE 1' TALL.
 5. SIGNAGE AND MARKINGS TO BE IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REGULATIONS.

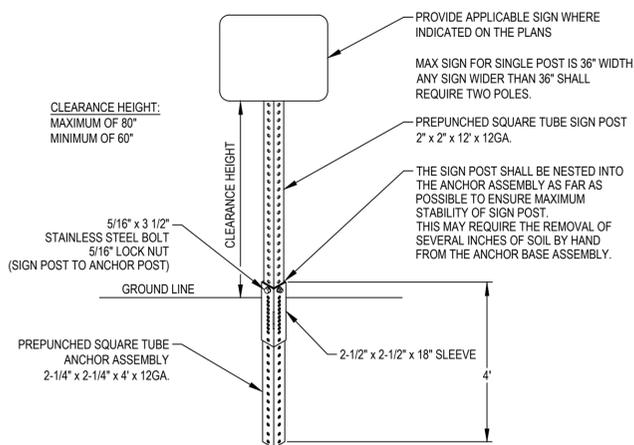
5 ACCESSIBILITY STRIPING
C-802 NOT TO SCALE



6 CONCRETE PAVEMENT
C-802 NOT TO SCALE

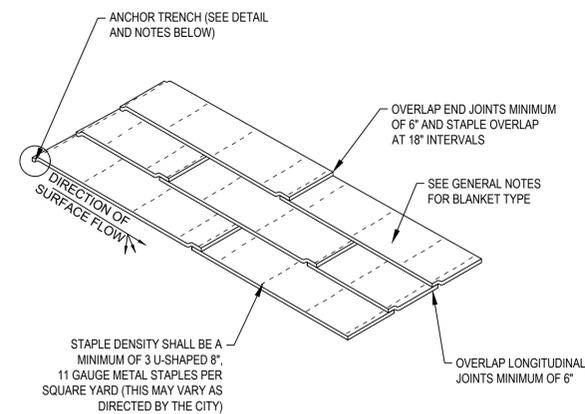


7 B612 CONCRETE CURB AND GUTTER - TIP OUT
C-802 NOT TO SCALE

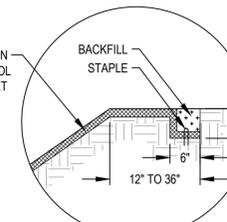


- NOTES:
1. SEE MNDOT STANDARD SIGN MANUAL FOR PUNCHING CODE AND DETAILED DRAWINGS OF TYPE "C" SIGN PANELS.
 2. SEE MNDOT TRAFFIC ENGINEERING MANUAL CHAPTER 6 FOR DETAILS OF TRAFFIC SIGN INSTALLATION.

8 SIGN POST
C-802 NOT TO SCALE

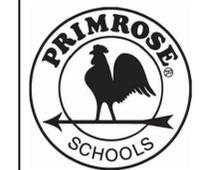


- ANCHOR TRENCH INSTALLATION:
1. DIG 6" X 6" TRENCH
 2. LAY BLANKET IN TRENCH
 3. STAPLE AT 1.5' INTERVALS
 4. BACKFILL WITH NATURAL SOIL AND COMPACT



9 EROSION CONTROL BLANKET INSTALLATION
C-802 NOT TO SCALE

CLIENT:



PRIMROSE SCHOOL -
LAKE ELMO
LAKE ELMO, WASHINGTON COUNTY,
MINNESOTA

PROJECT TITLE

ISSUE NO.:

1

DESCRIPTION:
SITE PERMIT PLANS

DATE:
04/10/2025

PROJECT NO.: 190300279

DWN BY: KRM

CHKD BY: AWD

APPD BY: JRA

ISSUE DATE: 04/10/2025

ISSUE NO.: 1

SHEET TITLE:

DETAILS

SHEET NO.:

C-802

GRANULAR MATERIAL BEDDING
(TO BE USED WHERE, IN THE OPINION OF THE ENGINEER, UNSTABLE MATERIAL PREVENTS USE OF THE "EARTH FOUNDATION" DETAIL)

EARTH FOUNDATION
(EXCEPT SANITARY SEWER)

PIPE FOUNDATION DETAILS

JANUARY 2022

STANDARD DRAWING NO. 101
LAKE ELMO

CITY OF LAKE ELMO

GRANULAR MATERIAL BEDDING METHOD
(FOR PVC SANITARY SEWER PIPE)

JANUARY 2022

STANDARD DRAWING NO. 103
LAKE ELMO

CITY OF LAKE ELMO

CATCH BASIN/MANHOLE, TYPE 406

PRECAST BASE	
MH DIA.	SLAB THICKNESS
48"	6"
54"-102"	8"
108"	10"
120"	12"

JANUARY 2022

STANDARD DRAWING NO. 406
LAKE ELMO

CITY OF LAKE ELMO

WATERMAIN OFFSET

JANUARY 2022

STANDARD DRAWING NO. 210
LAKE ELMO

CITY OF LAKE ELMO

CATCH BASIN, TYPE 404

JANUARY 2022

STANDARD DRAWING NO. 404
LAKE ELMO

CITY OF LAKE ELMO

1 SANITARY SERVICE CLEAN OUTS
NOT TO SCALE

NOTES:
1. IF CLEANOUT IS IN PAVEMENT, CONTRACTOR MUST INSTALL FORD A-1 CASTING, OR APPROVED EQUAL MARKED WITH "SEWER" ON LID.

JANUARY 2022

STANDARD DRAWING NO. 803
LAKE ELMO

CITY OF LAKE ELMO

2 PVC DRAINTILE CLEANOUT
NOT TO SCALE

NOTES:
1. IF CLEANOUT IS IN PAVEMENT, CONTRACTOR MUST INSTALL FORD A-1 CASTING, OR APPROVED EQUAL MARKED WITH "SEWER" ON LID.

JANUARY 2022

STANDARD DRAWING NO. 803
LAKE ELMO

CITY OF LAKE ELMO

PROJECT TITLE: PRIMROSE SCHOOL - LAKE ELMO

ISSUE NO.	DESCRIPTION	DATE
1	SITE PERMIT PLANS	04/10/2025

PROJECT NO.: 190300279

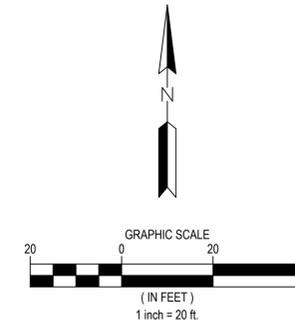
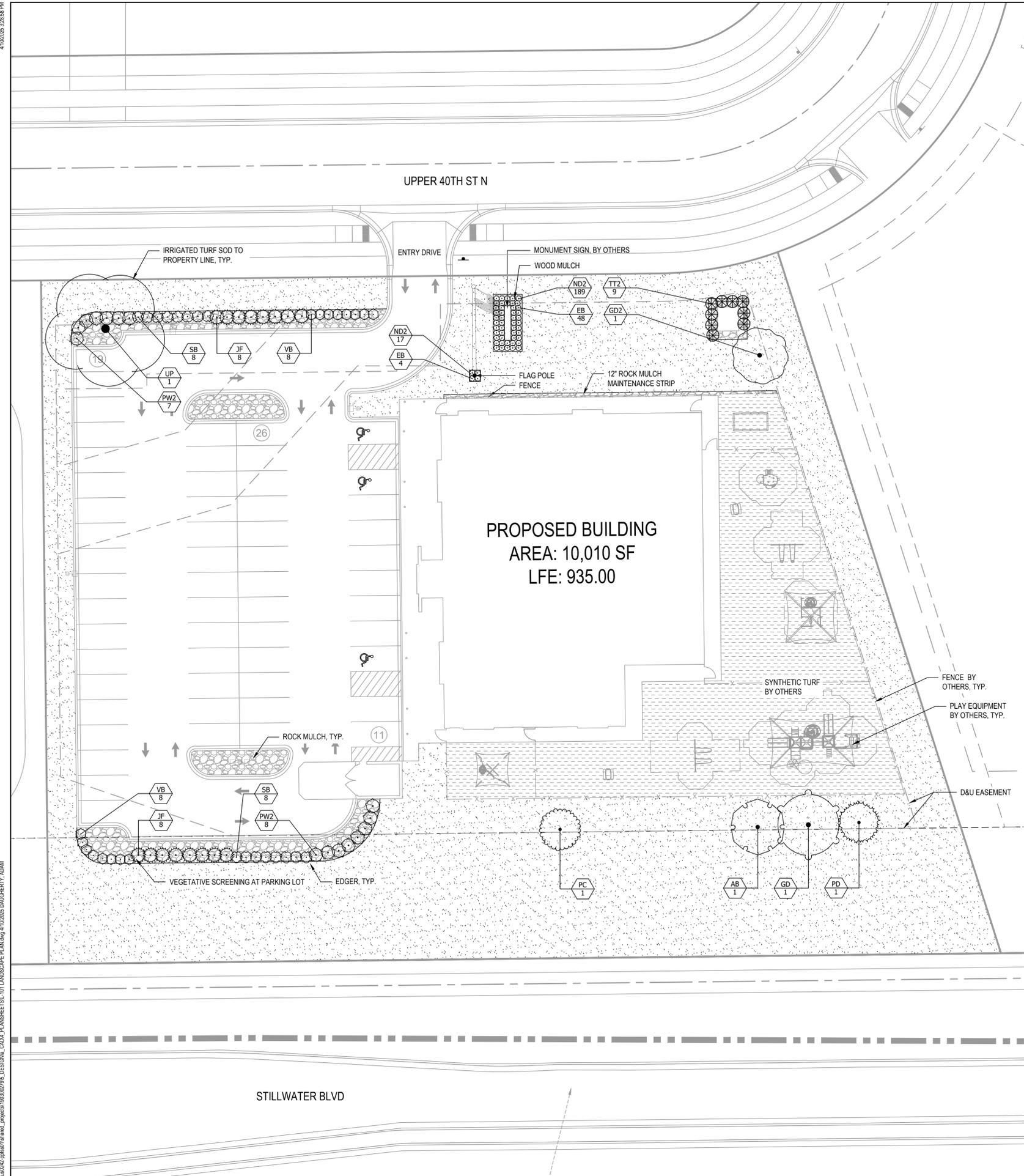
DWN BY: KRM | CHKD BY: AWD | APPD BY: JRA

ISSUE DATE: 04/10/2025

ISSUE NO.: 1

SHEET TITLE: DETAILS

SHEET NO.: C-803



LEGEND

- PROPERTY BOUNDARY
- LOT LINE
- EASEMENT LINE
- SETBACK LINE
- RIGHT OF WAY LINE
- SECTION LINE
- QUARTER LINE
- EXISTING EASEMENT LINE
- EXISTING PROPERTY LINE
- EDGER
- IRRIGATED TURF SOD
- SYNTHETIC TURF
- ROCK MULCH

MUNICIPAL LANDSCAPE CALCULATIONS

1. REQUIRED PARKING LOT TREES (1 PER 10 SPACES); 56 SPACES
 - 1.1. REQUIRED TREES: 6
 - 1.2. PROPOSED TREES: 6
2. REQUIRED PARKING LOT SCREENING
 - 2.1. PARKING LOT SCREENING PROVIDED
 - 2.2. REQUIRED SCREENING OF VEHICLE HEADLIGHTS FACING STILLWATER BLVD
 - 2.2.1. SCREENING PROVIDED

PLANT SCHEDULE

SYMBOL	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONT	CAL	COMPOSITION OF TOTAL
EVERGREEN TREES							
	AB	1	ABIES BALSAMEA	BALSAM FIR	B&B	6' HT.	16.7% (1/6)
	PD	1	PICEA GLAUCA 'DENSATA'	BLACK HILLS SPRUCE	B&B	6' HT.	16.7% (1/6)
	PC	1	PINUS CEMBRA	SWISS STONE PINE	B&B	6' HT.	16.7% (1/6)
OVERSTORY TREES							
	GD2	1	GLEDITSIA TRIACANTHOS INERMIS 'DRAVES'	STREET KEEPER® HONEY LOCUST	B&B	2.5"	16.7% (1/6)
	GD	1	GYMNOCLADUS DIOICA 'ESPRESSO'	KENTUCKY COFFEETREE	B&B	2.5"	16.7% (1/6)
	UP	1	ULMUS X 'NEW HORIZON'	NEW HORIZON ELM	B&B	2.5"	16.7% (1/6)
SYMBOL	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONT		COMPOSITION OF TOTAL
SHRUBS							
	JF	24	JUNIPERUS CHINENSIS 'SEA GREEN'	SEA GREEN JUNIPER	5 GAL		23.7% (24/101)
	PW2	20	PINUS MUGO 'WHITE BUD'	WHITE BUD MUGO PINE	5 GAL		20% (20/101)
	SB	24	SYRINGA X 'BLOOMERANG'	BLOOMERANG SERIES LILAC	5 GAL		23.7% (24/101)
	TT2	9	THUJA OCCIDENTALIS 'TECHNY GLOBE'	TECHNY GLOBE ARBORVITAE	5 GAL		9% (9/101)
	VB	24	VIBURNUM TRILOBUM 'BAILEY COMPACT'	BAILEY'S COMPACT CRANBERRYBUSH	5 GAL		23.7% (24/101)
ORNAMENTAL GRASSES							
	EB	52	ELYMUS ARENARIUS 'BLUE DUNE'	BLUE DUNE LYME GRASS	1 GAL		
PERENNIALS							
	ND2	206	NARCISSUS X 'DUTCH MASTER'	DUTCH MASTER DAFFODIL	1 GAL		

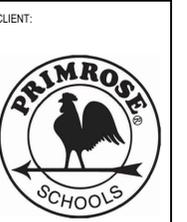
WARNING:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CALLING FOR LOCATIONS OF ALL EXISTING UTILITIES. THEY SHALL COOPERATE WITH ALL UTILITY COMPANIES IN MAINTAINING THEIR SERVICE AND/OR RELOCATION OF LINES.

THE CONTRACTOR SHALL CONTACT GOPHER STATE ONE CALL AT 651-454-0002 AT LEAST 48 HOURS IN ADVANCE (EXCLUDING THE DAY OF THE REQUEST AND EXCLUDING HOLIDAYS AND WEEKENDS) FOR THE LOCATIONS OF ALL UNDERGROUND WIRES, CABLES, CONDUITS, PIPES, MANHOLES, VALVES OR OTHER BURIED STRUCTURES BEFORE DIGGING. THE CONTRACTOR SHALL REPAIR OR REPLACE THE ABOVE WHEN DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.

GOPHER STATE ONE CALL

TWIN CITY AREA: 651-454-0002
TOLL FREE 1-800-252-1166



PRIMROSE SCHOOL - LAKE ELMO
LAKE ELMO, WASHINGTON COUNTY, MINNESOTA

PROJECT TITLE	PRIMROSE SCHOOL - LAKE ELMO
ISSUE NO.	1
DESCRIPTION	SITE PERMIT PLANS
DATE	04/10/2025

PROJECT NO.	190300279
DWN BY:	MSF
CHKD BY:	JDR
APPD BY:	MSF
ISSUE DATE:	04/10/2025
ISSUE NO.:	1
SHEET TITLE:	LANDSCAPE PLAN
SHEET NO.:	L-101

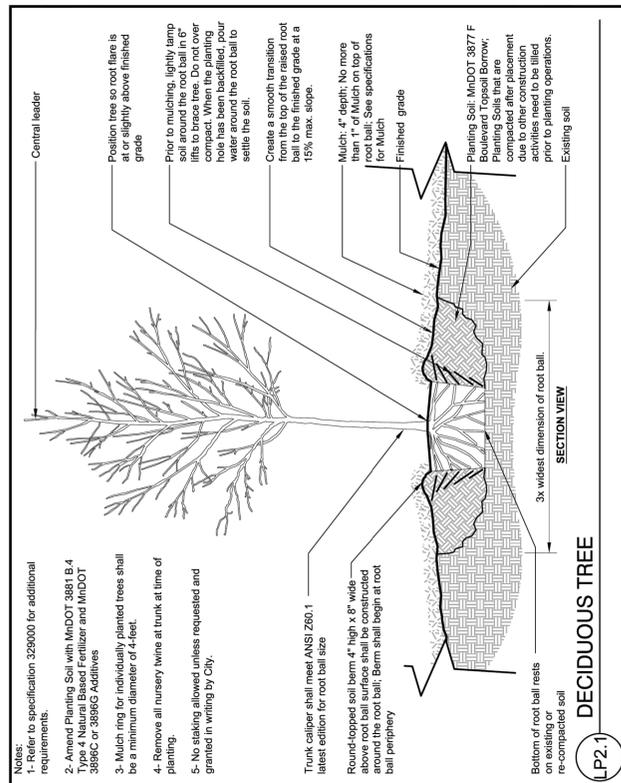
STANDARD PLAN NOTES
LANDSCAPE PLANS

- Contractor must contact Gopher State One Call 811 (www.gopherstateonecall.org) prior to tree staking and planting operations to verify underground utilities. Where private utilities exist on-site the Contractor is required to have those located as well.
- Plant materials shall meet American Standard for Nursery Stock: ANSI Z60.1, latest edition.
- No plant substitutions shall be made without the prior written authorization from the City.
- All tree locations to be field staked prior to installation. Contractor to coordinate field review of proposed tree locations with the City and Project Landscape Architect prior to any tree installation.
- All plants shall be planted immediately upon arrival to project site. No plant material is to be left overnight on the project site without being installed unless written approval by City.
- All trees, shrubs, perennials, turf lawn and native seeding to have a two-year warranty beginning upon written acceptance by the City. Defective plants as determined by the City shall be replaced within 30 days of notice during the growing season, and replacement materials shall receive the same two year warranty until plants are successfully established.
- Contractor to protect and maintain all plantings and plant beds, including protection from wildlife, weeding, re-mulching, fertilization, irrigation and all other typical forms of horticultural care until the end of the warranty period as determined and approved by City.
- All plants installed and maintained on City property shall be in accordance with City of Lake Elmo Bee-Safe Resolution No. 2015-13.
- An irrigation system or other water supply adequate to support the specified plant materials shall be provided.

APRIL 2017

THE CITY OF LAKE ELMO
CITY OF LAKE ELMO

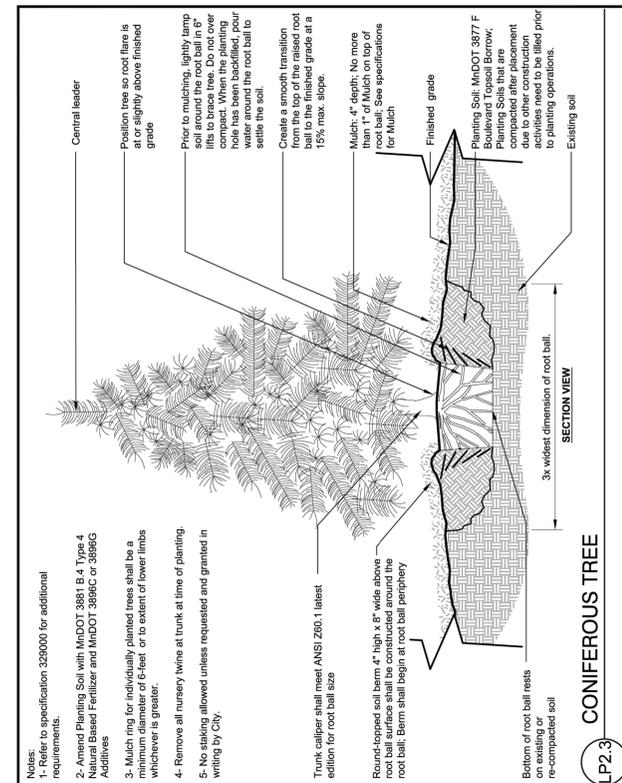
STANDARD DRAWING NO.
LP2.0
LAKE ELMO



APRIL 2017

THE CITY OF LAKE ELMO
CITY OF LAKE ELMO

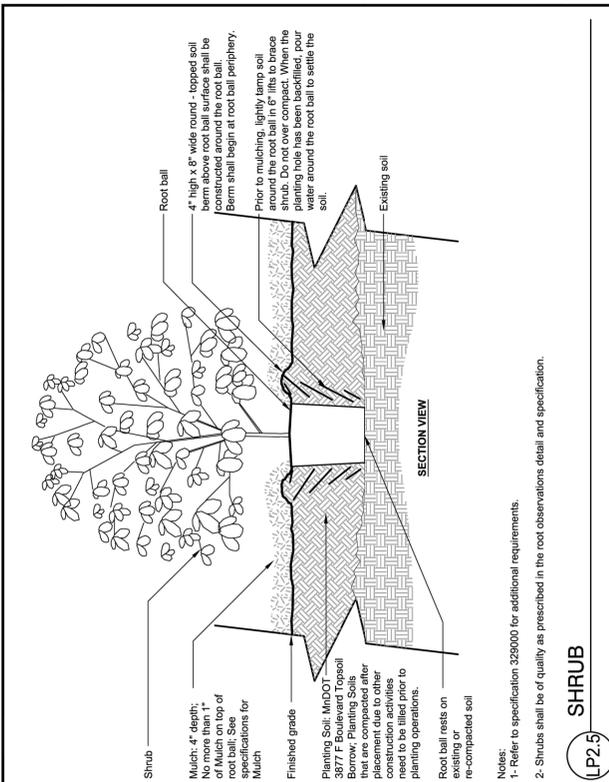
STANDARD DRAWING NO.
LP2.1
LAKE ELMO



APRIL 2017

THE CITY OF LAKE ELMO
CITY OF LAKE ELMO

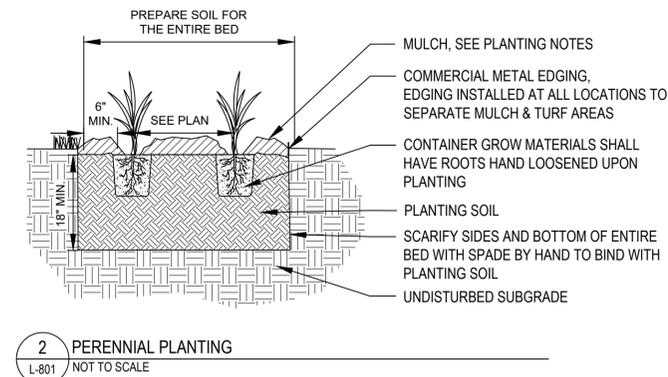
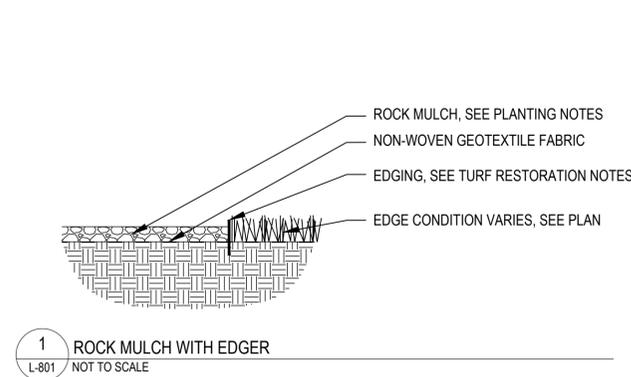
STANDARD DRAWING NO.
LP2.3
LAKE ELMO



APRIL 2017

THE CITY OF LAKE ELMO
CITY OF LAKE ELMO

STANDARD DRAWING NO.
LP2.5
LAKE ELMO



CLIENT:



PRIMROSE SCHOOL -
LAKE ELMO
LAKE ELMO, WASHINGTON COUNTY,
MINNESOTA

PROJECT TITLE

ISSUE NO:

1

DESCRIPTION:

SITE PERMIT PLANS

DATE:

04/10/2025

PROJECT NO.:

190300279

DWN BY:

MSF

CHKD BY:

JDR

APPD BY:

MSF

ISSUE DATE:

04/10/2025

ISSUE NO:

1

SHEET TITLE:

LANDSCAPE DETAILS

SHEET NO.:

L-801

INSPECTION AND ACCEPTANCE

- LANDSCAPE WORK WILL BE INSPECTED FOR ACCEPTANCE IN PARTS AGREEABLE TO THE OWNER, PROVIDED WORK OFFERED FOR INSPECTION IS COMPLETE, INCLUDING MAINTENANCE, FOR THE PORTION IN QUESTION.
- AT THE CONCLUSION OF THE ESTABLISHMENT PERIOD, WHICH WILL BE ONE YEAR FOLLOWING INITIAL INSTALLATION A FINAL INSPECTION OF PLANTING WILL BE MADE TO DETERMINE THE CONDITIONS OF AREAS SPECIFIED FOR LANDSCAPING.
- WHEN INSPECTED LANDSCAPE WORK DOES NOT COMPLY WITH REQUIREMENTS, REPLACE REJECTED WORK AND CONTINUE SPECIFIED MAINTENANCE UNTIL RE-INSPECTED BY OWNER AND FOUND TO BE ACCEPTABLE. REMOVE REJECTED PLANTS AND MATERIALS FROM SITE.

GUARANTEE AND REPLACEMENTS

- PLANT MATERIAL SHALL BE GUARANTEED FOR ONE FULL YEAR AFTER OWNER ACCEPTANCE AND SHALL BE ALIVE AND IN SATISFACTORY CONDITION AT THE END OF THE GUARANTEE PERIOD. SUCH GUARANTEE EXCLUDES VANDALISM.
- AT THE END OF THE ONE-YEAR GUARANTEE PERIOD, INSPECTION WILL BE MADE BY THE OWNER UPON WRITTEN NOTICE BY THE CONTRACTOR AT LEAST FIVE DAYS BEFORE THE ANTICIPATED DATE. ANY PLANT MATERIAL REQUIRED UNDER THE CONTRACT THAT IS DEAD OR NOT IN SATISFACTORY CONDITION, AS DETERMINED BY THE OWNER, SHALL BE REMOVED FROM THE SITE, AND SHALL BE REPLACED AS SOON AS CONDITIONS PERMIT DURING THE NORMAL PLANTING SEASONS.
- THE OPINION OF THE OWNER SHALL GOVERN IN ANY AND ALL DISPUTES BY THE CONTRACTOR REGARDING THE CONDITION AND DISPOSITION OF UNSATISFACTORY MAINTENANCE PROCEDURES OR REJECTED PLANTS.
- ALL REPLACEMENTS SHALL BE PLANT MATERIAL OF THE SAME KIND AND SIZE AS SPECIFIED IN THE PLANT LIST. REPLACEMENT COSTS SHALL BE BORNE BY THE CONTRACTOR.
- REPLACEMENT PLANTINGS REQUIRED AT THE END OF THE GUARANTEE PERIOD ARE NOT TO BE GUARANTEED. THE PLANT MATERIAL IS SUBJECT TO INSPECTION AND REJECTION BY THE OWNER BEFORE AND AFTER PLANTING.
- SOD: THE ESTABLISHMENT PERIOD SHALL BE 60 DAYS FOLLOWING INSTALLATION.

CODES AND INSPECTION

- THE ENTIRE INSTALLATION SHALL FULLY COMPLY WITH ALL LOCAL AND STATE LAWS AND ORDINANCES AND WITH THE ESTABLISHED CODES ALLOCABLE THERETO.
- THE CONTRACTOR SHALL TAKE OUT ALL REQUIRED PERMITS, ARRANGE FOR ALL NECESSARY INSPECTION, AND PAY ANY FEES AND EXPENSES IN CONJUNCTION WITH THE SAME AS PART OF THE WORK UNDER THIS CONTRACT.

QUALITY ASSURANCE

- ALL WORK AND MATERIALS TO BE IN FULL ACCORDANCE WITH LATEST RULES AND REGULATIONS OF THE DIVISION OF INDUSTRIAL SAFETY, THE UNIFORM PLUMBING CODE, NATIONAL ELECTRIC CODE, AMERICANS WITH DISABILITIES, AND OTHER APPLICABLE LAWS OR REGULATION.
- NOTHING IN THESE DRAWINGS OR SPECIFICATIONS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE CODES.
- FURNISH, WITHOUT EXTRA CHARGE, ANY ADDITIONAL MATERIAL AND LABOR AS REQUIRED TO COMPLY WITH THESE RULES AND REGULATIONS, THOUGH THE WORK IS NOT MENTIONED IN THESE PARTICULAR CONSTRUCTION DOCUMENTS.

PROTECTION OF EXISTING CONDITIONS

- BECOME ACQUAINTED WITH ALL SITE CONDITIONS. LOCATE EXISTING UTILITIES AND EQUIPMENT TO REMAIN. SHOULD UTILITIES OR OTHER WORK NOT SHOWN ON THE DRAWINGS BE FOUND DURING EXCAVATIONS, PROMPTLY NOTIFY ENGINEER. FAILURE TO DO SO WILL MAKE CONTRACTOR LIABLE FOR ANY AND ALL DAMAGE ARISING FROM OPERATIONS SUBSEQUENT TO DISCOVERY OF SUCH UTILITIES NOT SHOWN ON DRAWINGS.
- TAKE NECESSARY PRECAUTIONS TO PROTECT EXISTING SITE CONDITIONS. REPAIR ANY DAMAGED ITEM TO ITS ORIGINAL CONDITION OR FURNISH AND INSTALL EQUIVALENT REPLACEMENT AT NO ADDITIONAL COST TO OWNER.
- SEE SHEET C-201 FOR LOCATIONS OF TREES TO BE PROTECTED THROUGHOUT CONSTRUCTION IF SHOWN

COORDINATION

- SCHEDULE AND COORDINATE WORK WITH OTHER TRADES TO FACILITATE WORK AND AVOID CONFLICTS IN CONSTRUCTION SEQUENCE AND EQUIPMENT INSTALLATION.
- REVIEW ENTIRE PLAN SET AND COORDINATE WITH OTHER TRADES AS REQUIRED BY SEQUENCE OF CONSTRUCTION TO ENSURE PROVISION OF MAINLINE AND ELECTRICAL CONDUIT STUB-OUTS AT ALL REQUIRED LOCATIONS.

LANDSCAPE NOTES

- TREES SHALL BE PROVIDED IN THE QUANTITY, SIZE, GENUS, SPECIES, AND VARIETY AS LISTED ON THE PLANT SCHEDULE.
- TREES SHALL BE HEALTHY, VIGOROUS STOCK, GROWN IN RECOGNIZED NURSERY IN ACCORDANCE WITH GOOD HORTICULTURAL PRACTICE AND FREE OF DISEASE, INSECTS, EGGS, LARVAE, AND DEFECTS.
- OWNER RETAINS THE RIGHT TO INSPECT TREES FOR SIZE AND CONDITION OF BALLS AND ROOT SYSTEMS, INSECTS, INJURIES, AND LATENT DEFECTS, AND TO REJECT UNSATISFACTORY OR DEFECTIVE MATERIAL AT ANY TIME DURING PROGRESS OF WORK.
- NURSERY STOCK SHALL BE DELIVERED DIRECTLY FROM NURSERY. HEEL IN IMMEDIATELY UPON DELIVERY IF NOT TO BE PLANTED WITHIN FOUR HOURS, COVERING WITH MOIST SOIL OR MULCH TO PROTECT FROM DRYING. STORE PLANTS IN SHADE AND PROTECT FROM WEATHER.
- PROTECTION FROM EXTREMES IN EXPOSURE AND ROUGH HANDLING SHALL BE PROVIDED FOR ALL PLANT MATERIALS DURING TRANSPORT AND STORAGE.
- THE CONTRACTOR SHALL NOTIFY THE OWNER 48 HOURS PRIOR TO PLANTING SO THAT A MUTUALLY AGREEABLE TIME MAY BE ARRANGED FOR INSPECTION.
- LAY OUT INDIVIDUAL TREE LOCATIONS WITH STAKES CENTERED AT PROPOSED PLANTING LOCATIONS FOR APPROVAL BY OWNER.
- DO NOT START PLANTING WORK UNTIL STAKED LAYOUT IS APPROVED BY THE OWNER.
- TO ENSURE PROPER INFILTRATION THE LANDSCAPE CONTRACTOR MUST PROVE THE OPEN SUB-GRADE OF ALL PLANTING AREAS AFTER THEIR EXCAVATION IS COMPACTED LESS THAN 200 PSI. THE OWNER OR OWNER'S REPRESENTATIVE MUST BE ONSITE DURING COMPACTION TESTING.
- ALL GRADED AREAS OF THE SITE THAT ARE DESIGNATED FOR SHRUBS, TREES AND PERENNIALS SHALL HAVE NO LESS THAN 12" OF IMPORTED TOP SOIL, MEETING MNDOT SPEC 3877.2B FOR LOAM TOPSOIL BORROW.

TURF RESTORATION NOTES

- UNLESS OTHERWISE NOTED/INDICATED EDGE RESTRAINT BETWEEN PLANTING BEDS AND TURF SHALL BE BLACK COMMERCIAL GRADE STEEL LANDSCAPE EDGER, 1/8" THICKNESS. ANCHOR EVERY 18" ON-CENTER (MINIMUM). SUBMIT SAMPLE TO OWNER FOR APPROVAL.
- THE ESTABLISHMENT PERIOD FOR SEED SHALL BEGIN IMMEDIATELY AFTER INSTALLATION, WITH THE APPROVAL OF THE OWNER, AND CONTINUE UNTIL THE DATE THAT THE OWNER PERFORMS A FINAL INSPECTION.
- FERTILIZER SHALL CONFORM TO MNDOT SPEC. 3881, TYPE 2 PHOSPHOROUS-FREE.
- FERTILIZER SHALL HAVE A FORMULA (N-P-K) AS DETERMINED BY THE RESULTS OF A SOIL TEST. CONTRACTOR TO CONDUCT SOIL TEST AND PROVIDE RESULTS ALONG WITH RECOMMENDED FERTILIZER FORMULA TO OWNER FOR REVIEW AND APPROVAL PRIOR TO APPLICATION.
- TOPSOIL SHALL BE RE-USED OR IMPORTED AND CONFORM TO MNDOT SPEC. 3877.2B LOAM TOPSOIL BORROW. 6" OF TOPSOIL SHALL BE PLACED IN ALL SEEDING AND SODDED AREAS.
- INSTALLATION OF SEED AND SOD SHALL OCCUR WITHIN ONE (1) WEEK OF COMPLETING THE GRADING.
- CONTRACTOR SHALL BE RESPONSIBLE FOR WATER DURING THE PLANTING ESTABLISHMENT PERIOD FOR PLANTING AREAS (12 INCH UNCOMPACTED DEPTH), INCORPORATE 3 INCHES OF COMPOST INTO THE TOP 5 INCHES OF COMPACTED SOIL TO CREATE A TOPSOIL LAYER WITH A MINIMUM DEPTH OF 8 INCHES. SOILS BELOW THE TOP SOIL LAYER SHALL BE SCARIFIED TO AT LEAST 4 INCHES.
- FOR TURF AREAS (12 INCH UNCOMPACTED DEPTH), INCORPORATE 1.75 INCHES OF COMPOST INTO THE TOP 4.25 INCHES OF COMPACTED SOIL TO CREATE A TOPSOIL LAYER WITH A MINIMUM DEPTH OF 6 INCHES. SOILS BELOW THE TOP SOIL LAYER SHALL BE SCARIFIED TO AT LEAST 4 INCHES.

MAINTENANCE NOTES

- WHEN INSPECTED LANDSCAPE WORK DOES NOT COMPLY WITH REQUIREMENTS, REPLACE REJECTED WORK AND CONTINUE SPECIFIED MAINTENANCE UNTIL RE-INSPECTED BY OWNER AND FOUND TO BE ACCEPTABLE. REMOVE REJECTED PLANTS AND MATERIALS FROM SITE.
- BEGIN MAINTENANCE IMMEDIATELY AFTER PLANTING.
- MAINTAIN TREES AND BUSHES INCLUDING WATERING FOR ONE YEAR AFTER ACCEPTANCE BY OWNER. IT IS CONTRACTORS RESPONSIBILITY FOR COORDINATE WATERING.
- TRIM, PRUNE, REMOVE CLIPPINGS AND DEAD OR BROKEN BRANCHES, AND TREAT PRUNED AREAS AND OTHER WOUNDS.
- IT IS THE CONTRACTOR'S OPTION WHETHER OR NOT TO STAKE & GUY TREES. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING TREES IN AN UPRIGHT POSITION THROUGHOUT THE ONE-YEAR GUARANTEE PERIOD.

PLANTING NOTES

- UPON APPROVAL OF STAKING LOCATIONS CONTRACTOR SHALL EXCAVATE PLANTING HOLES CENTERED AT STAKED LOCATIONS.
- DIG HOLES AS DETAILED AND TO A DIAMETER A MINIMUM OF TWO TIMES THE DIAMETER OF THE ROOT BALL OR CONTAINER.
- ALL PLANTING AND SEEDING AREAS SHALL BE PREPARED PRIOR TO INSTALLATION ACTIVITIES WITH A HARLEY POWER BOX RAKE OR EQUAL TO PROVIDE A FIRM PLANTING BED FREE OF STICKS, RUBBISH, FOREIGN MATERIALS AND UNDESIRABLE PLANTS AND THEIR ROOTS. REMOVE STONES MEASURING OVER 1-1/2 INCHES IN ANY DIMENSIONS.
- SET BALLED AND BURLAPPED (B&B) STOCK ON LAYER OF COMPACTED PLANTING SOIL MIXTURE, PLUMB AND IN CENTER OF PIT OR TRENCH WITH TOP OF ALL AT SAME ELEVATION AS ADJACENT FINISHED LANDSCAPE GRADES.
- ROOT FLARE OF THE TREE MUST BE ABOVE FINISHED GRADE.
- CUT ALL CORDS AND TWIN AND REMOVE WIRE BASKET AND BURLAP FROM TOP AND SIDES OF BALLS; RETAIN BURLAP ON BOTTOMS.
- WHEN SET, PLACE ADDITIONAL PLANTING SOIL BACKFILL AROUND BASE AND SIDES OF BALL, AND WORK EACH LAYER TO SETTLE BACKFILL AND ELIMINATE VOIDS AND AIR POCKETS.
- WHEN EXCAVATION IS APPROXIMATELY 2/3 FULL, WATER THOROUGHLY BEFORE PLACING REMAINDER OF BACKFILL.
- REPEAT WATERING UNTIL NO MORE IS ABSORBED. WATER AGAIN AFTER PLACING FINAL LAYER OF BACKFILL.
- FOR CONTAINER GROWN STOCK, SAME AS FOR BALLED AND BURLAPPED STOCK, EXCEPT CUT CONTAINERS ON SIDES INTO QUARTERS WITH SHEAR. REMOVE CONTAINER BEFORE SETTING PLANT SO AS NOT TO DAMAGE ROOT BALLS.
- WATER EACH PLANT WITHIN 2 HOURS OF PLANTING.
- ALL PLANTINGS TO BE MULCHED UNLESS OTHERWISE NOTED ON THE PLAN.
- PLACE 3-INCH THICKNESS OF MULCH AROUND TREES AND SHRUBS WITHIN A PERIOD OF 48 HOURS AFTER THE SECOND WATERING.
- DO NOT PLACE MULCH IN DIRECT CONTACT WITH TRUNKS OR STEMS.
- WHERE NOTED/INDICATED, PLANT BEDS SHALL RECEIVE 4" DEPTH LOCALLY AVAILABLE 1-1/2"-2" TRAP ROCK MULCH, OVER WEED MAT. SUBMIT MULCH SAMPLE FOR OWNER APPROVAL.
- WHERE NOTED/INDICATED, PLANT BEDS SHALL RECEIVE 4" DEPTH LOCALLY AVAILABLE DOUBLE-SHRED HARDWOOD MULCH OVER WEED MAT.
- TREE SAUCER MULCH TO BE THREE INCHES (3") DEPTH NATURAL DOUBLE-SHRED HARDWOOD MULCH FOR TREES OUTSIDE OF PLANT BED. INSTALL PER TREE PLANTING DETAIL.



1 CARLSON PKWY N
PLYMOUTH, MN 55447
PHONE: 763-479-4200
WWW.STANTEC.COM

CLIENT:



**PRIMROSE SCHOOL -
LAKE ELMO**
LAKE ELMO, WASHINGTON COUNTY,
MINNESOTA

PROJECT TITLE

DATE	DESCRIPTION	ISSUE NO.
04/10/2025	SITE PERMIT PLANS	1

PROJECT NO.: 190300279

DWN BY: MSF	CHKD BY: JDR	APPD BY: MSF
ISSUE DATE: 04/10/2025		

ISSUE NO.: 1

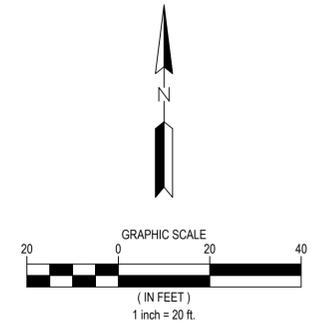
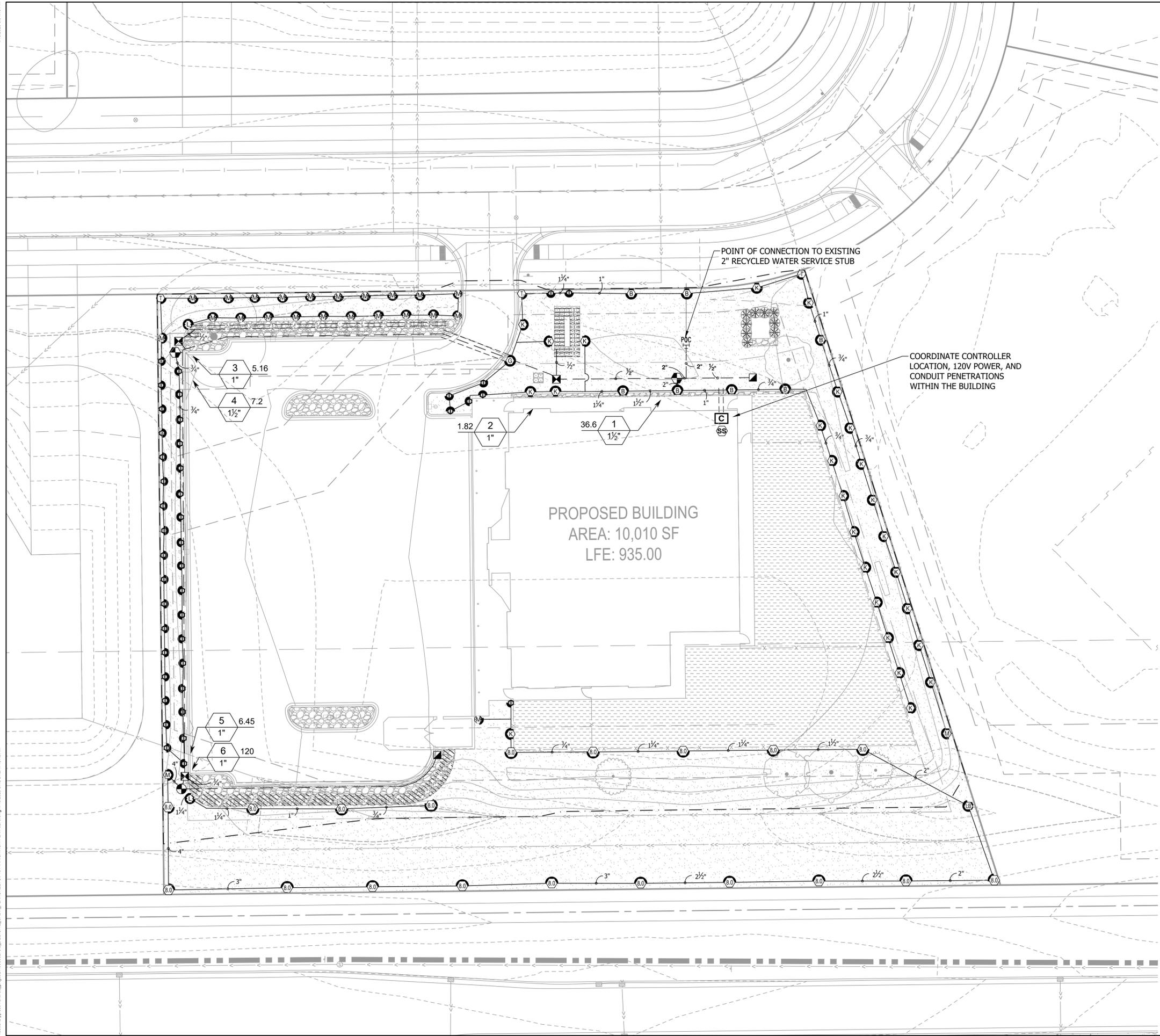
SHEET TITLE:

LANDSCAPE DETAILS

SHEET NO.:

L-802

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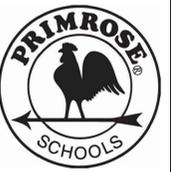


NOTES

1. SEE SHEET G-002 FOR ADDITIONAL PROJECT NOTES.
2. SEE SHEET I-801, I-802 & I-803



CLIENT:



**PRIMROSE SCHOOL -
LAKE ELMO**
LAKE ELMO, WASHINGTON COUNTY,
MINNESOTA

PROJECT TITLE

DATE	DESCRIPTION	ISSUE NO.
04/10/2025	SITE PERMIT PLANS	1

PROJECT NO.: 190300279

DWN BY: MSF CHKD BY: JDR APPD BY: MSF
 ISSUE DATE: 04/10/2025

ISSUE NO.: 1

SHEET TITLE:
IRRIGATION PLAN

SHEET NO.:
I-101

\\ud22-pj\staff\lmeier\project\190300279\DESIGN\CADD\PLANSHEET\I-101\IRRIGATION\PLAN_0279.dwg 4/10/2025 DAUGHERTY, ADM

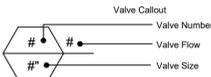
IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PSI	GPM
	HUNTER MP CORNER PROS-04-PRS40 TURF ROTATOR, 4IN. POP-UP, PRESSURE REGULATED TO 40 PSI, MP ROTATOR NOZZLE. T=TURQUOISE ADJ ARC 45-105 ON PRS40 BODY.	3	40	
	HUNTER MP1000 PROS-04-PRS40 TURF ROTATOR, 4IN. POP-UP WITH CHECK VALVE, FLOGUARD, PRESSURE REGULATED TO 40 PSI, MP ROTATOR NOZZLE ON PRS40 BODY. M=MAROON ADJ ARC 90 TO 210, L=LIGHT BLUE 210 TO 270 ARC, O=OLIVE 360 ARC.	2	40	
	HUNTER MP2000 PROS-04-PRS40 TURF ROTATOR, 4IN. POP-UP, PRESSURE REGULATED TO 40 PSI, MP ROTATOR NOZZLE ON PRS40 BODY. K=BLACK ADJ ARC 90-210, G=GREEN ADJ ARC 210-270, R=RED 360 ARC.	27	40	
	HUNTER MP3000 PROS-04-PRS40 TURF ROTATOR, 4IN. POP-UP, PRESSURE REGULATED TO 40 PSI, MP ROTATOR NOZZLE ON PRS40 BODY. B=BLUE ADJ ARC 90-210, Y=YELLOW ADJ ARC 210-270, A=GRAY 360 ARC.	7	40	
	HUNTER MP3500 PROS-04-PRS40-CV-F TURF ROTATOR, 4IN. POP-UP WITH FACTORY INSTALLED CHECK VALVE, FLOGUARD, PRESSURE REGULATED TO 40 PSI, MP ROTATOR NOZZLE ON PRS40 BODY. LB=LIGHT BROWN ADJUSTABLE ARC, 90-210.	1	40	
	HUNTER MP800SR PROS-04-PRS40 TURF ROTATOR, 4IN. POP-UP, PRESSURE REGULATED TO 40 PSI, MP ROTATOR NOZZLE ON PRS40 BODY. ADJ=ORANGE AND GRAY (ARC 90-210), 360=LIME GREEN AND GRAY (ARC 360)	42	40	
	HUNTER MP815 PROS-04-PRS40 TURF ROTATOR, 4IN. POP-UP, PRESSURE REGULATED TO 40 PSI, MP ROTATOR NOZZLE ON PRS40 BODY. M=MAROON AND GRAY ADJ ARC 90 TO 210, L=LIGHT BLUE AND GRAY 210 TO 270 ARC, O=OLIVE AND GRAY 360 ARC.	24	40	

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PSI	GPM
	HUNTER PGP-ADJ-B 8.0 TURF ROTOR, 4IN. POP-UP. ADJUSTABLE AND FULL CIRCLE. STANDARD ANGLE BLUE NOZZLE.	19	25	6

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
	HUNTER ICZ-101-40 W/ EZ-1 DECODER DRIP CONTROL ZONE KIT. 1IN. ICV GLOBE VALVE WITH 1IN. HY100 FILTER SYSTEM. PRESSURE REGULATION: 40PSI. FLOW RANGE: 2 GPM TO 20 GPM. 150 MESH STAINLESS STEEL SCREEN.	3
	AREA TO RECEIVE DRIPLINE HUNTER HDL-09-12-CV HDL-09-12-CV; HUNTER DRIPLINE W/ 0.9 GPH EMITTERS AT 18" O.C. CHECK VALVE, DARK BROWN TUBINGS W/ BLACK STRIPING. DRIPLINE LATERALS SPACED AT 18" APART, WITH EMITTERS OFFSET FOR TRIANGULAR PATTERN. INSTALL WITH HUNTER PLD BARBED OR PLD-LOC FITTINGS.	1,342 LF

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
	HUNTER PGV-100-MB W/ EZ-1 DECODER 1" PLASTIC ELECTRIC REMOTE CONTROL VALVE. MALE THREAD X BARB INLET/OUTLET. GLOBE CONFIGURATION.	1
	HUNTER PGV-151 GLOBE W/ EZ DECODER 1-1/2" 1-1/2IN. PLASTIC ELECTRIC REMOTE CONTROL VALVE. FEMALE NPT INLET/OUTLET, WITH FLOW CONTROL. GLOBE CONFIGURATION.	2
	HUNTER HQ-44RC 1" QUICK COUPLER VALVE, YELLOW RUBBER COVER, RED BRASS AND STAINLESS STEEL, WITH 1IN. NPT INLET, 2-PIECE BODY.	2
	HUNTER PC-400 TWO WIRE CONTROLLER	1
	HUNTER WSS WIRELESS SOLAR, RAIN FREEZE SENSOR WITH OUTDOOR INTERFACE. INSTALL PER MANUFACTURER'S RECOMMENDATIONS. COORDINATE MOUNTING LOCATION WITH BUILDING CONTRACTOR AND OWNER'S REPRESENTATIVE.	1
	POINT OF CONNECTION 2"	1
	IRRIGATION LATERAL LINE: PVC CLASS 160 SDR 26	2,106 LF
	IRRIGATION MAINLINE: PVC CLASS 200 SDR 21	546.3 LF
	PIPE SLEEVE: PVC CLASS 200 SDR 21	38.1 LF



VALVE SCHEDULE

NUMBER	MODEL	SIZE	TYPE	GPM	PSI	PSI @ POC	PRECIP
1	HUNTER PGV-151 GLOBE W/ EZ DECODER 1-1/2"	1-1/2"	TURF ROTARY	36.56	50.8	51.0	0.43 in/h
2	HUNTER ICZ-101-40 W/ EZ-1 DECODER 1"	1"	AREA FOR DRIPLINE	1.82	43.1		0.97 in/h
3	HUNTER ICZ-101-40 W/ EZ-1 DECODER 1"	1"	AREA FOR DRIPLINE	5.16	45.5		1.12 in/h
4	HUNTER PGV-151 GLOBE W/ EZ DECODER 1-1/2"	1-1/2"	TURF ROTARY	7.2	47.0		0.4 in/h
5	HUNTER ICZ-101-40 W/ EZ-1 DECODER 1"	1"	AREA FOR DRIPLINE	6.45	46.0		1.06 in/h
6	HUNTER PGV-100-MB W/ EZ-1 DECODER 1"	1"	TURF ROTARY	120.08	36.0		1.13 in/h

CRITICAL ANALYSIS

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P.O.C. NUMBER: 01
Water Source Information:

FLOW AVAILABLE
Point of Connection Size: 2"
Flow Available: 58.88 GPM

PRESSURE AVAILABLE
Static Pressure at POC: 62 PSI
Pressure Available: 62 PSI

DESIGN ANALYSIS
Maximum Station Flow: 36.56 GPM
Flow Available at POC: 58.88 GPM
Residual Flow Available: 22.32 GPM

Critical Station: 1
Design Pressure: 40 PSI
Friction Loss: 7.11 PSI
Fittings Loss: 0.71 PSI
Elevation Loss: 0 PSI
Loss through Valve: 3 PSI
Pressure Req. at Critical Station: 50.8 PSI
Loss for Fittings: 0.01 PSI
Loss for Main Line: 0.15 PSI
Loss for POC to Valve Elevation: 0 PSI
Loss for Backflow: 0 PSI
Critical Station Pressure at POC: 51.0 PSI
Pressure Available: 62 PSI
Residual Pressure Available: 11.0 PSI

GENERAL NOTES:

- CONTRACTOR TO VERIFY ALL UNDERGROUND UTILITY LOCATIONS PRIOR TO COMMENCING WORK. CONTACT GOPHER STATE ONE AT (651)-454-0002.
- CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND SITE CONDITIONS SHOWN ON PLANS PRIOR TO CONSTRUCTION. NOTIFY LANDSCAPE ARCHITECT OR OWNERS REPRESENTATIVE OF MAJOR DISCREPANCIES THAT WILL AFFECT CONSTRUCTION OPERATIONS.
- CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF THE INSTALLATION, AND OPERATION OF THE IRRIGATION SYSTEM WITHIN LIMITS OF WORK.
- DAMAGE TO PROPERTY FROM LANDSCAPE WORK MUST BE REPAIRED AT NO ADDITIONAL COST TO THE OWNER.
- IRRIGATION CONTRACTOR SHALL ARRANGE FOR ANY NECESSARY PERMITS AND/OR INSPECTIONS REQUIRED BY LOCAL AGENCIES OR ORDINANCES DURING THE COURSE OF CONSTRUCTION AS REQUIRED.
- WINTERIZATION OF THE IRRIGATION SYSTEM SHALL BE AS PER THE MANUFACTURER'S SPECIFICATIONS. CONTRACTOR IS RESPONSIBLE FOR THE FIRST WINTERIZATION AND SPRING STARTUP AFTER FINAL ACCEPTANCE. PROVIDE OWNER'S MANUAL AND OWNER'S REPRESENTATIVE TRAINING AT EACH SYSTEM EVENT.

IRRIGATION CONTROLLER NOTES:

- IRRIGATION CONTROLLER LOCATION IS DIAGRAMMATIC, FIELD LOCATE WITHIN BUILDING. ELECTRICAL CONTRACTOR TO PROVIDE 120 V.A.C. TO DETERMINED LOCATION.
- IRRIGATION CONTROLLER AND EQUIPMENT TO BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS AND CITY STANDARD DETAILS.

ELECTRICAL NOTES:

- ELECTRICAL POWER WILL BE PROVIDED WITHIN 10 FEET OF THE CONTROLLER LOCATION. COORDINATE WITH OWNER'S AUTHORIZED REPRESENTATIVE AS TO THE FINAL LOCATION OF CONTROLLER. COORDINATE HOOK-UP WITH ELECTRICAL CONTRACTOR AS REQUIRED.
- ALL POWER WIRE TAPS AND CONNECTIONS TO CONFORM TO LOCAL AND STATE CODES AND TO BE PERFORMED BY A LICENSED ELECTRICIAN.
- ALL 120 V.A.C. PRIMARY, AND 24 V.A.C. SECONDARY POWER TO BE INSTALLED AS PER STATE AND LOCAL CODES, WITH GROUND WIRE; MEETING N.E.C. AND M.A.C. REQUIREMENTS.
- CONTROL WIRE SHALL BE SOLID COPPER WIRE U.L. APPROVED FOR DIRECT BURIAL IN GROUND. MINIMUM GAGE: 12 AWG JACKETED DECODER CABLE FOR USE IN 2 WIRE SYSTEMS. PROVIDE ONE EXTRA RUN OF HUNTER CABLE FOR ENTIRE MAIN LINE PATH.
- INSTALL VALVE WIRES IN ONE CONTINUOUS PULL FROM VALVES TO CONTROLLER, WITHOUT SPLICES. IF NECESSARY, ALL 24 V.A.C. FIELD SPLICES TO BE NOTED ON "AS-BUILT" DRAWINGS AND LOCATED IN ECONO VALVE BOXES AND MARKED.
- ALL 24 VAC WIRE SPLICING SHALL BE EXECUTED WITH DIRECT BURIAL SPLICE KITS AS MANUFACTURED BY 3M. ONLY SPLICE KIT MODEL DBR/Y-6 IS ALLOWED.

IRRIGATION DESIGN NOTES:

- THE IRRIGATION CONTRACTOR SHALL BE RESPONSIBLE FOR FAMILIARIZING THEMSELVES WITH ALL DIFFERENCES IN GRADE, LOCATION OF OBSTRUCTIONS, LOCATION OF UTILITIES, ETC. MAKE IRRIGATION POINT OF CONNECTION AS INDICATED ON PLAN AND COORDINATE WITH OTHER WORK AS REQUIRED. EXACT LOCATION OF VACUUM BREAKER TO BE APPROVED BY LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
- THE IRRIGATION SYSTEM DESIGN IS BASED UPON THE MINIMUM OPERATING PRESSURE OF 70 PSI AND THE MAXIMUM FLOW DEMAND OF 40 GPM AT EACH POINT OF CONNECTION. THE IRRIGATION CONTRACTOR SHALL VERIFY WATER PRESSURE PRIOR TO CONSTRUCTION. ANY DIFFERENCE BETWEEN THE WATER PRESSURE INDICATED ON THE DRAWINGS AND THE ACTUAL PRESSURE READING AT THE IRRIGATION POINT OF CONNECTION SHALL BE IMMEDIATELY REPORTED IN WRITING TO THE OWNER'S AUTHORIZED REPRESENTATIVE. IF THE PRESSURE DIFFERENCES ARE NOT IMMEDIATELY REPORTED PRIOR TO BEGINNING CONSTRUCTION, THE IRRIGATION CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ALL REVISIONS TO THE IRRIGATION SYSTEM DEEMED NECESSARY BY THE OWNER'S REPRESENTATIVE AND ALL COSTS ASSOCIATED WITH THOSE REVISIONS. IF STATIC PRESSURE EXCEEDS 80 PSI, A PRESSURE REDUCER IS REQUIRED.
- THE IRRIGATION DESIGN PRESENTED IN THESE DOCUMENTS IS INTENDED TO BE DIAGRAMMATIC AND INDICATIVE OF THE WORK TO BE COMPLETED. ALL IRRIGATION EQUIPMENT, PIPING AND VALVE LOCATIONS, ETC. SHOWN WITHIN PAVED AREAS ARE FOR DESIGN CLARIFICATION AND SHALL ONLY BE INSTALLED ON OWNER'S PROPERTY, WITHIN CONSTRUCTION LIMITS, AND WITHIN PLANTING AREAS UNLESS OTHERWISE NOTED ON PLANS. IRRIGATION CONTRACTOR SHALL INSTALL ALL REMOTE CONTROL VALVES, QUICK COUPLERS, AND ISOLATION VALVES, IN SHRUB PLANTING AREAS OR AS APPROVED BY OWNER'S REPRESENTATIVE & THE LANDSCAPE IRRIGATION DESIGNER. TO THE EXTENT POSSIBLE, LOCATE ELECTRIC REMOTE CONTROL VALVE BOXES OUT OF DIRECT VIEW, YET ACCESSIBLE. AVOID ANY CONFLICTS BETWEEN THE SPRINKLER SYSTEM, PLANTING, LIGHTING AND ARCHITECTURAL FEATURES.
- WHEN IT IS APPARENT TO THE LANDSCAPE CONTRACTOR IN THE FIELD THAT OBSTRUCTIONS, GRADE DIFFERENCES, OR DIFFERENCES IN THE CALCULATED AREA DIMENSIONS EXIST THAT MAY HAVE NOT BEEN CONSIDERED IN THE DESIGN OF THE SYSTEM, THE IRRIGATION CONTRACTOR SHALL NOT WILLFULLY INSTALL THE IRRIGATION SYSTEM AS INDICATED ON THE CONSTRUCTION DRAWINGS. THE OWNER'S AUTHORIZED REPRESENTATIVE SHALL BE NOTIFIED IN WRITING OF ANY SUCH OBSTRUCTIONS OR DIFFERENCES PRIOR TO BEGINNING ANY IRRIGATION INSTALLATION. IF NOTIFICATION IS NOT RECEIVED PRIOR TO BEGINNING INSTALLATION, THE IRRIGATION CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ALL REVISIONS TO THE IRRIGATION SYSTEM AS DEEMED NECESSARY BY OWNER'S REPRESENTATIVE AND ALL COSTS ASSOCIATED WITH THOSE REVISIONS.
- IRRIGATION SYSTEM SUPPLY SHALL INCLUDE WATER METER, BACKFLOW PREVENTOR AND WINTERIZATION VALVES. COORDINATE WITH BUILDING MEP INSTALLATION.
- IRRIGATION SYSTEM TO INCLUDE RAIN SENSOR, CONTROLLER, ENCLOSURES, PIPING, VALVES, SUBSURFACE DRIPLINE, SPRAY HEADS, ROTORS, EMITTERS AND ALL OTHER COMPONENTS NECESSARY TO INSTALL A COMPLETE SYSTEM AS REQUIRED IN THE PLANS AND SPECIFICATIONS. IRRIGATION BID TO INCLUDE CONTRACTOR PROVIDED SUBMITTALS FOR REVIEW. SEE SPECIFICATIONS.
- THE CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL IRRIGATION EQUIPMENT AND APPURTENANCES, INCLUDING ITEMS NOT SHOWN, BUT NECESSARY TO ACHIEVE A COMPLETE AND OPERABLE IRRIGATION SYSTEM.
- THE IRRIGATION CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING ALL CONTROL WIRE AND MAINLINE SLEEVING OF SUFFICIENT SIZE, UNDER ALL PAVED AREAS IN ADDITION TO THE SLEEVING SHOWN ON THE DRAWINGS.
- SLEEVING LOCATIONS ARE APPROXIMATE AND INTENDED TO SHOW INTENT ONLY. FIELD ADJUST SLEEVE LOCATIONS AS NECESSARY.
- CAP THE ENDS OF ALL SLEEVES NOT CURRENTLY IN USE.
- ALL PRODUCT APPLICATIONS AND INSTALLATIONS MUST MEET MANUFACTURER'S REQUIREMENTS.
- FLOW RATES THROUGH PVC PIPING NOT TO EXCEED MANUFACTURER'S RECOMMENDATIONS.
- IRRIGATION PLANS TAKE PRECEDENCE OVER IRRIGATION SPECIFICATIONS. ANY DISCREPANCIES BETWEEN THESE TWO DOCUMENTS MUST BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT PRIOR TO BID OPENING.
- DESIGN INTENT IS TO PROVIDE AN IRRIGATION SYSTEM THAT PROVIDES SUFFICIENT WATER TO ALL PLANTING AREAS AND LIMITS WATER FROM NON-IRRIGATED AREAS. KEEP IRRIGATION WATER OFF OF ALL BUILDINGS, SIDEWALKS, ROADWAYS, AND OTHER PAVED SURFACES. IT IS THE RESPONSIBILITY OF THE IRRIGATION CONTRACTOR TO FIELD ADJUST AND / OR RECTIFY THESE CONDITIONS AS NECESSARY TO ENSURE THAT OVERSPRAY AND RUNOFF DO NOT OCCUR.
- THE IRRIGATION CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING THE PRESSURE REGULATOR ON EACH ELECTRIC CONTROL VALVE SO THE IRRIGATION HEAD FARTHEST AND HIGHEST IN ELEVATION FROM ITS ASSOCIATED CONTROL VALVE FUNCTIONS WITHIN THE OPERATING PRESSURE SHOWN ON THE IRRIGATION LEGEND (NOT TO EXCEED 5 PSI ABOVE THE INDICATED OPERATING PRESSURE).

SPRAY HEAD NOTES:

- FULL (HEAD-TO-HEAD) COVERAGE IS REQUIRED WITHIN THE AREAS DELINEATED TO RECEIVE IRRIGATION.
- LOCATE ALL HEADS 0'-6" FROM BACK OF WALK, CURB, ETC. AND ADJUST NOZZLES TO WATER ENTIRE PLANTING AREA, INCLUDING AREA FROM BACK OF WALK TO HEAD.
- ALL POP-UP STYLE IRRIGATION HEADS TO BE LOCATED IN TURF AREAS SHALL BE INSTALLED SO THE TOP OF THE IRRIGATION HEADS ARE 1/4" ABOVE FINISH GRADE.
- IRRIGATION CONTRACTOR SHALL REDUCE THE "THROW" OR RADIUS OF SPRAY NOZZLES WHEREVER SPRAY HEAD REQUIRED FOR PROPER COVERAGE HAS A RADIUS THAT EXCEEDS THE PLANTING AREA DIMENSIONS.
- WHEN INSTALLING SPRAY SERIES NOZZLES THAT REQUIRE ARC PATTERNS OTHER THAN THE STANDARD ARC PATTERNS (E.G., 360, 180, AND 90), THE CONTRACTOR SHALL USE THE APPROPRIATE FIXED ARC PATTERN (E.G. 120, 240, 270). THE CONTRACTOR SHALL USE VARIABLE ARC NOZZLES WHEN INSTALLING IRRIGATION HEADS ONLY WHEN REQUIRED PATTERN IS NOT ONE OF THE FIXED ARC PATTERNS. SELECT THE RADIUS OF VARIABLE ARC NOZZLES NOZZLES TO MATCH SITE CONDITIONS.
- THE IRRIGATION CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING FIELD ADJUSTMENTS TO THE IRRIGATION SYSTEM BY INSTALLING A QUARTER CIRCLE OR HALF CIRCLE SPRINKLER HEAD ON EACH SIDE OF ANY VERTICAL ELEMENT (UTILITY BOXES, STREET LIGHTS, TREES, ETC.) WHICH PREVENTS PROPER COVERAGE BY INTERFERING WITH THE SPRAY PATTERN OF THE IRRIGATION HEAD. ALL ADJUSTMENTS SHALL BE MADE AT NO ADDITIONAL COSTS TO THE OWNER.
- LOCATE ROWS OF HEADS AND DRIP IRRIGATION LATERAL GROUPINGS AT TOP AND MID SLOPE TO MINIMIZE AND / OR ELIMINATE STANDING WATER AT BOTTOM OF SLOPE. TO THE EXTENT POSSIBLE, AVOID LOCATING HEADS AT BOTTOM OF SLOPE. CIRCUIT HEADS AT SAME ELEVATION TOGETHER.
- DRAINAGE OF IRRIGATION WATER THROUGH SPRAY HEAD WILL NOT BE ALLOWED. INSTALL CHECK VALVES OR EQUAL AS REQUIRED TO CONTROL LOW HEAD DRAINAGE. INSTALLATION OF CHECK VALVE FEATURES SHALL BE INCLUDED IN THE BID PRICE OF THE IRRIGATION SYSTEM.
- THE IRRIGATION CONTRACTOR SHALL BE RESPONSIBLE FOR SETTING ALL SPRAY HEADS TO BE PERPENDICULAR TO THE ADJACENT FINISH GRADE UNLESS INSTRUCTED OTHERWISE.



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CLIENT:



PRIMROSE SCHOOL -
LAKE ELMO
LAKE ELMO, WASHINGTON COUNTY,
MINNESOTA

PROJECT TITLE

ISSUE NO:

1

DESCRIPTION:

SITE PERMIT PLANS

DATE:

04/10/2025

PROJECT NO.: 190300279

DWN BY: MSF CHKD BY: JDR APPD BY: MSF

ISSUE DATE: 04/10/2025

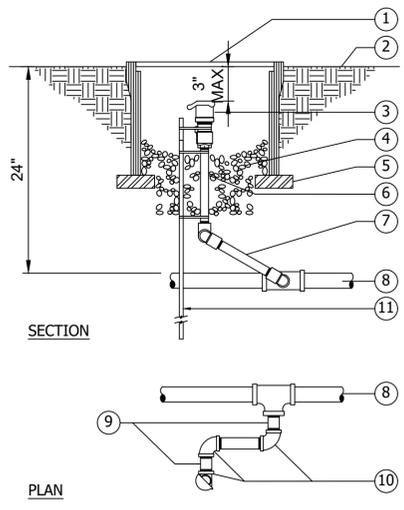
ISSUE NO.: 1

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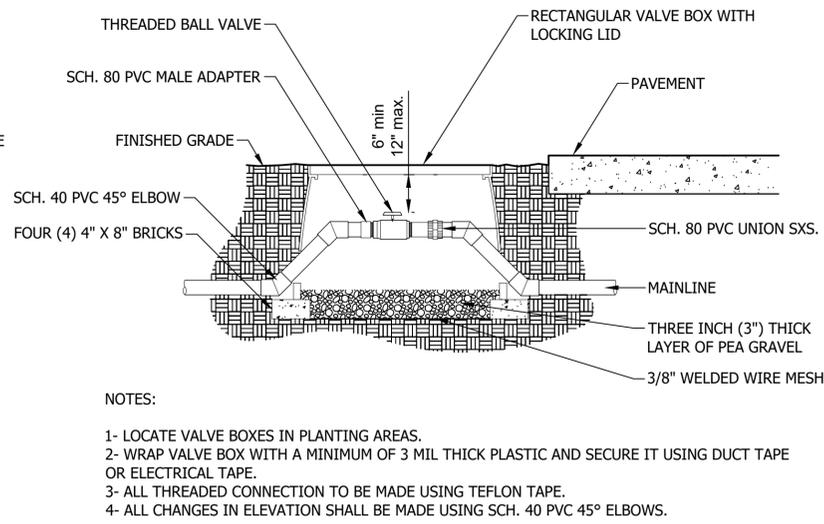
IRRIGATION DETAILS

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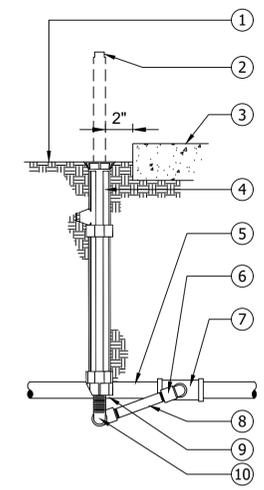
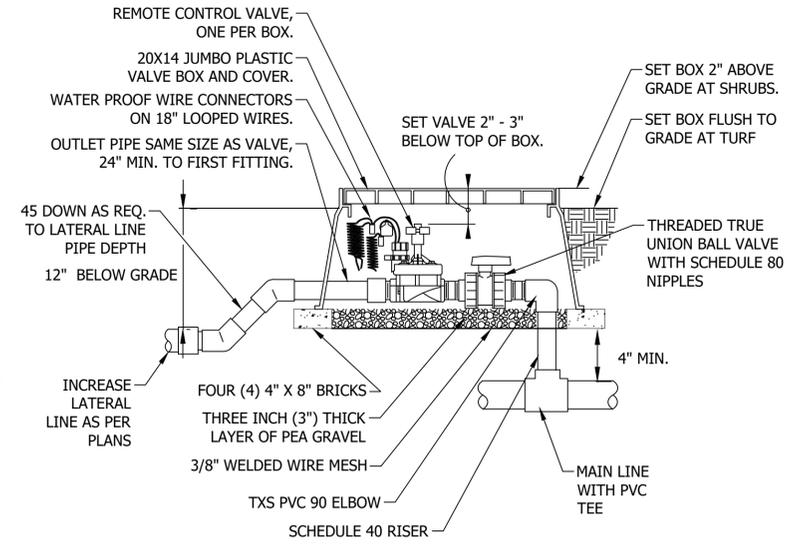
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1. PLASTIC VALVE BOX (SEE SPECS.) W/ LOCK BOLT & Q.C. HEAT BRANDED ON COVER.
2. FINISH GRADE BELOW VALVE BOX LID (1/2" SEED, 1 1/2" SOD, 2" IN PLANTER BED.
3. QUICK COUPLING VALVE AS SPECIFIED.
4. PEA GRAVEL: 6" DEEP BELOW QUICK COUPLING VALVE.
5. BRICK: 2 PLACES.
6. 3/4" SCH. 80 PVC NIPPLE.
7. 3/4" SCH. 80 PVC 6" LONG NIPPLE.
8. PVC MAIN LINE.
9. 3/4" X 3" SCH. 80 NIPPLE.
10. 3/4" SCH. 80 PVC 90° ELL.
11. 2"X2"X1/40" ANGLE IRON (36" LONG) W/ STAINLESS STEEL SCREW CLAMPS MIN. (3) PLACES.
12. USE TEFLON TAPE ON ALL THREADED CONNECTIONS.

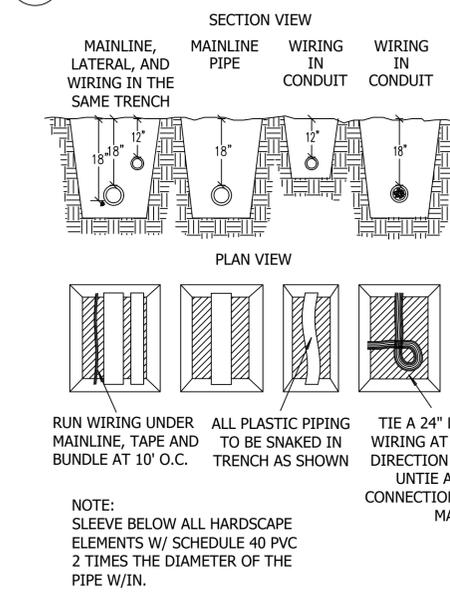


- NOTES:
- 1- LOCATE VALVE BOXES IN PLANTING AREAS.
 - 2- WRAP VALVE BOX WITH A MINIMUM OF 3 MIL THICK PLASTIC AND SECURE IT USING DUCT TAPE OR ELECTRICAL TAPE.
 - 3- ALL THREADED CONNECTION TO BE MADE USING TEFLON TAPE.
 - 4- ALL CHANGES IN ELEVATION SHALL BE MADE USING SCH. 40 PVC 45° ELBOWS.

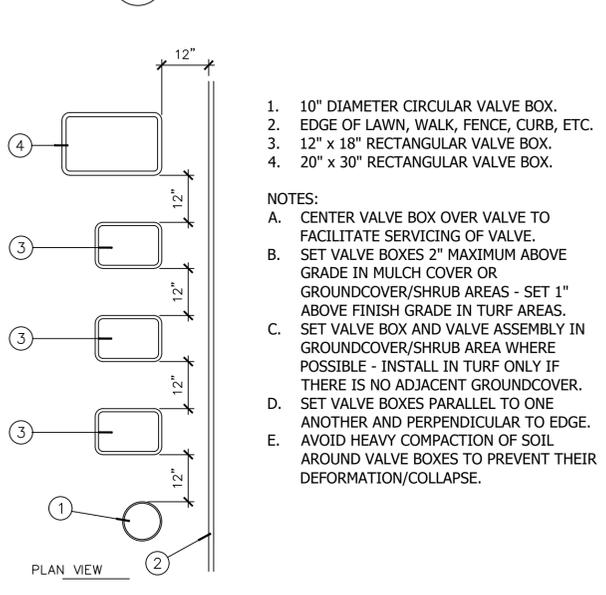


1. FINISH GRADE.
2. NOZZLE.
3. CURB, WALK, HEADER OR WALL.
4. POP-UP SPRAY BODY PER IRRIGATION PLAN.
5. SET HEAD FLUSH WITH FINISH GRADE.
6. PVC LATERAL LINE.
7. SCH. 40 PVC STREET 90° ELL.
8. SCH. 80 PVC NIPPLE (6" LONG).
9. MARLEX 90° STREET ELL.
10. MARLEX 90° ELL.
11. LOCATE HEAD 2" FROM WALKS, CURBS, PAVING, MOWSTRIPS OR HEADER.
12. USE TEFLON TAPE ON ALL MALE THREADS (EXCEPT MARLEX FITTINGS).

A QUICK COUPLING VALVE

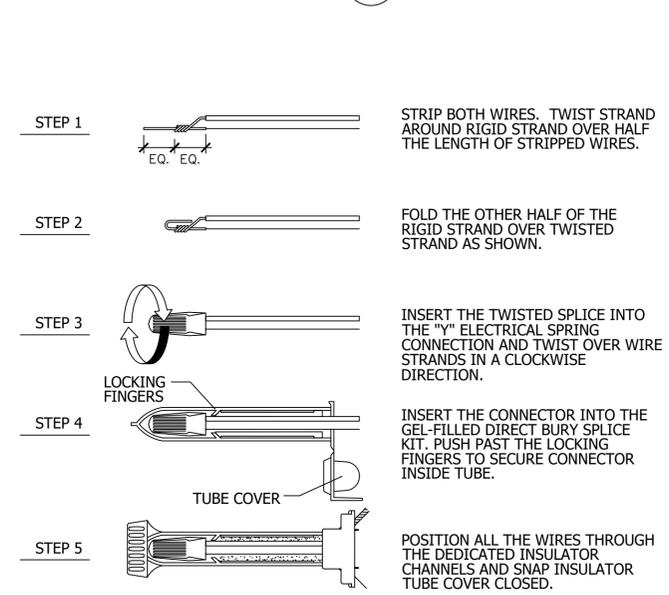


B ISOLATION VALVE



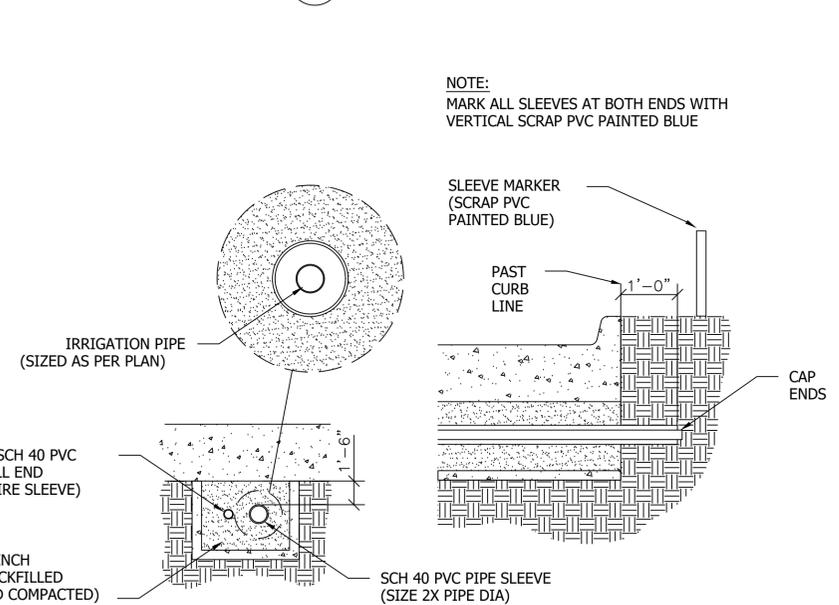
1. 10" DIAMETER CIRCULAR VALVE BOX.
 2. EDGE OF LAWN, WALK, FENCE, CURB, ETC.
 3. 12" x 18" RECTANGULAR VALVE BOX.
 4. 20" x 30" RECTANGULAR VALVE BOX.
- NOTES:
- A. CENTER VALVE BOX OVER VALVE TO FACILITATE SERVICING OF VALVE.
 - B. SET VALVE BOXES 2" MAXIMUM ABOVE GRADE IN MULCH COVER OR GROUND COVER/SHRUB AREAS - SET 1" ABOVE FINISH GRADE IN TURF AREAS.
 - C. SET VALVE BOX AND VALVE ASSEMBLY IN GROUND COVER/SHRUB AREA WHERE POSSIBLE - INSTALL IN TURF ONLY IF THERE IS NO ADJACENT GROUND COVER.
 - D. SET VALVE BOXES PARALLEL TO ONE ANOTHER AND PERPENDICULAR TO EDGE.
 - E. AVOID HEAVY COMPACTION OF SOIL AROUND VALVE BOXES TO PREVENT THEIR DEFORMATION/COLLAPSE.

C REMOTE CONTROL VALVE



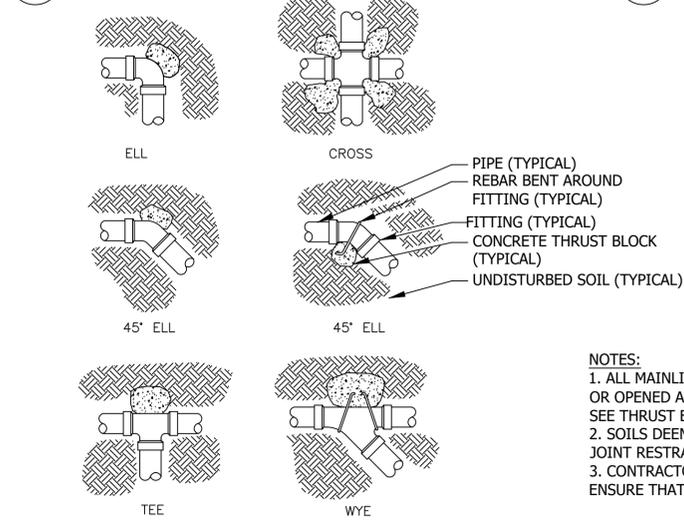
- STRIP BOTH WIRES. TWIST STRAND AROUND RIGID STRAND OVER HALF THE LENGTH OF STRIPPED WIRES.
- FOLD THE OTHER HALF OF THE RIGID STRAND OVER TWISTED STRAND AS SHOWN.
- INSERT THE TWISTED SPLICE INTO THE "Y" ELECTRICAL SPRING CONNECTION AND TWIST OVER WIRE STRANDS IN A CLOCKWISE DIRECTION.
- INSERT THE CONNECTOR INTO THE GEL-FILLED DIRECT BURY SPLICE KIT. PUSH PAST THE LOCKING FINGERS TO SECURE CONNECTOR INSIDE TUBE.
- POSITION ALL THE WIRES THROUGH THE DEDICATED INSULATOR CHANNELS AND SNAP INSULATOR TUBE COVER CLOSED.

D SPRAY HEAD



NOTE: MARK ALL SLEEVES AT BOTH ENDS WITH VERTICAL SCRAP PVC PAINTED BLUE

E PIPE AND WIRE TRENCHING



- NOTES:
1. ALL MAINLINE AND LATERAL LINE DIRECTION CHANGES THAT ARE TRENCHED OR OPENED ARE TO RECEIVE THRUST BLOCKING AND/OR JOINT RESTRAINTS. - SEE THRUST BLOCKING TABLE FOR BEARING STRENGTH.
 2. SOILS DEEMED UNSTABLE FOR ADEQUATE THRUST BLOCKING MUST UTILIZE JOINT RESTRAINTS AT NO ADDITIONAL COST TO OWNER.
 3. CONTRACTOR RESPONSIBLE TO INSTALL THE APPROPRIATE APPLICATION TO ENSURE THAT THE FITTING OR VALVE DOES DEFLECT OUTWARDLY.

G WEATHERPROOF CONNECTOR

THRUST BLOCKING

STEP 1. MULTIPLY THE PRESSURE LEVEL DESIRED FOR TESTING BY THE APPROPRIATE VALUE SHOWN IN THE FOLLOWING TABLE:

PIPE SIZE	DEAD END	90° TEE	90° ELBOW	45° ELBOW	22.5° ELBOW
1.5"	2.94	4.16	2.25	1.15	
2"	4.56	6.45	3.50	1.78	
2.5"	6.65	9.40	5.10	2.60	
3"	9.80	13.9	7.51	3.82	
3.5"	12.8	18.1	9.81	4.99	
4"	16.2	23.0	12.4	6.31	
5"	24.7	35.0	18.9	9.63	
6"	34.8	49.2	26.7	13.6	
8"	59.0	83.5	45.2	23.0	
10"	91.5	130.0	70.0	35.8	
12"	129.0	182.0	98.5	50.3	

BASED ON POUNDS PER PSI WORKING PRESSURE.

H SLEEVING

STEP 2. DETERMINE THE BEARING STRENGTH OF THE SOIL FROM THE TABLE BELOW:

SOILS AND SAFE BEARING LOADS LBS. SQ. FT.	BEARING STRENGTH OF SOILS
SOUND SHALE	10,000
CEMENTED GRAVEL AND SAND-DIFFICULT TO PICK	4,000
COARSE AND FINE COMPACT SAND	3,000
MEDIUM CLAY - CAN BE SPADED	2,000
SOFT CLAY	1,000
MUCK	0

STEP 3. DIVIDE THE TOTAL THRUST OBTAINED IN STEP 1 BY THE BEARING STRENGTH OF THE SOIL: THIS GIVES THE SQUARE FEET OF AREA NEEDED.

SIDE THRUST ON CURVES

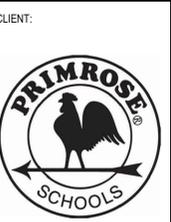
AN OUTWARD PRESSURE EXISTS ON ALL DEFLECTIONS FROM A STRAIGHT LINE. GOOD SOIL, PROPERLY TAMPED, IS SUFFICIENT TO HOLD SIDE THRUST - UNLESS SOIL CONDITIONS ARE UNSTABLE. IN THAT CASE, TO ANCHOR AGAINST THIS SIDE THRUST, THE BLOCKING SHOULD BE PLACED AGAINST THE PIPE ON EACH SIDE OF THE COUPLING. DO NOT THRUST BLOCK THE COUPLING ITSELF.

PIPE SIZE INCHES	SIDE THRUST POUNDS PER DEGREE
1.5"	5.1
2"	7.9
2.5"	11.6
3"	17.1
3.5"	22.4
4"	28.3
5"	43.1
6"	60.8
8"	103.0
10"	160.0
12"	225.0

BASED ON SIDE THRUST PER 100 LBS/SQUARE INCH PRESSURE PER DEGREE OF DEFLECTION

NOTE: MULTIPLY SIDE THRUST POUNDS BY DEGREES OF DEFLECTION TIMES POUNDS OF PRESSURE DIVIDED BY 100 TO OBTAIN TOTAL SIDE THRUST IN POUNDS.

I THRUST BLOCK



PRIMROSE SCHOOL - LAKE ELMO
LAKE ELMO, WASHINGTON COUNTY, MINNESOTA

PROJECT TITLE: IRRIGATION PLANS

ISSUE NO: 1

DATE: 04/10/2025

PROJECT NO: 190300279

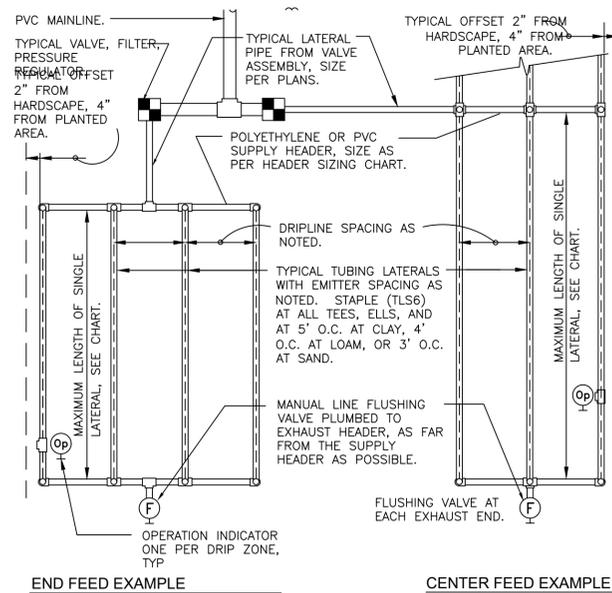
DWN BY: MSF | CHKD BY: JDR | APPD BY: MSF

ISSUE DATE: 04/10/2025

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SHEET TITLE: IRRIGATION DETAILS

SHEET NO: 1-802



MAXIMUM LENGTH OF SINGLE LATERAL (FEET)

DRIPPER SPACING	12"			18"			24"				
	0.26	0.4	0.6	0.26	0.4	0.6	0.26	0.4	0.6		
DRIPPER FLOW RATE (GPH)	15	127	109	86	65	177	151	120	91	152	116
INLET PRESSURE (PSI)	25	427	325	256	194	604	459	361	274	458	348
	35	539	409	322	244	763	579	456	346	580	440
	45	618	469	369	280	877	664	523	397	666	506

FLOW PER 100 FEET

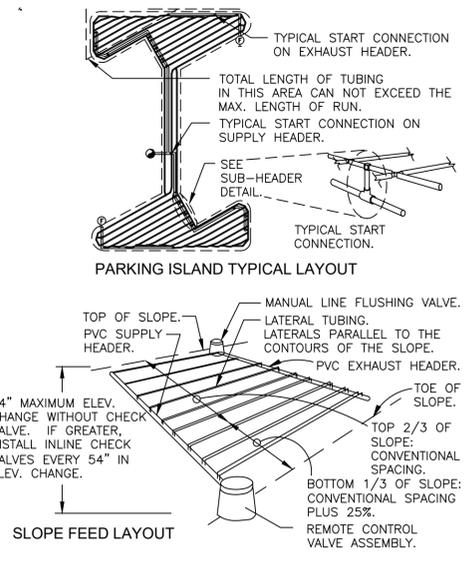
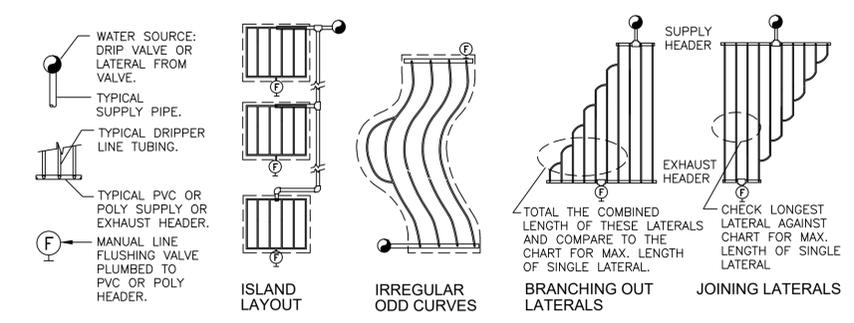
DRIPPER SPACING	0.26 GPH DRIPPER		0.4 GPH DRIPPER		0.6 GPH DRIPPER		0.9 GPH DRIPPER	
	GPH	GPM	GPH	GPM	GPH	GPM	GPH	GPM
12"	26.40	0.44	40.00	0.67	61.00	1.02	92.00	1.53
18"	17.58	0.29	26.67	0.44	41.00	0.68	61.00	1.02
24"	N/A	N/A	N/A	N/A	31.00	0.51	46.00	0.77

SUPPLY AND EXHAUST HEADER SIZING CHART (UNLESS NOTED ON PLANS)

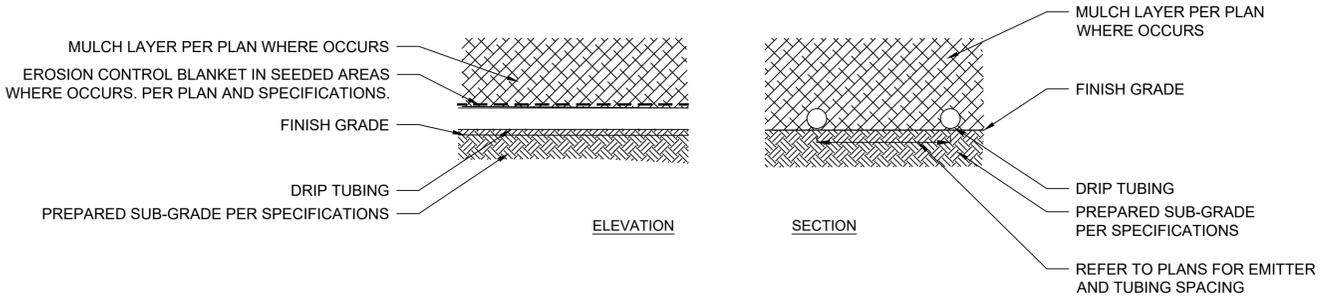
STEP 1: ADD LENGTH OF ALL LATERAL TUBING CONNECTED TO THE HEADER.
 STEP 2: DIVIDE THIS TOTAL LENGTH BY 100 TO INDICATE THE LENGTH IN UNITS OF 100.
 STEP 3: LOCATE THE GPM THAT APPLIES FOR EACH UNIT OF 100 FEET LENGTH ON THE CHART "FLOW PER 100 FEET". MULTIPLY THIS GPM NUMBER TIMES THE UNITS OF 100 FEET FOR THE TOTAL GPM AT THIS HEADER.
 STEP 4: SIZE THE HEADER WITH THE FOLLOWING:
 1 TO 6 GPM: 3/4" HEADER. 6 TO 10 GPM: 1" HEADER.
 10 TO 20 GPM: 1 1/4" HEADER. 20 TO 30 GPM: 1 1/2" HEADER.

GENERAL GUIDELINES FOR WATERING TIME

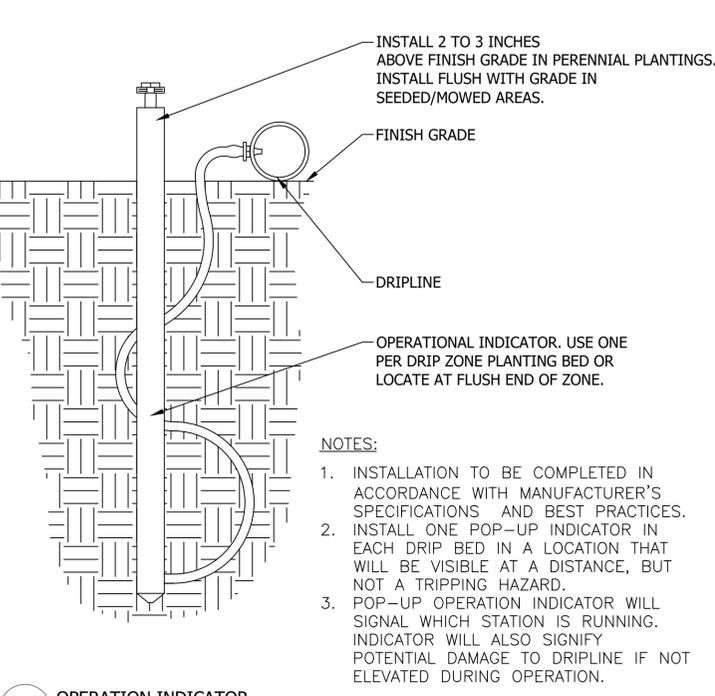
	TURF			SHRUB & GROUND COVER		
	CLAY	LOAM	SANDY	CLAY	LOAM	SANDY
DRIPPER FLOW (GPH)	0.26	0.4	0.6	0.26	0.4	0.6
DRIPPER INTERVAL	18"	12"	12"	18"	18"	12"
LATERAL (ROW) SPACING	18"-22"	18"-22"	12"-16"	18"-24"	18"-24"	16"-20"
APPLICATION RATE (IN/HR)	.19-.0.15	.43-.35	.96-.72	.19-.21	.29-.21	.72-.58
TIME TO APPLY 1/4"	79-100	35-43	16-21	79-107	52-71	21-26



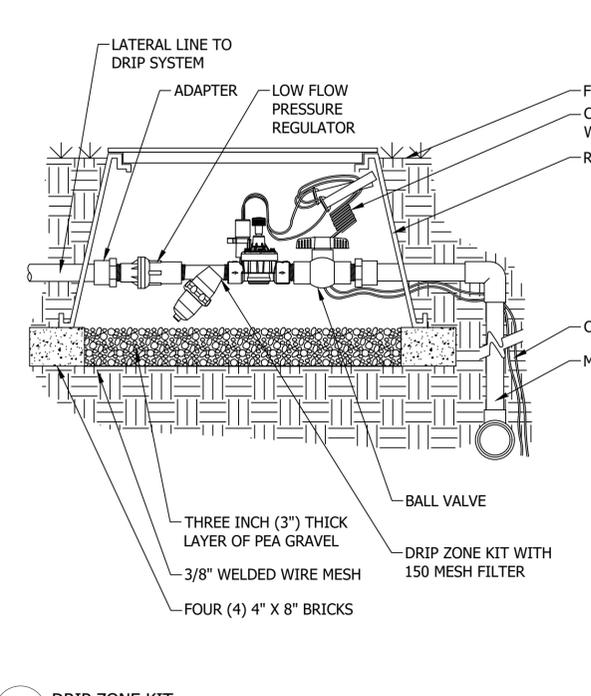
A TYPICAL DRIPLINE REQUIREMENTS



B TYPICAL DRIPLINE INSTALLATION

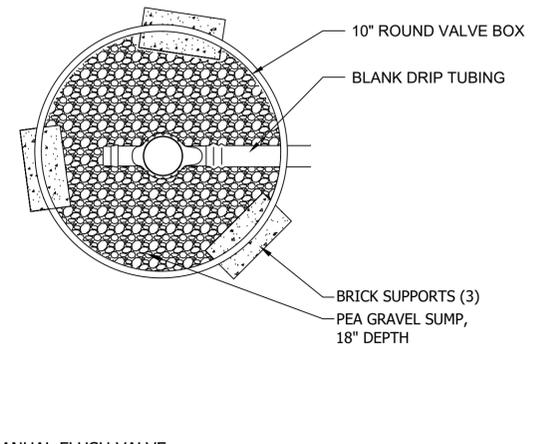


C OPERATION INDICATOR

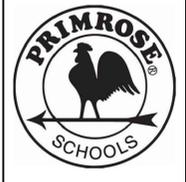


D DRIP ZONE KIT

- NOTES:**
- INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS AND BEST PRACTICES.
 - INSTALL CONTROLLER WHERE INDICATED ON DRAWINGS. VERIFY LOCATION WITH OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION.
 - PROVIDE WATERPROOF WIRE CONDUIT INTO CONTROLLER.
 - ELECTRICAL CONDUIT SHALL BE EXTENDED 6" BEYOND THE EDGE OF THE CONCRETE FOOTING.
 - BATTERY SHALL BE PER MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS.
 - IRRIGATION VALVES SHALL BE INSTALLED WITH DC LATCHING SOLENOIDS.
 - GROUND CONTROLLER IN ACCORDANCE WITH MANUFACTURER RECOMMENDATION.
 - ELECTRICAL WORK IS TO BE PERFORMED BY A LICENSED ELECTRICIAN.



E MANUAL FLUSH VALVE



PRIMROSE SCHOOL - LAKE ELMO
 LAKE ELMO, WASHINGTON COUNTY, MINNESOTA

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DESCRIPTION: SITE PERMIT PLANS

PROJECT NO.: 190300279

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