



Please note the meeting will be held in person at the Carver County Government Center on the Wednesday, April 17, 2024. The meeting will also be available virtually using this [link](#).

LOWER MINNESOTA RIVER WATERSHED DISTRICT

Lower Minnesota River Watershed District

7:00 PM

Wednesday, April 17, 2024

Carver County Government Center

602 East Fourth Street, Chaska, MN 55318

| Agenda Item | Discussion |
|------------------------------------|--|
| 1. Call to order | A. Roll Call |
| 2. Citizen Forum | <i>Citizens may address the Board of Managers about any item not contained on the regular agenda. A maximum of 15 minutes is allowed for the Forum. If the full 15 So are not needed for the Forum, the Board will continue with the agenda. The Board will take no official action on items discussed at the Forum, with the exception of referral to staff or a Board Committee for a recommendation to be brought back to the Board for discussion or action at a future meeting.</i> |
| 3. Approval of Agenda | A. Additions, Corrections, and Deletions to Agenda |
| 4. Public Hearings & Presentations | A. Presentation of report from Carver County Water Management on 2023 monitoring, technical, education and other conservation services B. LMRWD Work Plan Quarterly Report |
| 5. Consent Agenda | <i>All items listed under the consent agenda are routine by the Board of Managers and will be enacted by one motion and an affirmative vote of a majority of the members present. There will be no separate discussion of these items unless a Board Member or citizen request, in which event, the items will be removed from the consent agenda and considered as a separate item in its normal sequence on the agenda.</i> A. Approve Minutes March 20, 2024 Regular Meeting B. Receive and file March 2024 Financial report C. Approval of Invoices for payment <ul style="list-style-type: none"> i. Clifton Larson Allen (CLA) – Financial services through March 2024 ii. TimeSavers Off Site Secretarial – Preparation of February 2024 meeting minutes iii. Rinke Noonan, Attorneys at Law – February 2024 Legal Services iv. Rinke Noonan, Attorneys at Law – March 2024 Legal Services v. Daniel Hron – May 2024 office rent vi. US Bank Equipment Finance – March 2024 copier lease payment vii. Young Environmental Consulting Group, LLC – January 2024 technical, and Education & Outreach services viii. Naiad Consulting, LLC – March 2024 administrative services, mileage & expenses ix. 106 Group – March 2024 services related to Area #3 x. Bolton & Menk – Engineering Services through March 22, 2024, related to Vernon Avenue xi. Dakota County SWCD – Q1 2024 monitoring & educational services |

| | |
|---------------------------|---|
| | <ul style="list-style-type: none"> xii. Frenette Legislative Advisors – March & April 2024 legislative liaison services xiii. WSB – Area #3 land acquisition services xiv. 4M Fund –January 2024 Bank service charges D. Report from the Citizen Advisory Committee E. Reimburse Pilot Knob STEM school for educator mini-grant F. Authorize execution of River Watch Agreement between LMRWD and Friends of the MN Valley |
| 6. Permits | <ul style="list-style-type: none"> A. LMRWD Permit Renewals B. Safety & Security Center Phase 2 (LMRWD No. 2023-022) C. Interstate 35W Early Release Project Permit (LMRWD No. 2024-004) |
| 7. Action Items | <ul style="list-style-type: none"> A. 2023 Annual Report <ul style="list-style-type: none"> o Approve and authorize distribution B. LMWRD Water Resource Restoration Fund application <ul style="list-style-type: none"> o Request from Eden Prairie C. Biennial Solicitation of Letters of Interest for legal, technical & other professional services <ul style="list-style-type: none"> o Education and Outreach o Legal Counsel D. Study Area #3 <ul style="list-style-type: none"> o <u>The Board of Managers may close the meeting pursuant to statutes section 13D.05, subd. 3.c.3, to discuss the purchase of an easement or a fee ownership interest of a portion of property located in Eden Prairie, Hennepin County PID #3511622230013</u> |
| 8. Board Discussion Items | <ul style="list-style-type: none"> A. Lower MN River East One Watershed One Plan <ul style="list-style-type: none"> o Review of Joint Powers Organization |
| 9. Information Only | <ul style="list-style-type: none"> A. 535 Lakota Lane, Chanhassen – work without a permit B. Dredge Management <ul style="list-style-type: none"> o Vernon Avenue Improvement Project C. 2024 Legislative Activities Update D. LMRWD Permit Program Summary |
| 10. Communications | <ul style="list-style-type: none"> B. Administrator Report C. President D. Managers E. Committees F. Legal Counsel F. Engineer |
| 11. Adjourn | Next meeting of the LMRWD Board of Managers is 7:00 pm Wednesday, May 15, 2024. |

Upcoming meetings/Events

Managers are invited to attend any of these meetings. Most are free of charge and if not the LMRWD will reimburse registration fees.

- Metro Watershed – Tuesday, April 16, 2024, 7:00 pm to 9:00 pm, Capitol Region Watershed District, 595 Aldine Street, St. Paul, MN 55104
- ~~Lower MN River East 1W1P Advisory Committee meeting – April 17, 2024, 10:00 am to 1:00 pm, Scott SWCD office, 7151 W 190th St, Jordan, Minnesota 55352 CANCELLED~~
- Lower MN River East 1W1P Steering Committee meeting – Wednesday, April 17, 2024, 10:00 pm to 3:00 pm – [virtual only on MS Teams](#)

- ~~Lower MN River East 1W1P Policy Committee – Thursday, April 18, 2024, 3:00 pm to 5:00 pm, In-person at Le Sueur SWCD office located at 181 W Minnesota St, Le Center, MN 56057 and virtual on MS Teams – CANCELLED~~
- UMWA (Upper Mississippi Waterway Association) monthly meeting – Thursday, April 18, 2024, virtual only via Zoom
- ~~Public Hearing for Lower Minnesota River East 1W1P – Monday, April 29, 2024, 4:00 to 7:00 pm, Giesenbrau Bier Co., 1306 1st Street NE, New Prague, MN 56071 RESCHEDULED date TBD~~
- River Resource Forum – Tuesday, April 30, 2024, 9:00 am to 4:00 pm Minnesota Marine Art Museum, 800 Riverview Dr., Winona, MN 55987 and [virtual on WebEx](#)
- LMRWD Citizen Advisory Committee meeting – Tuesday, May 7, 2024, 4:30pm,
- Lower MN River East 1W1P Policy Committee meeting – Thursday, May 16, 2024, 3:00 pm to 5:00 pm, in-person at Le Sueur County SWCD office located at 181 W. Minnesota St. Le Center, MN 56056

For Information Only

- **WCA Notices**
 - Hennepin County, City of Bloomington – Notice of Application and Notice of Decision – Request to renew 2017 delineation for MN DNR River Bottom Trail (MN Valley State Trail Bloomington Segment Phase 1B)
 - Hennepin County, City of Bloomington - After the Fact TEP – Opus Marsh
 - Hennepin County, City of Bloomington – Notice of Application Exemption – Lower Lyndale Avenue Utility Reconstruction – Request for Comments
- **DNR Public Waters Work permits**
 - Carver County, City of Chaska – Amended permit issued – Sediment Removal, Erosion/Flood Prevention Chaska Creek
 - Carver County, City of Chaska, - East Creek Bridge Replacement – Request for Comments
- **DNR Water Appropriation permits**
 - None



LOWER MINNESOTA RIVER WATERSHED DISTRICT

Executive Summary for Action

Lower Minnesota River Watershed District Board of Managers Meeting

Wednesday, April 17, 2024

Agenda Item

Item 4. A. – Presentation of report from Carver County Water Management on 2023 monitoring, technical, education and other conservation services

Prepared By

Linda Loomis, Administrator

Summary

Andrew Edgcumbe from the Carver County Water Management Organization (Carver WMO) will join virtually to report on the 2023 service provided to the LMRWD by the Carver WMO.

Carver WMO has monitored water resources in Carver County on behalf of the LMRWD for many years. The LMRWD receives an annual report from the Carver WMO. In addition to monitoring services, Carver WMO includes the LMRWD in its education materials.

The LMRWD has a multi-year agreement to provide these services. The current agreement is attached for the Board's information.

At the March meeting of the Board of Managers, the Board approved adding Spring Creek in the City of Carver to the monitoring regime. Carver WMO has been informed that monitoring of Spring Creek should begin. Carver WMO will begin monitoring Spring Creek and that additional resource monitoring does not require an amendment to the agreement. They have said that they should be able to add this monitoring without going over the not to exceed amount in the agreement.

Attachments

Current Memorandum of Agreement between Carver County and the LMRWD

Recommended Action

No action recommended

Memorandum of Agreement

This Memorandum of Agreement is entered into by and between the County of Carver, 600 East 4th Street, Chaska, Minnesota 55318, through Carver County Public Services, Planning and Water Management Dept., (hereafter "Carver County Public Services, Planning and Water Management Dept.") and Lower Minnesota River Watershed District (112 E. 5th Street, #102, Chaska, Minnesota 55318).

Carver County is charged with water management responsibilities in all areas in the County that fall in the Carver County Water Management Organization (CCWMO). Toward this end the County has been monitoring surface water for nutrients and fecal coliform/E. coli since 1997. The data is used to determine areas of the County where surface and ground water are impacted, and to what extent the water has been impacted. Management plans aimed at reducing or eliminating the sources of degradation are then developed and implemented. Following implementation of the management plans, water quality monitoring information is used to measure the effectiveness of the plans, and to determine whether additional measures need to be put in place.

The purpose of this memorandum of agreement is to 1) establish the roles regarding the design and implementation of the program, 2) promote efficient use of staff and financial assets used in monitoring surface and ground water in the county, 3) provide for the assessment of the water quality monitoring data, and 4) ensure a comprehensive, local approach to water management in the county.

I. PROGRAM COORDINATION

Planning and implementation of an effective water quality monitoring program, and associated water management plan will require extensive communication between Carver County Public Services, Planning and Water Management Dept. and the Lower Minnesota River Watershed District (LMRWD), and the respective Boards and/or Councils of each entity. The Carver County Board of Commissioners is responsible for water management in the CCWMO pursuant to MS 103B.231 Subd. 3(b). Participation by the LMRWD and their Board, along with their constituents is essential to a well-developed program in the county. The goals of the program, the general approach, and roles of all parties relating to program planning and implementation are as follows:

A. Project Goal:

1. To establish long term water quality and quantity monitoring trends in the East Chaska Creek watershed, West Chaska Creek watershed, and Seminary Fen. This data includes but is not limited to stream, lake, and groundwater monitoring activities.
2. To establish a partnership with a common goal of providing water education to meet the specific needs of the LMRWD relative to its mission.

B. Objectives:

Monitoring:

1. Monitor four stream sites, one on West Chaska Creek and three on East Chaska Creek (EC 1, EC 2, EC 3, & CH 1_0) for the occurrence and concentration of nutrients and E. coli in the watersheds representative of land use and urban development patterns in Carver County;
2. Monitor level and flow at each of the aforementioned stream site locations.
3. Monitor water level at four nested shallow wells, eight deep wells and one stream site (Assumption Creek at 61) within the Seminary Fen and its recharge areas;
4. Monitor water quality at three lakes (Courthouse, Firemen's, and Brickyard) using the CAMP protocol;
5. Utilize analysis of land use, nutrient use, and hydrologic attributes that may be resulting in surface water degradation;
6. Provide basic information from which the efficacy of Best Management Practices may be determined;
7. Disseminate the information developed through the monitoring program to the appropriate policy makers, scientists, and citizens of Carver County and the state of Minnesota; and
8. Provide data that are suitable for TMDL (Total Maximum Daily Load), WRAP (Watershed Restoration and Protection Strategy), and 1W1P (One Watershed One Plan) development if requested.
9. Provide additional monitoring services to the aforementioned if requested by LMRWD.

Education:

1. Provide public education and outreach to citizens, staff, developers, contractors, decision makers, and students within the LMRWD boundary area in Carver County.
2. Provide public participation through programs and activities to citizens, staff developers, contractors, decision makers, and students within the LMRWD boundary area in Carver County.

C. Approach:*Monitoring:*

Grab samples will be collected at each established stream site mentioned above from April to October, and as needed otherwise, to monitor three watersheds: 1) East Chaska Creek which is representative of highly developed area with only short-term water quality information, 2) West Chaska Creek which is representative of areas that are currently transitioning from rural/agricultural land use to residential land use, and 3) Assumption Creek to get baseline chemistry and physical data. Continuous level loggers are installed at in the spring and retrieved in the fall. The sites have been operated by Carver County and with the aid of funding from the Lower Minnesota River Watershed District for the past twenty years. Samples will be obtained during different flow regimes to accurately categorize annual load amounts and concentrations of selected chemical parameters and E. coli, respectively. The complete design of the monitoring program is outlined with the annual Carver County Water Management Organization Water Monitoring Plan, documented separately.

The three lakes to be monitored (Brickyard, Courthouse, and Fireman's) will be monitored bi-weekly

April-October following the RMB Lake Monitoring Program protocol. Parameters to be monitored are total phosphorus, total Kjeldahl nitrogen, chlorophyll a, Secchi disc, dissolved oxygen, temperature, pH, specific conductance, and chloride.

The Seminary Fen and its upslope recharge areas will be monitored by obtaining level measurements at 4 nested shallow piezometer sites within the fen, and at 5 MNDNR Observation Wells both within the fen and its upslope recharge area, with 10 wells equipped with data loggers. Site visits include manual dropdown water level measurements to help correct automated data logger outputs. Data is downloaded and submitted to MNDNR.

The scope of this agreement may be expanded during the term of contract if requested by **LMRWD**.

Education:

Education will be conducted through different media including digital outreach, in-person events (i.e. fairs/festivals), brochures, displays, newsletter and newspaper articles, and youth education programs. These activities will help LMRWD achieve its mission to increase public participation and educational awareness in the topic areas of stormwater runoff and water pollution prevention, lake and river health, good housekeeping, and more.

D. Responsibilities

Carver County Public Services, Planning and Water Management Dept.

Monitoring:

1. Act as lead in set-up and installation of water quality monitoring sites as well as conduct routine maintenance or improvements to automatic sampling stations as needed;
2. Routine check-up of stations as needed to ensure proper functioning;
3. Pick-up of samples and deliver to laboratory as needed. Samples will be analyzed for Nitrate/Nitrite Nitrogen, Ortho-phosphorous, Total Phosphorous, Total Suspended Solids, E. coli, and other parameters as deemed necessary. A Maximum fourteen (14) grab samples, with representative baseflow and storm events will be collected at each site.
4. Conduct routine flow rating to ensure a statistically valid rating curve is established at each site;
5. Conduct bi-weekly lake sampling on three lakes (Courthouse, Brickyard and Firemen's). The lakes will be sampled as part of and according to the protocols of the Metropolitan Councils CAMP (citizen aided monitoring program);

6. Conduct Seminary Fen well site visits as deemed necessary to obtain manual well water level measurements and conduct data downloads. Flow rating and measurement at the Assumption Creek site will follow protocol as outlined above.
7. Provide LMRWD with yearly updates and related reports for four stream sites (three on East Chaska Creek and one on West Chaska Creek) and three lakes (Courthouse, Brickyard and Firemen's);
8. Provide partner agencies (MNDNR, Met Council, Cities of Chaska & Chanhassen) with data as requested.

Education:

1. Provide public education and outreach to citizens, staff, developers, contractors, decision makers, and students within the LMRWD boundary area in Carver County
2. Provide the LMRWD with updates and reports as requested.

LMRWD

1. Provide the County with monetary fund's **not to exceed**; \$37,000 in 2023, \$38,500 in 2024, \$40,000 in 2025, \$41,500 in 2026, and \$39,000 in 2027. Costs per year may increase if scope of the agreement is expanded by mutual agreement. These funds help to cover staff cost (\$50.00/hr), lab analysis and annual reporting for three stream sites on East Chaska Creek, one site on West Chaska Creek, monitoring and reporting for three lakes, and monitoring and reporting for the well sites and Assumption Creek stream site within the Seminary Fen. A final invoice reflecting actual lab and labor costs will be submitted to the LMRWD in December (or as soon as they are available) of each year.

II. AGREEMENT REVISIONS

The appropriate representatives from Carver County and the Lower Minnesota River Watershed District will meet as deemed necessary to review this agreement and identify areas needing improvement. The MOA may be modified as directed by and upon written mutual agreement of the appropriate Carver County and LMRWD authority. Specific issues may be addressed through addendums to the original MOA.

III. TERMS OF AGREEMENT {Project Activity Period}

This agreement shall remain in effect for five (5) years beginning January 1, 2023 and terminating December 31, 2027 unless acted upon according to Section IV below. This MOA may be modified as directed by and upon written mutual agreement of all appropriately authorized parties as indicated in Section II above.

IV. PREMATURE TERMINATION OF AGREEMENT

This agreement may be terminated by any party. When any party wishes to terminate the agreement, the other party must receive notice thirty (30) days prior to the proposed termination date. Termination shall be effective thirty (30) days after all authorized parties have mutually

agreed to termination. Termination may occur in a shorter timeframe by the mutual agreement of all authorized parties.

V. EQUAL EMPLOYMENT OPPORTUNITY AND AFFIRMATIVE ACTION

The parties agree to comply with all applicable laws relating to nondiscrimination and affirmative action. The parties agree not to discriminate against any employee, applicant for employment or participant in this project because of race, color, creed, religion, national origin, sex, marital status, status with regard to public assistance, membership or activity in a local civil rights commission, disability, sexual orientation, or age; and further agrees to take action to ensure that applicants and employees are treated equally with respect to all aspects of employment, including rates of pay, selection for training, and other forms of compensation.

VI. INDEPENDENT CONTRACTOR

- a. Nothing contained in this Agreement is intended or should be construed as creating the relationship of co-partners or joint ventures with the County. No tenure or any rights including worker's compensation, unemployment insurance, medical care, sick leave, vacation leave, severance pay, PERA, or other benefits available to County employees, including indemnification for third party personal injury/property damage claims, shall accrue to the Contractor or employees of the Contractor performing services under this Agreement.
- b. Contractor acknowledges and agrees that no withholding or deduction for State or Federal income taxes, FICA, FUTA, or other, will be made from the payments due Contractor and it is Contractor's sole obligation to comply with all federal and state tax laws.

VII. INDEMNIFICATION AND INSURANCE

Each party shall be liable for its own acts to the extent provided by law and hereby agrees to indemnify, hold harmless and defend the other, its officers and employees against any and all liability, loss, costs, damages, expenses, claims or actions, including attorney's fees which the other, its officers and employees may hereafter sustain, incur or be required to pay, arising out of or by reason of any act or omission of the party, its agents, servants or employees, in the execution or performance or failure to adequately perform its obligations pursuant to this Agreement. It is understood and agreed that the parties' liability shall be limited by the provisions of Minn.Stat.Chap.466 and/or other applicable law.

VIII. MERGER

It is understood and agreed that the entire Agreement between the parties is contained herein, and that this Agreement supersedes all oral agreements and negotiations between the parties relating to the subject matter. All items referred to in this Agreement

are presumed to be incorporated or attached and are deemed to be part of this Agreement.

IX. HEALTH AND SAFETY

The Contractor shall be solely responsible for the health and safety of its employees and subcontractor's employees in connection with the services performed in accordance with this Agreement. The Contractor shall ensure that all employees, including those of all subcontractors, have received training required to properly and safely perform services outlined in this Agreement. Such training is to include, but not be limited to, all applicable sections of the State and Federal Occupation, Safety and Health Administration (OSHA) laws, Superfund Amendments and Reauthorization Act (SARA), Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), Uniform fire Code and/or any other applicable health and safety regulations. Upon the request of the County, the Contractor shall provide copies of any licenses and/or training records for contractor and/or contractor's employees or subcontractor's employees who perform services pursuant to this Agreement.

X. NONWAIVER, SEVERABILITY & APPLICABLE LAWS

1. Non-waiver.

Nothing in this Agreement shall constitute a waiver by the County of any statute of limitations or exceptions on liability.

2. Severability.

If any part of this Agreement is rendered void, invalid or unenforceable such rendering shall not affect the remainder of this Agreement unless it shall substantially impair the value of the entire Agreement with respect to either party. The parties agree to substitute for the invalid provision a valid provision that most closely approximates the intent of the invalid provision.

3. Applicable Laws.

The Laws of the State of Minnesota shall apply to this Agreement.

XI. SIGNATURES

The below signed individuals, acting on behalf of their respective organizations, provide authority to the Carver County Public Health and Environment, Lower Minnesota River Watershed District to undertake the program described here-in under the provisions put forth within this Memorandum of Agreement.

Carver County

Date: 12/22/22

By: *Gayle Degler*
Gayle Degler (Dec 22, 2022 11:41 CST)

Name: Gayle Degler

Title: Bd chair

Carver County

Date: 12/22/22

By: *Dave Hemze*
Dave Hemze (Dec 22, 2022 09:26 CST)

Name: Dave Hemze

Title: County Administrator

Lower Minnesota River Watershed District

Date: 12/22/22

By: *Jesse J Hartmann*
Jesse J Hartmann (Dec 22, 2022 09:12 CST)

Name: Jesse J Hartmann

Title: President



LOWER MINNESOTA RIVER WATERSHED DISTRICT

Executive Summary for Action

Lower Minnesota River Watershed District Board of Managers Meeting
Wednesday, April 17, 2024

Agenda Item

Item 4. B. – LMRWD Work Plan Quarterly Report

Prepared By

Linda Loomis, Administrator

Summary

In September 2023, when the Board of Managers approved the 2024 Work Plan, the Board requested quarterly updates. The 2024 Work Plan update for the first quarter of 2024 is attached for the Board's information.

In planning for the 2025 Work Plan, the Board of Managers will be invited to give feedback earlier in the process. The Board should determine how to proceed with its involvement with the 2025 Work Plan; either through discussing at the May Board of Managers meeting or through a work session. It could be combined with the discussion of the Fens that was requested by the Board after the Fen Stewardship presentation at the February Board of Manager meeting.

The Board should provide direction as to how it would like to proceed with development of the 2025 work plan.

Attachments

Technical Memorandum – Lower Minnesota River Watershed District – Projects and Programs Quarter 1 Progress Report, dated April 11, 2024

Recommended Action

Provide feedback and direction to staff

Technical Memorandum



To: Linda Loomis, Administrator
Lower Minnesota River Watershed District (LMRWD)

From: Della Schall Young, CPESC, PMP, Principal Scientist
Jess Norby, Senior Water Resources Scientist
Suzy Lindberg, Communication Manager

Date: April 11, 2024

Re: Lower Minnesota River Watershed District—Projects and Programs Quarter 1
Progress Report

The following summary shows the progress we have made on projects and programs and projects that have been completed.

PROJECTS AND PROGRAMS

Individual Project Permit Program

The LMRWD reviews permit applications for individual projects in cities without their local government unit (LGU) permits, Minnesota Department of Transportation (MnDOT) projects, and LGUs that have opted to have the LMRWD maintain specific rules through 2024. The LMRWD has reviewed 18 permit applications and inquiries and issued one permit in Quarter 1 of 2024 (January–March). Projects under review or permitted in 2024 are shown in Table 1.

Table 1. Projects that are under review, conditionally approved, or permitted in 2024

| Permit Number | Project Name | Status | Date Received | Conditional Approval | Permit Issued |
|---------------|--------------------------|-----------------------------------|---------------|----------------------|---------------|
| 2022-031 | RSI Marine Storage | Conditional Approval | 9/20/2023 | 2/21/2024 | - |
| 2022-037 | Peterson Wetland Bank | Active | 5/23/2023 | 7/19/2023 | 1/9/2024 |
| 2023-013 | Merriam Junction Trail | Under Review | 3/20/2024 | - | - |
| 2023-017 | MN Bluffs Regional Trail | Conditional Approval | 12/28/2023 | 3/20/2024 | - |
| 2023-020 | Tramore Heights Addition | Conditional Approval | 8/21/2023 | 2/21/2024 | - |
| 2023-022 | MAC SSC Phase 2* | Active Rule B/Under Review Rule D | 10/2/2023 | - | |
| 2023-025 | TH35W SP1981-140 | Under Review | 1/24/2024 | - | - |
| 2023-026 | CP Pipeline Abandonment | Conditional Approval | 1/5/2024 | 2/21/2024 | - |
| 2023-027 | TH41 ORF Relocation | Under Review | 12/12/2023 | - | - |
| 2024-001 | Saint John’s Church | No Permit Required | 1/15/2024 | - | - |

| Permit Number | Project Name | Status | Date Received | Conditional Approval | Permit Issued |
|---------------|-------------------------|----------------------|---------------|----------------------|---------------|
| 2024-002 | MnDOT Pond Maintenance | Under Review | 3/20/2024 | - | - |
| 2024-003 | Port Cargill Savage | Upcoming | - | - | - |
| 2024-004 | 35W Early Release* | Conditional Approval | 2/20/2024 | - | - |
| 2024-005 | Fort Snelling Cemetery | Upcoming | - | - | - |
| 2024-006 | T2 North Expansion | Under Review | 2/28/2024 | - | - |
| 2024-007 | Chalet Driving Range | No Permit Required | 2/18/2024 | - | - |
| 2024-008 | CD Terminal Storage Pad | Under Review | 3/22/2024 | - | - |
| 2024-009 | FWTEC | Under Review | 3/28/2024 | - | - |
| 2024-010 | Lyndale Road | Under Review | 3/29/2024 | - | - |

*Projects are being brought to the board for review on April 17, 2024.

In addition to the application and inquiry reviews, the LMRWD also tracks expiration dates, renewals, and inquires for currently active or conditionally approved projects. The LMRWD has renewed nine permits in 2024.

Municipal Permits

The LMRWD reviews LGU permit applications for LGUs within the LMRWD. The LMRWD has reviewed and issued one (1) LGU permit application in 2024 for the City of Chaska. The City of Chaska now maintains LGU permitting authority for LMRWD Rule B and Rule D outside of the high value resource areas.

Education and Outreach (E&O) Program

In 2024, work continues to engage the community through the E&O Program service areas:

- Board of Managers Coordination
- Management of the Citizen Advisory Committee
- Social media activities
- Signage design and placement
- School engagement efforts
- Partnerships for community outreach and engagement activities

Board of Managers Coordination

Young Environmental coordinated the E&O Board Workshop held in January to discuss the future of engagement goals, successes, and concerns as well as the overall vision of the program.

Citizen Advisory Committee (CAC)

Young Environmental continues to support the CAC and will begin a recruitment search to meet membership goals because a current CAC member has resigned. We will coordinate and facilitate CAC meetings as the members have requested, including educational opportunities such as migratory bird watching along the Minnesota River, guided by Bob Brereton, a member of the board of directors for the Minnesota Valley Audubon Chapter.

Social Media

Young Environmental has placed routine social media posting on hold because our team is waiting for LMRWD board approval to move forward with the new vision we proposed, which consists of less frequent posting but greater focus on unique content relevant to the LMRWD. Our team incorporated feedback from the LMRWD board, the CAC, and staff from the E&O Board Workshop in January 2024 to adjust the E&O program vision of social media engagement. Posting for 2024 has been limited to critical information as the LMRWD administrator suggested.

Signage

Young Environmental has continued the conversations with local partners for interpretive signs that were created in 2023 and is collaborating to install the signs for Quarry Lake, Courthouse Lake, and Ike’s Creek. We will continue to identify and suggest future signage ideas for high-value resource areas and LMRWD project sites.

Schools Engagement

Young Environmental continued to advance the Educator Mini-Grant Program, releasing both direct mail and email blasts to raise awareness. Out of six applicants, five were awarded grants in March 2024—this was the largest number of applications received in one Educator Mini-Grant Program cycle. Our team is following up with one educator to assist with developing the scientific material for the project based on water quality sampling and analysis for grades 6 and 12.

Community Outreach Engagement

Young Environmental continued to build partnerships with local organizations toward achieving water quality and natural resource messaging and engagement goals. Our team has secured an LMRWD presence at several local events planned for 2024, some in a shared space with similar entities, such as Nine Mile Creek Watershed District, and will continue to coordinate tabling events while preparing necessary materials to successfully engage with the public in resource protection. A spring/summer newsletter and cost-share grant pamphlet are currently in draft for 2024 event table handouts.

Area 3 Minnesota Riverbank and Bluff Stabilization Project

Area 3 permit applications have been submitted, and coordination with the regulating agencies continues. The table below lists the permit applications that are in progress and their current status.

| Permit | Status |
|--------------------------|--|
| MnDNR Public Waters | MnDNR requested a No-Rise Evaluation to complete the application. The no-rise model is currently undergoing Quality Assurance/Quality Check (QA/QC). |
| USACE Section 404 | Permit issuance is waiting on the National Historic Preservation Association review to be completed. |
| Wetland Conservation Act | Approval depends on the USACE decision for Section 404. |
| USACE Section 106 | 106 Group is reviewing the potential for deeply buried soils in the western and eastern portions of the limits of disturbance to satisfy Section 106 requirements. |

| Permit | Status |
|---|---|
| Minnesota Pollution Control Agency (MPCA) 401 Certification | The MPCA waived its Section 401 authority |
| LMRWD Rules B and C | The no-rise model is currently undergoing QA/QC |

After the project receives approval from the USACE under Sections 404 and 106, the WCA LGU, and the MnDNR, the project will continue with 90 percent design. Additionally, the LMRWD is working with Barr Engineering and AET to collect two soil borings on the upper slope of the bluff to investigate the groundwater levels. Soil boring collection is anticipated to happen this spring or early summer.

Fen Stewardship Plans

Stewardship Plans have been completed for Gun Club, Nicols Meadow, Savage, and Seminary fens. The plans identify a number of stewardship actions to protect and enhance the fens: improving groundwater data collection, continuing vegetation surveys, addressing invasive vegetation species, and pursuing opportunities for land acquisition around the fens in coordination with the MnDNR. Two meetings were held in March with MnDNR fen program staff to discuss LMRWD fens and prioritization of stewardship actions. At the MnDNR’s request, and for collaboration purposes, the stewardship matrices in the four plans are being combined into a single LMRWD fen matrix that will identify priority stewardship actions at each fen.

Ground and Surface Water Resources

MnDNR staff suggested that Seminary Fen wells would benefit from upgraded equipment to gather more precise groundwater level data. Price quotes have been obtained, and further coordination is happening with Carver County and MnDNR to ensure the equipment meets the monitoring requirements and to determine installation, data gathering needs, and responsibilities.

MnDNR staff noted in recent meetings the importance of getting a better understanding of the drain tile network that exists in Seminary Fen. Field work will be completed this spring or summer to field-verify and record GPS locations of drain tiles and outlets. This field verification will use drain tile maps that identify historical tile information as a reference. After the initial field assessment, additional fieldwork may be planned to assess drain tile condition and functionality, such as video scoping of the tile lines.

Groundwater recharge maps are being developed for the four fens to help better understand where the groundwater that feeds the fens is coming from. The mapping effort is expected to be completed by summer 2024.

Vegetation

Buckthorn and purple loosestrife control actions are being planned in coordination with MnDNR staff, including additional efforts to map native vegetation and invasive species in the fens. A volunteer buckthorn removal event for Seminary Fen will be held on April 14.

Property Acquisition

Further coordination will occur with MnDNR on property acquisition. An LMRWD consultant will be contracted to research private properties around the fens and to assess property values and

potential steps to acquisition.

Vernon Avenue Dredge Material Management Site

In January 2024, Bolton & Menk, Inc., finalized the 100% Construction Plans and prepared the Bid Package and Engineer's Opinion of Probable Cost. Additionally, we transmitted the Archeological Literature Review and Assessment and Architectural History Survey to the Minnesota State Historic Preservation Office for concurrence. The next step in the project is to advertise the project for bids.

Gully Inventory and Condition Assessment

The 2023 Gully Inventory project identified four priority gullies to be further studied in 2024 to assess causes of erosion and identify methods to stabilize, restore, or minimize further erosion. Three of the gullies are in Shakopee, and one is in Burnsville. Two of the Shakopee gullies are expected to be addressed as part of an upcoming City of Shakopee riverbank stabilization project near Huber Park. A meeting will be held with Shakopee staff in mid-April to determine if there are areas the LMRWD can support in the gully stabilization work that the City will undertake as part of the Huber Park project.

Field work is planned for mid-April to collect detailed site information and assess potential stabilization methods for the third Shakopee gully and the Burnsville gully. Contour maps of these two gullies have been developed from recent US Geological Survey data. Once site data have been collected, hydraulic and hydrologic modeling will be completed to aid in determining appropriate stabilization techniques or other methods to reduce erosion.

Work will begin in late spring and summer on the following tasks:

1. Collect public pipe outfall information to complete an assessment of public pipe outfalls and their connection to gullies on private properties.
2. Complete a desktop analysis using new light detection and ranging (LiDAR) data to identify gullies that have not been previously inventoried.
3. Further assess methods to access gullies previously deemed inaccessible.

The third volume of the LMRWD's gully inventory and condition assessment program has been completed. The 2023 gully assessment was implemented to assess the high- and very high-priority gullies identified during past years to determine if the sites continue to pose a risk, identifying appropriate candidates for potential restoration projects.

The 2023 assessment consisted of four components:

1. Field preparation and training
2. Field data collection
3. Gully ranking
4. Recommendations

The sites were sorted into four categories:

1. Public Safety Concern
2. Public No Safety Concern
3. Private Safety Concern

4. Private No Safety Concern

The gullies were ranked by need for restoration based on a scoring system within their given categories. To quantitatively rank each gully, multiple factors were considered, including erosion potential score, proximity to LMRWD natural resources, and number of MPCA sites marked as “under investigation” or an “active cleanup site” within a one-mile radius of the LMRWD 2023 Gully Inventory and Condition Assessment Project site. Each factor was assigned points that correspond to varying rates of degradation and need for remediation to provide a final ranking score for each gully.

Ongoing activities in 2024 include the following:

1. A restoration feasibility study will be conducted for four recommended gullies, based on a list recommended from the 2023 study.
2. The 2023 project recommended completing a high-level assessment of public pipe outfalls and their connection to gullies on private property.
3. A desktop analysis using new LiDAR data is planned to identify gullies that have not yet been inventoried.
4. Gullies that were considered inaccessible by foot will be assessed for alternative modes of accessibility.

Floodplain Modeling Project

The modeling approach for this project is being discussed with the MnDNR floodplain managers for their feedback before we present the approach to LMRWD municipal partners. We have also started a literature review to investigate methods for estimating future peak discharges on the Minnesota River, which will inform future conditions’ floodplain modeling and mapping. Model updates will commence after concurrence is obtained from municipal partners.

Spring Creek Site Stabilizations

ISG estimated wetland impacts based on the 60% design plans and the wetland delineation completed in the fall 2023. We submitted the updated wetland impacts with our joint application to the USACE and are awaiting a response. The USACE will determine whether a cultural resources review is necessary to complete the project. The project is in the City of Carver Historic District, so there is potential for cultural resource impacts.

Trout Stream Geomorphic Assessment

This project will implement recommendations from the original trout stream assessment completed in 2019. Eight trout streams will be resurveyed to assess changes in stream alignment, cross-sectional geometry, and base flow. Stream width-to-depth ratios, stream bed slope, meander pattern, habitat conditions, and other features will be analyzed to assess stream health and stability. Interns will begin stream surveys in late May to collect data to inform the geomorphic assessment report they will complete by the end of August.

Water Resources Restoration Fund

This program will fund projects sponsored by LGUs that reduce urban nonpoint source pollution, improve and protect groundwater quality, and promote surveys and studies of wetland (fen) health and management. An official application process for the Water Resources Restoration Fund was developed and distributed to the LGUs within the LMRWD.

Application materials were sent to LGUs on December 8, 2023, after the municipal coordination meetings, with three application and deadline reminders. Applications were due on February 29, 2024. The LMRWD received one (1) application from the City of Eden Prairie for the Richard T. Anderson (RTA) West Buff Overlook Stabilization Improvements Project. The project was reviewed in line with previously developed evaluation forms. The funding recommendation will be presented at the April 17, 2024, LMRWD Board meeting.



LOWER MINNESOTA RIVER WATERSHED DISTRICT

Minutes of Regular Meeting

Board of Managers

Wednesday, March 20, 2024

Carver County Government Center, 602 East 4th Street, Chaska, MN 7:00 p.m.

Approved _____

1. CALL TO ORDER

A. ROLL CALL

On Wednesday, March 20, 2024, at 7:00 PM CST, in the Board Room of the Carver County Government Center, 602 East 4th Street, Chaska, Minnesota, President Barisonzi called to order the meeting of the Board of Managers of the Lower Minnesota River Watershed District (LMRWD).

The first item on the agenda was the Oath of Office for Joseph Barisonzi and Apollo Lammers. Apollo Lammers was appointed to the LMRWD Board of Manager by the Scott County Board of Commissioners on February 20, 2024. President Barisonzi was re-appointed by the Hennepin County Board of Commissioner on January 24, 2024. Mr. Lammers and President Barisonzi were sworn in and executed the Oath of Office and the Manager's Bond, which were signed by Board Secretary, Lauren Salvato.

President Barisonzi asked for the roll call to be taken. The following Managers were present: Manager Laura Amundson, President Joseph Barisonzi, Manager Theresa Kuplic, Manager Apollo Lammers, and Manager Lauren Salvato.

In addition, the following attended the meeting in-person: Linda Loomis, Naiad Consulting, LLC, LMRWD Administrator; Della Schall Young, Young Environmental Consulting Group, LLC, LMRWD Technical Consultant; John Kolb, Rinke Noonan Attorneys at Law, LMRWD Legal Counsel; Troy Kuphal, District Director, and Chase Emmers, Water Resource Specialist, Scott County Soil & Water Conservation District; Patty Thomsen, LMRWD Citizen Advisory Committee and Vinatha Viswanathan, Hennepin County Resident

Manager Ben Burnett, Prior Lake Spring Lake Watershed District attended the meeting virtually.

2. CITIZEN FORUM

No one was present to address the Board of Managers.

3. APPROVAL OF THE AGENDA

A. Additions, Corrections and Deletions to the Agenda

President Barisonzi introduced this item. President Barisonzi asked to remove Item 7. E. LMRWD Communication Policy from the Agenda. He asked to move Item 8. A. – Evaluation of Administrative Services Agreement from a Board discussion item to an Action Item and place it as Item 7. E. and then asked to remove Item 5. C. viii. - accumulated 2023 hours in excess of contracted amount removed from the Consent Agenda. Administrator Loomis asked that the

February 2024 invoice for Rinke Noonan, Attorneys at Law and the 4M January 2024 Bank Service Charges be removed from the agenda as the invoice was not received.

President Barisonzi made a motion to approve the agenda with Item 7.E. – LMRWD Communication Policy removed, move Item 8.A. – Evaluation of Administrative Services to Item 7.E., remove Item 5.C.viii. - accumulated 2023 hours in excess of contracted amount from the Consent Agenda, remove Item 5.C.iii. - February 2024 invoice for Rinke Noonan and Item 5.C.xiv. – 4M Fund, January 2023 Bank Service charges from the agenda. [There was no second to the motion.] Upon a vote being taken the motion was carried unanimously.

4. PUBLIC HEARINGS & PRESENTATION

A. Presentation of report from Scott County Soil & Water Conservation District on 2023 monitoring, technical, education and other conservation services

Troy Kuphal, District Director, from the Scott County Soil & Water Conservation District, introduced himself. Mr. Kuphal then introduced Chase Emmers, Water Resource Specialist. Mr. Emmers proceeded to present the findings of water resource monitoring in 2023 to the Board.

Mr. Emmers provided a map of where various monitoring activities occur, Eagle Creek, Dean Lake, and Savage Fen. He first discussed thermal monitoring of Eagle Creek. He noted that he was able observe actual trout in the Creek while monitoring. Temperatures fall mostly within the ideal temperatures for trout, with a few warmer spikes throughout the season. He noted that there were problems with equipment that had to be resolved. Managers asked about whether Brown Trout or Brook Trout were observed. Mr. Emmers said that what he saw was mostly Brown Trout.

President Barisonzi asked about the impact of MnDOT facilities on Eagle Creek. Della Schall Young, Young Environmental Consulting Group, explained that MnDOT must account for trout streams when managing stormwater and cannot negatively impact trout waters. She noted that is one of the reasons that monitoring is important, impacts to water resources can be noticed and reported.

Mr. Emmers then presented findings on the water quality sampling of Eagle Creek. There was a noticeable increase in Total Suspended Solids. There is no easily identified cause. It could be caused by all the wildlife in the area or a result of erosion near the monitoring station. He noted there was vandalism at monitoring station and has spoken to the Met Council about relocating the station or installing security cameras. He noted the high level of e. coli at certain times of the year - especially winter. The source of the e. coli has not been identified; it may be caused by the large number of waterfowl attracted to open water in the winter. Manager Amundson remembered that this pollutant was discussed last year. Ms. Schall Young provided some ideas to determine what the source is. Manager Salvato asked about the citizen monitoring program and if that could give the LMRWD more immediate information. President Barisonzi suggested that a recommendation be brought back to the Board in the future.

Mr. Emmers showed pictures of beaver activity in the area.

He provided information on Dean Lake. He said data at Dean Lake was influenced by the lower water levels in 2023. He noted there were not any results that should cause concern. He then presented findings for monitoring in Savage Fen. He noted that some of the wells were dry because of the lack of rainfall, but water levels rebounded after rainfall in the late summer and fall.

President Barisonzi asked if the data reported by Mr. Emmers was included in the Fen Study that was presented at the February Board meeting. Ms. Schall Young reported that it was not, because this is new data, but the historical data was included. Mr. Emmers explained how data is reported to the DNR and permanently stored.

President Barisonzi made a motion to accept and authorize execution of 2024 Agreement between the Lower Minnesota River Watershed District and the Scott Soil and Water Conservation District for Monitoring, Technical, Education and Other Conservation Services contingent upon addition of a clause that requires an approval when any cost incurred more than the contracted amount requires an addendum to the agreement. Manager Amundson seconded the motion. Upon a vote being taken the motion was carried unanimously.

5. CONSENT AGENDA

President Barisonzi introduced the item.

President Barisonzi asked to remove Item 5.C. viii. From the consent agenda and consider it in its normal sequence on the agenda.

A. Approve Minutes February 21, 2024, Regular Meeting minutes

B. Receive and file February 2024 Financial Report

C. Approval of Invoices for payment

- i. Clifton Larson Allen (CLA) - Financial services through February 2024**
- ii. TimeSavers Off Site Secretarial – Preparation of January 2024 meeting minutes**
- ~~**iii. Rinke Noonan, Attorneys at Law – February 2024 Legal Services**~~
- iv. Daniel Hron – March & April 2024 office rent**
- v. US Bank Equipment Finance – March 2024 copier lease payment**
- vi. Young Environmental Consulting Group, LLC – February 2024 technical, and Education and Outreach services**
- vii. Naiad Consulting, LLC – February 2024 administrative services, mileage, and expenses**
- viii. Naiad Consulting, LLC – accumulated 2023 hours in excess of contract**
- ix. 106 Group – February 2024 services related to Area #3**
- x. 106 Group – February 2024 services related to Vernon Avenue**
- xi. Bolton & Menk – Engineering Services through February 21, 2024, related to Vernon Avenue**
- xii. WSB – Area #3 land acquisition services**
- xiii. Liberty Mutual – payment of 2024-2025 Surety Bond**
- ~~**xiv. 4M Fund – January 2024 financial service charges**~~

D. Report from the Citizen Advisory Committee

E. Adopt Resolution 24-04 Rescinding Resolution 23-14 Supporting Change of Boundary Between Minnehaha Creek Watershed District, and Lower Minnesota River Watershed District

Manager Salvato made a motion to approve the Consent Agenda with the invoice for March office rent removed. Manager Amundson seconded the motion. Upon a vote being taken the motion was carried unanimously.

Item 5.C. viii. - Naiad Consulting, LLC – accumulated 2023 hours in excess of contract allowance

President Barisonzi commented that the Administrator Agreement provides for prior approval by the Board of Managers before hours over 150 hours per month are allowed. He noted that he was not opposed to the payment of the invoice, he just wanted to make sure the LMRWD

was being intentional about the services it was paying for. Administrator Loomis explained that she was aware that the Administrator Agreement requires prior approval of hours that exceed 150 hours per month. She explained that it is not always practical to get prior approval, as the Board meets once a month and that when hours are required to conduct the work of the LMRWD it is usually between meetings. She noted that previous Board allowed hours to be carried over to the next month and then it usually equaled out at some point. Administrator Loomis further explained that excess hours have only been incurred once, maybe twice over the course of her tenure with the LMRWD. She explained that the amount of work the Board of Managers has required since September of 2023 has increased and she wasn't able to catch up. She didn't want to carry hours over from one year to the next and that was why the Board was asked at the December meeting to allow payment of the excess hours from 2023

President Barisonzi stated that he just wants to make sure that the LMRWD is following what has been stated in the agreements the LMRWD has.

President Barisonzi requested that an amendment to the Administrative Services Agreement be drafted to address this and presented to the Board for approval.

President Barisonzi made a motion to approve payment of the Item 5.C.viii. and that an amendment to the agreement be brought back to the Board allowing. Manager Kuplic seconded the motion. Upon a vote being taken the motion carried unanimously.

6. PERMITS & REPORTS ON STANDING BUSINESS ITEMS

A. LMRWD Permit Renewals

President Barisonzi introduced this item.

Manager Salvato made a motion to renew permits as recommended in Table 1 of Technical Memorandum – March 2024 Permit Renewal Requests dated March 13, 2024. Manager Kuplic seconded the motion. Upon a vote being taken the motion carried unanimously.

B. MN Bluffs Regional Trail (LMRWD No. 2023-017)

President Barisonzi introduced and moved this item. Manager Salvato questioned tree removal that is occurring in the project area. Administrator Loomis reported that she had asked the city about the tree removal but hadn't received an answer.

President Barisonzi made a motion to conditionally approve a permit for MN Bluffs Regional Trail (LMRWD No. 2023-017) subject to the receipt of a copy of the NPDES construction stormwater permit, final construction plans signed by a professional engineer, contact information for the contractor, contact information for the person(s) responsible for erosion and sediments controls inspections and maintenance, documentation of approval from the City of Chaska, documentation of approval from the MN Department of Natural Resources, signed JPA between Carver County Regional Rail Authority and the City of Chaska, designation of the individual who will remain liable to the LMRWD for performance under Rule B and Rule C from the time permitted activities commence until vegetation is established and the LMRWD has certified satisfaction with erosion and sediment control requirements'. Manager Kuplic seconded the motion. Upon a vote being taken the motion was carried unanimously.

7. ACTIONS ITEMS

A. Lower MN River East One Watershed One Plan

President Barisonzi introduced this item. He explained that at the last meeting two board members were directed to prepare a letter regarding the draft Lower Minnesota River East One Watershed One Plan. He commented that the letter was really well done.

[No motion was made. However, President Barisonzi asked that all in favor of sending the comments and letter say aye.] Upon a vote being take, the motion carried.

B. Biennial Solicitation of Letters of Interest for legal, technical & other professional services

President Barisonzi introduced this item and offered the following motion:

President Barisonzi made a motion to authorize hiring Young Environmental Consulting Group, LLC as the District Engineer and direct the Administrator to negotiate a contract extension for review and approval by the Board. Manager Kuplic seconded the motion. Upon a vote being taken the motion carried unanimously.

President Barisonzi made a motion to authorize Young Environmental Consulting Group to evaluate and engage engineering firms for inclusion in the pool with a report back to the Board at the next meeting on the progress and status of all application. Manager Kuplic seconded the motion.

Manager Amundson asked if past practice has been to include all the firms who submitted applications in the pool, as long as there are not any disqualifying factors. Ms. Schall Young stated that Manager Amundson outlined the common practice. She noted that the matrix put together is the same matrix used in the past. She noted that she reviewed the application and said they were all qualified. Manager Salvato questioned the goal of the direction; would it be to vet them further? President Barisonzi said that it would be to defer to the person that would be working with them, giving them the authority treat them as she sees fit. Ms. Schall Young explained the process that has been used in the past.

Administrator Loomis questioned the direction provided by the motion, that Young Environmental would review the submittals and then come back to the Board with recommendations. President Barisonzi clarified that the motion was to include all the submittals in the pool and proceed.

Upon a vote being taken, the motion carried unanimously.

President Barisonzi said two applicants for education and outreach were received and he considered that both were worthy of interviews.

President Barisonzi made a motion to authorize the Personnel Committee with the support of the Administrator to review the applicants and proposed rubric, revise the rubric as necessary, draft question for the candidates (same questions for all candidates), send questions and request interviews for all candidates, interview the candidates, and make recommendations to the Board. Manager Salvato seconded the motion.

Manager Amundson said she didn't feel that it was necessary to be interviewed. She noted that she has prepared many letters of interest and the second proposal received was not what she considers to be a letter of interest. President Barisonzi defended the second submittal that they responded with what he considers to be a letter of interest.

Upon a vote being taken the motion carried.

President Barisonzi noted the LMRWD asked for letters of interest for legal services.

President Barisonzi made a motion to authorize the personnel committee, with the support of the Administrator to conduct interviews for the applicants for Legal Counsel including the following steps; review applicants and proposed rubric, revise rubric as necessary, evaluate the existing candidates and choose those to be interviewed, draft question for candidates (same questions for all candidates) send questions and request interview for all candidates interview candidates and make recommendations to the Board. Manager Kuplic seconded the motion [the audio does not indicate this motion was seconded; President Barisonzi responded that Manager Kuplic seconded the motion when asked by the Administrator]

Manager Kuplic thought it would be beneficial to include Ms. Schall Young when considering which legal counsel to choose.

Ms. Schall Young said that the relationship between the District Engineer and Legal Counsel is a critical relationship, especially when it comes to implementation of the permitting program. It is key that the relationship has confidence and trust. President Barisonzi asked if Manager Kuplic would like to add “with the support of the District Engineer” to the motion. Manager Kuplic said that she would like to add that to the motion. President Barisonzi said he would accent that as a friendly amendment.

Upon a vote being taken the motion carried.

C. Education & Outreach

President Barisonzi introduced this item.

Manager Kuplic made a motion to table item 7.C. -LMRWD Social Media Content and Strategy. Manager Salvato seconded the motion. Upon a vote being taken, the motion carried unanimously.

Manager Salvato made a motion to approve the recommendations of the Citizen Advisory Committee and award educator min-grant as follows: Integrated Arts Academy - \$475; Friends of the Mississippi – Environmental Stewardship Institute - \$500; Shakopee Area Catholic Schools - \$500; Prior Lake High School - \$500; and Minnesota Valley Refuge Friends - \$500. Manager Amundson seconded the motion. Upon a vote being taken, the motion carried unanimously.

D. Proposed Partnering with the MN River Collaborative on the Water Storage Study

President Barisonzi introduced this item.

The Board discussed the project overall and the proposed recommendation by staff. President Barisonzi noted there were no financial commitments in the motion being considered.

Manager Salvato made a motion to adopt Resolution 24-05 – Developing a Scope of Study to Identify Areas of the Minnesota River Basin Suitable for Upland Storage. Manager Kuplic seconded the motion. Upon a vote being taken, the motion carried unanimously.

~~**E. LMRWD Communication Policy**~~ – This item was removed from the agenda.

E. Evaluation of Administrative Services

President Barisonzi introduced this item. He explained that he and Manager Salvato prepared a memo that has been shared with the Board. He noted that this is not an evaluation of the performance of the current administrator but is looking to the future to make sure the LMRWD has the capacity to accomplish the goals of the LMRWD.

He noted that three questionnaires were prepared with recommended actions to be taken. He asked to make a change to the recommendation by having the self-evaluation first and then the board evaluation would occur.

President Barisonzi made a motion to authorize the Personnel Committee to solicit, collect and aggregate information about the Administrator Position using the materials developed presented to the Board. Manager Salvato seconded the motion. Upon a vote being taken, the motion carried unanimously.

F. MPCA Lower Minnesota River Watershed Surface Water Monitoring Request Guidance

President Barisonzi introduced this item.

Manager Salvato made a motion to recommend creeks (Ike's Creek, Unnamed Creek #1, and Spring Creek) to the MPCA for monitoring. Manager Amundson seconded the motion. Upon a vote being taken, the motion carried unanimously.

G. Fen Stewardship Plan

President Barisonzi introduced this item.

President Barisonzi asked if they should set the meeting date. Administrator Loomis said a meeting poll could be used if potential dates were identified. President Barisonzi said he would get dates.

Manager Kuplic made a motion to receive the plan and post it to the website and to call a special meeting of the Board of Manager to discuss the Fen Stewardship Plan and set the date by polling the Board members. The motion was seconded by Manager Salvato. Upon a vote being taken, the motion carries unanimously.

H. Area #3

At this point the Board of Managers closed the meeting pursuant to MN Statutes section 13D.05, subd. 3.c.3, to discuss the purchase of an easement or fee ownership interest of a portion of property located in Eden Prairie, Hennepin County PID #3511622230013 related to the Study Area #3 project.

The Board came out of closed session and adopted Resolution 24-06 Authorizing Acquisition of Land by Eminent Domain.

Manager Salvato made a motion to adopt Resolution 24-06 Authorizing Acquisition of Land by Eminent Domain. The motion was seconded by Manager Kuplic. Upon a vote being taken, the motion carried unanimously.

8. BOARD DISCUSSION ITEMS

~~**A. Evaluation of Administrative Services – Moved to Item 7. E.**~~

B. 2024 Legislative Activities Update

President Barisonzi introduced this item. President Barisonzi informed the Board that the legislation funding River Watch was forwarded for inclusion in the omnibus bill. Rough fish bill was moving forward also.

C. Education and Outreach (E&O) Program Recommendations Summary Report

President Barisonzi asked the Board of Manager to read the information from the January 11 work session.

9. FOR INFORMATION ONLY

A. 535 Lakota Lane, Chanhassen – work without a permit

Della Schall Young and Hannah LeClaire, Young Environmental Consulting Group, reported that the Engineer for the property owner has been in contact with the LMRWD and has indicated that he will not be able to certify the retaining wall. They are working to provide the LMRWD with a plan for the retaining wall and a stormwater management plan.

B. LMRWD Permit Program Summary

This item was for information only, there was no discussion of this item.

10. COMMUNICATIONS

- A. **Administrator Report:** Administrator Loomis reported that the March Administrator Report was complete but had not been sent to the Board. She informed the Board of the status of the Ike's Creek restoration plan and that USFWS is considering applying for a grant through the America the Beautiful Grant, that was recommended by Manager Salvato. Scott County SWCD has some workshops planned and has included LMRWD logos on all promotional materials. The city of Chanhassen has requested information about the LMRWD to include in a comprehensive communication to residents about watershed within the City of Chanhassen. Administrator Loomis informed the Board that she had attended Minnesota Association of Watershed Administrators meeting and mentioned that she learned about a project where BWSR is assessing water storage opportunities at the major watershed level. One of the watershed that is in this program is Yellow Medicine, which is in the MN River Basin. Chaska is looking for funding for a ravine stabilization project. Request from Geosyntec to partner in a grant through LCCMR to investigate current drainage design methods. The Vernon Avenue project is ready to go out for bid, however the LMRWD needs to be sure it can fund the project before going out for bid. Staff is looking into funding options.
- B. **President:** No report
- C. **Managers:** Manager Salvato indicated she should be at the Board meeting in April, as it is before her due date. However, she wanted the other Managers to be aware that she may not be able to attend.
- D. **Committees:** No report
- E. **Legal Counsel:** No report
- F. **Engineer:** No report.

11. ADJOURN

At 9:03 pm, President Barisonzi adjourned the meeting.

The next meeting of the LMRWD Board of Managers meeting will be 7:00, Wednesday, April 17, 2024, and will be held at the Carver County Government Center, 602 East 4th Street, Chaska, MN. Electronic access will also be available.

Attest:

Lauren Salvato, Secretary

Linda Loomis, Administrator

Item 5.B.
 LMRWD 4-17-2024

| | | | |
|--|---|--------------|----------------------|
| BEGINNING BALANCE | 29-Feb-24 | | \$ 951,041.93 |
| ADD: | | | |
| General Fund Revenue: | | | |
| March 2024 Interest | | \$ 4,193.83 | |
| Cargill 2023 License fee for placement of dredge materials | | \$ 8,942.00 | |
| | | | |
| Total Revenue and Transfers In | | | \$ 13,135.83 |
| DEDUCT: | | | |
| Debits/Reductions | | | |
| Rinke Noonan Attorneys at Law | January 2024 legal services | \$ 830.00 | |
| State of MN - Dept of Admin/Plant Mng | Publication of biennial solicitation in State Register | \$ 67.50 | |
| Chaska High School - Science Dept. | Reimburse for Educator mini-grant | \$ 475.00 | |
| First half 2024 per diem & expenses | payment to Manager Dull for per diem & expenses | \$ 402.47 | |
| Bolton & Menk, Inc. | Engineering for Vernon Avenue through February 21, 2024 | \$ 7,201.00 | |
| Bolton & Menk, Inc. | Sponsorship of 2024 Salt Symposium | \$ 500.00 | |
| 106 Group | January 2024 services related to Area #3 | \$ 1,659.00 | |
| 106 Group | January 2024 services related to Vernon Avenue | \$ 74.00 | |
| Clifton Larson Allen, LLP (CLA) | January 2024 financial services | \$ 1,759.65 | |
| Daniel Hron | March & April 2024 office rent | \$ 1,300.00 | |
| Naiad Consultitng | 2023 Supplemental invoice | \$ 3,150.00 | |
| Naiad Consultitng | January 2024 administrative services & expenses | \$ 14,438.67 | |
| TimeSaver Off Site Secretarial, Inc. | Preparation of January 2024 meeting minutes | \$ 206.50 | |
| US Bank Equipment Finance | March 2024 copier lease payment | \$ 245.75 | |
| WSB | Property acquisition services for Area #3 | \$ 351.00 | |
| Young Environmental Consulting | January 2024 technical, & E & O services | \$ 50,700.94 | |
| 4M Fund | February 2024 bank service fee | \$ 40.00 | |
| | | | |
| Total Debits/Reductions | | | \$ 83,401.48 |
| ENDING BALANCE | 31-Mar-24 | | \$ 880,776.28 |

| | 2024 Budget | March Actuals | YTD 2024 | Over (Under) Budget |
|--|------------------------|---------------------|----------------------|--------------------------|
| Administrative expenses | \$ 377,838.00 | \$ 37,250.87 | \$ 73,870.19 | \$ (303,967.81) |
| Cooperative Projects | | | | |
| Eden Prairie Bank Stabilization Area #3 | \$ 100,000.00 | \$ 6,382.00 | \$ 7,545.50 | \$ (92,454.50) |
| Gully Erosion Contingency Fund | \$ - | \$ - | \$ - | \$ - |
| Seminary Fen Ravine Restoration site A | \$ - | \$ - | \$ - | \$ - |
| Seminary Fen Ravine Restoration site C-2 | \$ 90,000.00 | \$ - | \$ - | \$ (90,000.00) |
| Eagle Creek Bank Restoration: Town & Country R | \$ 30,000.00 | \$ - | \$ - | \$ (30,000.00) |
| Shakopee River Bank Stabilization | \$ 50,000.00 | \$ - | \$ - | \$ (50,000.00) |
| 509 Plan Budget | | | | |
| <i>Resource Plan Implementation</i> | | | | |
| Watershed Resource Restoration Fund | \$ 82,500.00 | \$ - | \$ - | \$ (82,500.00) |
| Fen Private Land acquisition study | \$ 50,000.00 | \$ - | \$ - | \$ (50,000.00) |
| Gully Inventory | \$ 150,000.00 | \$ 483.00 | \$ 483.00 | \$ (149,517.00) |
| MN River Floodplain Model Feasibility Study | \$ - | \$ 723.00 | \$ 3,073.00 | \$ 3,073.00 |
| Downtown Shakopee Stormwater BMPs | \$ 50,000.00 | \$ - | \$ - | \$ (50,000.00) |
| Spring Creek stabilization project | \$ 100,000.00 | \$ - | \$ 656.25 | \$ (99,343.75) |
| Sustainable Lakes Mgmt. Plan (Trout Lakes) | \$ 50,000.00 | \$ - | \$ - | \$ (50,000.00) |
| Geomorphic Assessments (Trout Streams) | \$ 100,000.00 | \$ 1,404.00 | \$ 1,404.00 | \$ (98,596.00) |
| Fen Stewardship Program | \$ 75,000.00 | \$ 8,418.97 | \$ 10,361.47 | \$ (64,638.53) |
| District Boundary Modification | \$ - | \$ - | \$ - | \$ - |
| Local Water Management Plan reviews | \$ 5,000.00 | \$ - | \$ - | \$ (5,000.00) |
| Project Reviews | \$ 50,000.00 | \$ 8,946.51 | \$ - | \$ (50,000.00) |
| Project inspections | \$ - | \$ 200.00 | \$ - | \$ - |
| <i>Monitoring</i> | \$ 75,000.00 | \$ - | \$ - | \$ (75,000.00) |
| <i>Watershed Management Plan</i> | \$ - | \$ 1,351.75 | \$ 2,944.50 | \$ 2,944.50 |
| <i>Public Education/CAC/Outreach Program</i> | \$ 115,000.00 | \$ 5,922.63 | \$ 10,653.62 | \$ (104,346.38) |
| <i>Cost Share Program</i> | \$ 20,000.00 | \$ - | \$ - | \$ (20,000.00) |
| Nine Foot Channel | | | | |
| Return of unused state funds | \$ - | \$ - | \$ - | \$ - |
| Dredge Site Improvements | \$ 240,000.00 | \$ 9,168.75 | \$ 14,775.00 | \$ (225,225.00) |
| Bonded Debt Levy | | | | |
| Scheduled Area #3 Bond payments | \$ 300,000.00 | \$ - | \$ - | \$ (300,000.00) |
| Total: | \$ 2,110,338.00 | \$ 80,251.48 | \$ 125,766.53 | \$ (1,984,571.47) |

| | 2023 Budget | Year end totals | YTD 2023 | Over (Under) Budget |
|--|------------------------|--------------------|------------------------|----------------------|
| Administrative expenses | \$ 250,000.00 | \$ 3,150.00 | \$ 383,601.26 | \$ 133,601.26 |
| Cooperative Projects | | | | |
| Eden Prairie Bank Stabilization Area #3 | \$ - | \$ - | \$ 166,585.70 | \$ 166,585.70 |
| Gully Erosion Contingency Fund | \$ - | \$ - | \$ - | \$ - |
| Seminary Fen Ravine Restoration site A | \$ - | \$ - | \$ - | \$ - |
| Seminary Fen Ravine Restoration site C-2 | \$ 20,000.00 | \$ - | \$ - | \$ (20,000.00) |
| 509 Plan Budget | | | | |
| <i>Resource Plan Implementation</i> | | | | |
| Watershed Resource Restoration Fund | \$ 100,000.00 | \$ - | \$ - | \$ (100,000.00) |
| Gully Inventory | \$ 90,500.00 | \$ - | \$ 81,264.54 | \$ (9,235.46) |
| MN River Corridor Management Project | \$ - | \$ - | \$ - | \$ - |
| Carver Levee Improvement Project | \$ - | \$ - | \$ 25,000.00 | \$ 25,000.00 |
| Assumption Creek Hydrology Restoration | \$ - | \$ - | \$ - | \$ - |
| Groundwater Screening Tool Model | \$ - | \$ - | \$ - | \$ - |
| MN River Floodplain Model Feasibility Study | \$ 75,000.00 | \$ - | \$ 10,329.10 | \$ (64,670.90) |
| Schroder Acres Park | \$ - | \$ - | \$ - | \$ - |
| Downtown Shakopee Stormwater BMPs | \$ 50,000.00 | \$ - | \$ - | \$ (50,000.00) |
| PLOC Realignment/Wetland Restoration | \$ - | \$ - | \$ - | \$ - |
| Spring Creek Project | \$ 90,000.00 | \$ - | \$ 56,927.92 | \$ (33,072.08) |
| West Chaska Creek | \$ - | \$ - | \$ 22,559.00 | \$ 22,559.00 |
| Sustainable Lakes Mgmt. Plan (Trout Lakes) | \$ - | \$ - | \$ - | \$ - |
| Geomorphic Assessments (Trout Streams) | \$ - | \$ - | \$ - | \$ - |
| Fen Stewardship Program | \$ 75,000.00 | \$ - | \$ 70,218.25 | \$ (4,781.75) |
| District Boundary Modification | \$ - | \$ - | \$ - | \$ - |
| MN River Sediment Reduction Strategy | \$ - | \$ - | \$ - | \$ - |
| Local Water Management Plan reviews | \$ 5,000.00 | \$ - | \$ 31.25 | \$ (4,968.75) |
| Project Reviews | \$ 50,000.00 | \$ - | \$ 136,900.93 | \$ 86,900.93 |
| <i>Monitoring</i> | \$ 75,000.00 | \$ - | \$ 92,994.69 | \$ 17,994.69 |
| <i>Watershed Management Plan</i> | \$ - | \$ - | \$ 95,093.84 | \$ 95,093.84 |
| <i>Public Education/CAC/Outreach Program</i> | \$ 85,000.00 | \$ - | \$ 92,857.64 | \$ 7,857.64 |
| <i>Cost Share Program</i> | \$ 20,000.00 | \$ - | \$ 38,594.54 | \$ 18,594.54 |
| Nine Foot Channel | | | | |
| Return of unused state funds | \$ - | \$ - | \$ 182,742.77 | \$ 182,742.77 |
| Dredge Site Improvements | \$ 240,000.00 | \$ - | \$ 320,767.85 | \$ 80,767.85 |
| Total: | \$ 1,225,500.00 | \$ 3,150.00 | \$ 1,776,469.28 | \$ 550,969.28 |



LOWER MINNESOTA RIVER WATERSHED DISTRICT

Executive Summary for Action

Lower Minnesota River Watershed District Board of Managers Meeting
Wednesday, April 17, 2024

Agenda Item

Item 5. D. – Report from the Citizen Advisory Committee

Prepared By

Linda Loomis, Administrator

Summary

The Citizen Advisory Committee (CAC) met on April 2, 2024. The meeting was not a formal meeting, as the CAC had the privilege of being led on a bird-watching excursion by Robert Brereton from the Minnesota Valley Audubon Society. The group met at the old Cedar Avenue Bridge in Bloomington, and we saw a great variety of birds.

Members that have not attended meetings were contacted to see what the reason for their absence was. One member indicated that he plans to resign because of health reasons. We have not been able to contact one of the members but will continue to reach out to him.

A list of outreach events was reviewed with the members.

A tour of CHS, Inc. in Savage is planned for the May CAC meeting. Managers are always welcome to attend CAC meetings.

Attachments

LMRWD April 2024 CAC meeting agenda

LMRWD March 2024 meeting notes

CAC Outreach Events

Recommended Action

No action recommended



LOWER MINNESOTA RIVER WATERSHED DISTRICT

Agenda

Citizen Advisory Committee

Tuesday, April 2, 2024 | 4:30 p.m.

Old Cedar Bridge, 9500 Old Cedar Ave S, Bloomington

1. Call to Order and Roll Call
2. Citizen Input on Non-agenda Items
3. Consent Agenda
 - a. Approval of the April Agenda
 - b. Approval of the March Minutes
4. CAC Discussion Items
 - a. Update on volunteer calendar of events:
 - Not having a presence at:
 - Eden Prairie Eco Expo (April 20th)
 - Dakota County Soil & Water 2024 Tree Sale (April 25th & 26th)
 - Eagan Arbor Day Celebration (not occurring in 2024)
 - Hennepin County Master Gardener Plant Sale (May 18th)
 - Dakota County Fair (August 5th-11th)
 - Chaska Farmers' Market
 - Secured spot at:
 - Eden Prairie Arbor Day Walk & Green Fair (April 27th)- Partnering with Nine Mile Creek Watershed District
 - Burnsville Native Plant Market (May 18th)
 - Savage Farmers' Market (June 16th and August 11th)
 - Carver Farmers' Market (August 13th)
 - Availability for volunteers at:
 - City of Chaska's Earth Day event at McKnight Park (May 4th)
 - Carver County Fair (August 7th-11th)
 - Scott SWCD's Outdoor Education Days at Cedar Lake Regional Farm (last week in September)

5. Communications

- Hennepin County is hosting a free aquatic invasive species (AIS) detector course this spring. The course is an introduction to AIS science, identification, and surveillance. You will learn how to identify and report invasive species, best practices for preventing the spread of AIS, relevant rules and regulations, and how to search for AIS on your own. This course consists of two portions: a self-paced online course and an in-person workshop with the instructors. The self-paced online course opens on Wednesday, April 3, takes approximately eight hours to complete and must be completed prior to the in-person workshop. The in-person workshop is on Friday, May 3 at French Park in Plymouth from 9 a.m. to 5 p.m.
[z.umn.edu/DetectorsRegistration](https://www.z.umn.edu/DetectorsRegistration)
- Volunteer Buckthorn Removal Event on April 14th at Seminary Fen from 8am-12pm. Meet at the parking lot located off of Flying Cloud Drive/Hwy 61

6. Adjournment and Bird Watching Activity with Bob Brereton (Minnesota River Valley Audubon Chapter)

Please RSVP to confirm a quorum



LOWER MINNESOTA RIVER WATERSHED DISTRICT

Minutes

Citizen Advisory Committee

Tuesday, March 5, 2024 | 4:30 p.m.

Virtual via WebEx

1. Call to Order and Roll Call

- a. Lee Peterson, CAC Member
- b. Patty Thomsen, CAC Member
- c. Linda Loomis, LMRWD Administrator
- d. Theresa Kuplic, Board Member
- e. Suzy Lindberg, Young Environmental Education and Outreach Team
- f. Jess Norby, Young Environmental Education and Outreach Team, CAC Facilitator

2. Citizen Input on Non-agenda Items

- a. Patty requested the availability of dredge material from the Minnesota River. She wondered if the material had good nutritional value to feed native plants. If so, she wanted to grow some plants in a bucket of dredge material and have the experiment prepared to bring to future tabling events as an interactive display. Linda confirmed that the material is suitable for plants and that she can work with Patty to arrange this request.

3. Consent Agenda

- ~~a. Approval of the March Agenda~~
- ~~b. Approval of the February Minutes~~

Note: With only two CAC members in attendance, there was not a quorum to approve agenda or minutes.

4. Old Business

- a. Winter Salt Use Video Review – CAC provide status update
- b. Update on MN River Journey video – Sent for Board approval in February 2024
- c. Update on Education and Outreach Priorities Meeting (January CAC Meeting)
- d. Refresher of CAC Role in LMRWD (Linda)
- e. There were no updates on Old Business.*

5. CAC Discussion Items

a. 2024 Calendar Planning: CAC Meetings (i.e. group events, learning opportunities, and tours) (*see attached calendars in packet, updated with dates*)

- The CAC members that were present (Patty and Lee) discussed their feedback on the calendar.
- Patty noted she was okay with skipping the waterfowl tour and focusing on a regular meeting for April if needed.
- Theresa commented that the calendar looked really good. Next month, the CAC could host a regular Webex meeting or look at migrating birds.
- Jess noted that the Minnesota River tour scheduled for late summer could pair well with one of the mini grant applications. Theresa agreed that it would be really cool to see a teacher in action using the money. Patty asked if the Friends of the Mississippi River grant would be eligible because they're not officially within the watershed. Linda replied that she specifically encouraged Natalie to apply because of the connection between the two rivers. The project is specifically focused on educating students about the Minnesota River, which fits our goal. She wants to teach kids the relationship between agriculture and water quality. Lee noted that he had the same question, but liked this response. Jess recommended we replace Ike's Creek tour with the Minnesota River Boat Tour. Linda noted the Board of Managers is also planning a Minnesota River Boat tour, which is yet to be scheduled. Patty suggested doing both the Ike's Creek tour as scheduled and also the tour with the Friends of the Mississippi River as an additional monthly event. Based on this, the group had general consensus on the draft calendar.

b. 2024 Calendar Planning: Outreach Events (i.e. group volunteering and tabling)

- Patty asked what the best way is to view the event list. s noted that after today's meeting, a Google document will be circulated for sign-ups.
- Arbor Day Event (Eden Prairie)- Exhibitor Application due Monday, March 11th. Jess noted that Young Environmental will attend to support the CAC in this early event. Theresa noted that she did this event with Judy last year and this is definitely a priority event to sign up for. Judy was also interested in attending this event.
- After circulating the Google document, the Young Environmental team will see how events line up for staffing and finalize the calendar.

c. Finalize Ideas for Spring/Summer Newsletter Draft: **Discuss and Prioritize:**

- i. Show photos of rain gardens from cost-share grants. Discussion: Jess advocated for sharing this topic. Patty asked if this could show with the issues with using fertilizer as it relates to rain gardens and native plants.
- ii. Share ways to reduce water use and introduce rain barrels.
- iii. Showcase spring pollinator gardens. Discussion: Theresa noted highlighting native plants and showing people what they can do in their land. Highlight the difference between weeds and native plants. Check with city ordinances for prairies. We altered the land and need to do some work to get it back to a native state. Share a discussion of turf vs. native plantings vs. weeds – the “plant debate”.

- iv. Share information on the use of fertilizers vs. native plants.
- v. Provide information about keeping storm drains clean and impact to waterways.
- vi. Discussion: Continue to repeat pet waste topic for any season. Linda noted that this is a big issue. We could combine the topic with fertilizers to show multiple issues that are harmful. Combine both topics into a “spring runoff” topic.
- vii. Share information that’s unique to the Minnesota River – i.e. presentations on Minnesota Department of Natural Resources fisheries or fishing on the river.
- viii. Show Ike’s Creek (information from resource signs?)
 - ix. Introduce nature viewing opportunities and waterfowl migration that can be viewed in the spring.
 - x. Topics that were prioritized include spring runoff, cost share opportunities, and management of yards and pet waste best practices. Action item: Young Environmental will begin a first draft and circulate for review.

b. Educator mini-grant applications review

- Although Judy was not in attendance at the meeting, she shared her scores with the Education and Outreach team before the CAC meeting. Her scores were read on her behalf during the meeting and included in the rubric.
- Tammy Hakanson (Integrated Arts Academy, Chaska)
 - i. The CAC discussed Mini Grant 1: See scoring rubric for individual scores. Discussion: Patty questioned whether waders were the best use of funds for supplies. Theresa noted that the waders do create an experiential component that leads to a memorable project. Patty confirmed this makes sense. The group recommended this mini grant for Board approval.
- Natalie Warren (Friends of the Mississippi River's Environmental Stewardship Institute)
 - i. The CAC discussed Mini Grant 2: See scoring rubric for individual scores. Discussion: Despite the group being outside the Lower Minnesota River Watershed District, there is a high correlation to shared goals. The group also really liked the opportunity to include the CAC in the boat tour. Patty asked if the amount was high for busing. Linda replied that applicants will provide receipts for their costs and that transportation costs are higher than you would think. The group recommended this mini grant for Board approval.
- Alexis Buesgens (Chaska Middle School West):
 - i. The CAC discussed Mini Grant 3: see scoring rubric for individual scores. Discussion: Patty stated that the program has fantastic engagement and offers a scholarship. They have a reputable website but less focus on river sedimentation. Lee noted it was a slim application and not a lot of information on how the funds would be used. Jess noted the program is less centered around

water. Based on the discussion and scoring, this was not recommended for Board approval.

- Amy Conniff (Shakopee Area Catholic School)
 - i. The CAC discussed Mini Grant 4: see scoring rubric for individual scores. Discussion: Some members scored this grant lower based on the limited amount of expense detail. The discussion highlighted that CAC members would like more clarification on how the money will be specifically used. Patty mentioned programs they do and wasn't sure they fit the requirements. She wanted clarification on what program they would be applying for. Jess indicated that she could reach out to the applicant to ask some clarifying questions. Based on the scores, the group recommended conditional approval based on the responses to the secondary questions.
- Maggie Ekrem (Prior Lake High School)
 - i. The CAC discussed Mini Grant 5: see scoring rubric for individual scores. Discussion: Patty noted the application was very detailed and liked that the costs were itemized. The applicant listed state standards and was very organized. Lee noted this was a good application and his only clarifying questions were on the professional environmental educator and the volunteer honorarium. The group recommended this mini grant for Board approval.
- The Education and Outreach team closed this session by noting next steps to reach out to Shakopee Area Catholic School and document the CAC's recommendations for Board approval at the March meeting.

6. Communications

a. Administrator Report

- Update on Watershed Activities:
 - Linda shared that the watershed district solicited for its technical, legal, and professional services contracts and the deadline for proposals is tomorrow. The Board will review the proposals and make decisions on who they want to work with for the next two years.
 - Linda noted that new projects are starting, including the hydrologic investigation of the Minnesota River with the US Army Corps of Engineers. The project will look at water storage to reduce sediment in the Minnesota River.
 - Linda also noted the ongoing collaboration with the One Watershed, One Plan committee for the Lower Minnesota River East plan. Comments have been prepared in response and the Board of Managers wrote a letter to accompany the comments.
 - Linda also noted the improvements to Vernon Avenue road. The bids for construction were received and the costs are much higher than expected.
- Board Transitions:
 - Linda noted there is a new Board member who will be appointed

to Scott County's seat at the March meeting. She noted that Manager Barisonzi was reappointed to his position and is currently the Board President. Manager Amundson will not be reapplying to her position in 2024; however, she will stay on the Board until Hennepin County reappoints someone new. She is not sure if Hennepin County is advertising the position. Patty asked what the counties are looking for in the position. Linda noted that these requirements are up to the County Board; however, she noted there is currently a need for engineering knowledge, which Manager Amundson previously brought to the Board.

b. CAC Report

- Open Floor for Announcements and Information Sharing:
- Patty discussed a woodworking project for a volunteer activity for tabling. Jess asked what types of things we need for tabling events. Patty said she would like to bring examples of plants to show long root systems. Jess noted this type of hands-on experience can be very positive. Linda noted that Judy has liked the root puller from Nine Mile Creek Watershed District, when we've been able to borrow it. Hennepin County also has hands-on displays for aquatic invasive species outreach. She noted that activities are really helpful to engage with the general public. Jess agreed that exploring our connections with the education and outreach community to find materials is a good strategy. Linda said Riley Purgatory Bluff Creek Watershed District has a sand table, but it may work better for inside events. Action item: Inventory what we have, what we need, and what may be available in our network.
- Linda mentioned sampler plate as a good need to have for monitoring for lakes. This is a way to get people engaged if they are by the lakes – no docks there. Patty would be interested in planting a shepherd rod or volunteering to help people see what is in the lakes.
- Jess mentioned volunteer opportunity at Seminary Fen to remove buckthorn this last Sunday, but we attended and connected with DNR staff to plan another event. Host another event on April 14th to do another vegetation management volunteer event. Linda – it's been since at least 2017 since buckthorn clearing has happened. Buckthorn changes hydrology of the fen. There used to be a group called Friends of Seminary Fen.
- Patty asked what firm gave the design for Vernon Avenue: what company designed it and determined an estimate? Linda replied that they worked with Bolton and Menk to design it. Their estimate is more than \$1 million.

7. Adjournment

8. Motion for adjournment Lee motioned; Patty seconded

Technical Memorandum



To: Linda Loomis, Administrator
Lower Minnesota River Watershed District (LMRWD)

From: Jess Norby, Senior Water Resources Scientist
Suzy Lindberg, Communications Manager

Date: March 13, 2024

Re: Educator Mini-Grant Recommendations – Spring Round 2024

The Educator Mini-Grant program is a key component of the Education and Outreach Program, focusing on educating school-aged students within and surrounding the LMRWD. The program provides up to 10 grants per school year – each up to \$500 – to help cover the cost of materials and/or programming that focuses on water resources.

On behalf of the LMRWD, Young Environmental released a new call for educator mini-grants in February and received **six applications**, requesting a total of **\$2,975** in funding. Young Environmental pre-screened the applications for compliance and funding eligibility and created review packets that were distributed to the Citizen Advisory Committee (CAC) for discussion at the March 5, 2024 meeting. Our team led the discussion on the applications, providing recommendations and justification for the educational relevance and cost-effectiveness of each grant application. Based on the resulting discussion, and further clarifications made with one applicant, the CAC has provided the following recommendations for Board approval.

SUMMARY

Based on the review process, our team and the CAC recommends authorizing funding for 5/6 of the applications, noting their alignment with LMRWD mission and goals for watershed-focused education, which includes authorizing **\$2,475** in funding to five current applicants. With this approach, there will also be budget remaining for up to five grants in the fall season of the school year. We have included a detailed scoring matrix and comments from the CAC on page 2, followed by the full mini-grant applications received for reference.

| Mini Grant | Summary | Total Average Score | Recommended Board Action |
|---|--|---------------------|--|
| Mini-Grant 1: Integrated Arts Academy | Funds for waders and materials to lead an experiential field trip on water sampling. | 6.8 | Recommend approving funding request for \$475 . |
| Mini-Grant 2: Friends of the Mississippi River | Funds will be used for transportation for a canoe-trip on | 7 | Recommend approving funding request for \$500 . |

| Mini Grant | Summary | Total Average Score | Recommended Board Action |
|--|--|---------------------|--|
| – Environmental Stewardship Institute | the Minnesota River, which can include the LMRWD’s CAC. | | |
| Mini-Grant 3: Chaska Middle School West | Requested funds to support the Deep Portage Learning Center programming. | 4.4 | Recommend <u>not approving</u> the funding request for \$500 because the project is not focused on watershed education. |
| Mini-Grant 4: Shakopee Area Catholic Schools | Funds will be used for Cedar Lake Farms Field trip programming, led by Scott County Watershed District, including transportation funds and purchase of National Geographic Kids Water! Book. | 7 | Recommend approving funding request for \$500. |
| Mini-Grant 5: Prior Lake High School | Funds will be used to purchase Credit River stream experiment equipment | 7.6 | Recommend approving funding request for \$500. |
| Mini-Grant 6: Minnesota Valley Refuge Friends | Funds will be used to design curriculum relating to watershed, stormwater, and habitat education. | 7.4 | Recommend approving funding request for \$500. |
| TOTAL GRANT AMOUNT REQUESTED FOR BOARD APPROVAL | | | \$2,475 |

Attachment I:



Lower Minnesota River Watershed District - Educator Mini-Grant Evaluation Spring 2024 Round

| Mini-Grant Summary | Amount Requested | Applicant Contact | Citizen Advisory Committee (CAC) Members | | | | | | Staff Vote | | TOTAL AVG SCORE | CAC Recommendation | Notes |
|---|------------------|--|--|------------|----------------|------------------|--------------|---------------|------------------------------|-------------------------|-----------------|--|--|
| | | | Judy Berglund | Greg Genz* | Thomas Hartle* | Kevin Kedrowski* | Lee Peterson | Patty Thomsen | Linda Loomis (Administrator) | Jess Norby (Young Env.) | | | |
| Mini-Grant 1: <i>Integrated Arts Academy</i> Money will be spent on waders and materials for an experiential field trip on water sampling. | \$475 | Tammy Hakanson hakanson.t@isd112.org | 6 | --- | --- | --- | 8 | 6 | 7 | 7 | 6.8 | Based on the total average score, the CAC recommends the Mini-Grant for Board Approval. | The CAC wished to ensure that activities are communicated effectively for water quality. They suggested providing professional help to guide activities (if funds allow) or connecting with a water professional who may be willing to volunteer time to ensure the supplies are used effectively. |
| Mini-Grant 2: <i>Friends of the Mississippi River – Environmental Stewardship Institute</i> Money will be spent on transportation for a canoe trip on Minnesota River. | \$500 | Natalie Warren nwarren@fmr.org | 6 | --- | --- | --- | 7 | 6 | 8 | 8 | 7 | Based on the total average score, the CAC recommends the Mini-Grant for Board Approval. | Project had a strong connection to the Minnesota River and the group is providing an opportunity for the CAC to participate in tour with students, which can help with relationship-building. |

Lower Minnesota River Watershed District - Educator Mini-Grant Evaluation Spring 2024 Round



LOWER MINNESOTA RIVER
WATERSHED DISTRICT

| Mini-Grant Summary | Amount Requested | Applicant Contact | Citizen Advisory Committee (CAC) Members | | | | | | Staff Vote | | TOTAL AVG SCORE | CAC Recommendation | Notes |
|--|------------------|---|--|------------|----------------|------------------|--------------|---------------|------------------------------|-------------------------|-----------------|--|---|
| | | | Judy Berglund | Greg Genz* | Thomas Hartle* | Kevin Kedrowski* | Lee Peterson | Patty Thomsen | Linda Loomis (Administrator) | Jess Norby (Young Env.) | | | |
| Mini Grant 3: <i>Chaska Middle School West</i> Money will be used to support the Deep Portage Learning Center programming | \$500 | Alexis Buesgens Buesgens.a@distrikt112.org | 3 | --- | --- | --- | 6 | 5 | 4 | 4 | 4.4 | Based on the total average score, the CAC recommends the Board not approve the mini grant for this grant cycle for a lack of direct alignment with goals. | The group determined the Deep Portage programming lacks a direct connection to watershed education and therefore recommended against funding based on competition this round. |
| Mini-Grant 4: <i>Shakopee Area Catholic Schools</i> Money will be used for Cedar Lake Farms Field Trip programming | \$500 | Amy Conniff aconniff@sacsschools.org | 6 | --- | --- | --- | 7 | 6 | 8 | 8 | 7 | Based on the total average score, the CAC recommends the Mini-Grant for Board Approval. | Staff clarified the educational value by further researching the Cedar Lake Farms program and determined it aligns with goals. |
| Mini-Grant 5: <i>Prior Lake High School</i> Money will be invested in Credit River stream experiment equipment | \$500 | Maggie Ekrem mekrem@plsas.org | 6 | --- | --- | --- | 8 | 8 | 8 | 8 | 7.6 | Based on the total average score, the CAC recommends the Mini-Grant for Board Approval. | The CAC greatly appreciated the level of detail included in itemized costs and believed the educational tools were highly in alignment. |

Lower Minnesota River Watershed District - Educator Mini-Grant Evaluation Spring 2024 Round



LOWER MINNESOTA RIVER
WATERSHED DISTRICT

| Mini-Grant Summary | Amount Requested | Applicant Contact | Citizen Advisory Committee (CAC) Members | | | | | | Staff Vote | | TOTAL AVG SCORE | CAC Recommendation | Notes |
|--|------------------|---|--|------------|----------------|------------------|--------------|---------------|------------------------------|-------------------------|-----------------|--|-------|
| | | | Judy Berglund | Greg Genz* | Thomas Hartle* | Kevin Kedrowski* | Lee Peterson | Patty Thomsen | Linda Loomis (Administrator) | Jess Norby (Young Env.) | | | |
| Mini-Grant 6: Minnesota Valley Refuge Friends Design of curriculum for watershed, stormwater, habitat | \$500 | Alison Schaub hello@mnvalleyrefugefriend.org | 6 | --- | --- | --- | 7 | 8 | 8 | 8 | 7.4 | Based on the total average score, the CAC recommends the Mini-Grant for Board Approval. | |

*Note: Three CAC members were absent from the March 5 monthly meeting and did not contribute to the scoring. They were provided with the mini-grant application package and our staff followed up with them offline to request scores. While we did not receive input from every CAC member, there was general consensus with members and staff in attendance on their review of applications.

Recurring Events

| June Recurring Events | | | | | | |
|-----------------------------|-----------------------------|-------------|--|--|-----------------------------|----------------------------|
| Date/Time | Event | City | Location | Communications | LMRWD Attending/ Volunteers | Tabling Supplies/ comments |
| June 2 (Sunday) 8 AM-1PM | Savage Farmers' Market | Savage | 4800 West 123rd Street, Savage, MN | | | |
| June 4 (Tuesday) 3-6 PM | Carver Farmers' Market | Carver | 1607 Hartwell Drive, Carver, MN 55315 | Contacted 3/26. Coordinator responded 3/27 and informed us of fee. Asked Linda about fee 3/27. | Patty | |
| June 5 (Wednesday) 4-8 PM | Chaska Farmers' Market | Chaska | 3120 Chaska Blvd., Chaska, MN | Contacted 3/26. Coordinator responded 3/27 and informed us of fee. Asked Linda about fee 3/27. | Judy | |
| June 8 (Saturday) 8 AM-1 PM | Bloomington Farmers' Market | Bloomington | 1800 West Old Shakopee Road, Bloomington, MN 55431 | Contacted 3/26. Did not hear back, followed up and heard back on 4/3. Submitted application 4/4. | Patty Judy | |
| June 9 (Sunday) 8 AM-1 PM | Savage Farmers' Market | Savage | 4800 West 123rd Street, Savage, MN | | | |

| | | | | | | |
|------------------------------------|-----------------------------------|-------------|--|--|-------|--|
| June 15 (Saturday) 8 AM-1 PM | Bloomington Farmers' Market | Bloomington | 1800 West Old Shakopee Road, Bloomington, MN 55431 | | | |
| June 16 (Sunday) 8 AM-1 PM | Savage Farmers' Market | Savage | 4800 West 123rd Street, Savage, MN | Contacted 3/26. Heard back 3/27 and submitted application 3/27. Confirmed spot on 3/28. | Patty | |
| June 22 (Saturday) 8 AM-1 PM | Bloomington Farmers' Market | Bloomington | 1800 West Old Shakopee Road, Bloomington, MN 55431 | | | |
| June 23 (Sunday) 8 AM-1 PM | Savage Farmers' Market | Savage | 4800 West 123rd Street, Savage, MN | | | |
| June 29 (Saturday) 8 AM-1 PM | Bloomington Farmers' Market | Bloomington | 1800 West Old Shakopee Road, Bloomington, MN 55431 | | | |
| June 30 (Sunday) 8 AM-1 PM | Savage Farmers' Market | Savage | 4800 West 123rd Street, Savage, MN | | | |

| July Recurring Events | | | | | | |
|--------------------------------------|-----------------------------------|-------------|--|----------------|-----------------------------------|----------------------------------|
| Date/Time | Event | City | Location | Communications | LMRWD Attending/ Volunteers | Tabling Supplies/ comments |
| July 6 (Saturday) 8 AM-1 PM | Bloomington Farmers' Market | Bloomington | 1800 West Old Shakopee Road, Bloomington, MN 55431 | | | |
| July 7 (Sunday) 8 AM- 1 PM | Savage Farmers' Market | Savage | 4800 West 123rd Street, Savage, MN | | | |
| July 10 (Wednesday) 5-8 PM | Midweek Music and Market | Bloomington | 1800 West Old Shakopee Road, Bloomington, MN 55431 | | | |
| July 13 (Saturday) 8 AM-1 PM | Bloomington Farmers' Market | Bloomington | 1800 West Old Shakopee Road, Bloomington, MN 55431 | | | |
| July 14 (Sunday) 8 AM- 1 PM | Savage Farmers' Market | Savage | 4800 West 123rd Street, Savage, MN | | | |
| July 17 (Wednesday) 5-8 PM | Midweek Music and Market | Bloomington | 1800 West Old Shakopee Road, Bloomington, MN 55431 | | | |

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|------------------------------------|-----------------------------------|-------------|--|--|--|--|
| July 20 (Saturday) 8 AM-1 PM | Bloomington Farmers' Market | Bloomington | 1800 West Old Shakopee Road, Bloomington, MN 55431 | | | |
| July 21 (Sunday) 8 AM- 1 PM | Savage Farmers' Market | Savage | 4800 West 123rd Street, Savage, MN | | | |
| July 24 (Wednesday) 5-8 PM | Midweek Music and Market | Bloomington | 1800 West Old Shakopee Road, Bloomington, MN 55431 | | | |
| July 27 (Saturday) 8 AM-1 PM | Bloomington Farmers' Market | Bloomington | 1800 West Old Shakopee Road, Bloomington, MN 55431 | | | |
| July 28 (Sunday) 8 AM-1 PM | Savage Farmers' Market | Savage | 4800 West 123rd Street, Savage, MN | | | |
| July 31 (Wednesday) 5-8 PM | Midweek Music and Market | Bloomington | 1800 West Old Shakopee Road, Bloomington, MN 55431 | | | |

| August Recurring Events | | | | | | |
|---------------------------------|-----------------------------|-------------|--|--|-----------------------------|----------------------------|
| Date/Time | Event | City | Location | Communications | LMRWD Attending/ Volunteers | Tabling Supplies/ comments |
| August 3 (Saturday) 8 AM- 1 PM | Bloomington Farmers' Market | Bloomington | 1800 West Old Shakopee Road, Bloomington, MN 55431 | | | |
| August 4 (Sunday) 8 AM- 1 PM | Savage Farmers' Market | Savage | 4800 West 123rd Street, Savage, MN | | | |
| August 7 (Wednesday) 5-8 PM | Midweek Music and Market | Bloomington | 1800 West Old Shakopee Road, Bloomington, MN 55431 | | | |
| August 10 (Saturday) 8 AM- 1 PM | Bloomington Farmers' Market | Bloomington | 1800 West Old Shakopee Road, Bloomington, MN 55431 | Contacted 3/26. Did not hear back, followed up and heard back on 4/3. Submitted application 4/4. | Patty | |
| August 11 (Sunday) 8 AM- 1 PM | Savage Farmers' Market | Savage | 4800 West 123rd Street, Savage, MN | Contacted 3/26. Heard back 3/27 and submitted application 3/27. Confirmed spot on 3/28. | Patty | |

| | | | | | | |
|---------------------------------------|-----------------------------------|-------------|--|--|-------|--|
| August 13 (Tuesday) 3-6 PM | Carver Farmers' Market | Carver | 1607 Hartwell Drive, Carver, MN 55315 | Contacted 3/26. Coordinator responded 3/27 and informed us of fee. Asked Linda about fee 3/27. Registered 3/29 | Patty | |
| August 14 (Wednesday) 5-8 PM | Midweek Music and Market | Bloomington | 1800 West Old Shakopee Road, Bloomington, MN 55431 | | | |
| August 17 (Saturday) 8 AM- 1 PM | Bloomington Farmers' Market | Bloomington | 1800 West Old Shakopee Road, Bloomington, MN 55431 | | | |
| August 18 (Sunday) 8 AM- 1 PM | Savage Farmers' Market | Savage | 4800 West 123rd Street, Savage, MN | | | |
| August 21 (Wednesday) 5-8 PM | Midweek Music and Market | Bloomington | 1800 West Old Shakopee Road, Bloomington, MN 55431 | | | |
| August 24 (Saturday) 8 AM- 1 PM | Bloomington Farmers' Market | Bloomington | 1800 West Old Shakopee Road, Bloomington, MN 55431 | | | |
| August 25 (Sunday) 8 AM- 1 PM | Savage Farmers' Market | Savage | 4800 West 123rd Street, Savage, MN | | | |

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|---------------------------------------|-----------------------------------|-------------|--|--|--|--|
| August 31 (Saturday) 8 AM- 1 PM | Bloomington Farmers' Market | Bloomington | 1800 West Old Shakopee Road, Bloomington, MN 55431 | | | |
|---------------------------------------|-----------------------------------|-------------|--|--|--|--|

One-Time Events

| Date/ Time | Event | City | Location | Communications | LMRWD Attending/ Volunteers | Tabling Supplies/ comments |
|----------------------------|---|--------------|---|--|-----------------------------|----------------------------|
| March 9 9 AM-3 PM | 22nd Annual "Everything Spring" Home, Landscape & Garden Expo | Eden Prairie | Grace Church (9301 Eden Prairie Rd., Eden Prairie, MN) | | | |
| April 20 10 AM-6 PM | Eden Prairie Eco-Expo | Eden Prairie | Eden Prairie Mall Center Court | -Fee for participation | -Patty Theresa | |
| April 25 & 26 | Dakota County Soil & Water 2024 Tree Sale | Farmington | Dakota County Fair Grounds (4008 220th St W, Farmington, MN 55024) | -Contacted 3/26, Dakota County responded 3/27. Not accepting exhibitors | -Patty | |
| April 26 8 AM-6:30 PM | Scott SWCD Tree Sale | Jordan | Scott County Fair Grounds (7151 West 190th Street Jordan, MN 55352) | Jess contacted on Friday, Mar 22. Jess followed up 4/3, did hear back that they aren't accepting volunteers for this one | -Patty Theresa | |
| April 27 10 AM-11:30 AM | Arbor Day Celebration | Savage | McColl Pond Environmental Learning & Event Center (13550 Dakota Ave. Savage, Minnesota 55378) | | | |
| April 27 1-3 PM | Arbor Day Tree Sale | Shakopee | Public Works (400 Gorman St., Shakopee, MN) | | | |

| | | | | | | |
|--------------------------------|---|--------------------|---|---|-------------------------|---|
| April 27 10 AM- 1 PM | Arbor Day Event | Eden Prairie | Round Lake Park; 16691 Valley View Rd; Eden Prairie, MN 55346 | Communicated, solidified a spot | Jess Theresa Judy | native plant/rain garden, cost share information. Jess will look into borrowing larger display items |
| May 4 | Earth Day Festival | Chaska | McKnight Park | Waiting for Linda to reply, but City has said we have a spot if we want it | | |
| May 10 & 11 8 AM- 3PM | Minnesota Landscape Arboretum Plant Sale | Chanhassen | Farm at the Arb (3210 W. 82nd St., Chaska, MN) | Contacted 3/26. Reached out to Terry Staub (Master Gardeners) to see if he has any info 4/3. Terry knows volunteer coordinator for event and is reaching out 4/3. Followed up 4/12. | Patty Judy | |
| May 11 8:30 AM- 12:30 PM | Plant Sale- Holz Farm | Eagan | 4665 Manor Drive, Eagan, MN | Got in touch with Recreation Manager for City of Eagan. She is passing our information along 4/3. Followed up 4/12. | Patty Theresa | |
| *May 13 | Resident Tree Pickup & Rain | Mendota Heights | Mendota Heights Public Works (2431 Lexington | | | |

| | | | | | | |
|---------------------------------|---|--------------------|--|---|---------------------|--|
| 9 AM - 12 PM | Barrel/Compost Bin Pickup | | Avenue S, Mendota Heights, MN 55118). | | | |
| *May 17 4-6 PM | Arbor Day Celebration | Eagan | Sky Hill Park (3590 Blue Cross Road, Eagan, MN) | | -Theresa | |
| May 18 9 AM-12 PM | Native Plant Market | Burnsville | Parking Lot across from City Hall (100 Civic Center Parkway, Burnsville, MN) | Contacted 3/26. Responded 3/27. Confirmed our spot (weather dependent) | Theresa Judy | |
| May 18 9 AM-2 PM | Hennepin County Master Gardener Plant Sale | Hopkins | Hopkins Pavilion (11000 Excelsior Blvd, Hopkins, MN 55343) | -Contacted 3/26. Responded 3/26. They will not be having exhibitors at this event | -Patty | |
| *May 20 9 AM- 12 PM | Public Works Open House | Bloomington | Public Works Building (1700 West 98th Street, Bloomington, MN) | | | |
| June 7 | Scott SWCD Plant Sale | Jordan | Scott County Fair Grounds (7151 West 190th Street Jordan, MN 55352) | -Jess heard back and the event does not need volunteers | | |
| June 20 5-7 PM | LakeFest (June) | Eagan | Schwanz Lake Fishing Pier (Trapp Farm Park) | | | |
| July 13 8:30 AM-4:30 PM | Learning Garden Tours | Minneapolis | Minneapolis (Hosted by Hennepin County Master Gardeners) | Contacted about the Arboretum Plant sale, Terry Staub passed our contact along to coordinator of this event on 3/26 | | |

| | | | | | | |
|---|------------------------|------------|---|--|---------------|--|
| July 16 5-7 PM | LakeFest (July) | Eagan | Thomas Lake Park (4425 Pilot Knob Road, Eagan, MN) | | | |
| July 24-28 | Scott County Fair | Jordan | Scott County Fair Grounds (7151 West 190th Street Jordan, MN 55352) | | | |
| August 5-11 | Dakota County Fair | Farmington | Dakota County Fair Grounds (4008 220th St W, Farmington, MN 55024) | Reached out regarding the Tree Sale. District Manager of Dakota SWCD let us know that we could host a booth at the Fair. We declined due to amount of commitment needed and participation in Carver County Fair. | | |
| August 7-11 | Carver County Fair | Waconia | Carver County Fair Grounds (501 W 3rd St, Waconia, MN 55387) | | | |
| August 15 5-7 PM | LakeFest (August) | Eagan | Blackhawk Park (1629 Murphy Parkway, Eagan, MN) | | | |
| Sept 23-27 (Rain days are Sept 20-Oct 2) | Outdoor Education Days | New Prague | Cedar Lake Farm Regional Park (25875 Juniper Ave, New Prague, MN 56071) | Contacted 3/26. Heard back 3/28. Asked for specifics on dates 3/29. | Patty Theresa | |

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|---------------------------------|--|-------------|---|--|------|--|
| *September 8-10 | Mendota Mdewakanton Traditional Pow Wow | Mendota | St. Peters Church Grounds (1405 Sibley Memorial Hwy 55120, Mendota, MN) | | | |
| *September 16 10 AM- 1 PM | Buzz Fest | Bloomington | Moir Park Park Shelters 1 & 2 (10320 Morgan Ave S. Bloomington, MN 55431) | | Judy | |
| *September 25 | Metro Children's Water Festival | St. Paul | Minnesota State Fair Grounds | | | |
| October 1 | Public Works Open House | Carver | Carver Fire Department 801 Jonathan Carver Pkwy, Carver, MN 55315 | | | |
| *October 28 9:30 AM-12 PM | Fall Clean Water Clean up | Prior Lake | Sand Point Beach (14349 Crest Avenue NE, Prior Lake) | | | |



LOWER MINNESOTA RIVER WATERSHED DISTRICT

Executive Summary for Action

Lower Minnesota River Watershed District Board of Managers Meeting
Wednesday, April 17, 2024

Agenda Item

Item 5. E. - Reimburse Pilot Knob STEM School for 2023 educator mini-grant

Prepared By

Linda Loomis, Administrator

Summary

At the November 15, 2023, meeting of the LMRWD Board of Managers, the Board approved an educator mini-grant of \$300 for the Pilot Knob STEM School.

The Grant was to bring the MN Zoo's Zoomobile to the School's STEM Fair. The School held its Fair and has provided the LMRWD with a report on the event, that included receipts and pictures. The Board should authorize reimbursement to the Pilot Knob STEM School as requested in the final report.

Attachments

Educator mini-grant application
November 15, 2023 meeting minutes excerpt
Educator Mini-grant agreement
Pilot Knob STEM School final report with pictures

Recommended Action

Motion to authorize reimbursement of Educator Mini-grant for Pilot Knob STEM School



Educator Mini-Grant Program Application

Name of School/Organization:

Pilot Knob STEM Magnet School

First Name:

Michele

Last Name:

Link-Valenstein

Email:

michele.linkvalenstein@isd197.c

Phone:

651-428-1634

Describe your current role?

STEM Teacher/ Magnet Facilitator

If you are a student, please provide the name and email of your supervising educator.

Address of School/Organization

Street Address:

1436 Lone Oak Road

Address line 2:

City:

Eagan

State:

MN

Zip Code:

55121

Name and Address Where Activity Will Take Place (if Different from Above)

Street Address:

Address line 2:

City:

State:

Zip Code:

What age(s) are the participants?

K-5th grade

6-12th grade

18+ years

Senior

Estimated number of participants:

200-300

Describe your proposed activity or project and how it relates to water resources and wildlife habitat education. Include project goals and learning objectives for participants.

One of the large scale events we host at Pilot Knob is a STEM Fair. In the past, this event has focused on Engineering. Our goal is to reconfigure this event to represent all components of STEM. Students must understand that science is in the natural world all around us and that we can use STEM to become stewards of the land and animals. As a district, we are located two miles from the confluence of the Minnesota and Mississippi Rivers. We want to honor the heritage that comes with this location and incorporate that into our STEM programming.

Many of our Earth and Life Sciences standards revolve around wildlife habitats. We would like to represent that at our STEM fair by inviting the Minnesota Zoomobile Booth to present. A Zoomobile booth would provide a naturalist and animals with a connection to a local conservation theme. This addition would allow us to educate students and families about wildlife animals that live in the Watershed District alongside us.

When is this activity/project scheduled to take place?

March 2024

Total requested amount (maximum \$500):

\$300

Specify how funds will be allocated (e.g. supplies, materials, and transportation):

\$300 to bring the Zoomobile to Pilot Knob for two hours.

I understand that if my funding request is approved, I must complete and submit the Program Project Reporting and Reimbursement form to receive payment. Any photos submitted may be used by the LMRWD in future communications.

Signature: 

Date:

09/25/2023

President Barisonzi noted sometimes the public that provides feedback may not be the public that uses the river, such as those that are fishing for sustenance. He said the LMRWD should address barriers to participation in planning. He suggested that the LMRWD make sure that when they are looking at their work plan at the workshop next year that this becomes one of the issues that they want to talk about. He added that they should also discuss the coordination of the feedback letter to make sure it solicits the feedback from the different managers with technical support as needed.

Manager Salvato added that in the recreation survey for the Upper Mississippi River they included fishing for sustenance as an environmental justice tie-in. President Barisonzi reiterated his desire to have this addressed in LMRWD workplans.

C. City of Carver Levee

President Barisonzi introduced this item and shared that the City of Carver will be at the December Board Meeting and asked if there was additional information that needed to be brought to the attention of the Board.

D. Dredge Management

President Barisonzi introduced this item and said that the Board received good information in the meeting materials. Administrator Loomis noted that there are a lot of project going on in this corridor. She stated that the Corp. of Engineers is having to re-bid the Continental Grain Marsh Repair project. She added that if the Corp. of Engineers couldn't get into the site when they were conducting reconnaissance for the Continental Marsh project. They contacted the LMRWD about accessing the site, to deliver material for the Continental Marsh Project. It was not clear why access to the site was closed. Administrator Loomis coordinated contacts for all the projects planned in this corridor; MnDOT, USACE and Eureka Fiber Optic and the LMRWD.

i. Dredging at mouth of MN River

No update on this item.

ii. Sale of Dredge Material

No update on this item.

iii. Private Dredge Material Placement

No update on this item.

iv. Vernon Avenue reconstruction and culvert replacement project

No update on this item.

E. Watershed Management Plan

No new information to report since the last update.

F. 2023 Legislative Action

No new information to report since the last update.

G. Education and Outreach Plan

President Barisonzi introduced this item. He noted that the \$500 for Redtail Ridge Elementary School was for water testing equipment which Friends of the Minnesota Valley has and is part of what the Board paid for their program. He added that the school could use this equipment for free.

Manager Hartmann made a motion to approve the recommendations of the CAC and awards educator mini-grants as follows: Nicollet Middle School Green Team - \$500; Pilot Knob STEM Magnet School - \$300; Chaska High School - \$500; and Redtail Ridge Elementary School - \$500. Manager Salvato seconded the motion. Upon a vote being taken, the motion carried unanimously.

H. LMRWD Projects

(Only projects that require Board action will appear on the agenda. Informational updates will appear on the Administrator Report)

i. Area #3

President Barisonzi introduced and asked Administrator Loomis to walk them through the information. She noted that the LMRWD received an appraisal for the property at Area #3 necessary to construct the project. The LMRWD is interested in securing a portion of the property, either by easement or property ownership. She noted that the Board was provided with hard copies of the information received.

Attorney Kolb noted that the information was just received the day of the meeting. He stated that there are options and prices associated with a partial fee purchase in the package. He added that there is also the price associated with just an acquisition of an easement over this property. He noted that they are in the process of posturing the LMRWD for a voluntary acquisition. He noted that he had not seen the information yet. He added that he is not sure if there will be additional costs with land use or governance restrictions on subdividing this parcel to facilitate the partial acquisition. He shared that this is a pre-decisional, information document and is not yet public information. He said the LMRWD will need the City to determine if there are additional costs to be considered to comply with the Cities land use requirements. He added that when they revisit this they will need to discuss if an easement or a fee acquisition makes more sense then decide how they want to approach this landowner. He noted that it was the landowner's suggestion that they consider an easement as opposed to a fee purchase.

Manager Amundson asked why they would buy this land. Attorney Kolb shared that he had this discussion with the acquisition consultant and Young Environmental. He stated that it comes down to the level of control and the risk to the project if the LMRWD only has an easement versus ownership, as ownership would give them much greater control of the property. He stated that they should be able to get everything done that they need to under an easement, but future access for maintenance must be considered.

i. Spring Creek

No update on this item.

I. Permits and Project Reviews

i. ACE Rent a Car (LMRWD No. 2022-022) – After the Fact Permit

President Barisonzi introduced and asked for a motion before discussion. He then asked Administrator Loomis to provide background on this item. She stated that Manager Salvato had asked why a stop work order was not placed on this project by the LMRWD. She explained that the intent of the owner was not to circumvent the rules, ACE Rent a Car just did not understand and were very cooperative once they were notified. She added that they also notified the airport as they owned the land that this was being built on.

Manager Salvato stated that she was trying to understand the coordination that led to this permit. Ms. Young explained that they have been in contact with ACE quite a bit and they

LOWER MINNESOTA RIVER WATERSHED DISTRICT
2023 Educator Mini-Grant Program
Cost Share Grant Agreement

This grant agreement made this 30 day of January 2024 is between the Lower Minnesota River Watershed District, a Minnesota Watershed District ("LMRWD") a public body with purposes and powers set forth in Minnesota Statutes Chapters 103B and 103D, and Michele Link-Valenstein, ("GRANTEE"), a teacher at Pilot Knob STEM Magnet School. The GRANTEE's address is Pilot Knob STEM Magnet School, 1436 Lone Oak Rd., Eagan, MN 55121.

1. Scope of Work. GRANTEE will use funds for the purposes identified in the Educator Mini-Grant Program Application, attached to this Agreement as Exhibit 1.
2. Grant Agreement Period. The GRANTEE will have until the end of the current school year to complete the project.
3. Reimbursement. The GRANTEE may request reimbursement in an amount not to exceed \$300. At the time reimbursement is requested, GRANTEE will provide the LMRWD a reimbursement and reporting request form, receipts for all direct purchases, and project photos.
4. Indemnification. The LMRWD will be held harmless against all liability and loss in connection with the Project.
5. Notices. Any notice or demand, authorized or required under this Agreement shall be in writing and shall be addressed to the other party as follows:

To LMRWD:

Administrator
Lower Minnesota River Watershed District
112 East Fifth Street, Suite 102 Chaska, MN 55318

To GRANTEE:

Michele Link-Valenstein
Pilot Knob STEM Magnet School
1436 Lone Oak Road
Eagan, MN 55121

The parties agreeing to be signed as follows:

GRANTEE:

LOWER MINNESOTA RIVER WATERSHED DISTRICT:

By: Michele Link-Valenstein

By: _____

Its: _____

Its: President

Date: 1/30/2024

Date: _____



Educator Mini-Grant Program Reimbursement and Reporting Request Form

Name of School/Organization:

First Name:

Last Name:

Email:

Phone:

Address of School/Organization

Street Address:

Address line 2:

City:

State:

Zip Code:

When and where did the activity/project take place?

Describe how your activity or project engaged participants?

Total number of participants:

List your relevant expenses:

Refund amount (cannot be more than the original award amount):

\$

Please provide information for the check recipient:

First Name:

Last Name:

Street Address:

Address line 2:

City:

State:

Zip Code:

Please submit photos of your activity or project in action. Include the photographer's name in the photo file name and email to admin@lowermnriverwd.org.



Detailed Receipt

(401736)
Pilot Knob STEM Magnet School
Michele Link-Valenstein
1436 Lone Oak Rd
Eagan MN 55121-1199

Order Number: 5336009
Amount Paid: \$300.00

VISIT DATE: Wednesday, March 20, 2024

| Quantity | Description | Price | Amount |
|----------|----------------------|----------|-----------|
| 1 | ZM:Zoomobile Program | \$300.00 | \$ 300.00 |
| | | | |
| | | | |
| | | | |
| | | | |

Total Amount: \$300.00

Payment Description & Payment Amount:
W:Visa \$300.00

Thank you for visiting the Minnesota Zoo. If you have any questions contact the Zoo at 952.431.9200.











LOWER MINNESOTA RIVER WATERSHED DISTRICT

Executive Summary for Action

Lower Minnesota River Watershed District Board of Managers Meeting
Wednesday, April 17, 2024

Agenda Item

Item 5. F. – Authorize execution of River Watch Agreement between LMRWD and Friends of the MN Valley

Prepared By

Linda Loomis, Administrator

Summary

At the October 18, 2023, LMRWD Board of Managers meeting, the Board approved funding of the River Watch Program conducted by the Friends of the MN Valley (FMR).

The LMRWD prepared an agreement for services between the LMRWD and FMR for the program. FMR and LMRWD legal counsel have reviewed the agreement.

The Board should approve the agreement and authorize execution

Attachments

Excerpt from October 18, 2023, meeting minutes

Agreement for Services

Recommended Action

Motion to approve Agreement for Services for River Watch and authorize execution

B. Discussion of Friends of the MN Valley funding request

Mr. Suss came forward and withdrew his request for funding for next year's County Fair project. He shared that they have reached out to the directors of SWCDs in the river basin and asked if they would be interested in sharing a booth at the County Fairs with the Friends of the Minnesota River Valley, which has received some support. He shared the request for funding for the River Watch program.

Mr. Crawford reviewed the River Watch program with the Board. He stated that they have reached their capacity with their current funding and are requesting funding from the Board to work with more schools on the River Watch program.

Manager Salvato asked if the program is in the category of a volunteer monitor. Mr. Crawford explained that they have their own project number so the students are able to go enter the project number on the PCA database and see all of the River Watch data that has been collected since the program started. He noted that they have around 150 students who go out to the river in one day. He added that Prior Lake alone has generated a large amount of data.

Manager Salvato asked if this program is looking to get more lower income children into STEM. Mr. Crawford stated that this is definitely a priority for them. He added that they are now working with the All Nations Program to expand the diversity of the program.

President Barisonzi asked about the volume of the program. Mr. Crawford shared that during the 2022-2023 school year they worked with around 2500 kids and are around 700 kids so far this school year. He noted that they have different curriculums for elementary, middle, and high school students.

Mr. Suss reviewed the request for \$20,000 and how they would be able to expand the program with these funds.

Manager Hartmann noted that it is a priority of the district to collect chloride and asked if the students will be collecting this. Mr. Crawford stated that they have signed up for chloride tests from Salt Watch and they bring them out into the field with them. He noted that he does also send in this data. Mr. Suss added that they will be an official partner with Salt Watch soon.

The Board agreed that it would be important to them that chloride is added to this conversation and reporting structure.

Mr. Evenson shared that this funding is not only going to help the students, but also their parents, teachers, and friends. He noted that this will reach the whole sphere of the kids that are in these classes. He added that this will also help create a basis for future education of these kids and provide opportunities for them in the area of natural resources. He stated that this will also help give these students an understanding of natural resources.

Manager Kuplic shared that they are amazed that the high school students are helping teach this information to the younger students.

Manager Kuplic made a motion to support the proposal and authorize funding of \$20,000 for the 2023-2024 River Watch Program. Manager Salvato seconded the motion. Upon a vote

being taken the following voted in favor of the motion: Amundson, Hartmann, Kuplic and Salvato; the following voted against: None; President Barisonzi abstained.

Suss thanked the Board for their funding and support.

7. OLD BUSINESS

A. 2021/2022 Financial Audit

Administrator Loomis introduced this item and shared that the audit is still ongoing. She noted that they are hoping to have most of the audit wrapped up this week.

President Barisonzi asked if there had been any action taken against the previous auditor. Administrator Loomis stated that they have filed a formal complaint with the accountancy board regarding this auditor.

B. Lower Minnesota River East One Watershed One Plan Governance

An update was provided in the October Administrator Report.

Administrator Loomis shared that the first draft of the plan was released today for comments to the.. Advisory Committee. She noted that the Policy Committee will likely receive it tomorrow. She added that she can share a copy of the plan with anyone interested

C. City of Carver Levee

Administrator Loomis introduced this item and shared that she and Ms. Young had run into the project manager for the city of Carver on this project at the Minnesota Water Resource Conference and he shared that he would like to come to the December Board Meeting to give an update to the Board on this.

D. Dredge Management

i. Dredging at mouth of MN River

Administrator Loomis introduced and provided background on this item. She shared that the dredging was supposed to take place on October 2nd.

ii. Sale of Dredge Material

No update on this item.

iii. Private Dredge Material Placement

Administrator Loomis noted that she has not gotten a notice from the DNR that Cargill has requested a permit to do any additional dredging at Cargill east or west.

iv. Vernon Avenue reconstruction and culvert replacement project

Administrator Loomis shared that she did receive a notice this week from the Corp. of Engineers that they will not require a permit from them on this project. She noted that they are just waiting for the LMRWD to permit the project as well as the DNR.

E. Watershed Management Plan

No new information to report since the last update.

F. 2023 Legislative Action

Administrator Loomis introduced this item. She shared that Lisa Frenette, the Board's legislative liaison, is in attendance.

Ms. Frenette shared that they have had a lot of success with dredge management and the things that they have needed to do with BWSR allowing the Board to use some extra funds for other issues. She shared that there may not be any money available next year as so much was spent

AGREEMENT FOR SERVICES

This Agreement is between the LOWER MINNESOTA RIVER WATERSHED DISTRICT, STATE OF MINNESOTA, (the “LMRWD”) a public body with purposes and powers set forth in Minnesota Statutes Chapters 103B and 103D, with offices located at 112 East 5th Street, Suite 102, Chaska, MN 55318, and Friends of the Minnesota Valley, (the “FRIENDS”) a 501(c)3 tax-exempt, nonprofit corporation, with headquarters located at 6601 Auto Club Road, Bloomington, MN 55438

The parties agree as follows:

1. TERM OF THE AGREEMENT

The Friends agrees to furnish River Watch program services to the LMRWD commencing October 18, 2023 and terminating December 31, 2024, unless terminated earlier in accordance with the Default and Cancellation provisions of this Agreement.

2. SERVICES TO BE PROVIDED

The Friends agrees to provide River Watch program services to the LMRWD as more fully described in Exhibit A, attached hereto and incorporated herein by reference.

3. PAYMENT FOR SERVICES

The Friends will bill LMRWD for services rendered. Payment shall be made within thirty-five (35) days from receipt of the invoice. Payment will be distributed in three installments: 1) The first payment of 50% will be distributed after the execution of the grant agreement. 2.) The second payment of 40% will be distributed after the first payment of 50% has been expended and reporting requirements have been met. An Interim Financial Report that summarizes expenditures of the first 50% must be signed by the Grantee and approved by the LMRWD. Grantee is required at this point to submit documentation of the expenditures report on the Interim Financial Report for verification. 3.) The third payment of 10% will be distributed after the grant has been fully expended and reporting requirements are met. The final 10% payment must be requested within 30 days of the expiration date of the Grant Agreement. A Final Financial Report that summarizes final expenditures for the grant must be signed by the Grantee and approved by the LMRWD.

The total cost of this Agreement shall not exceed Twenty Thousand Dollars (\$20,000).

4. INDEPENDENT CONTRACTOR

The Friends shall select the means, method, and manner of performing the services. Nothing is intended or should be construed as creating or establishing the relationship of a partnership or a joint venture between the parties or as constituting either party as the agent, representative, or employee of the other party for any purpose. The Friends is and shall remain an independent contractor for all services performed under this Agreement.

5. LIABILITY

Each party shall be responsible for its own acts and deeds and the results thereof. The Friends’s liability shall be governed by the provisions of Minnesota Statutes, Chapter 466 and other applicable law.

6. INSURANCE

A. Both parties agree at all times during the term of this Agreement, and beyond such term when so required, to have and keep in force the following insurance coverages:

Limits

1. Commercial General Liability on an occurrence Basis with contractual liability coverage:

| | |
|--|-------------|
| General Aggregate | \$2,000,000 |
| Products – Completed Operations Aggregate | 2,000,000 |
| Personal and Advertising Injury | 1,500,000 |
| Each Occurrence – Combined Bodily Injury and Property Damage | 1,500,000 |

2. Workers' Compensation and Employer's Liability

| | |
|-----------------------|-----------|
| Workers' Compensation | Statutory |
|-----------------------|-----------|

Employer's Liability. Bodily injury by:

| | |
|--------------------------|---------|
| Accident – Each Accident | 500,000 |
| Disease – Policy Limit | 500,000 |
| Disease – Each Employee | 500,000 |

3. Professional Liability – Per Claim 1,500,000
Aggregate 2,000,000

The professional Liability insurance must be maintained continuously for a period of two years after the termination of this Agreement.

B. A self-insurance program is an acceptable method to provide the required insurance limits.

C. Duty to Notify. Each party shall promptly notify the other party of any claim, action, cause of action or litigation brought against it, its employees, officers, agents or subcontractors, which arises out of the services contained in this Agreement. Each party shall also notify the other party whenever it has a reasonable basis for believing that it and/or its employees, officers, agents or subcontractors, might become the subject of a claim, action, cause of action, or litigation arising out of and/or related to the services contained in this Agreement.

7. DATA PRACTICES

Each party, its officers, agents, owners, partners, employees, volunteers and subcontractors shall abide by the provisions of the Minnesota Government Data Practices Act, Minnesota Statutes, Chapter 13 (MGDPA), the Health Insurance Portability and Accountability Act of 1996 (HIPAA) and the Health Information Technology for Economic and Clinical Health Act (HITECH), adopted as part of the American Recovery and Reinvestment Act of 2009, and implementing regulations, if applicable, and all other applicable state and federal laws, rules, regulations and orders relating to data privacy or confidentiality. The terms of this section shall survive the cancellation or termination of this Agreement.

8. SUCCESSORS AND ASSIGNMENTS

- A. Each party binds itself, its partners, successors, assigns and legal representatives to the other party for all covenants, agreements and obligations contained in the contract documents.
- B. Neither party shall assign, transfer or pledge this Agreement and/or the services to be performed, whether in whole or in part, without the prior written consent of the other party.

9. MERGER AND MODIFICATION

- A. It is understood and agreed that the entire Agreement between the parties is contained herein and that this Agreement supersedes all oral agreements and negotiations between the parties relating to the subject matter. All items that are referenced or that are attached are incorporated and made a part of this Agreement. If there is any conflict between the terms of this Agreement and referenced or attached items, the terms of this Agreement shall prevail.
- B. Any alterations, variations, modifications, or waivers of provisions of this Agreement shall only be valid when they have been reduced to writing as an amendment to this Agreement signed by the parties.

10. DEFAULT AND CANCELLATION

- A. If each party fails to perform any of the provisions of this Agreement or so fails to administer the work as to endanger the performance of the Agreement, it shall be in default. Unless the defaulting party's default is excused by the other party, the non-defaulting party may upon written notice immediately cancel this Agreement in its entirety.
- B. A party's failure to insist upon strict performance of any provision or to exercise any right under this Agreement shall not be deemed a relinquishment or waiver of the same, unless consented to in writing. Such consent shall not constitute a general waiver or relinquishment throughout the entire term of the Agreement.
- C. This Agreement may be canceled with or without cause by either party upon thirty (30) day written notice.

11. SURVIVAL OF PROVISIONS

Provisions that by their nature are intended to survive the term, cancellation or termination of this Agreement include but are not limited to: INDEPENDENT CONTRACTOR; LIABILITY; INSURANCE; DATA PRACTICES; DEFAULT AND CANCELLATION; PROMOTIONAL LITERATURE; and MINNESOTA LAW GOVERNS.

12. CONTRACT ADMINISTRATION

In order to coordinate the services being provided to the LMRWD with the activities of the Friends, Thomas Crawford, or successor, shall manage this Agreement on behalf of the Friends and serve as liaison between the Friends and the LMRWD.

13. COMPLIANCE AND NON-DEBARMENT CERTIFICATION

Both parties shall comply with all applicable federal, state and local statutes, regulations, rules and ordinances currently in force or later enacted.

14. NOTICES

Any notice or demand which must be given or made by a party under this Agreement or any statute or ordinance shall be in writing, and shall be sent registered or certified mail. Notices to the Friends shall be sent to the Friends Administrator with a copy to the originating Department at the address given in the opening paragraph of the Agreement. Notice to the Commission shall be sent to the address stated in the opening paragraph of the Agreement.

15. MEDIA OUTREACH

LMRWD shall not use the term “_____”, or any derivative thereof in LMRWD’s advertising, external facing communication and/or marketing, including but not limited to advertisements of any type or form, promotional ads/literature, client lists and/or any other form of outreach, without the written approval of the _____, or their designees.

16. MINNESOTA LAWS GOVERN

The Laws of the State of Minnesota shall govern all questions and interpretations concerning the validity and construction of this Agreement and the legal relations between the parties and their performance. The appropriate venue and jurisdiction for any litigation will be those courts located within the Hennepin County, State of Minnesota. Litigation, however, in the federal courts involving the parties will be in the appropriate federal court within the State of Minnesota. If any provision of this Agreement is held invalid, illegal or unenforceable, the remaining provisions will not be affected.

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FRIENDS ADMINISTRATOR AUTHORIZATION

Reviewed by the Friends Attorney's Office

FRIENDS OF THE MINNESOTA VALLEY STATE OF MINNESOTA
The Friends certify that the person who executed this Agreement is authorized to do so on behalf of the Friends as required by applicable articles, bylaws, resolutions or ordinances.*

Attorney

By: _____
Its: _____

Date: _____

Lower Minnesota River Watershed District

The LMRWD certifies that the person who executed this Agreement is authorized to do so on behalf of the LMRWD as required by applicable articles, bylaws, resolutions or ordinances.*

Printed Name: _____

Signed: _____

Title: _____

Date: _____

* Parties shall submit applicable documentation (articles, bylaws, resolutions or ordinances) that confirms the signatory's delegation of authority. This documentation shall be submitted at the time parties the Agreement is executed.

EXHIBIT A

SCHEDULE OF SERVICES

River Watch is a volunteer monitoring program coordinated by Friends of the Minnesota Valley and highlights a partnership between Friends of the Minnesota Valley and the Lower Minnesota River Watershed District. In the program, teachers and youth volunteers use biological monitoring criteria established by the MPCA to monitor local streams. Teachers use this as a unique hands-on research experience in the classroom setting. The details of the program responsibilities are as follows:

- Take proper precautions to ensure the safety of those involved in activities relating to River Watch.
- Recruit and manage teachers and students to monitor sites within the Lower Minnesota River Watershed District
- Coordinate and facilitate training sessions in field collection techniques and macroinvertebrate identifications including all in-person, hands-on training.
- Provide funds to cover internal teacher costs including busing and substitute teacher pay
- Provide all Quality Assurance/Quality Control checks.
- Manage program finances.
- Manage program contracts.
- Maintain communication with all parties.
- Keep accessible all data sheets, site selection forms, financial records, and reports.
- Provide copies of checked data sheets as requested.
- Coordinate outreach educational opportunities.
- Coordinate volunteer appreciation efforts.
- Develop and distribute Year End Results to all interested parties upon request and via Hennepin Friends website.



LOWER MINNESOTA RIVER WATERSHED DISTRICT

Executive Summary for Action

Lower Minnesota River Watershed District Board of Managers Meeting
Wednesday, April 17, 2024

Agenda Item

Item 6. A. – LMRWD Permit Renewals

Prepared By

Linda Loomis, Administrator

Summary

There is a total of 3 permits that require renewing this month. Table 1 of the Technical Memorandum – April 2024 Permit Renewal Requests, dated April 10, 2024, is attached listing the Permits that have requested renewal.

Attachments

Technical Memorandum –April 2024 Permit Renewal Requests dated April 10, 2024

Recommended Action

Motion to approve renewal requests listed in Table 1. Summary of April 2024 LMRWD permit renewal requests detailed in Technical Memorandum – April 2024 Permit Renewal Requests dated April 10, 2024

Technical Memorandum



To: Linda Loomis, Administrator
Lower Minnesota River Watershed District (LMRWD)

From: Hannah LeClaire, PE, Project Manager
Rachel Kapsch, Water Resources Scientist

Date: April 10, 2024

Re: April 2024 Permit Renewal Requests

Per Lower Minnesota River Watershed District (LMRWD) Rule A, it is the permittee's responsibility to request permit renewals when necessary. However, LMRWD staff has taken a proactive approach by sending out a reminder two months prior to permit expiration to current permit holders with upcoming permit expirations.

Table 1 summarizes the permittees who have received permit expiration reminder emails. If a project is not complete, the LMRWD will renew the permit to maintain permitting authority throughout all close out procedures. Requests for information regarding changes to project scope since the original permit issuance and project close out materials are also included on permit expiration reminder emails.

SUMMARY

Table 1. Summary of April 2024 LMRWD Permit Renewal Requests

| LMRWD No. | Project Name | City | Previous Expiration Date | Recommended Expiration Date |
|-----------|---|-------------|--------------------------|-----------------------------|
| 2022-005 | Chaska West Creek Apt | Chaska | June 6, 2024 | June 6, 2025 |
| | Reason for Extension: Construction is not complete | | | |
| 2022-039 | Former Knox Site | Burnsville | June 6, 2024 | June 6, 2025 |
| | Reason for Extension: Final site inspection and as-built review | | | |
| 2023-009 | AT&T Bloomington to Eureka Fiber | Bloomington | June 26, 2024 | June 26, 2025 |
| | Reason for Extension: Construction is not complete | | | |

Recommendations

Based on review of the permit expirations, we recommend approval of permit renewals.



LOWER MINNESOTA RIVER WATERSHED DISTRICT

Executive Summary for Action

Lower Minnesota River Watershed District Board of Managers Meeting
Wednesday, April 17, 2024

Agenda Item

Item 6. B. – Safety & Security Center Phase 2 (LMRWD No, 2023-022)

Prepared By

Linda Loomis, Administrator

Summary

Young Environmental Consulting Group has reviewed an application for Phase 2 of the Safety & Security Center at the Minneapolis-St. Paul Airport on behalf of the LMRWD. Details of the application review are attached in Technical Memorandum – Safety & Security Center Phase 2 (LMRWD No. 2023-022), dated April 10, 2024.

Attachments

Technical Memorandum – Safety & Security Center Phase 2 (LMRWD No. 2023-022), dated April 10, 2024

Recommended Action

Motion to approve a permit Safety & Security Center Phase 2 (LMRWD No. 2023-022) for site preparation and mass grading only (LMRWD Rule B). The applicant is required to amend the permit before construction of impervious surfaces and stormwater best management practices (BMPs) (LMRWD Rule D)

Technical Memorandum



To: Linda Loomis, Administrator
Lower Minnesota River Watershed District (LMRWD)

From: Erica Bock, Water Resources Scientist
Hannah LeClaire, PE, Water Resources Engineer

Date: April 10, 2024

Re: Safety and Security Center Phase 2 (LMRWD No. 2023-022)

The Metropolitan Airports Commission (MAC) has applied for an individual project permit from the LMRWD to begin Phase 2 of the Safety and Security Center (SSC) Project. The LMRWD reviewed and conditionally approved the SSC Phase 1 (LMRWD No. 2021-022) project at the November 2021 Board Meeting (Attachment 1) and a permit was issued on March 18, 2022. The SSC Phase 1 project consisted of constructing a fire station, concrete apron, asphalt parking lot, and infiltration basin in Minnehaha Creek Watershed District. The LMRWD is awaiting final construction as-builts for the SSC Phase 1 Project to close out the permit.

The Safety and Security Center Phase 2 Project (SSC Phase 2 Project) is located on the north end of the Minneapolis-Saint Paul International (MSP) Airport (Figure 1). The applicant's engineer, Kimley-Horn and Associates, Inc. (Kimley Horn), has submitted the permit application, associated application exhibits, and construction plans for the SSC Phase 2 Project.

The project proposes building demolition and construction; roadway realignment; utility and parking lot construction; and infiltration basin construction for stormwater management. The project proposes 9 acres of disturbance. There are currently 5.3 acres of impervious surfaces, and the project proposes 8.6 acres of new and reconstructed impervious surfaces. The project proposes construction between May 2024 and December 2026. The project is not located within a High Value Resource Area, Steep Slopes Overlay District, or 100-year floodplain of the Minnesota River. The project triggers LMRWD Rule B—Erosion and Sediment Control and Rule D—Stormwater Management. Because MAC does not have their municipal permit, the project requires an LMRWD individual project permit.

After a meeting with the applicant on February 22, 2024, to discuss the project, time constraints for construction scheduling became apparent. In previous permit applications with similar time constraints, permits have been issued in phases, allowing the applicant to begin initial site preparation activities and mass grading ahead of the impervious surface construction and stormwater management approvals under Rule D. Because of the construction schedule concerns of the applicant, we have segregated our permit review to just the initial site preparation activities and mass grading activities (Rule B). The initial permit will explicitly prohibit the construction of impervious surfaces and stormwater management facilities until LMRWD staff can confirm the project meets all the requirements for Rule D. The applicant will be required to provide updated

stormwater treatment calculations to obtain a permit amendment that includes the construction of impervious surfaces planned for summer 2024.

SUMMARY

Project Name: Safety and Security Center (SSC) Phase 2
Purpose: Building, roadway, and stormwater management facility construction

Project Size:

| Area Disturbed | Existing Impervious Area | Proposed Impervious Area | Net Increase Impervious Area |
|----------------|--------------------------|--------------------------|------------------------------|
| 9 acres | 5.3 acres | 8.6 acres | 3.3 acres |

Location: 6320 34th Avenue South
Saint Paul, MN 55450

LMRWD Rules: Rule B – Erosion and Sediment Control
Rule D – Stormwater Management

Recommended Board Action: Approval of Rule B (initial site preparation activities [including building demolition] and mass grading only)

DISCUSSION

The LMRWD received the following documents for review:

- LMRWD online permit application; received October 2, 2023.
- LMRWD Application Narrative and Exhibits for SSC Phase 2 by Kimley-Horn, dated September 15, 2023; received October 2, 2023.
- SSC Phase 2 Drainage Plans and Exhibits by Kimley-Horn, dated July 25, 2023; received October 2, 2023.
- XPSWMM Model by Kimley-Horn; received November 20, 2023; revised and received February 1, 2024.
- Stormwater Management Narrative by Kimley-Horn, dated March 4, 2024; received March 7, 2024.
- Existing and Proposed Conditions MIDS Model, by Kimley-Horn; received March 7, 2024.
- SSC Phase 2 Construction Plans by Kimley-Horn, dated November 13, 2023; received March 7, 2024.
- Revised SWPPP by Kimley-Horn; received March 25, 2024.

The application was deemed complete on March 25, 2024, and the documents received provide the minimum information necessary for a Rule B permit review.

Rule B – Erosion and Sediment Control

The LMRWD regulates land-disturbing activities that affect one or more acres under Rule B. The proposed project would disturb approximately 9 acres within the LMRWD boundary. The applicant has provided an erosion and sediment control plan and a Stormwater Pollution Prevention Plan (SWPPP). Temporary erosion and sediment control measures include storm drain inlet protection,

silt fences, construction entrance/exits, sediment control log (woodchip), and rapid stabilization method 3 (MnDOT 2575.3M). The contractor and individuals responsible and liable for the inspection and maintenance of erosion and sediment control features are:

Contractor:

Morcon Construction
612-221-2631
colsen@morcon.com

Erosion and Sediment Control:

Ryan Carolan – Kimley Horn, 763-251-030, ryan.carolan@kimley-horn.com
Allan Sapp – Kimley Horn, 612-280-3851, allan.sapp@kimley-horn.com
Mark Weinhandl – H + U Construction, 612-875-2917, mweinhandl@hu-construction.com
Tim Elmer – MAC, 612-726-8170, tim.elmer@mspmac.org

The project complies with Rule B.

Recommendations

The applicant has made it clear that time is of the essence for the project. Therefore, staff recommend conditional approval of the project for initial site preparation activities (including building demolition) and mass grading only.

As discussed, this permit allows the applicant to begin work on the initial site preparation activities and mass grading but does not allow for the construction of any new impervious surface. Staff recommends the applicant and the LMRWD continue to work together to ensure the stormwater management system complies with LMRWD Rule D. The LMRWD met with Kimley-Horn and MAC Staff on March 27, 2024, to discuss additional items required to comply with LMRWD Rule D. A permit amendment will be required to construct impervious surfaces and stormwater management best management practices (BMPs).

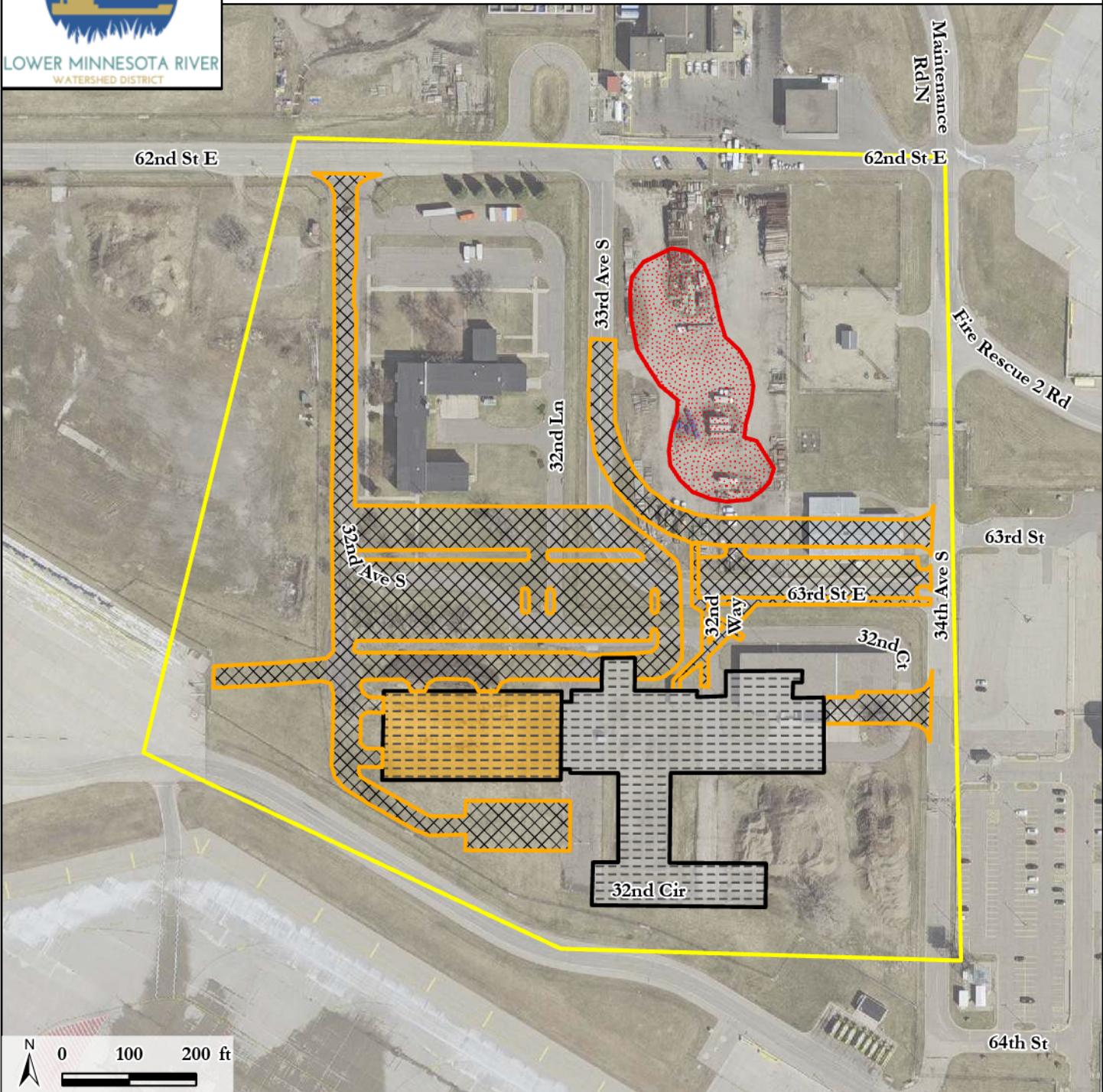
Based on review of the project, we recommend approval of the project for Rule B only.

Attachments


- Figure 1—SSC Phase 2 Project Location Map
- Attachment 1—SSC Phase 1 Project Review Memo



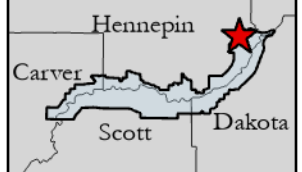
Figure I: Safety and Security Center Phase II Project Location
LMRWD No. 2023-022



Legend

-  Project Location
-  Proposed Covered Parking
-  Proposed Impervious
-  Proposed Infiltration Basin
-  Proposed Safety and Security Center

LMRWD Watershed Location Map



Technical Memorandum

To: Linda Loomis, Administrator
Lower Minnesota River Watershed District

From: Kaci Fisher, Environmental Scientist
Katy Thompson, PE, CFM

Date: November 10, 2021

Re: 2021 Safety and Security Center Phase I (LMRWD No. 2021-022)

The Metropolitan Airports Commission (MAC, applicant) has applied for an individual project permit from the Lower Minnesota River Watershed District (LMRWD) to construct additional facilities on the Minneapolis St. Paul (MSP) Airport property, as shown in Figure 1. The applicant's engineer, Kimley-Horn, has provided site plans for the 2021 Safety and Security Center Phase I project (Project) along with the permit application.

The proposed Project involves constructing a fire station, emergency shelter, parking lot, and access drive. The Project would disturb approximately 13.3 acres and create approximately 5.0 acres of new impervious surface. The Project is not located within the High Value Resource Area, Steep Slopes Overlay District, or the Minnesota River floodplain; however, it is located in an unincorporated region.

Because it is located in an unincorporated area, this Project requires an LMRWD individual permit and, as such, is subject to an LMRWD permitting review.

Summary

| | |
|----------------------|--|
| <u>Project Name:</u> | 2021 Safety and Security Center Phase I |
| <u>Purpose:</u> | Construction of a fire station, emergency shelter, parking lot, and access drive within the MSP airport property |
| <u>Project Size:</u> | 13.3 acres disturbed; 5.0 acres proposed new |

impervious

Location: 4300 Glumack Dr., St. Paul, MN 55111 (Parcel 3002823110001)

LMRWD Rules: Rule B—Erosion and Sediment Control
Rule D—Stormwater Management

Recommended Board Action: Conditional approval

Discussion

The District received the following documents for review:

- LMRWD online permit application; received May 18, 2021
- Project Map by Burns & McDonnell Engineering; dated May 8, 2018; received May 18, 2021
- Master drainage plans by MAC; dated June 12, 2003; received May 18, 2021
- Construction plans by Kimley-Horn; dated May 17, 2021; received May 18, 2021
- Revised construction plans by Kimley-Horn; dated October 18, 2021; received October 18, 2021
- Integrated Spill Response & Coordination Plan by MSP International Airport and MAC; dated December 7, 2004; revised April 23, 2014; received May 18, 2021
- SWPPP Inspection and Onsite Amendment Log by Kimley-Horn; dated June 14, 2021; received May 18, 2021
- Concrete Washout Guidance by MPCA; dated February 2009; received May 18, 2021
- Stormwater Best Management Practice Concrete Washout by EPA; dated February 2012; received May 18, 2021
- Construction implementation schedule via email by Kimley-Horn; received May 27, 2021
- Stormwater narrative via email by Kimley-Horn; received May 27, 2021
- Revised stormwater narrative via email by Kimley-Horn; received October 18, 2021

The application was deemed complete on October 29, 2021, and the documents received provide the minimum information necessary for permit review.

Rule B – Erosion and Sediment Control

The District regulates land-disturbing activities that affect one acre or more under Rule B. The proposed Project would disturb approximately 13.3 acres. The applicant has provided a Stormwater Pollution Prevention Plan and generally complies with Rule B;

however, a copy of the NPDES permit (either stormwater construction or individual) and contact information for the contractor and person(s) responsible for all erosion and sediment control will still be needed before a final permit can be issued.

Rule D – Stormwater Management

The District regulates land-disturbing activities that create new impervious areas greater than one acre. The Project proposes a total of 5.0 acres of impervious surfaces. The applicant originally submitted plans in May 2021 with the intention of directing the Project’s stormwater to MSP pond #2. Staff met with the applicant on June 7, 2021, to discuss if the pond could handle the additional proposed stormwater. Because there was a lack of data about MSP pond #2, the applicant agreed to revise the stormwater management plan.

The revised application submitted on October 18, 2021, and discussed with the applicant on October 29, 2021, now proposes constructing an infiltration pond with an infiltration swale for Phase I of the Project. A second infiltration pond is proposed for Phase II, but it is not part of this review. The Phase I infiltration pond and a small amount of the new impervious surface is located within the Minnehaha Creek Watershed District (MCWD) and will be permitted by MCWD. The applicant met with both MCWD and the District on October 29, 2021, to discuss the different regulations and permitting processes for the two jurisdictions.

Section 4.4.1 of Rule D requires that applicants demonstrate no increase in proposed runoff rates. The applicant submitted XSPWMM analysis demonstrating the proposed infiltration basins will provide rate control for the new impervious surfaces the Project will create. The existing and proposed rates are provided in Table 1 and meet the District’s rate control requirements.

Table 1. Rate Control Summary

| Design Event | Existing Rates (cfs) | Proposed Rates (cfs) | Change (cfs) |
|------------------|----------------------|----------------------|--------------|
| 2-year/24-hour | 918 | 918 | 0 |
| 10-year/24-hour | 1,462 | 1,462 | 0 |
| 100-year/24-hour | 2,329 | 2,329 | 0 |

Section 4.4.2 of Rule D requires stormwater runoff volume retention on-site to be equivalent to one inch of runoff from impervious surfaces. For the MAC project, the required volume reduction is 18,173 cubic feet. The proposed infiltration pond is sized to be 10,759 square feet by 1.8 feet deep with an assumed infiltration rate of 0.45 inches per hour to meet the volume requirement. The soils data indicate the infiltration rate could be closer to 0.8 inches per hour. The applicant has stated that they will conduct infiltration testing during construction and augment the soils at the infiltration basin, if needed, to achieve a minimum infiltration rate of 0.50 inches per hour. Even with the

lower infiltration rate of 0.45 inches per hour, the Project will provide a minimum of 19,366 cubic feet, which meets the volume reduction requirement.

Because the Project meets the volume requirement, it also meets the no net increase in total phosphorus and total suspended solids water quality requirements. As presented, the Project complies with Rule D.

Recommendations

Staff recommends conditional approval of the Project, conditioned on the receipt of the following:

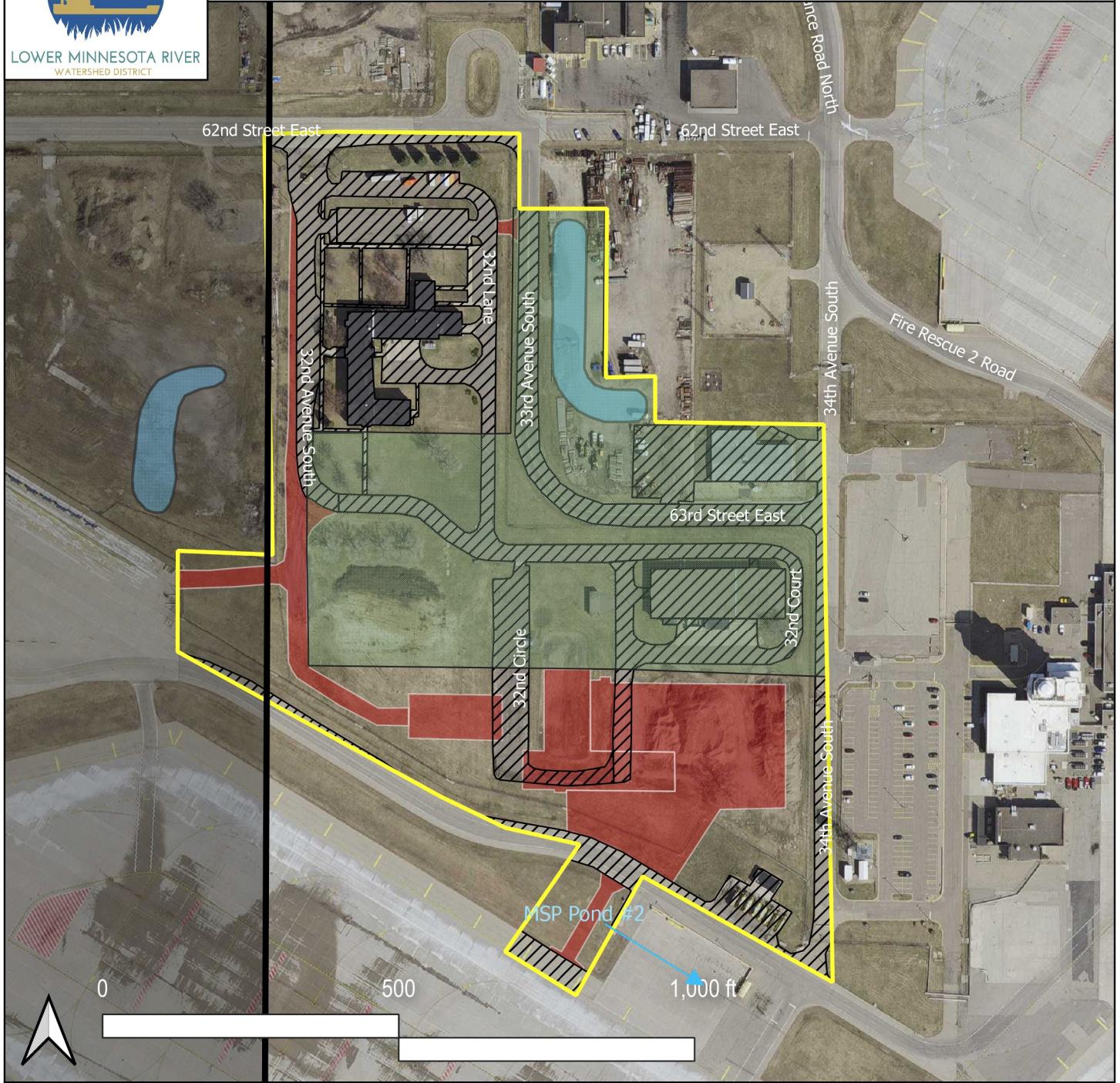
- Copy of NPDES permit, either construction stormwater permit or individual permit if it states a construction stormwater permit is not needed
- Contact information of the contractor
- Contact information for the person(s) responsible for erosion and sediment control

Attachments














- Figure 1—2021 Safety and Security Center Phase I Location Map



Figure I: 2021 Safety and Security Center
Project Location



LEGEND

-  Project Location
-  2021 Security & Safety Center
-  Existing Impervious
-  New Impervious
-  Infiltration Basin
-  Phase 2
-  Public Waters
-  LMRWD Boundary
-  Steep Slopes Overlay District
-  High Value Resource Area
-  100-yr Floodplain
-  Floodway
-  MCWD

LMRWD Watershed Location Map





LOWER MINNESOTA RIVER WATERSHED DISTRICT

Executive Summary for Action

Lower Minnesota River Watershed District Board of Managers Meeting
Wednesday, April 17, 2024

Agenda Item

Item 6. C. – Interstate 35W Early Release Project Permit (LMRWD No. 2024-004)

Prepared By

Linda Loomis, Administrator

Summary

This project is for a temporary project needed by improvements to Interstate 35W in Burnsville. Young Environmental Consulting Group has reviewed the application on behalf of the LMRWD and details of the review and recommendations can be found in Technical Memorandum – Interstate 35W Early Release Project Permit (LMRWD No. 2024-004), dated April 10, 2024.

Attachments

Technical Memorandum – Interstate 35W Early Release Project Permit (LMRWD No. 2024-004), dated April 10, 2024

Recommended Action

Motion to approve a permit for Interstate 35W Early Release Project contingent upon receipt of a copy of the NPDES construction stormwater permit, contact information for the contractor(s) undertaking land-disturbing activities, contact information for the person(s) responsible for erosion control inspections and maintenance and final construction plans signed by a professional engineer

Technical Memorandum



To: Linda Loomis, Administrator
Lower Minnesota River Watershed District (LMRWD)

From: Rachel Kapsch, Water Resources Scientist
Hannah LeClaire, PE, Project Manager

Date: April 10, 2024

Re: Interstate 35W Early Release Project Permit (LMRWD No. 2024-004)

The Minnesota Department of Transportation (MnDOT) has applied for an individual project permit from the LMRWD to construct temporary lane widening for project staging, shoulder pavement replacement to accommodate temporary traffic load increases, and crossovers to allow maintenance of temporary traffic. The proposed activities for this project will facilitate traffic maintenance during construction of MnDOT State Project (SP) 1981-140, a larger MnDOT construction project slated for 2025 (LMRWD No. 2023-025). The early release project is located within the Interstate 35W (35W) corridor in Burnsville, MN, extending from Southcross Drive West to north of 121st Street (Figure 1). The applicant's engineer, TKDA, submitted the permit application, associated application exhibits, and site plans for the 35W Early Release project.

The early release project will disturb 3.1 acres of developed MnDOT Right of Way (ROW) and proposes 0.7 acres of temporary new impervious surfaces. Within the LMRWD boundaries, the project proposes to perform crossover construction at the following locations: Minnesota State Highway 13 (MN 13) westbound (WB), MN 13 eastbound (EB), and within the 35W corridor. Additionally, temporary shoulder widening and replacement are proposed along the entrance ramp from MN 13 WB to 35W northbound (NB). Temporary shoulder widening and replacement is also proposed proximal to 35W NB entrance ramps from Cliff Road. Locations of proposed activities are detailed in Figure 1.

No new permanent stormwater best management practices (BMPs) will be constructed as part of this project due to the temporary nature of proposed activities. Permanent stormwater BMPs will be constructed as part of the SP 1981-140 project, which is currently under review by the LMRWD for a permit.

Although the project is not located within a High Value Resource Area (HVRA), drainage from temporary pavement enters the Black Dog Lake HVRA. Drainage that enters the Black Dog Lake HVRA is treated by an existing MnDOT stormwater BMP before entering the Minnesota River. Additionally, the northern extent of the project is located within the Minnesota River floodplain. The applicant proposes to begin construction in August of 2024. The project triggers LMRWD Rule B – Erosion and Sediment Control, Rule C – Floodplain and Drainage Alteration, and Rule D – Stormwater Management.

The City of Burnsville has a LMRWD municipal local governmental unit (LGU) permit. However,

because the city does not have authority to permit MnDOT projects, this project requires an LMRWD individual permit and is subject to an LMRWD permitting review.

SUMMARY

Project Name: 35W Early Release Permit

Purpose: Perform temporary lane widening, shoulder pavement replacement, and crossover construction to accommodate current traffic loads and future ROW construction project.

Project Size:

| | Existing Impervious Area | Proposed Impervious Area | Net Increase Impervious Area |
|------------------|--------------------------|--------------------------|------------------------------|
| Area Disturbed | — | 3.1 acres | — |
| Total Impervious | 0.7 acres | 1.4 acres | 0.7 acres |

Location: MN13 (EB/WB) and 35W (NB/SB)
Burnsville, MN 55337

LMRWD Rules: Rule B – Erosion and Sediment Control
Rule C – Floodplain and Drainage Alteration
Rule D – Stormwater Management

Recommended Board Action: Conditional approval

DISCUSSION

The LMRWD received the following documents for review:

- LMRWD online permit application; received February 20, 2024.
- LMRWD Application Exhibits for 35W Early Release by TKDA; received February 20, 2024.
- Pages 83-97 of Construction Plan Set with Markups by TKDA; received March 6, 2024.
- Authorization of Agent form and SP-150 Drainage Overview Map by TKDA; received March 14, 2024.
- Minnesota River Bridge Design-Build Drainage Overview Map and Pages X39-X42 and Page 95 from Construction Plan Set with Markups by TKDA; received March 21, 2024.

The application was deemed complete on March 21, 2024, and the documents received provide the minimum information necessary for permit review.

Rule B – Erosion and Sediment Control

The LMRWD regulates land-disturbing activities that affect **one acre** or more under Rule B. The proposed project would disturb approximately **3.1 acres** within the LMRWD boundary. The applicant has provided an erosion and sediment control plan and a Stormwater Pollution Prevention Plan (SWPPP). Temporary erosion and sediment control measures proposed include filter berm type

1 (compost), filter berm type 4 (topsoil berm), storm drain inlet protection, culvert end controls, sediment control logs (compost), silt fences, and rapid stabilization method 4. The contractors and person responsible for the inspection and maintenance of erosion and sediment control will be determined in June 2024 after bidding has occurred.

The project generally complies with Rule B, but a copy of the National Pollutant Discharge Elimination System (NPDES) construction stormwater permit, contact information for the contractor(s) performing land-disturbing activities, contact information for the person(s) responsible for erosion control inspections and maintenance, and designation of individual liable to the LMRWD for performance under Rule B are needed before the LMRWD can issue a permit.

Rule C – Floodplain and Drainage Alteration

The LMRWD requires the applicant to provide documentation that proposed floodplain alterations will not cause an increase in 100-year water surface elevations. Per the 95% construction plans submitted by TKDA, work within the floodplain is limited to the removal of a median barrier to allow for a temporary traffic crossover, which will not impact existing ground contours. The temporary modifications will have no effect on conveyance or the 100-year water surface elevations, meeting the minimum requirements of Rule C.

Rule D – Stormwater Management

The project proposes a total of 0.7 acres of temporary new impervious surface, a portion of which (16,735 square feet) drains to the Black Dog Lake HVRA. Stormwater management is provided by an existing stormwater BMP. Stormwater drains to a MnDOT Pond (located in the southeast (SE) quadrant of 35NB and Black Dog Road SE ramp) constructed during the Minnesota River Bridge Design-Build Project and outlets to the Minnesota River. The existing pond effectively manages stormwater before it enters the Minnesota River, complying with Rule D.

Recommendations

Based on review of the project, we recommend conditional approval contingent on the receipt of the following:

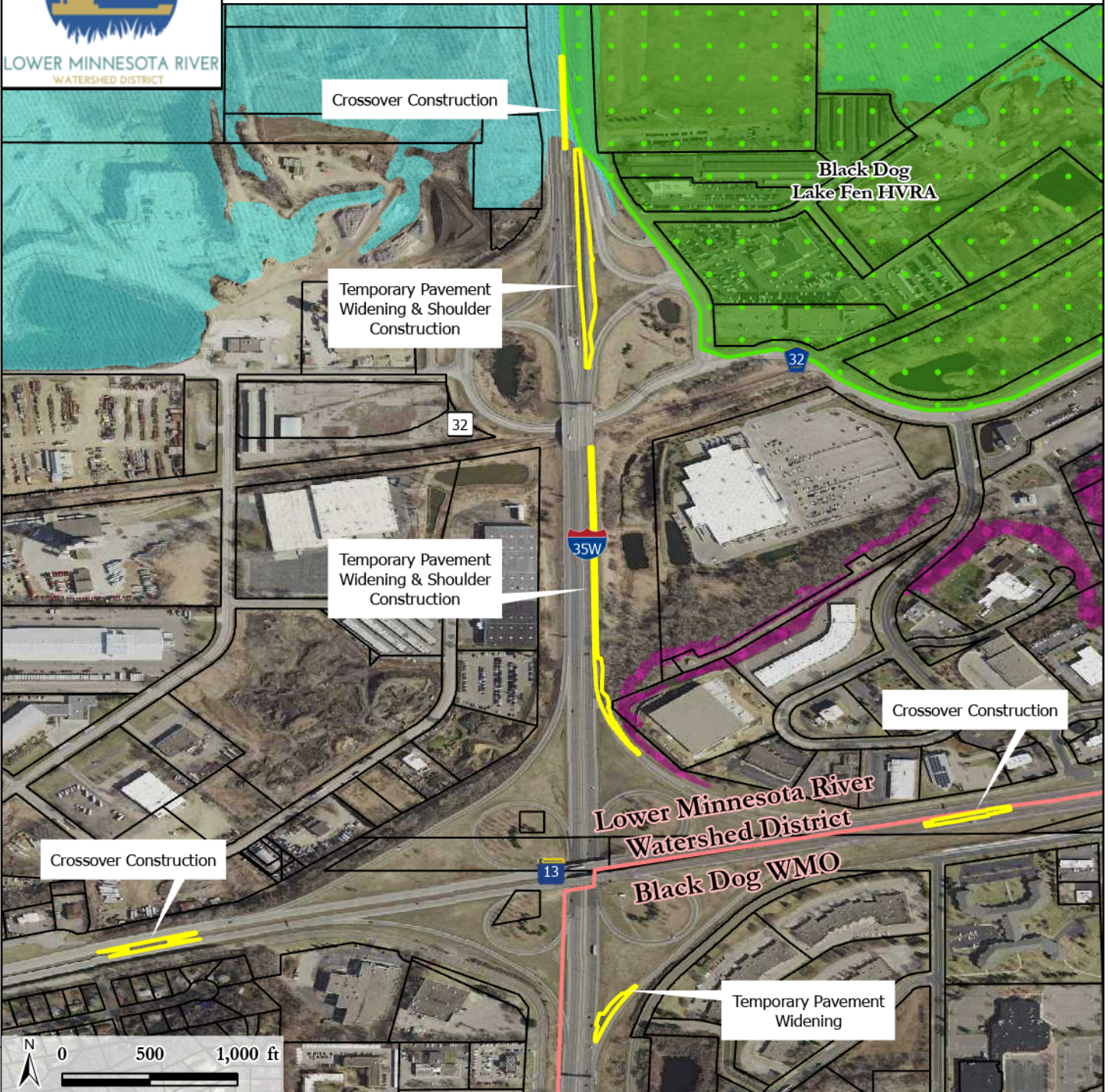
- Copy of the NPDES construction stormwater permit.
- Contact information for the contractor(s) undertaking land-disturbing activities.
- Contact information for the person(s) responsible for erosion control inspections and maintenance.
- Final construction plans signed by a professional engineer.

Attachments

- Figure 1—35W Early Release Location Map



Figure I: 35W Early Release Project Location
LMRWD No. 2024-004



Legend

- Project Location
- LMRWD Boundary
- Parcels
- High Value Resource Area
- Steep Slope Overlay District
- 100-yr Floodplain

LMRWD Watershed Location Map



Projects \LA\LRWD\Project Reviews\02 In Process\2024-004-35W Early Release\04 GIS



LOWER MINNESOTA RIVER WATERSHED DISTRICT

Executive Summary for Action

Lower Minnesota River Watershed District Board of Managers Meeting
Wednesday, April 17, 2024

Agenda Item

Item 7. A. – 2023 Annual Report

Prepared By

Linda Loomis, Administrator

Summary

Minnesota Statute 103D.351, requires that Managers prepare a yearly report of the financial conditions of the watershed district, the status of all projects, the business transacted by the watershed district, other matters affecting the interests of the watershed district, and a discussion of the managers' plans for the succeeding year. Young Environmental Consulting Group prepared the 2022 Annual Report and now has completed preparation of the 2023 Annual Report. The report is attached for the Board's review. There are still a few minor changes that may be made before distribution, but the report is essentially complete.

If the report is acceptable, the Board should approve and finalize the report and authorize distribution as required by Statute. The report will be posted on the LMRWD website.

Attachments

2023 LMRWD Annual Report

Recommended Action

Motion to approve 2023 LMRWD Annual Report and authorize distribution and posting to LMRWD website



2023

ANNUAL REPORT



LOWER MINNESOTA RIVER
WATERSHED DISTRICT

GREETINGS

The Lower Minnesota River Watershed District (LMRWD) is an area in the south metro, which spans parts of Carver, Dakota, Hennepin, Ramsey, and Scott counties. Amidst growing communities, you can find rare and unique resources including trout streams, calcareous fens (calcium-rich wetlands), and river bluffs surrounding the focal point of the LMRWD: The Minnesota River. The LMRWD works to protect and improve these natural resources, while educating the public about their importance.



2023 HIGHLIGHTS

New Funding to Stabilize Area 3

The LMRWD is leading a large-scale bank stabilization project along the Minnesota River in Eden Prairie, MN. The steep slopes along this area of the river are eroding quickly and action is needed to protect both the river and bluff properties. The LMRWD was awarded \$2.75 million in legislative funding to construct the project, which will be matched by District funds. Hennepin County also awarded a grant to advance this work. Learn more on page 9.

Minnesota River Management

From flood protection to sediment removal, the Minnesota River is at the heart of our work. Did you know? The LMRWD works to remove and manage sediment from the Minnesota River. In 2023, the LMRWD began improvements to its dredge facility and continued communication with partners across Minnesota River basin to lower the sediment reaching the river.

Building Community Around Watershed Management

The LMRWD has been strategically working internally and with partners to spread the mission. The LMRWD continued to build Board of Managers capacity, coordinate with local stakeholders on grants, and evaluate the efficiency of the local governmental unit permit program.

To protect valuable water and natural resources, the LMRWD needs continued support from our watershed community as well as upstream partners who can have a positive impact on the health of the Minnesota River. You can find ways to get involved with the LMRWD as a volunteer or through recreation on local waterways, trails, and parks. Learning more about the resources in your backyard is the first step to protecting and appreciating them.

**IN PARTNERSHIP,
LINDA LOOMIS, ADMINISTRATOR**

A. BOARD OF MANAGERS

The Board of Managers oversees the direction of watershed management, bringing representation from each county within the LMRWD. The Citizen Advisory Committee is a voluntary advisory group appointed by the Board to engage citizens in community actions. The election of officers was held at the October Board of Managers meeting.



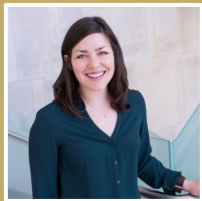
Jesse Hartmann
 President (Jan-Nov)
 Scott County
 Term Expired:
 12/20/2023



Joseph Barisonzi
 President (Nov-Dec)
 Hennepin County
 Term Expires:
 2/28/2027



Theresa Kuplic
 Vice President
 Dakota County
 Term Expires:
 2/28/2024



Lauren Salvato
 Secretary
 Carver County
 Term Expires:
 2/28/2026



Laura Amundson
 Treasurer
 Hennepin County
 Term Expires:
 2/28/2024

Thank you, Manager Hartmann!

At the end of 2023, the LMRWD said goodbye to Manager Jesse Hartmann, who retired from his long-time service to the Board. Throughout his nearly eight years on the Board, Jesse successfully held several roles, including Vice President (2016-2018), President (2018-2023), and Manager (2023). He provided leadership for watershed management at a critical time for the LMRWD. Learn more about his work on [our website](#).



The Board of Manager meets on the third Wednesday of every month at the Carver County Government Center. The public is welcome to attend meetings. Learn more at: <https://lowermnrivewd.org/meetings>

CITIZEN ADVISORY COMMITTEE (CAC)

The Citizen Advisory Committee is a voluntary advisory group appointed by the Board to engage citizens in community actions. In 2023, the CAC grew to six members who engage in learning activities and volunteer at community events such as farmer’s markets to spread the mission of the LMRWD.



Left to Right: Judy Berglund (President), Greg Genz (Secretary), Thomas Hartle, Kevin Kedrowski (Vice President), Lee Peterson, Patty Thomsen

TECHNICAL ADVISORY COMMITTEE (TAC)

| Partner Organization | |
|---|------------------------------|
| SWCDs | |
| Carver Soil and Water Conservation District | View Website |
| Dakota Soil and Water Conservation District | View Website |
| Scott Soil and Water Conservation District | View Website |
| Counties | |
| Carver County | View Website |
| Dakota County | View Website |
| Hennepin County | View Website |
| Scott County | View Website |
| Cities | |
| City of Bloomington | View Website |
| City of Burnsville | View Website |
| City of Carver | View Website |
| City of Chanhassen | View Website |
| City of Chaska | View Website |
| City of Eagan | View Website |
| City of Eden Prairie | View Website |
| City of Lilydale | View Website |
| City of Mendota | View Website |
| City of Mendota Heights | View Website |
| City of Savage | View Website |
| City of Shakopee | View Website |

| Partner Organization | |
|--|------------------------------|
| Park District | |
| Three Rivers Park District | View Website |
| Tribal Government | |
| Shakopee Mdewankanton Sioux Community | View Website |
| State Agencies | |
| Metropolitan Airports Commission (MAC) | View Website |
| Minnesota Board of Water and Soil Resources (BWSR) | View Website |
| Metropolitan Council Environmental Services | View Website |
| Minnesota Department of Natural Resources (MnDNR) | View Website |
| Minnesota Department of Transportation (MnDOT) | View Website |
| Minnesota Pollution Control Agency (MPCA) | View Website |
| Federal Agencies | |
| US Army Corps of Engineers | View Website |
| US Fish & Wildlife Services | View Website |



The Technical Advisory Committee (TAC) supports the LMRWD in specific areas of expertise across jurisdictional boundaries. Engineers and water resource coordinators from each organization are typically appointed to participate in the LMRWD TAC during their tenure.

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LEGISLATIVE

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B. CONTACT PERSON



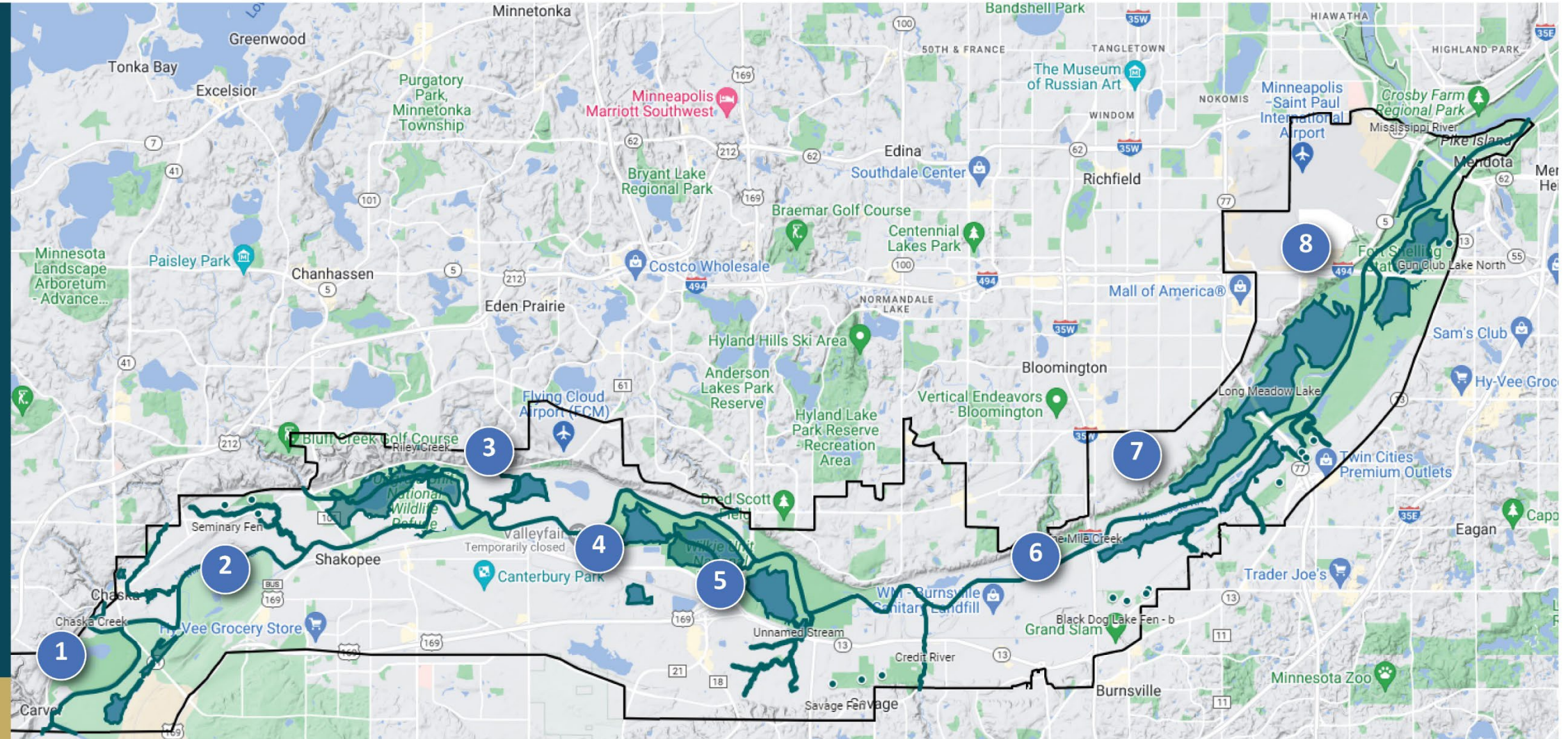
Linda Loomis, Administrator
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Chaska, MN 55318
763.568.9522
naiadconsulting@gmail.com

C. PREVIOUS YEAR WORK PLAN SUMMARY

LMRWD AND PARTNER PROJECTS

In 2023, the LMRWD led a variety of projects throughout the watershed to provide ongoing flood control, stream and riverbank repairs, channel maintenance to ensure navigation on the Minnesota River, and protection for unique resources. The LMRWD also worked to address emerging threats such as chloride pollution.

The LMRWD was awarded \$2.75 million in state funding to construct bank stabilization solutions at Area 3 in Eden Prairie. Because the site is posing an immediate threat to river water quality and protection of bluffs, the LMRWD worked to obtain funding and finalize construction plans.



PROJECTS



1 Spring Creek Site Stabilization



3 Area 3 Minnesota Riverbank and Bluff Stabilization Project



5 Nine-Foot Channel Maintenance



7 Gully Inventory and Condition Assessment - Phase 3



2 Fen Stewardship Plans



4 Vernon Avenue Dredge Material Management Site

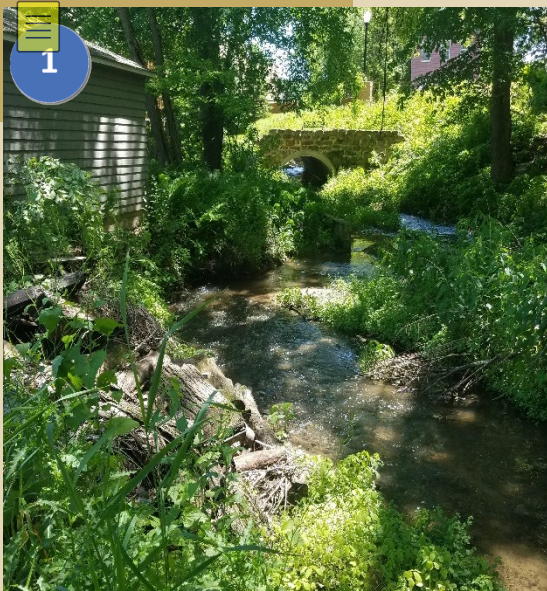


6 Floodplain Modeling Project



8 Hennepin County Chloride Project

Learn more about the projects starting on page 7.



Spring Creek Site Stabilization

The LMRWD began investigating erosion along Spring Creek in 2022 after residents reached out regarding impacts to private property. The project studied three sites along the creek in Carver, MN. In 2023, two of the sites were advanced for bank stabilization practices, which were designed to the 60% level. A wetland delineation has been submitted to USACE. These improvements are scheduled to be constructed in the winter of 2024-25.

The third site was studied further but determined that a project was not needed because of low erosion potential. The LMRWD will continue to work on providing a steep slopes management plan for the homeowner of this site.



Did you know? The Minneapolis-Saint Paul International Airport is within the LMRWD. The watershed district regularly partners with the Metropolitan Airport Commission to manage water at the airport. In 2023, the MAC adjusted its boundaries to better align with the hydrological zones.

Water Resources Restoration Fund



The LMRWD uses a Water Resources Restoration Fund to partner with neighboring cities to and support projects with goals and objectives and objectives that are in alignment.

The fund has been used for the City of Carver's Levee Improvements, Lewis Street Improvements in the City of Shakopee, and Seminary Fen Ravine C-2 in Chaska. These partnerships are critical to maximizing resources to make a larger impact on solutions. Thank you to our project partners in 2023!

2



Fen Management Plans

Calcareous fens are wetlands fed by groundwater that are home to rare calcium-rich plants. They are a unique resource within LMRWD.

To continuously manage and protect this rare resource, the LMRWD has led an ongoing partnership with the Minnesota Department of Natural Resources (MnDNR) and the Metropolitan Council to develop management plans to protect, preserve, and possibly restore calcareous fens within LMRWD.

Fen management plans have been developed for:

- Gun Club Lake Fen
- Nicols Meadow Fen
- Savage Fen
- Seminary Fen

Since the “Fens Sustainability Gaps Analysis for Carver, Dakota, and Scott Counties, Minnesota” report was published in 2020, additional findings on fen hydrogeology were produced and added to the drafted management plans. The management plans prescribe ongoing assessments and strategies to ensure these unique wetlands are protected from potential impacts including land use and climate change. The plans document the unique interaction of groundwater and its recharge rate to feed the fens.

The plans were finalized at the end of 2023 and presented to the LMRWD Board of Managers for adoption. Through careful stewardship, these spaces can be preserved for generations to come.



As a sensitive resource, it is better for the public to interact with the fens in a limited way. Some protected sites can be viewed from trails, but it is best to avoid walking through fens and potentially disrupting flora and fauna. Volunteers are often needed to remove invasive species, like buckthorn, and these events are led by a seasoned guide. Follow the LMRWD on social media to learn more about volunteer opportunities as they are scheduled.

3



Area 3 Minnesota Riverbank and Bluff Stabilization Project

The LMRWD is home to many areas with steep slopes along the Minnesota River. Within Area 3 in the City of Eden Prairie, there is large-scale erosion happening at the intersection of a sharp bend in the Minnesota River and very steep riverbank slopes.

Sections of the slope are estimated to experience a rate of erosion at 3 feet per year, contributing to the excessive erosion and sediment concerns of the Minnesota River. In 2021, after 10 years of collecting monitoring data, the LMRWD and partners, moved forward with a design to stabilize the riverbank and prevent future erosion of the bluff toe and further sediment and nutrient loading to the river. During project development, the team discovered that a local stormwater pond had direct impacts to the stability of Area 3.

The technical team completed a cultural resource and threatened and endangered species reviews and a wetland delineation. A Natural Heritage review by the MnDNR and land acquisition processes are still underway. Final engineering is to be completed by June 2024 with construction scheduled March through December of 2024.

This capital improvement project continues to progress, with 60% plans developed in 2023. Funding was secured for the approximately \$5.5 million dollar project from the Minnesota State Legislature and Hennepin County. Completing this key project will address the immediate need to stabilize steep slopes, providing protection for both the river water quality and property along the bluffs.



In 2023, the LMRWD continued to collaborate with the Lower Minnesota River East One Watershed, One Plan process, finding areas of opportunity for overlapping resource management and protection. Staff attended meetings for plan development and the Board of Managers provided comments focused on the health of the Minnesota River.

4



Vernon Avenue Dredge Material Management Site

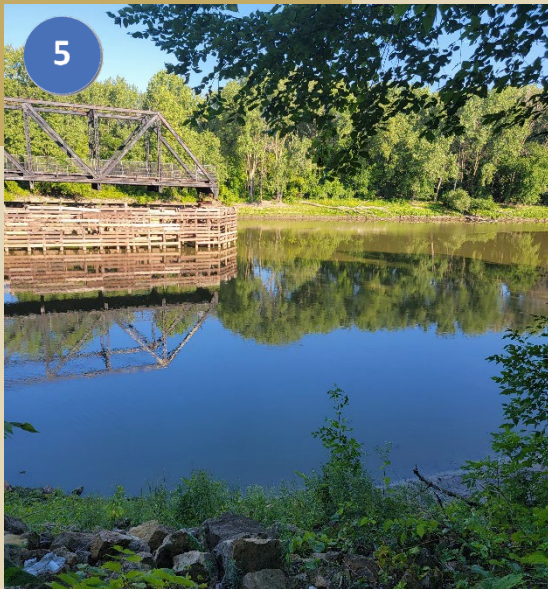
LMRWD is responsible for disposing of material dredged from the Minnesota River by USACE. This dredge disposal site is located at River Mile Post 14.2 (RMP 14.2) in Savage, MN, and accessed by Vernon Avenue. Field assessments showed Vernon Avenue was in disrepair and required maintenance.

The LMRWD led an important project to improve Vernon Avenue, ensuring safe and effective access to the dredge management site. Plans to rehabilitate the road and a nearby culvert were completed and the project is on track to be bid for construction in 2024. The project involved coordination with the Union Pacific Railroad to allow access and work within the railroad right-of-way.



Did you know? The LMRWD is unlike other state water management organizations. It was formed in 1960 to provide local participation to the USACE in the construction and maintenance of a nine-foot navigation channel in the Minnesota River. Because of this partnership, more than two million tons of goods are transported between ports on the Minnesota River to ports along the Mississippi River and the Gulf of Mexico.

5



Nine-Foot Channel Maintenance

The LMRWD continues to work with the USACE on maintenance of the navigation channel by following the USACE Dredged Material Management Plan for reaches of the Minnesota River upstream of the I-35W Bridge.

The LMRWD also works with local industry to temporarily store material dredged from private barge slips. The dredge site is an important component of successfully maintaining the channel of the Minnesota River, making it a working river that is key to local and national industry.



Floodplain Modeling Project

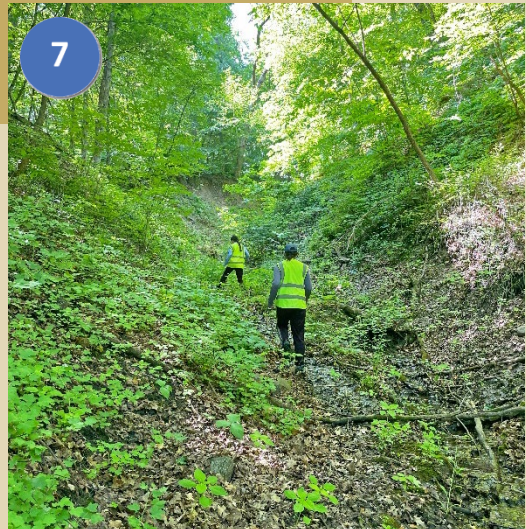
The existing floodplain model was developed by state agencies and the LMRWD in 2002. Since this time, there has been a significant change in the water surface elevation and the LMRWD leadership questioned the model’s effectiveness as a decision-making tool and its use for resource management. In 2022 the LMRWD oversaw a process to compare the efficiency of the model with the updated District rules. It was determined that the floodplain model needed to be updated, a process that is currently underway.



Hennepin County Chloride Project

Chloride pollution is a growing concern for water managers. A small amount of salt used for winter ice management can have a big impact, and it’s now known that just 1 teaspoon of salt can permanently pollute 5 gallons of water. The LMRWD has worked with the Hennepin County Chloride Initiative, the Low Salt, No Salt Minnesota program to build community capacity that maintains winter safety while reducing salt use. Learn more about this ongoing issue and how you can help on the [LMRWD website](#).

**This project received Watershed-based Implementation Funding from BWSR*



Gully Inventory and Condition Assessment–Phase Three

With the Minnesota River as the focal point, LMRWD has spent multiple years examining issues of the river’s complex natural system. A gully is a ravine that is formed by water moving across a bluff area, creating areas along the Minnesota River that are actively eroding and contributing more sediment to the river.

The LMRWD began the gully inventory and condition assessment in 2020, leading two initial phases to track gully conditions along the river. In 2023, Phase 3 of the project work was implemented to assess gullies deemed “high” and “very high” priority in the earlier phases. These sites are understood to pose a continued risk to river water quality and are being further investigated for restoration.

Each gully was quantitatively ranked based on restoration need using factors such as erosion potential, proximity to natural resources, and the potential for site contamination. The next stage of the project will use 2023 fieldwork results and recommendations to inform restoration feasibility studies for four gullies that are contributing the most sediment to the Minnesota River. By compiling site data for more than 300 gullies, the LMRWD can actively manage and improve these sites over time.

ONGOING PROGRAM WORK



Individual Permit Program

The LMRWD operates an individual permit program for new development occurring within the watershed district. The regulation is not designed to add more permit requirements, but to perform specific checks related to LMRWD-specific interests such as steep slopes, high value resource areas (such as project areas near fens), and floodplain alteration. The LMRWD permit team works collaboratively with permittees to ensure a seamless process. To learn more about permitting, see page 31.



Municipal Permit Program

The LMRWD issues municipal permits to partner cities within the watershed district, which allows them to issue permits and manage actions as the primary permitting authority. In 2023, the LMRWD led a municipal permit program audit to ensure that city regulations are working in parallel with the LMRWD rules and standards. The results of the audits identified areas of excellence and opportunities for enhancements, while highlighting the existing working relationships of many partners (see page 32).



Monitoring Program

The LMRWD collaborates with local partners at soil and water conservation districts (SWCD) to obtain current monitoring data. The watershed district is home to many urban lakes, rivers and streams, calcareous fens, and trout waters. Water quality monitoring helps provide data and trends that inform management strategies and protection and improvement of valuable waterbodies. To learn more about monitoring in the LMRWD, see page 19.



Education and Outreach Program

An important component of our work is educating residents and businesses about the challenges faced and the opportunities to enjoy the rare resources that make the LMRWD so unique. The Education and Outreach (E&O) Program uses many outreach components, including cost-share grants, signage, media channels, and special events to engage the public and partners in resource protection. To learn more about E&O activities completed in 2023, see page 24.

D. WORK PLAN AND BUDGET

The LMRWD continues its work on programs and projects defined in the Watershed Management Plan.

| Administrative and Managerial Funds | 2023 Cost |
|--|---|
| Administrative Services This fund is used for staffing, conferences, coordination with stakeholders, nine-foot channel navigation, and advisory committee coordination. | \$250,000 |
| Program Funds | |
| Cost-Share Incentives and Water Quality Restoration Program LMRWD will have funding available for community members to implement water resources projects and guide educational activities. | \$20,000 |
| Dredge Management The LMRWD oversees the operations and management of the dredge management site on the Minnesota River. | \$240,000 |
| Education and Outreach Program The LMRWD will continue to lead activities that engage and inform the community in watershed management. | \$85,000 |
| Fen Stewardship Program The LMRWD is developing specific management strategies for continued protection and preservation of these valued resources. | \$75,000 |
| Gully Inventory and Assessment Program The LMRWD leads ongoing inventory and assessment of more than 300 gullies throughout the watershed district. | \$90,500 |
| Monitoring Program The monitoring program will continue to track progress toward water quality goals through a detailed data assessment. | \$75,000 |
| Permit Program The permit program ensures new development complies with the watershed management plan and LMRWD rules. | \$50,000 |
| Water Resources Restoration Fund The LMRWD provides project funds to partners completing work within the LMRWD with a shared benefit toward watershed management goals. | \$100,000 |
| Capital Improvement Project Funds | |
| Minnesota River Floodplain Modeling The LMRWD determined that the hydrologic and hydraulic modeling commonly used to regulate development in the floodplain and evaluate Rule C permits is out of date. The initial capital investment of updating the model will be followed by annual updates. | \$75,000 |
| Spring Creek Site Stabilization Three sites were studied for bank stabilization measures, with two advancing to the design stage. Vegetation management (e.g., removal of invasives, native plantings, etc.), will be explored with the property owners. | \$90,000 |
| Minnesota River Study Area 3 – Bluff Stabilization Project To address riverbank erosion, the LMRWD is leading a large-scale design and construction of stabilization practices for Area 3 project in Eden Prairie, MN. The project continued with the design, permitting, and funding and land acquisitions. | \$133,830  |

E. PROGRESS ON GOALS

The LMRWD has defined nine goals within its Watershed Management Plan. Each annual work plan includes programs and projects that are prioritized to advance progress on each of these goals.

PROTECT, IMPROVE, MAINTAIN

District Goals

- 

1
Organizational Management
- 

2
Surface Water Management
- 

3
Groundwater Management
- 

4
Unique Natural Resources Management
- 

5
Wetland Management
- 

6
Floodplain and Flood Management
- 

7
Erosion and Sediment Control
- 

8
Commercial and Recreational Navigation
- 

9
Public Education and Outreach

| Goal | Strategies | Short-Term Metric | Long-Term Metric | 2023 Progress to Goal |
|--|---|--|--|--|
| Goal 1: Organizational Management | <ul style="list-style-type: none"> • Cooperate with local, state, and federal government; other agencies; and non-government organizations on issues affecting the District’s resources. • Provide public information services. • Perform periodic assessments and program reviews. | <ul style="list-style-type: none"> ✓ Completion of scheduled activities ✓ Annual local government units (LGU) audits ✓ Amount of dollars from other agencies and property owners | <ul style="list-style-type: none"> ✓ Formation of a Minnesota River Basin Commission ✓ Legislative funding support | <ul style="list-style-type: none"> ✓ Continued collaboration with partners on water and natural resources projects ✓ Hosted municipal/ LGU coordination meetings ✓ Managed Legislative funds for dredge material management |
| Goal 2: Surface Water Management | <ul style="list-style-type: none"> • Provide strategic resource evaluation and management. • Develop a High Value Resources Area overlay district. • Create watershed management standards. • Promote disconnected stormwater management and low-impact development. • Develop a cost-share incentive program. • Lead water quality restoration programs. • Modify and continue the monitoring program. • Complete detailed data assessments. • Coordinate with other agencies and water quality programs. • Develop steep slopes standard. • Develop a vegetation management standard/plan. | <ul style="list-style-type: none"> ✓ Number and types of projects completed as part of the cost-share incentive program and water quality restoration programs ✓ Number of targeted studies and projects completed | <ul style="list-style-type: none"> ✓ Positive trends in water quality parameters identified for monitoring efforts | <ul style="list-style-type: none"> ✓ Continued surface water management programs ✓ Continued monitoring program ✓ Continued water quality cost-share incentive program |

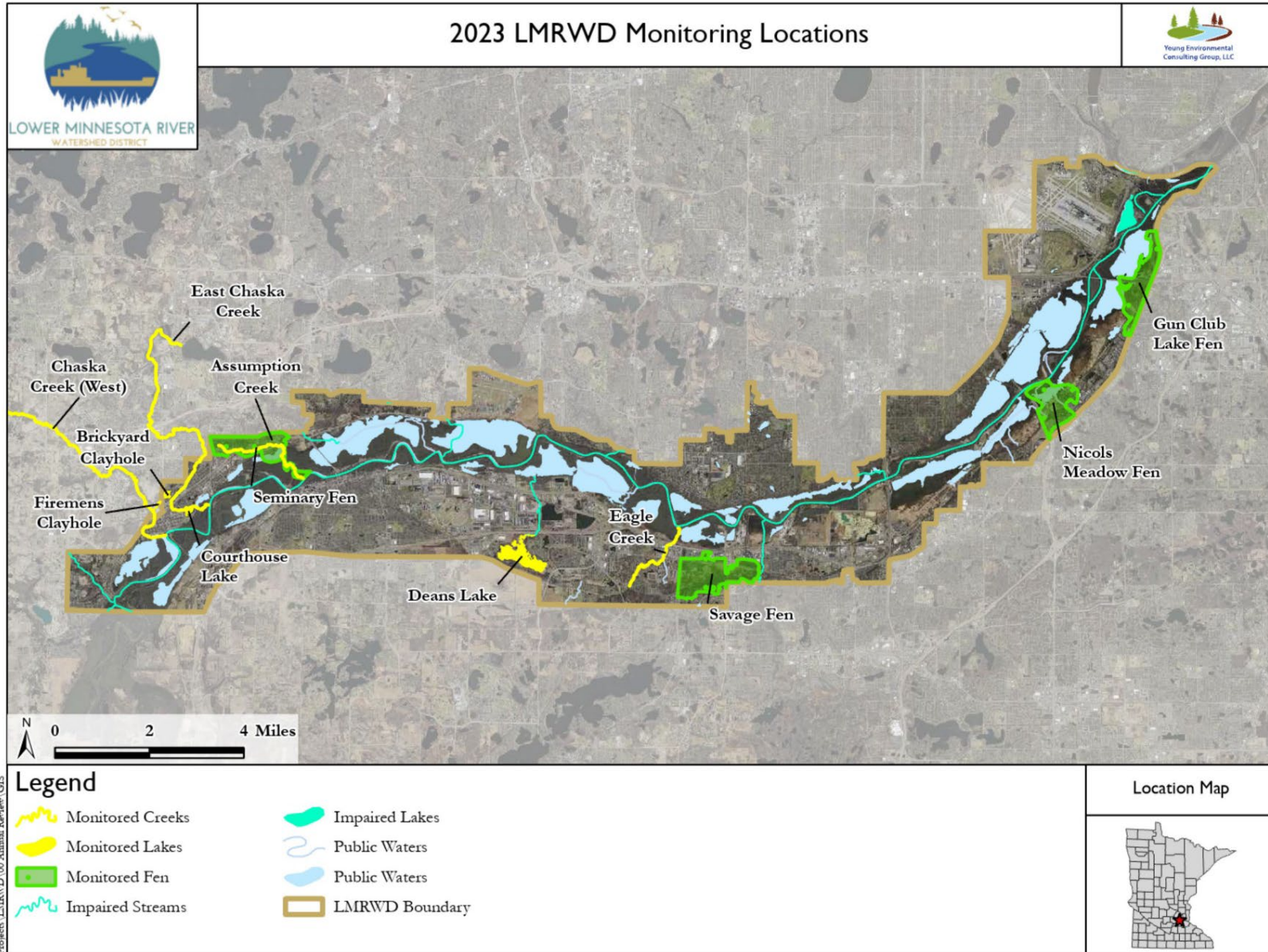
| Goal | Strategies | Short-Term Metric | Long-Term Metric | 2023 Progress to Goal |
|--|--|--|--|--|
| Goal 3: Groundwater Management | <ul style="list-style-type: none"> • Provide strategic resource evaluation and management. • Modify and continue the monitoring program. • Support wellhead protection efforts. • Develop infiltration standard. • Promote conservation and wise use of groundwater. • Monitor groundwater. • Perform regional modeling. | <ul style="list-style-type: none"> ✓ Number of targeted studies and projects completed | <ul style="list-style-type: none"> ✓ Positive trends in water quality parameters identified for monitoring efforts | <ul style="list-style-type: none"> ✓ Continued monitoring lakes, streams, and fens |
| Goal 4: Unique Natural Resources Management | <ul style="list-style-type: none"> • Provide strategic resource evaluation and management. • Modify and continue the monitoring program. • Acquire and manage data. • Provide technical assistance. • Provide educational opportunities. • Develop a mechanism for identifying and acquiring high value conservation easements. • Encourage wildlife connectivity projects that achieve multiple goals, such as water quality improvements and fen and steep slopes protection. • Develop a vegetation management standard/plan. | <ul style="list-style-type: none"> ✓ Number of targeted studies and projects completed ✓ Development and completion of the Fen Stewardship Plan ✓ Development of groundwater model for fen management | <ul style="list-style-type: none"> ✓ Number and acreage of unique natural resources protected, restored, or enhanced ✓ Acquisition of high valued easements ✓ Sustained protection of the fens and trout waters | <ul style="list-style-type: none"> ✓ Drafted and adopted Fen Management Plans for five sites ✓ Further studied gullies throughout the watershed district ✓ Created website content to showcase recreational opportunities at natural resource sites |
| Goal 5: Wetland Management | <ul style="list-style-type: none"> • Provide strategic resource evaluation/management. • Develop a mechanism for identifying and acquiring high value conservation easements. | <ul style="list-style-type: none"> ✓ Completion of scheduled activities | <ul style="list-style-type: none"> ✓ Number and acreage of wetlands protected, restored, or enhanced | <ul style="list-style-type: none"> ✓ Continued support to LGU partners regarding WCA ✓ Drafted and adopted Fen Management Plans for five sites |

| Goal | Strategies | Short-Term Metric | Long-Term Metric | 2023 Progress to Goal |
|--|--|--|---|---|
| | <ul style="list-style-type: none"> • Delegate Wetland Conservation Act (WCA) to LGUs. • Require LGUs to conduct wetland inventories and complete wetland management plans. • Review WCA notices as received. • Develop a wetland standard. • Develop a vegetation management standard/plan. | | | |
| Goal 6: Floodplain and Flood Management | <ul style="list-style-type: none"> • Develop floodplain and drainage alteration standard. • Develop infiltration and peak flow standards. • Manage localized flooding. • Adopt infiltration and peak flow standards. | <ul style="list-style-type: none"> ✓ Completion of scheduled activities | <ul style="list-style-type: none"> ✓ Number of structures damaged and value of flood damages ✓ Preservation of floodplain resources | <ul style="list-style-type: none"> ✓ Completed the <i>Lower Minnesota River Floodplain Model Feasibility Study</i> ✓ Began developing updated Minnesota River Floodplain Model |
| Goal 7: Erosion and Sediment Control | <ul style="list-style-type: none"> • Develop watershed management standards. • Develop steep slopes standard. • Support the National Pollutant Discharge Elimination System (NPDES) general permit. • Develop erosion and sediment control standard. • Develop a vegetation management standard/plan. • Provide streambank and mainstem erosion assessment. • Continue gully erosion repair. • Promote and encourage shoreland protection. | <ul style="list-style-type: none"> ✓ Completion of scheduled activities ✓ Reduction in streambank and ravine bank and slope failures | <ul style="list-style-type: none"> ✓ Positive trends in water quality ✓ Protection and preservation of Minnesota River Bluff | <ul style="list-style-type: none"> ✓ Continued to manage steep slopes through the permit program and projects such as Area 3 Bank Stabilization ✓ Finalized third gully inventory and condition assessment ✓ Led work at Spring Creek sites in Carver, MN, to address bank erosion |

| Goal | Strategies | Short-Term Metric | Long-Term Metric | 2023 Progress to Goal |
|---|--|---|--|---|
| | <ul style="list-style-type: none"> • Develop a shoreline and streambank standard. | | | |
| Goal 8: Commercial and Recreational Navigation | <ul style="list-style-type: none"> • Promote safety education. • Manage existing Cargill East River (MN – 14.2 RMP) dredge material site. • Create a beneficial use plan for dredge materials. • Develop a funding structure to ensure proper maintenance and improvement along the river. | <ul style="list-style-type: none"> ✓ Completion of scheduled activities ✓ Number of targeted studies and projects completed | <ul style="list-style-type: none"> ✓ Secure regular congressional and state Legislative funding for the Nine-Foot channel | <ul style="list-style-type: none"> ✓ Continued to manage dredged material at the Cargill East River site to maintain a Nine-Foot navigation channel ✓ Explored options for sale of dredged materials. |
| Goal 9: Public Education and Outreach | <ul style="list-style-type: none"> • Provide public information services. • Provide educational opportunities. • Promote safety education. • Maintain Citizen Advisory Committee (CAC). • Develop an outreach program. • Engage volunteers. • Provide opportunity for public input. • Produce scientific studies and work products. • Promote a variety of education programs. • Use multiple outlets to distribute information. | <ul style="list-style-type: none"> ✓ Number and types of sponsored events ✓ Number of participants at events ✓ Number of articles, press releases, and pamphlets developed and printed ✓ Number of volunteers | <ul style="list-style-type: none"> ✓ Same as short-term metrics | <ul style="list-style-type: none"> ✓ Attended local engagement events to promote awareness of the LMRWD ✓ Grew involvement in the educator mini-grant program, connecting teachers with resources ✓ Continued to maintain CAC ✓ Maintained website and social media presence ✓ Led public relations and media outreach to expand knowledge of the LMRWD work ✓ Developed custom signage to share resource information with the public |

F. SUMMARY OF SIGNIFICANT TRENDS IN MONITORING DATA

The LMRWD continues to monitor data at locations across the watershed. Data is collected on creeks, lakes, and fens.



Project: LMRWD_00_Annual Report GIS

IMPAIRED WATERS

Several streams, parts of streams, and lakes are listed in the Minnesota Pollution Control Agency's 2023 list of impaired waters. The impairments are being addressed with total maximum daily load (TMDL) plans that are designed to reduce or eliminate the impairments.

| Waterbody | Affected Use | Pollutant or Stressor |
|----------------------------------|--|--|
| Rivers | | |
| Minnesota River | <ul style="list-style-type: none"> • Aquatic Recreation, Aquatic Life, Fish Consumption | <ul style="list-style-type: none"> • Sediment, Nutrients, Fecal Coliform, Dissolved Oxygen, Mercury in Fish Tissue, Mercury in the Water Column, PCB in Fish Tissue |
| Lakes | | |
| Snelling Lake | <ul style="list-style-type: none"> • Fish Consumption | <ul style="list-style-type: none"> • Mercury in Fish Tissue |
| Creeks | | |
| Assumption Creek | <ul style="list-style-type: none"> • Aquatic Life | <ul style="list-style-type: none"> • Fish Bioassessments |
| Bluff Creek | <ul style="list-style-type: none"> • Aquatic Life | <ul style="list-style-type: none"> • Sediment, Fish Bioassessments |
| Carver Creek | <ul style="list-style-type: none"> • Aquatic Life, Aquatic Recreation | <ul style="list-style-type: none"> • Sediment, Nutrients, Fecal Coliform, Fish Bioassessments, Benthic Macroinvertebrates Bioassessments |
| Chaska Creek- East | <ul style="list-style-type: none"> • Aquatic Life, Aquatic Recreation | <ul style="list-style-type: none"> • Sediment, Fecal Coliform, Chloride, Fish Bioassessments |
| Chaska Creek- West | <ul style="list-style-type: none"> • Aquatic Recreation | <ul style="list-style-type: none"> • Fecal Coliform |
| Credit River | <ul style="list-style-type: none"> • Aquatic Life, Aquatic Recreation | <ul style="list-style-type: none"> • Chloride, E. coli, Fish Bioassessments |
| Eagle Creek | <ul style="list-style-type: none"> • Aquatic Recreation | <ul style="list-style-type: none"> • E. coli |
| Nine Mile Creek | <ul style="list-style-type: none"> • Aquatic Life, Aquatic Recreation | <ul style="list-style-type: none"> • Chloride, E. coli, Fish Bioassessments, Benthic Macroinvertebrates Bioassessments |
| Purgatory Creek | <ul style="list-style-type: none"> • Aquatic Life, Aquatic Recreation | <ul style="list-style-type: none"> • E. coli, Benthic Macroinvertebrates Bioassessments |
| Prior Lake Outlet Channel | <ul style="list-style-type: none"> • Aquatic Life | <ul style="list-style-type: none"> • Fish Bioassessments, Benthic Macroinvertebrates Bioassessments |
| Riley Creek | <ul style="list-style-type: none"> • Aquatic Life, Aquatic Recreation | <ul style="list-style-type: none"> • Sediment, E. coli, Fish Bioassessments |
| Sand Creek | <ul style="list-style-type: none"> • Aquatic Life, Aquatic Recreation | <ul style="list-style-type: none"> • Chloride, Sediment, Nutrients, E. coli, Fish Bioassessments, Benthic Macroinvertebrates Bioassessments |
| Spring Creek | <ul style="list-style-type: none"> • Aquatic Recreation | <ul style="list-style-type: none"> • Fecal Coliform |


TRENDS AND IMPROVEMENTS





Trend analysis is a technique applied to data collected over a defined time period to assess whether the quality or health of the resource assessed is getting better or worse. Trend analysis can also be applied to water level for assessing long-term groundwater supply for fens. Different organizations collect and report samples or data on behalf of the LMRWD. Each may use different methods to assess trends, but they are generally reported as being statistically significant or not based on a p-value. The p-value refers to the likelihood that the data


varies from our hypothesis, which is typically defined as “no change” in water quality or water level. If the p-value is less than 0.05, it is a scientifically accepted way of describing that the data pattern would be highly unlikely if there was no trend, which indicates significance. The trends discussed below were qualified using p-values to indicate their statistical significance.

Water Resource Trends

 **Brickyard Lake** is showing signs of improving water quality with decreased phosphorus concentrations; however, these trends were not statistically significant. While Courthouse Lake is seeing a long-term statistically significant trend of increasing phosphorus concentrations, all Clayhole Lakes (Courthouse, Brickyard, and Fireman’s) are showing a statistically significant trend of improving water transparency.

 **East Chaska Creek** showed a statistically significant trend of decreasing phosphorus concentrations in the last 10 years while West Chaska Creek shows a significant trend of decreasing nitrate concentrations for the same period. There are signs of improvement for East and West Chaska Creek with decreasing sediment transport but they are not statistically significant.

 In 2023, **Eagle Creek** sediment concentrations were above the state standard. The slightly higher than average concentrations of sediment in the creek could be attributed to several factors, including localized erosion from increased streamflow. However, long-term trend analysis from 1989 showed that Eagle Creek had a significant trend of decreasing total phosphorus concentrations with [no clear trend in sediment concentrations](#). The creek is also facing a challenge of increasing chloride concentrations. **Bluff Creek, Riley Creek, Purgatory Creek, East Chaska Creek, and West Chaska Creek** are also showing increasing chloride concentrations but have not reached an impairment status. Increasing chloride concentrations are a recognized concern across the entire [Twin Cities Metro Region](#).

 Assessing trends in **groundwater levels** associated with **fens** produced mixed results as the LMRWD works to restore and protect these wetland resources. Analysis indicates a statistically significant short-term (2016-2023) increase in groundwater levels for the Gun Club Lake Fen complex. A statistically significant decreasing trend in groundwater levels for the same period was observed in nearby Nichols Meadow Fen. Savage Fen had mixed trends in groundwater levels with the two deep wells having increased their observed levels over the last ten years, but all ten shallow wells show decreased water levels over a ten-year average. There were no noticeable trends in groundwater levels for Seminary Fen from 2016-2023, the period of record available. The groundwater level data from Savage and Seminary Fens were not tested for statistical significance.

Trend analysis improves as more water quality or water level data is collected, and the period of record to analyze for change becomes larger. LMRWD will continue to collaborate with its partners to collect valuable water monitoring data for the water resources within its boundaries. Accurate trends are essential to long-term planning of the management of water resources.

G. ANNUAL COMMUNICATION

In addition to ongoing communication from the LMRWD to constituents through website updates and public meetings, the annual report serves as a formal communication tool. The annual report provides a snapshot of ongoing projects, goal progress, and day-to-day activities. Please join us in watershed management by visiting our website.



Please join us in watershed management:
<https://lowermnriverwd.org>



LMRWD AT A GLANCE

PEOPLE

The District is managed by the Board of Managers with input from the Citizen Advisory Committee, Technical Advisory Committee, staff, and consultants. Learn more on pages 1-3.

WATER QUALITY

The LMRWD carefully monitors water quality data to understand trends and mitigate impaired waters. Learn more on page 19.

PROJECTS

The LMRWD completes projects to control erosion, manage stormwater, protect river corridors, and much more. Learn more on page 6.

EDUCATION/ OUTREACH

The LMRWD oversees a robust education and outreach program to engage the public in unique resources and promote a community approach to water management. See page 24.

WORK PLAN

A comprehensive work plan guides the LMRWD's day-to-day work. The work plan is based on the watershed management plan and its goals. See the 2023 work plan on page 13.

REGULATORY

The LMRWD collaborates with neighboring cities on local water plans while overseeing a comprehensive regulatory program. Learn more about these efforts beginning on page 26.

GOALS

The LMRWD goals focus on protecting unique natural resources in an area of the Twin Cities metro that continues to develop. Learn more about District goals and progress on page 14.

FINANCIAL

The LMRWD is funded by contributing counties and other governmental resources and grants. To better understand the watershed budget and revenue, view the [Implementation Plan](#).

EDUCATION AND OUTREACH

The LMRWD leads a dynamic education and outreach program to work with the community. Here are a few of the tools used to reach out to stakeholders throughout the year.



Citizen Advisory Committee

The LMRWD maintains an advisory committee of citizen volunteers who participate to raise awareness about the LMRWD while educating themselves and others about a wide range of water and natural resources topics and best practices. The CAC also creates outreach materials and in 2023, the group created a seasonal newsletter, a Minnesota River video, and a collection of chloride information.

In 2023, the CAC met monthly with topics and tours that included fishing the Minnesota River and wastewater treatment. The group has also been learning about salt reduction and best practices for pollinator gardens (shown left). The CAC also volunteers their time at community events where they can speak to the public directly.

Thank you to our wonderful volunteer CAC members!



Are you looking for a meaningful volunteer experience to work collaboratively on resource protection? Apply to participate in the LMRWD Citizen Advisory Committee.



Schools Engagement

The LMRWD has expanded its impact with school-age students by providing a mini-grant program. The program provides up to 10 grants per school year, each up to \$500, to help cover the cost of materials and programming that focus on water resources. If you are an educator interested in the grants, learn more on [the website](#).

In 2023, the LMRWD awarded grants to:

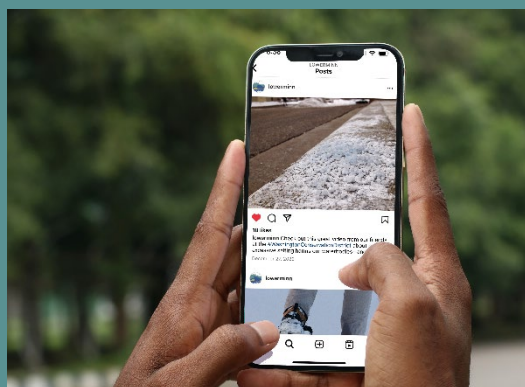
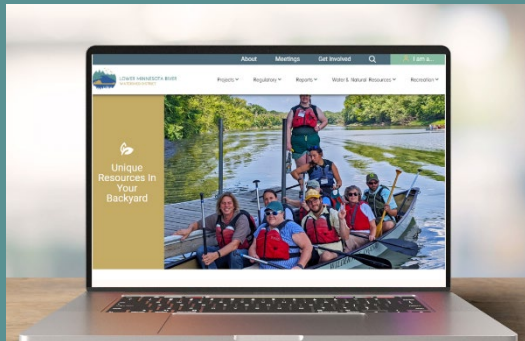
1. Nicollet Middle School Green Team (\$500)
2. Pilot Knob STEM Magnet School (\$300)
3. Chaska High School (\$500)
4. Redtail Ridge Elementary School (\$500)

The LMRWD also worked with Burnsville High School to develop curriculum for water sampling.

Thank you to the invested educators who participated!

Sharing the LMRWD Story

In 2023, the LMRWD used many strategies to engage with the community within the watershed district as well as upstream and neighboring communities.



Website Updates

In 2023, the LMRWD updated its website to better serve the community. New content was developed to highlight volunteer opportunities, recreational activities throughout the LMRWD, and focus on all of the resources unique to the area. The website also improved the user experience for partners applying for permits and includes more interactive visuals. Check out the [updated website](#) and see what's new!

Social Media

The LMRWD continued to maintain its presence on social media with frequent postings to Facebook, Instagram, and X. Popular topics include best practice, LMRWD news and events, and recreational guides.

Follow along to join the conversation by searching **“LowerMinn”** on your favorite channel.

Media Releases

The LMRWD worked with local publications to share newsworthy stories and raise awareness about the District's work toward many large-scale goals. Press coverage was obtained to recognize the service of Manager Hartmann and the Board President Joseph Barisonzi authored a Star Tribune opinion piece outlining the need for a basinwide approach to improve the Minnesota River's health.

Interpretive and Resource Signage

The LMRWD connects directly with audiences at resources of value through interpretive and resource signage. Not only do signs create awareness about high-value resources, they engage the public in protection through beautiful custom artwork and helpful, easy-to-understand reference facts. In 2023, signs were created for Courthouse and Quarry Lakes, Riley Creek, with several others in development.

Outreach Events

The LMRWD expanded its participation in outreach events, exploring new ways to spread the mission and work of the organization. The Board led a special-purpose workshop in July 2023 to plan effective messaging. The CAC worked to plan and staff tables at a number of conservation-themed events.



Steps to Use Less Salt



1 Shovel

Local Tabling Events

The CAC staffed events across the watershed to spark conversations on water quality and natural resources. In 2023, the LMRWD had a presence at the following events:

1. Everything Spring Expo: Eden Prairie
2. Arbor Day Walk & Green Fair: Eden Prairie
3. Burnsville Native Plant Market
4. Eagan Market Fest
5. Chaska Farmers Market
6. Bloomington Farmers Market
7. Buzz Fest: Bloomington

These events provide the opportunity to interact with residents one on one, sharing helpful resources such as handouts on cost-share grants and clean water practices. The LMRWD is excited to continue connecting to the public with future events following the success of 2023.

Upstream County Fair Events

The supported the Friends of the Minnesota River Valley and the Izaak Walton League in attending ten county fairs in upstream communities of the Minnesota River. The goal of these events was to build relationships and a shared connection and ownership in protecting and enjoying the Minnesota River. The Izaak Walton League Green Crew youth employees staffed these important events.

2023 Salt Symposium Sponsorship

As part of ongoing efforts to raise awareness about chloride pollution, the LMRWD sponsored the 2023 Salt Symposium, held virtually on August 1-2. As a Bronze Level Sponsor, the LMRWD helped ensure the event, filled with local and international experts, was successfully executed. To learn more about the Salt Symposium and future events, [click here](#).

Outreach Events (Continued)



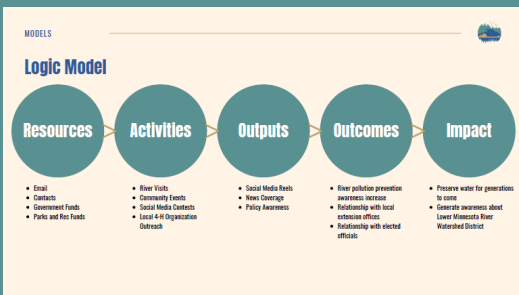
Metro Children's Water Festival Sponsorship

The LMRWD continued its support for and participation in the Metro Children's Water Festival, a unique and vibrant event with tailored educational content for 4th grade students in the Twin Cities. The LMRWD provided more than \$1,500 in funding for six buses and sponsored an educational booth where Manager Lauren Salvato prepared a presentation to help educate students. Learn more about this great event on [their website](#). Photo Credit: Metro Children's Water Festival.



River Watch Program Sponsorship

The LMRWD partnered with Friends of the Minnesota Valley by providing \$20,000 in funding for the River Watch Program. The program engages students who live in the Minnesota River Basin to maintain data collection equipment and collect water quality samples from areas throughout the river basin. The program achieves a win-win by obtaining more up-to-date monitoring data and inspiring the next generation of science leaders. Learn more about River Watch [online](#). Photo Credit: Friends of the Minnesota Valley.



Texas A&M Public Relations Project

A group of students at Texas A&M University studied the Lower Minnesota River Watershed as part of a project to create a public relations campaign. The group used data from the LMRWD to create a public engagement plan to increase awareness about the Minnesota River. The final recommendations included target audiences, barriers to success, campaign strategies, and draft content.



Scott County Water Education Partnership

The LMRWD supports Scott County as they bring conservation to the classroom within the watershed district. The Scott Soil and Water Conservation District offers educational programming and brings free classroom visits to all schools within the County. Learn more about their program at: scottswcd.org/education



Cost-Share Incentive and Water Quality Restoration Grant Program

The LMRWD provides a program for residents, businesses, neighborhoods, and communities to apply for matching funds for projects intended to improve water quality and provide public education. This program requires a 50% match. Projects completed or awarded in 2023 included:

- Appletree Condominiums, Bloomington, MN: Completed slope stabilization (\$7,500)
- Neighbors Nurturing Nature Project, Bloomington, MN: Completing habitat improvement (\$7,445)
- DaGiau Family, Bloomington, MN: Completing a rain garden (\$2,500)
- Cartwright Family, Bloomington, MN: Completed a rain garden (\$2,500)
- Scarborough Townhomes, Bloomington, MN: Led a pond surround restoration (\$7,500)
- Boykin Family, Carver, MN: Completing a rain garden (\$1,390)

To learn more about cost-share opportunities and apply, visit the [LMRWD website](#).



H. SOLICITATION FOR CONSULTANT PROPOSALS

In accordance with MN Statute 103B.227 Subd. 5. “a watershed management organization shall at least every two years solicit interest proposals for legal, professional, or technical consultant services before retaining the services of an attorney or consultant or extending an annual services agreement”.

In 2023, the LMRWD was in the middle of the two-year solicitation period and did not advertise a request for proposals.

Consultant Pool

The LMRWD continues to work with an engineering pool who provide professional services. These companies include Barr Engineering Company, Bolton & Menk, Inc, EOR Inc., ISG Inc., Windsor Engineers, WSB, Ultieg Engineers, HR Green, and IMO Consulting Group.



Consultant Opportunities are advertised at:
<https://lowermriverwd.org/news/requests-proposals>



I. LOCAL WATER PLAN ADOPTION

2010

MENDOTA

In April 2010, water management is contained in Mendota's Comprehensive Plan.

2011

SAVAGE

In June 2011, the City began updating its Local Surface Water Management Plan.

2013

LILYDALE

Lilydale's Dec. 2013 plan adopted a resolution in 2018, conditionally approving the Local Surface Water Management Plan.

2015

MSP & FLYING CLOUD AIRPORTS

In May 2015, both airports revised their stormwater pollution prevention plans (SWPPPs).

2017

BURNSVILLE

In November 2017, Burnsville adopted its Local Surface Water Management Plan.

2018

CHANHASSEN

In January 2018, Chanhassen adopted its Local Surface Water Management Plan.

BLOOMINGTON

- ▶ In June 2018, Bloomington adopted its Local Surface Water Management Plan.

MENDOTA HEIGHTS

- ▶ In July 2018, Mendota Heights adopted its Local Surface Water Management Plan.

CHASKA

- ▶ In November 2018, Chaska adopted its Local Surface Water Management Plan.

CARVER

- ▶ In December 2018, Carver adopted its Local Surface Water Management Plan.

2019

EAGAN

In January 2019, Eagan adopted its Local Surface Water Management Plan.

SHAKOPEE

- ▶ In November 2019, Shakopee adopted its Local Surface Water Management Plan.

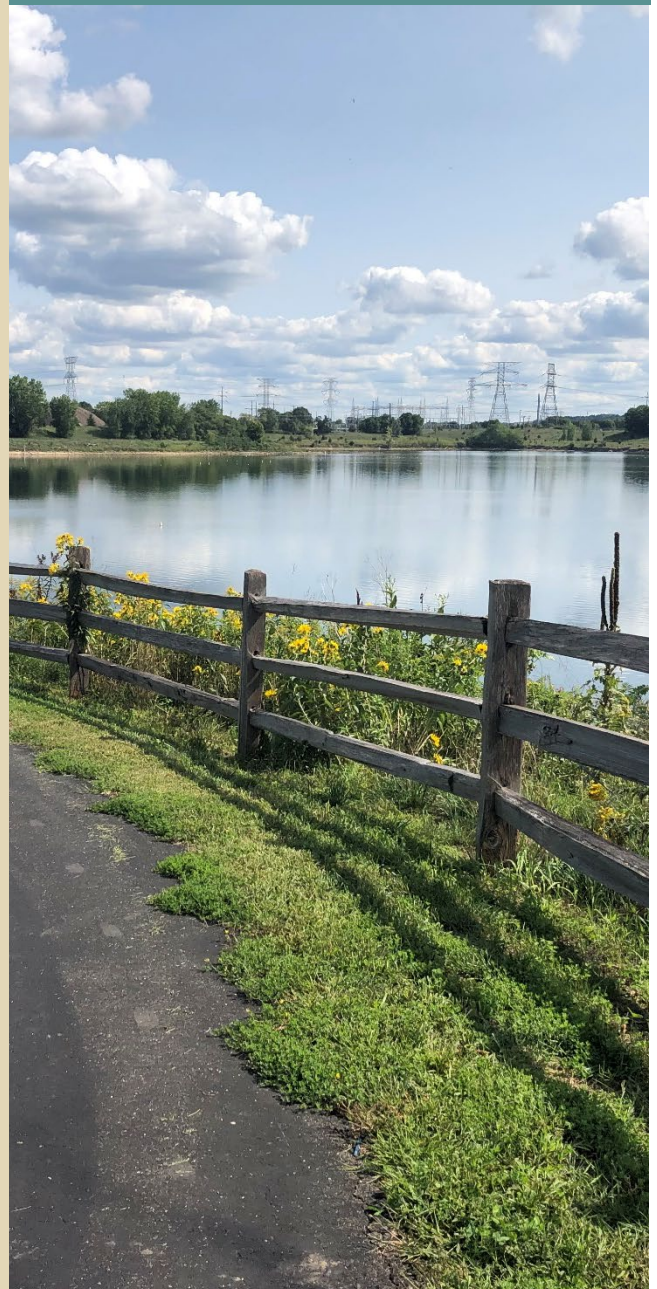
2020

EDEN PRAIRIE

In December 2020, Eden Prairie adopted its Local Surface Water Management Plan.

In 2023, the LMRWD adopted revisions to the surface water management plans for the cities of Lilydale and Chaska.

The timeline to the left shows local water plan adoption over the last decade of water management and collaboration.



J. STATUS OF LOCALLY ADOPTED ORDINANCES

The LMRWD first adopted rules in 2020, which were amended in October 2022. Local governments that wish to obtain a municipal permit must highlight how they intend to implement and enforce rules through official controls (i.e. ordinances). In 2022, municipal permits were approved for six local government units (LGU) within the watershed district with one conditional approval. In 2023, the City of Burnsville moved from conditional approval to full approval, with the stipulation that they do not have permitting authority in the floodplain.

In 2023, the LMRWD adopted the City of Lilydale’s updated Surface Water Management Plan. The City of Lilydale also adopted a revised ordinance for stormwater management and illicit discharges.

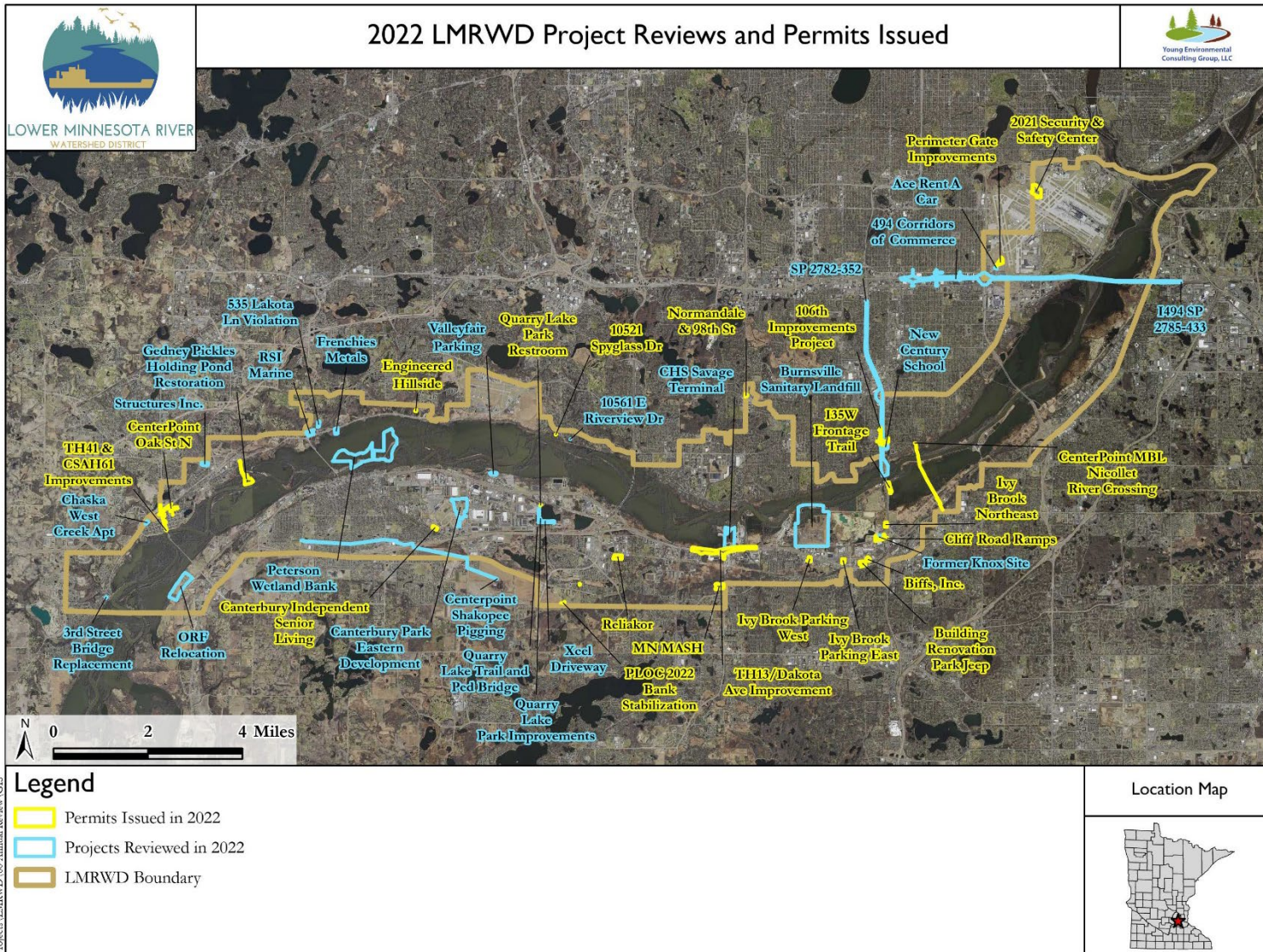
Municipal permit holders are shown below, with ongoing coordination planned for 2023 with communities not listed. We appreciate our collaboration with our local partners to strengthen our watershed’s protection of natural resources.

| Date | City | Ordinance | Status |
|-----------|-------------------------|----------------------|---|
| 2020 | City of Egan | Municipal LGU Permit | Approved |
| 2020 | City of Mendota Heights | Municipal LGU Permit | Approved |
| 2020 | City of Bloomington | Municipal LGU Permit | Approved, does not include permitting authority for Rule C – Floodplain and Drainage Alteration |
| 2021 | City of Carver | Municipal LGU Permit | Approved, does not include permitting authority for Rule C – Floodplain and Drainage Alteration |
| 2021 | City of Shakopee | Municipal LGU Permit | Approved, does not include permitting authority for Rule C – Floodplain and Drainage Alteration |
| 2022-2023 | City of Burnsville | Municipal LGU Permit | Conditionally Approved (2022), Approved, does not include permitting authority for Rule C – Floodplain and Drainage Alteration (2023) |
| 2023 | City of Lilydale | Municipal LGU Permit | Approved |



K. SUMMARY OF PERMITS/VARIANCES

The LMRWD continues to oversee a permitting program to ensure that new development in the community complies with watershed district rules. In 2022, the District reviewed and approved 22 permits and led an inspection program to oversee projects as needed. No variances were issued.



Project: LMRWD_00 Annual Review - GIS



LOWER MINNESOTA RIVER
WATERSHED DISTRICT



lowermnriverwd.org



LOWER MINNESOTA RIVER WATERSHED DISTRICT

Executive Summary for Action

Lower Minnesota River Watershed District Board of Managers Meeting

Wednesday, April 17, 2024

Agenda Item

Item 7. B. – LMRWD Water Resource Restoration Fund Application

Prepared By

Linda Loomis, Administrator

Summary

Request from Eden Prairie

The LMRWD established the Water Restoration Resource Fund to fund projects that may not have been identified at the time the LMRWD developed its Plan implementation program. Many of these projects are opportunity projects; ones that may have been considered, but for some reason not ready to proceed. In 2023, the LMRWD made all its partners aware of this program and solicited applications from partners.

A deadline of February 29, 2024, was set for applications to be submitted. One application was received from the City of Eden Prairie. Young Environmental Consulting Group reviewed and evaluated the application according to the matrix that had been developed to evaluate previous requests for funding of partner's projects. The review and evaluation are attached in Technical Memorandum – Richard t. Anderson (RTA) West Bluff Overlook – LMRWD Water Resources Restoration Fund Review, dated April 10, 2024.

Attachments

Technical Memorandum – Richard t. Anderson (RTA) West Bluff Overlook – LMRWD Water Resources Restoration Fund Review, dated April 10, 2024

Recommended Action

Motion to contribute 15% of the project cost which equates to \$45,154 of the estimated project cost. The final contributed dollar amount will be based on the awarded construction contract. Contribution is contingent upon receipt of documentation that the project meets the permitting requirements of the LMRWD and other regulatory agencies, final signed construction plans and specifications, awarded contract and bid information, executed grant and maintenance agreement, and agreements that payments from the LMRWD are reimbursement based and require receipts of paid invoices as well as a summary of the work completed as part of the receipt/invoice

Technical Memorandum



To: Linda Loomis, Administrator
Lower Minnesota River Watershed District (LMRWD)

From: Erica Bock, Water Resources Scientist
Hannah LeClaire, PE, Water Resources Engineer

CC: Karli Wittner
Jason Goblirsch
Parks and Recreation Department, City of Eden Prairie

Date: April 10, 2024

Re: Richard T. Anderson (RTA) West Bluff Overlook – LMRWD Water Resources
Restoration Fund Review

At the September 21, 2023, LMRWD Board Meeting, the LMRWD approved the Water Resources Restoration Fund (WRRF) work plan. The work plan consisted of developing an official application and process for the WRRF to distribute to the local governmental units (LGUs). The goal of the WRRF is to help fund projects sponsored by LGUs that reduce urban nonpoint source pollution, improve and protect groundwater quality, and promote surveys and studies of wetland (fen) health management. The WRRF application materials were distributed to the LGUs after the municipal coordination meetings on December 8, 2024. The deadline for the WRRF application was February 29, 2024.

The LMRWD received one (1) application on February 29, 2024, from the City of Eden Prairie (City) for the Richard T. Anderson (RTA) West Bluff Overlook Stabilization Improvements Project (Attachment 1). Young Environmental reviewed the project in line with the previously developed evaluation form (Attachment 2). This memo summarizes Young Environmental's funding evaluation of the project.

RTA Application and Evaluation

The City is requesting funding from the LMRWD to stabilize one of the most popular and eroded trails within the RTA recreation area. RTA is a 125-acre bluff land overlooking the Minnesota River Valley. RTA is within the Steep Slopes Overlay District (SSOD) and is public land with a parking lot located at 18700 Flying Cloud Drive, Eden Prairie, MN, 55347 (Figure 1). RTA was included in the 2020 and 2023 LMRWD gully inventories and was identified in the 2020 study as High Priority Region 13. The 2023 Gully Inventory and Condition Assessment reviewed the RTA Site with 7 gullies as high priority gullies.

The City would like to begin restoring areas of erosion within the RTA recreation area. There are three goals of the West Bluff Overlook Stabilization project, including:

1. Preventing further erosion.
2. Providing a user-friendly trail for access to the prairie bluff overlook.
3. Preventing further degradation of the high-quality plant communities in RTA.

The estimated cost for the stabilization project is \$301,025 (Attachment 1).

Restoration work will be completed on 1,360 linear feet of trail by installing 160 stone steps adjacent to a 520 linear foot riprap channel with ditch checks, three boulder retaining walls, and a pretreatment settling basin (Figure 2). The project plans to minimize ongoing maintenance while preventing erosion and providing a safer trail for users that encourages visitors to remain on designated trails. Due to the current erosion, users have encroached into the high-quality woodland in search of a navigable route. These additional trails have damaged native plants and exacerbated the erosion problem. The surface water from this ravine trail empties directly into an unnamed stream, causing sedimentation.

The project will be constructed during the growing season of 2024 with bid opening anticipated in April and construction to begin in June. The project is estimated to be completed by winter 2024. The City is requesting \$50,000 from the WRRF, which is 17% of the estimated total cost for the stabilization project. Table 1 shows the scoring of the project based on alignment with the goals, policies, and strategies of the LMRWD Watershed Management Plan (WMP).

Table 1: RTA Project Funding Request Scoring

| Scoring Metric | Scoring Comments | Additional Point Opportunities | Project Score | Max Points |
|--------------------------------|---|--|---------------|------------|
| 1. Project Type | The RTA Project addresses goals within the City's 2040 Comprehensive Plan and Surface Water Management Plan. Additionally, this is a gully (ravine) restoration project located within the SSOD, which is a high priority management area of the LMRWD. The RTA Project is listed as a Capital Improvement Project (CIP) in the City's 2023-2032 CIP and is a direct tributary to Rice Lake | Maximum points awarded. | 24 | 24 |
| 2. Plan Goals Addressed | The RTA Project addresses multiple goals in the LMRWD WMP, including: <ul style="list-style-type: none"> • Goal 2: Surface Water Management • Goal 4: Unique Resource Management • Goal 7: Erosion and Sediment Control | The RVA Project addresses five out of the nine LMRWD Watershed Management Plan Goals, and a point was awarded for each area. | 5 | 9 |

| Scoring Metric | Scoring Comments | Additional Point Opportunities | Project Score | Max Points |
|-------------------------------------|--|---|---------------|------------|
| | <ul style="list-style-type: none"> • Goal 8: Commercial and Recreational Navigation • Goal 9: Public Education and Outreach. | | | |
| 3. Water Capture | The project includes a riprap channel with ditch checks to slow runoff, along with 145 square feet of pretreatment settling basin. | The Water Capture Score gives credit to projects that meet or exceed the standards for stormwater runoff volume management. | 3 | 7 |
| 4. Pollutant Management | The project provides pollutant management by stabilizing the ravine, which will greatly reduce total suspended solids (TSS) and total phosphorus (TP) downstream. The project engineer estimates that approximately 40-80 tons of sediment and 8.1-16 pounds of phosphorus will be reduced as part of the project. | Maximum points awarded. | 7 | 7 |
| 5. Habitat Restoration | This project provides a secondary benefit to habitat by seeding the disturbed areas with native seed mixtures that provide food and habitat for wildlife. Additionally, the project will prevent further degradation of habitat by keeping hikers on the trails. | Projects that include habitat creation or enhancement as the primary purpose of the project receive a score of seven. | 3 | 7 |
| 6. Bank Stabilization | The project does not propose streambank stabilization as part of the project. | Points are awarded for streambank stabilization projects. | 0 | 7 |
| 7. Watershed Benefits | The ravine discharges to an Unnamed Stream and then to Bluff Creek and Rice Lake. | The watershed benefits score gives more credit to projects that are near the headwaters and provide site benefits beyond the immediate site location. | 3 | 7 |
| 8. Partnership Opportunities | The City has provided funding details and intends to contribute the remaining funds to implement the project. As part of LMRWD WMP Strategy 7.3.1, the LMRWD aims to | Maximum points awarded. | 7 | 7 |

| Scoring Metric | Scoring Comments | Additional Point Opportunities | Project Score | Max Points |
|----------------------------|---|--------------------------------|---------------|------------|
| | partner with LGUs to fund projects that address gully erosion. | | | |
| 9. Public Education | The project is located on public land and has opportunities for signage and increased visitors. | Maximum points awarded. | 7 | 7 |
| Total Score | | | 59 | 82 |

Project Scoring

Based on the presented information, the RTA Project received a score of 59 points out of a maximum of 82 points, placing it in the moderate-to-high priority category for the LMRWD (Attachment 2, Table 1). This category qualifies the project for partial funding.

Funding Recommendations

Based on the scoring, we recommend contributing 15% of the project cost (lesser of the awarded project cost or engineers cost estimate), which equates to \$45,154 of the estimated project cost. However, the final contributed dollar amount will be based on the awarded construction contract. The project addresses several goals in both the LMRWD WMP as well as the City's Surface Water Management Plan. It proposes to stabilize a ravine at the RTA site, part of a large ravine system in the SSOD, which remains a high priority for the LMRWD. Furthermore, the project follows the LMRWD's strategy of partnering with LGUs to leverage financial resources and improve natural resources within the LMRWD boundaries.

Before funds can be released, the following information is required:

- Documentation that the project meets the permitting requirements of the LMRWD and other regulatory agencies.
- Final signed construction plans and specifications.
- Awarded contract and bid information.
- Executed grant and maintenance agreement.
- Agreement that payments from the LMRWD are reimbursement-based and require receipts of paid invoices as well as a summary of the work completed as part of the receipt/invoice.

Attachments

- Figure 1—Eden Prairie RTA Site Overview
- Figure 2—RTA Project Location
- Attachment 1—City of Eden Prairie RTA WRRF Application
- Attachment 2—Funding Request Evaluation

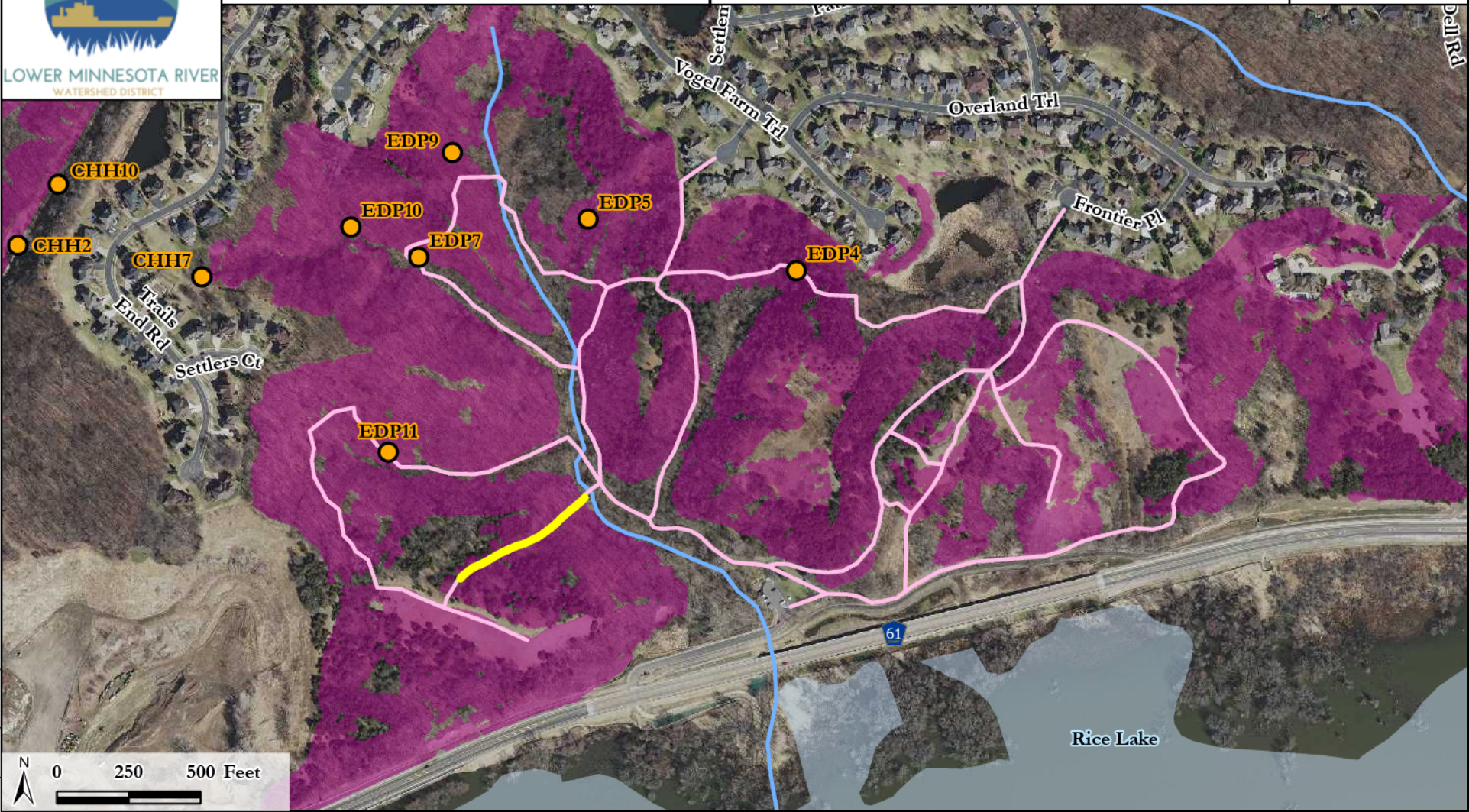


LOWER MINNESOTA RIVER
WATERSHED DISTRICT

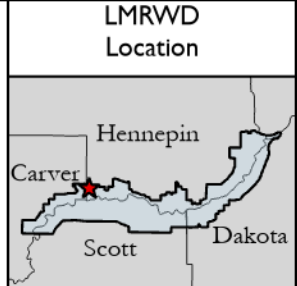
Richard T Anderson West Bluff Overlook Stabilization Improvements Overview



Young Environmental
Consulting Group, LLC



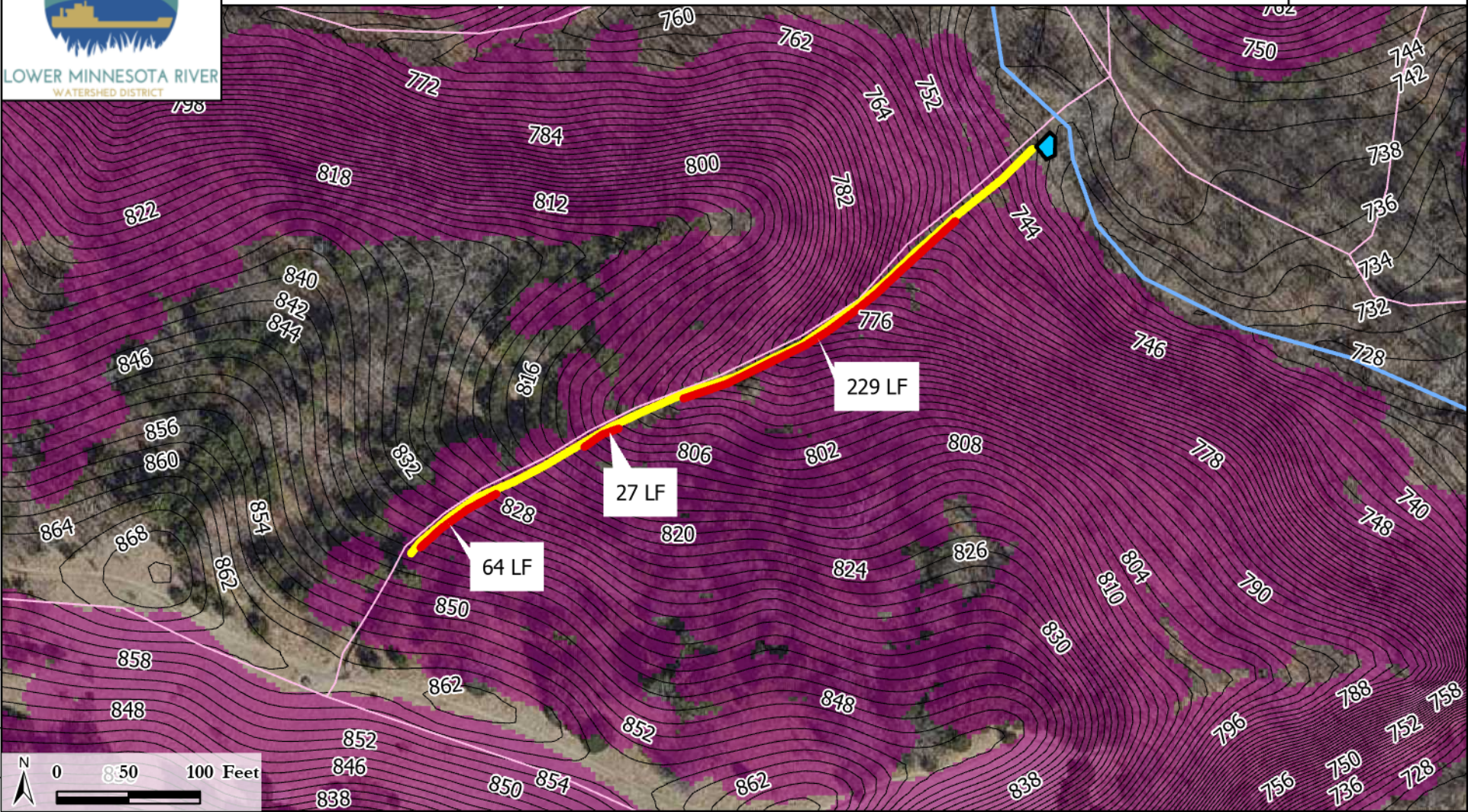
- Legend**
- LMRWD High Priority Gullies
 - Public Waterbodies
 - Steep Slope Overlay District
 - Project Location
 - Unnamed Stream
 - Trails









Projects \LMRWD\ Cap. Improvement Projects \Gully_Inventory_2023 Gully_GIS



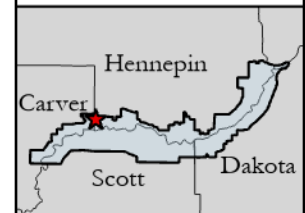
Richard T Anderson West Bluff Overlook Stabilization Improvements



Legend

-  Proposed Riprap Lined Channel
-  Proposed Boulder Wall
-  Proposed Pretreatment Basin
-  Steep Slope Overlay District
-  Unnamed Stream
-  Trails

LMRWD Location Map





Lower Minnesota River Watershed District (LMRWD) Water Resources Restoration Fund Application

Fill out the project application. The following information is required for all projects.

| Project Information | |
|--|---|
| Project Name: | |
| Address/Cross Streets: | |
| Property Owner Name: | |
| City: | |
| County: | |
| Project Contact Name: | |
| Project Contact Phone: | |
| Project Contact Email: | |
| Land Access: | <input type="checkbox"/> Private Access Only <input type="checkbox"/> Partially Private Access <input type="checkbox"/> Partially Public Access <input type="checkbox"/> Public Access |
| Describe Access Location: | |
| Attach access map showing: | |
| <ul style="list-style-type: none"> • Public versus private land • Limits of disturbance • Property lines and property ownership • Right-of-way (ROW) and access information | |
| Attach project map showing: | |
| <ul style="list-style-type: none"> • Project location • Project features • Watershed boundary (if applicable) • Waterbodies to which the project drains • Calcareous fens (if applicable) • Trout streams (if applicable) • Minnesota Pollution Control Agency (MPCA) Impaired Waters (if applicable) | |
| List Project Partners: | |

What is the proposed project schedule? (Estimated schedule is acceptable. Please indicate the finality of the schedule. For construction projects, at a minimum, provide the estimated bid opening date, construction start date, and length of anticipated construction.) Describe factors that may affect your anticipated schedule, if any.

Provide a project narrative informing the LMRWD how the project addresses similar goals of the LMRWD Watershed Management Plan ([Watershed Management Plan, Section 3: Goals, Policies, and Strategies](#)). Address how the project meets of the goals of the local governmental unit's (LGU) surface water management plan. Describe the goals, need, size, and quantifiable benefits of the project. Project narratives should include a summary of existing and proposed conditions. Reference attachments as necessary.

| Funding | |
|---|--|
| Funding Amount Request from LMRWD (up to 25% of total cost): | \$ _____ |
| Matching Funds from applicant and additional partners | Applicant Contribution \$ _____ |
| | \$ _____ |
| | \$ _____ |
| | \$ _____ |
| Total Project Cost (attach engineer's cost estimate if project has not yet been bid or fee estimate if your project is not a construction project) | \$ _____ |
| Attach cost/fee estimate or bidded construction cost | |
| Is the project in the LMRWD Watershed Management Plan Capital Improvement Projects Section (pg. 188/259 of the Watershed Management Plan)? | <input type="checkbox"/> Yes (If Yes, what is the name of the project as identified in the Plan?): _____ <input type="checkbox"/> No |
| Is the project included in the LGU Local Comprehensive Plan or LGU Surface Water Management Plan (SWMP)? | <input type="checkbox"/> Local Comprehensive Plan Location (Section and Page No.): _____ <input type="checkbox"/> SWMP Location (Section and Page No.): _____ |
| What waterbody(s) does your project drain to? | Name(s): _____ |
| Are any of these waterbodies an MPCA listed impaired water, designated trout stream, calcareous fen, or Minnesota Department of Natural Resources (DNR)-Protected wetland? Minnesota Impaired Waters List | <input type="checkbox"/> Yes (If Yes, Name/s): _____ _____ <input type="checkbox"/> No |
| What issues does the project address within the LGU Local Comprehensive Plan or SWMP? | |

Please fill out the rest of the application form as it applies to your project.

The following sections may not apply to all projects.

If a section does not apply, please select not applicable (N/A).

| Stormwater Volume Control | |
|---|--|
| Does your project propose any volume control or reduction of stormwater runoff? | <input type="checkbox"/> Yes <input type="checkbox"/> N/A |
| If yes, what is the estimated total volume reduction? (Ensure your project narrative describes method of stormwater volume control) | |

| Pollutant Management | | | | | | | | | |
|--|---|-------------------|-------------------|--|--|--|--|--|--|
| Does your project propose pollutant management to prevent impairment or protect downstream resources? | <input type="checkbox"/> Yes <input type="checkbox"/> N/A | | | | | | | | |
| Is the downstream resource impaired for any pollutants? Minnesota's Impaired Waters List | <input type="checkbox"/> Yes (If yes, list the impairments): <hr/> <input type="checkbox"/> No | | | | | | | | |
| What are the pollutants targeted and their percent reduction because of the project? (Ensure that your project narrative describes the method of pollutant management) | <table border="1"> <thead> <tr> <th>Pollutant</th> <th>Percent Reduction</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> </tr> <tr> <td></td> <td></td> </tr> <tr> <td></td> <td></td> </tr> </tbody> </table> | Pollutant | Percent Reduction | | | | | | |
| | Pollutant | Percent Reduction | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

| Brief Description of Habitat Restoration Benefits |
|---|
| <p>Please provide a brief description (500 words or less) about how the proposed project provides habitat benefit (i.e. increase in native plantings, removing dams, aquatic connectivity, riparian restoration, wetland restoration, forest management). If project is in a stream or river, please provide the MPCA Stream Habitat Assessment (MSHA) score (or other stream habitat assessment), documentation, and photos (if applicable).</p> |
| |

| Streambank Stabilization | |
|--|--|
| Is there a designed streambank restoration component of the project? | <input type="checkbox"/> Yes If Yes, what is the proposed length to be stabilized: _____ <input type="checkbox"/> N/A |
| Has the current bank stability been evaluated? (i.e. Bank Erosion Hazard Index, MPCA Channel Condition and Stability Index, Minnesota Department of Transportation (MnDOT) Hydlnfra, etc.) Please attach supporting documentation. | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| What is the current streambank stability? Please attach supporting documentation and photos. | <input type="checkbox"/> Very Stable <input type="checkbox"/> Stable <input type="checkbox"/> Moderately Unstable <input type="checkbox"/> Unstable |
| Permitting | |
| Does the project trigger any LMRWD Rules (if applicable)? | <input type="checkbox"/> Rule B: Erosion and Sediment Control <input type="checkbox"/> Rule C: Floodplain and Drainage Alteration <input type="checkbox"/> Rule D: Stormwater Management: <input type="checkbox"/> Rule F: Steep Slopes <input type="checkbox"/> N/A |
| If the project triggers LMRWD Rules, summarize how the project intends to comply with the Rules (i.e. stormwater management). | |
| Provide documentation of additional permitting requirements from regulatory agencies (e.g., Minnesota DNR, MPCA, and/or additional city permits). Identify which permits are required and provide their status (in-progress, obtained, etc.) Before funds are dispersed, copies of approved permits will be required; however, approval is not required for application eligibility. | |
| Permit | Status |
| | |
| | |
| | |
| | |
| | |
| | |

Construction Plans

Attach Construction Plan Sheets
(if applicable)



RICE LAKE



Richard T. Anderson Bluff Overlook Trail Project

edenprairie.org



Trails

- Paved / Hardsurface
- Unpaved / Softsurface

- Project Location
- Park Boundary
- Unnamed Stream
- Watershed District Boundary

OPINION OF PROBABLE COST
CITY OF EDEN PRAIRIE
RICHARD T. ANDERSON WEST BLUFF OVERLOOK STABILIZATION PROJECT
STANTEC PN: 227706585
CONCEPTUAL PLANS
February 28, 2024

| NO. | ITEM DESCRIPTION | UNIT | QUANTITY | UNIT PRICE | TOTAL PRICE |
|--|---|------|----------|--------------|----------------------|
| BASE BID SCHEDULE | | | | | |
| 1 | MOBILIZATION/DEMOBILIZATION | LS | 1 | \$ 25,000.00 | \$ 25,000.00 |
| 2 | TREE REMOVAL | EA | 25 | \$ 575.00 | \$ 14,375.00 |
| 3 | DOWNED TREE AND MINOR BRUSH REMOVAL ALONG PATH | LS | 1 | \$ 2,500.00 | \$ 2,500.00 |
| 4 | REMOVE EXISTING TIMBER STEPS | EA | 9 | \$ 500.00 | \$ 4,500.00 |
| 5 | REMOVE EXISTING BENCH AND FOOTINGS | EA | 1 | \$ 750.00 | \$ 750.00 |
| 6 | LANNON STONE STEPS (8"x8"x4') | EA | 160 | \$ 650.00 | \$ 104,000.00 |
| 7 | 3/4" CRUSHED ROCK | TON | 28 | \$ 100.00 | \$ 2,800.00 |
| 8 | COMMON EXCAVATION - OFFSITE (EV) | CY | 80 | \$ 50.00 | \$ 4,000.00 |
| 9 | STREET SWEEPER w/PICKUP BROOM | HR | 8 | \$ 175.00 | \$ 1,400.00 |
| 10 | RANDOM RIPRAP CLASS II | TON | 230 | \$ 125.00 | \$ 28,750.00 |
| 11 | RANDOM RIPRAP CLASS III (DITCH CHECKS) | TON | 13 | \$ 150.00 | \$ 1,950.00 |
| 12 | BOULDER RETAINING WALL (2-4-FOOT MAX HEIGHT) | LF | 320 | \$ 175.00 | \$ 56,000.00 |
| 13 | TRAFFIC CONTROL | LS | 1 | \$ 4,000.00 | \$ 4,000.00 |
| 14 | PRETREATMENT SETTLING BASIN | LS | 1 | \$ 10,000.00 | \$ 10,000.00 |
| 15 | TEMPORARY ROCK CONSTRUCTION ENTRANCE - MAINTAINED | LS | 1 | \$ 3,000.00 | \$ 3,000.00 |
| 16 | SEED AND SLOPE STABILIZATION | LS | 1 | \$ 10,000.00 | \$ 10,000.00 |
| SUBTOTAL | | | | | \$ 273,025.00 |
| [30%] CONTINGENCY | | | | | \$ 28,000.00 |
| TOTAL OPINION OF PROBABLE CONSTRUCTION COST | | | | | \$ 301,025.00 |



RICHARD T. ANDERSON WEST BLUFF OVERLOOK STABILIZATION PROJECT

EDEN PRAIRIE,
HENNEPIN COUNTY, MINNESOTA

PROJECT TITLE

ISSUE NO.:

DESCRIPTION:

DATE:

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.

LICENSE NO.:

PROJECT NO.:

DWN BY:

CHKD BY:

ISSUE DATE:

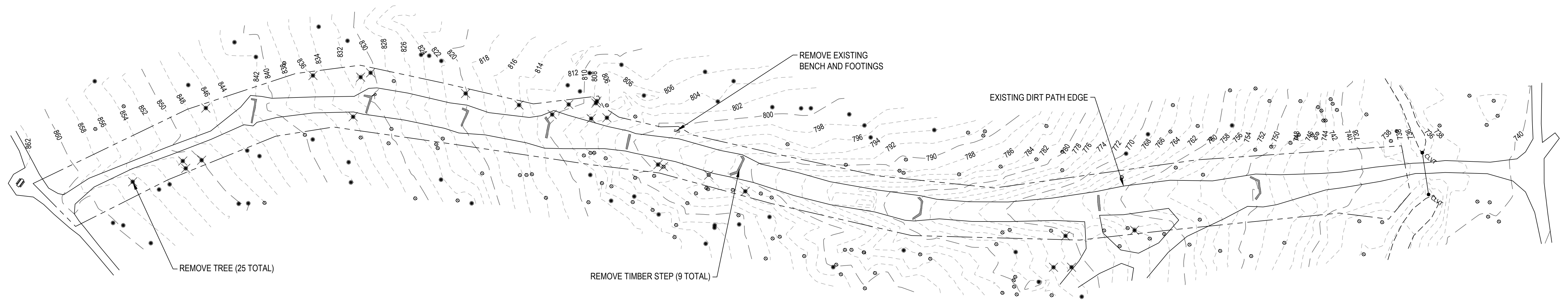
ISSUE NO.:

SHEET TITLE:

EXISTING CONDITIONS AND REMOVALS PLAN

SHEET NO.:

C-001

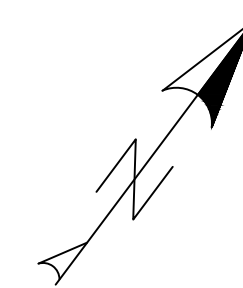
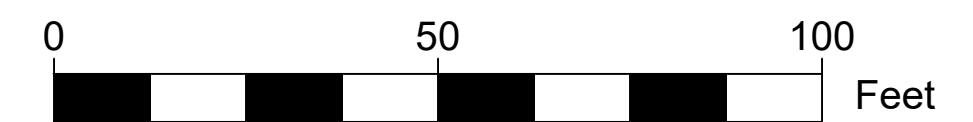


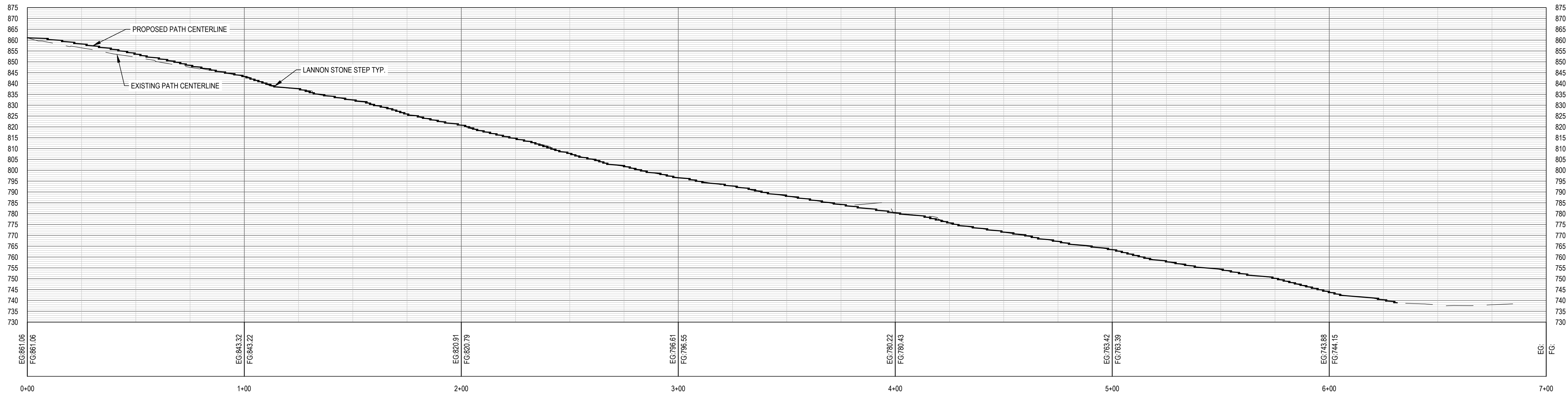
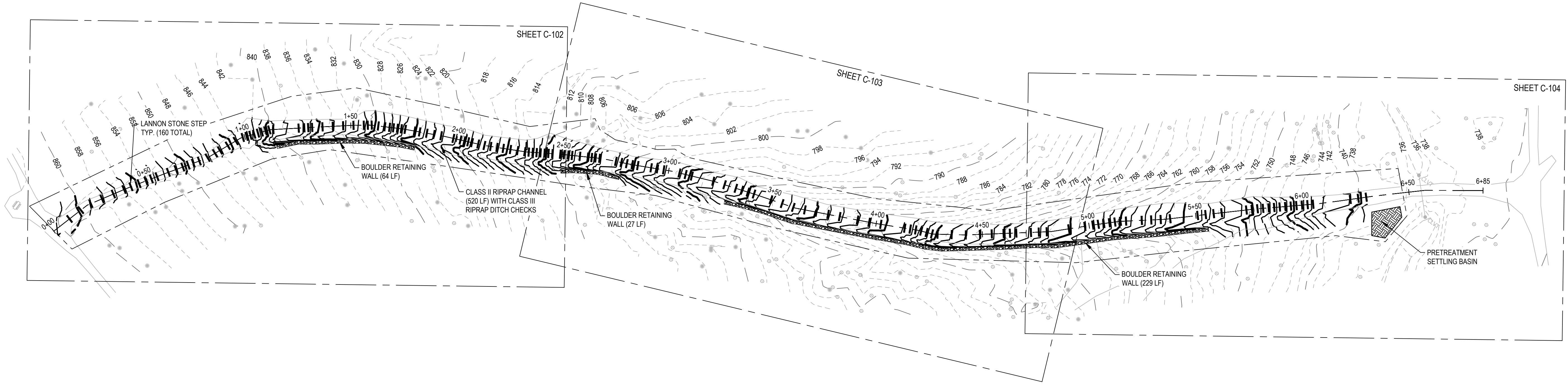
NOTE:

- ALL DISTURBED AREAS SHALL BE RESTORED WITH NATIVE SEED AND EROSION CONTROL BLANKET CATEGORY 25 AS SHOWN IN THE RESTORATION PLAN.
- DOUBLE SILT FENCE SHALL BE INSTALLED AT THE BOTTOM OF THE HILL TO PREVENT SEDIMENT FROM DISCHARGING INTO THE ADJACENT STREAM.
- A ROCK CONSTRUCTION ENTRANCE SHALL BE INSTALLED AND MAINTAINED AT THE ACCESS LOCATION.
- PROTECT CULVERT THAT RUNS UNDER THE ACCESS PATH AT THE BOTTOM OF THE HILL.
- REMOVE ALL EVERGREEN TREES WITHIN 10-FEET OF EITHER SIDE OF THE EXISTING PATH (23 TOTAL).
- REMOVE ADDITIONAL TREES AS SHOWN ON THE CONSTRUCTION PLANS ABOVE (2 TOTAL).
- PROTECT ALL TREES NOT SPECIFIED FOR REMOVAL.
- REMOVE ALL DOWNED TREES AND BRANCHES WITHIN 10-FEET OF EXISTING PATH.

LEGEND

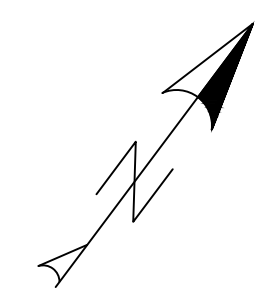
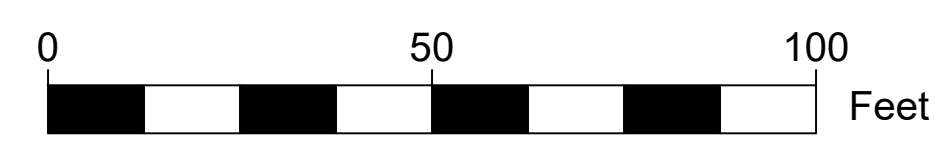
- 901 --- EXISTING MINOR CONTOUR
- 900 --- EXISTING MAJOR CONTOUR
- — — EXISTING DIRT PATH EDGE
- - - - CONSTRUCTION LIMITS
- █ REMOVE TIMBER STEP
- ✕ REMOVE TREE
- ▨ REMOVE BENCH AND FOOTINGS



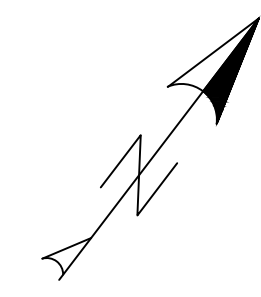
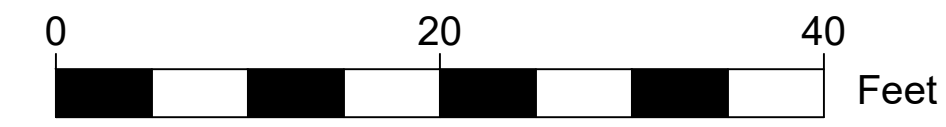
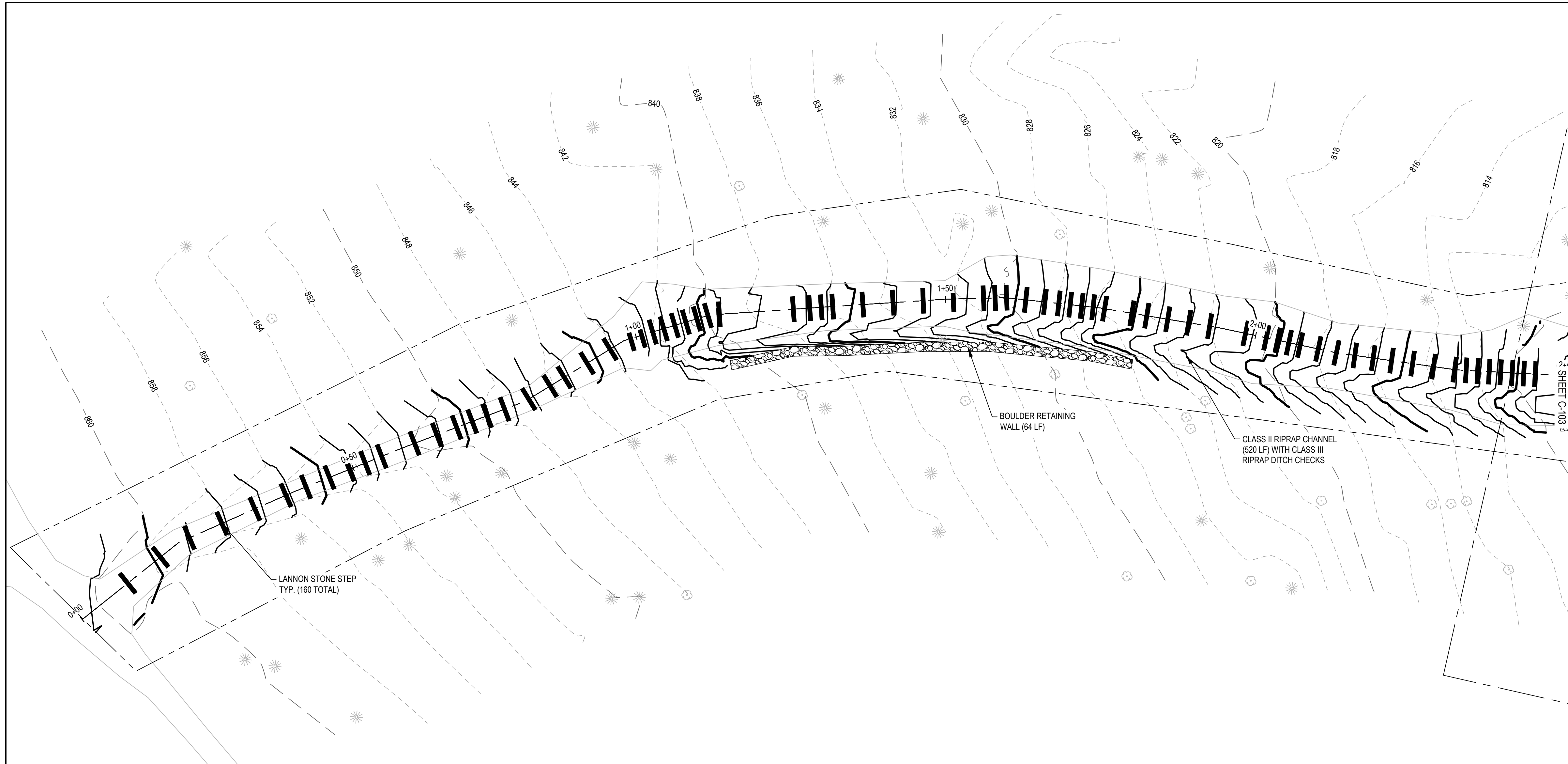


- NOTE:**
- LANNON STONE STEPS SHALL HAVE ROUGH DIMENSIONS OF 8-INCH BY 8-INCH BY 4- FEET.
 - THE BOULDER RETAINING WALL SHALL BE STEPPED AND HAVE A MAXIMUM HEIGHT OF 2-4- FEET.
 - A PRETREATMENT SETTLING BASIN SHALL BE INSTALLED AT THE BOTTOM OF THE SLOPE BEFORE WATER FROM THE CHANNEL DISCHARGES INTO THE CREEK.
 - CLASS II RIPRAP CHANNEL SHALL HAVE A 1-FOOT BOTTOM WIDTH AND 1-FOOT DEPTH WITH 2:1 SIDE SLOPES.
 - CLASS III RIPRAP DITCH CHECKS SHALL BE KEYED-IN AT EVERY 10- FEET OF ELEVATION DROP IN CHANNEL.

- LEGEND**
- 901 --- EXISTING MINOR CONTOUR
 - 900 --- EXISTING MAJOR CONTOUR
 - — — EXISTING DIRT PATH EDGE
 - - - - - CONSTRUCTION LIMITS
 - █ INSTALL LANNON STONE STEP (8"X8"X4')
 - ▨ BOULDER RETAINING WALL (2-4' MAX HEIGHT)
 - ▩ PRETREATMENT SETTLING BASIN

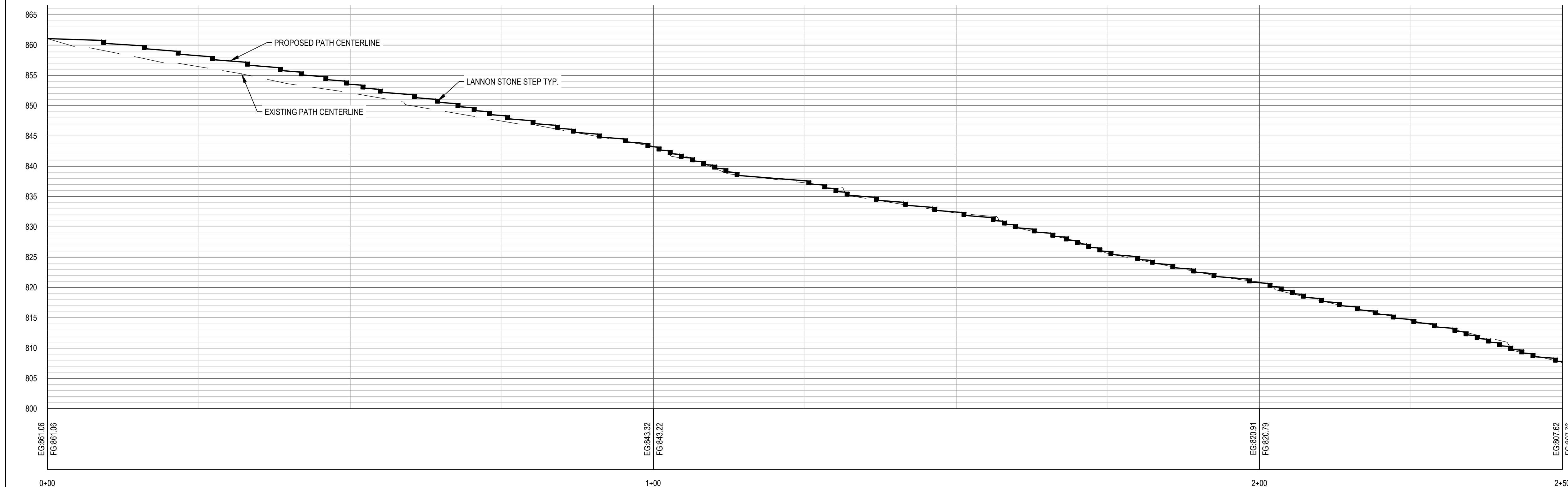


| | | | |
|----------------|--|----------|-----|
| PROJECT TITLE | RICHARD T. ANDERSON WEST BLUFF OVERLOOK STABILIZATION PROJECT | | |
| ISSUE NO. | 1 | | |
| DESCRIPTION | CONCEPTUAL PLANS | | |
| DATE | 2/28/2024 | | |
| CERTIFICATION: | I HEREBY CERTIFY THAT THIS PLAN SPECIFICATION, OR REPORT WAS 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. | | |
| LICENSE NO.: | | | |
| PROJECT NO.: | 227706585 | | |
| DWN BY: | JRP | CHKD BY: | SEH |
| ISSUE DATE: | 2/28/2024 | APPD BY: | SEH |
| ISSUE NO.: | 1 | | |
| SHEET TITLE: | GRADING AND EROSION CONTROL PLAN | | |
| SHEET NO.: | C-101 | | |



- NOTE:
- LANNON STONE STEPS SHALL HAVE ROUGH DIMENSIONS OF 8-INCH BY 8-INCH BY 4-FEET.
 - THE BOULDER RETAINING WALL SHALL BE STEPPED AND HAVE A MAXIMUM HEIGHT OF 2-4-FEET.
 - A PRETREATMENT SETTLING BASIN SHALL BE INSTALLED AT THE BOTTOM OF THE SLOPE BEFORE WATER FROM THE CHANNEL DISCHARGES INTO THE CREEK.
 - CLASS II RIPRAP CHANNEL SHALL HAVE A 1-FOOT BOTTOM WIDTH AND 1-FOOT DEPTH WITH 2:1 SIDE SLOPES.
 - CLASS III RIPRAP DITCH CHECKS SHALL BE KEYED-IN AT EVERY 10-FOET OF ELEVATION DROP IN CHANNEL.

- LEGEND
- - 901 - - EXISTING MINOR CONTOUR
 - 900 - EXISTING MAJOR CONTOUR
 - EXISTING DIRT PATH EDGE
 - - - - CONSTRUCTION LIMITS
 - █ INSTALL LANNON STONE STEP (8"X8"X4')
 - ▨ BOULDER RETAINING WALL (2-4' MAX HEIGHT)



Stantec
 ONE CARLSON PARKWAY, SUITE 100
 PLYMOUTH MN, 55447
 PHONE: 763-479-4200
 FAX: 763-479-4242
 WWW.STANTEC.COM

CLIENT:

CITY OF EDEN PRAIRIE
 8080 MITCHELL RD
 EDEN PRAIRIE, MN 55344

RICHARD T. ANDERSON WEST BLUFF OVERLOOK STABILIZATION PROJECT
 EDEN PRAIRIE, MINNESOTA
 HENNEPIN COUNTY, MINNESOTA

| | | |
|---------------|---|--|
| PROJECT TITLE | RICHARD T. ANDERSON WEST BLUFF OVERLOOK STABILIZATION PROJECT | |
| ISSUE NO. | 1 | |
| DESCRIPTION | CONCEPTUAL PLANS | |
| DATE | 2/28/2024 | |

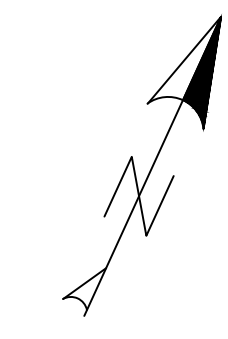
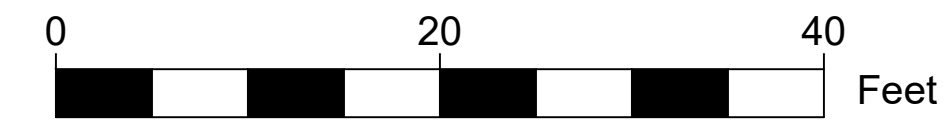
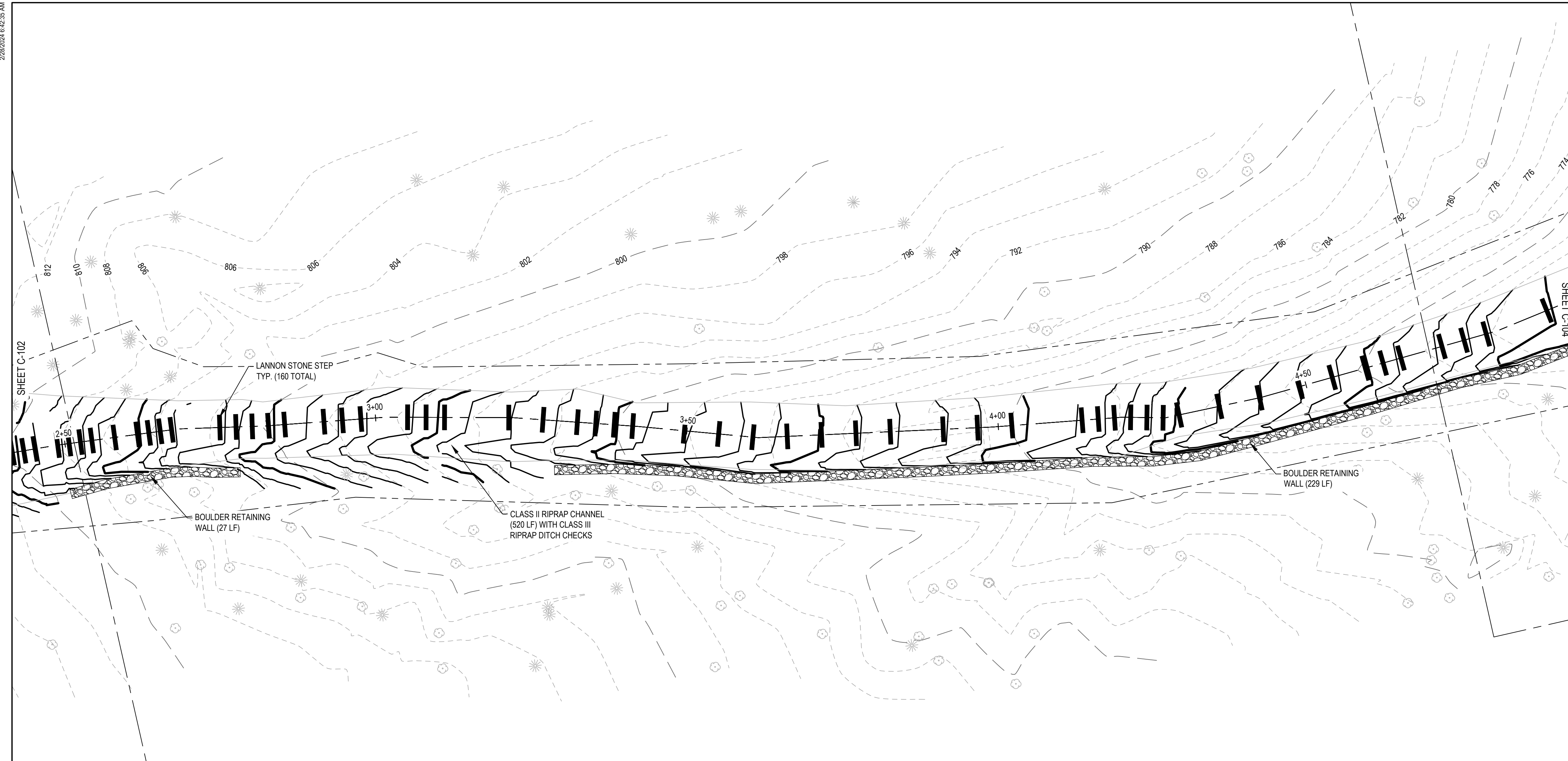
CERTIFICATION:
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 LICENSE NO.:
 DATE:

PROJECT NO.: 227706585
 DWN BY: JRP CHKD BY: SEH APPD BY: SEH
 ISSUE DATE: 2/28/2024
 ISSUE NO.: 1

SHEET TITLE:
 GRADING AND EROSION CONTROL PLAN

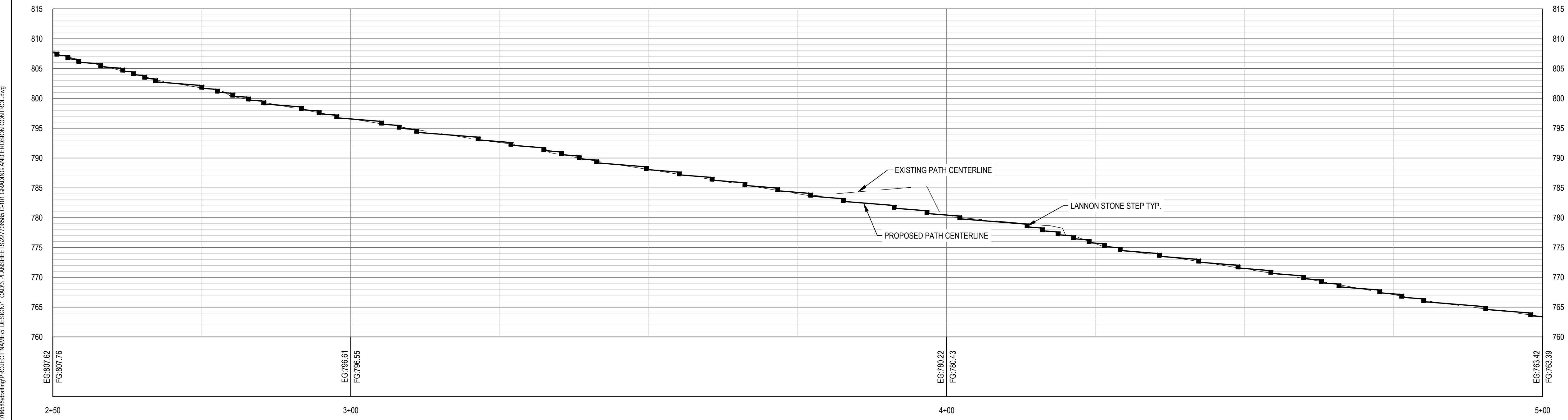
SHEET NO.:
C-102



- NOTE:
1. LANNON STONE STEPS SHALL HAVE ROUGH DIMENSIONS OF 8-INCH BY 8-INCH BY 4-FEET.
 2. THE BOULDER RETAINING WALL SHALL BE STEPPED AND HAVE A MAXIMUM HEIGHT OF 2-4-FEET.
 3. A PRETREATMENT SETTLING BASIN SHALL BE INSTALLED AT THE BOTTOM OF THE SLOPE BEFORE WATER FROM THE CHANNEL DISCHARGES INTO THE CREEK.
 4. CLASS II RIPRAP CHANNEL SHALL HAVE A 1-FOOT BOTTOM WIDTH AND 1-FOOT DEPTH WITH 2:1 SIDE SLOPES.
 5. CLASS III RIPRAP DITCH CHECKS SHALL BE KEYED-IN AT EVERY 10-FOET OF ELEVATION DROP IN CHANNEL.

LEGEND

| | |
|-------------|--|
| --- 901 --- | EXISTING MINOR CONTOUR |
| --- 900 --- | EXISTING MAJOR CONTOUR |
| --- | EXISTING DIRT PATH EDGE |
| --- | CONSTRUCTION LIMITS |
| █ | INSTALL LANNON STONE STEP (8"x8"x4') |
| █ | BOULDER RETAINING WALL (2-4' MAX HEIGHT) |



Stantec

ONE CARLSON PARKWAY, SUITE 100
 PLYMOUTH MN, 55447
 PHONE: 763-479-4200
 FAX: 763-479-4242
 WWW.STANTEC.COM

CLIENT:

CITY OF EDEN PRAIRIE
 8080 MITCHELL RD
 EDEN PRAIRIE, MN 55344

RICHARD T. ANDERSON WEST BLUFF OVERLOOK STABILIZATION PROJECT

EDEN PRAIRIE, MINNESOTA
 HENNEPIN COUNTY, MINNESOTA

| | | |
|----------------|--|----------|
| PROJECT TITLE | RICHARD T. ANDERSON WEST BLUFF OVERLOOK STABILIZATION PROJECT | |
| ISSUE NO. | 1 | |
| DESCRIPTION | CONCEPTUAL PLANS | |
| DATE | 2/28/2024 | |
| 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. | |
| LICENSE NO. | | |
| DATE | | |
| PROJECT NO. | 227706585 | |
| DWN BY: | CHKD BY: | APPD BY: |
| JRP | SEH | SEH |
| ISSUE DATE: | 2/28/2024 | |
| ISSUE NO.: | 1 | |
| SHEET TITLE: | GRADING AND EROSION CONTROL PLAN | |
| SHEET NO.: | C-103 | |

Attachment 2—Funding Request Evaluation

Funding Request Evaluation

LMRWD continues to receive inquiries from municipalities and other partners for project funding support. Historically, because the requests were infrequent and appeared to compete with other requests or priorities, the decision to provide financial assistance was not supported by documented criteria nor scoring. Recently, with the request from the City of Carver for the levee project, Young Environmental developed the following scoring system, which was applied to this request.

The goal of the scoring system is to establish impartial and fair evaluations for all District funding requests based on the project's alignment with the goals, policies, and strategies of the LMRWD Watershed Management Plan. Projects are scored on nine different metrics, detailed below, for a possible 82 points.

- 1. Project Type (Maximum 24 points):** The Project Type Score considers whether a proposed project is tributary to an impaired waterway, if it solves an issue previously identified by the community or LMRWD plans, and whether the project is explicitly included in the community or LMRWD plans. Points are awarded based on how well the project aligns with the community or LMRWD plans.
- 2. Plan Goals (Maximum 9 points):** The Plan Goals Score gives credit depending on how well-aligned a proposed project is with the goals of the LMRWD Watershed Plan. Projects are assigned a score of 0 through 9 based on how many of the LMRD's goals are addressed.
- 3. Water Capture (Maximum 7 points):** The Water Capture Score gives credit to projects that meet or exceed the standards for stormwater runoff volume management. Projects are assigned a score of 0 to 7 based on the amount of volume reduction that the proposed project provides.
- 4. Pollutant Management (Maximum 7 points):** The Pollutant Management Score gives credit to projects that meet or exceed the amount of water quality treatment provided beyond what is required for regulatory purposes. Projects without a pollutant reduction component will receive a score of 0, whereas those that reduce pollutant loading to downstream resources can receive a score of up to 7.
- 5. Habitat Restoration (Maximum 7 points):** The Habitat Restoration Score gives credit to projects that provide habitat benefits. Projects with no habitat benefit receive a score of 0. Projects likely to achieve habitat benefits as a secondary project benefit receive a score of 3. Projects that include a replacement of the existing habitat with an improved habitat receive a score of 5. Projects that include habitat creation or enhancement as the primary purpose of the project receive a score of 7.

- 6. Bank Stabilization (Maximum 7 points):** The Bank Stabilization Score gives credit to projects that restore or stabilize degraded gullies, streambanks or shorelines. A project is assigned a bank stabilization score based on the length of the gully, streambank, or shoreline restored or stabilized and the level of existing degradation. This metric is only applied to projects with a designed restoration component (versus indirect benefits). Projects without a designed bank or shoreline restoration component are assigned a score of 0.
- 7. Watershed Benefits (Maximum 7 points):** The Watershed Benefits Score gives credit to projects that provide benefits beyond the immediate site location. Scores are based on where the proposed project is located within the watershed, giving greater weight to those near headwaters.
- 8. Partnership Opportunities (Maximum 7 points):** The Partnership Opportunity Score gives credit to projects that allow the LMRWD to partner with other organizations. The LMRWD is interested in being a project partner with its member communities. A project receives the maximum score of 7 if one or more of the partners is a financial contributor to the project.
- 9. Public Education (Maximum 7 points):** The Public Education Score gives credit to projects that spread awareness of the LMRWD's projects and their benefits to the public. The score is based on the accessibility of the final project, giving the greatest weight to those on public lands with public access.

Using the total points scored, projects fit in one of four priority categories (e.g., low, low-to-moderate, moderate-to-high, high), as shown in Table 1.

Table 1. LMRWD Funding Request Scoring Priority

| Project Score | Priority | Recommended Action |
|---------------|------------------|--|
| 0–19 | Low | Do not recommend funding requests at this time; additional information may be needed to evaluate the potential project more fully. |
| 20–40 | Low-to-Moderate | Work with project sponsors to incorporate more District goals, policies, or strategies. |
| 41–61 | Moderate-to-High | Consider partial funding requests, with funding amount and design components that align with District priorities. |
| 62–82 | High | Recommend full funding request as presented. |



LOWER MINNESOTA RIVER WATERSHED DISTRICT

Executive Summary for Action

Lower Minnesota River Watershed District Board of Managers Meeting
Wednesday, April 17, 2024

Agenda Item

Item 7. C. – Biennial Solicitation of letters of interest for legal technical & other professional services

Prepared By

Linda Loomis, Administrator

Summary

At the March 20, 2024, meeting of the LMRWD Board of Managers, the Board accepted the proposal for technical services from Young Environmental Consulting Group, LLC and included all submittal from engineering firms into the engineering pool. Professional service agreements are being developed with each of those service providers.

The Board directed the Personnel Committee to interview all candidates for Educational & Outreach Services and for Legal Counsel. Interviews were held April 10, 2024. Managers not on the Personnel Committee were invited to attend the interviews and a recording of the interviews was available to Managers that were unable to attend.

The Board will select providers for Education & Outreach services and Legal Counsel at the April 17, 2024, meeting.

Education & Outreach submittals include:

- Young Environmental Consulting Group, LLC
- VoCoeur, Inc.

Legal Service submittals include:

- Rinke Noonan Attorneys at Law
- Flaherty|Hood, P. A.
- Ojanen Law Office
- Smith Partners

Attachments

None

Recommended Action

Motion to accept submittal from the preferred Education & Outreach provider and develop a Professional Services Agreement between the LMRWD and chosen provider

Motion to accept submittal from the preferred Legal Counsel and develop a Professional Services Agreement between the LMRWD and the chosen Legal Counsel.



LOWER MINNESOTA RIVER WATERSHED DISTRICT

Executive Summary for Action

Lower Minnesota River Watershed District Board of Managers Meeting
Wednesday, April 17, 2024

Agenda Item

Item 7. D. – Study Area #3

Prepared By

Linda Loomis, Administrator

Summary

A letter was sent to the property owner with LMRWD's final offer. The property owner has until April 19, 2024 to accept the offer made by the LMRWD.

A verbal update will be made at the April 17, 2024 LMRWD Board of Managers meeting.

Attachments

No attachments

Recommended Action

No action recommended



LOWER MINNESOTA RIVER WATERSHED DISTRICT

Executive Summary for Action

Lower Minnesota River Watershed District Board of Managers Meeting
Wednesday, April 17, 2024

Agenda Item

Item 8. A. – Lower MN River East One Watershed One Plan

Prepared By

Linda Loomis, Administrator

Summary

Review of Joint Powers Organization

Legal Counsel has reviewed the Joint Powers Agreement for the Implementation of the Lower Minnesota River East Watershed Comprehensive Water Management Plan (the “JPA”). The current JPA is attached with comments by LMRWD Legal Counsel. In addition, he provided an explanation as follows:

“I read through the agreement several times. It is hard to understand exactly what the parties are envisioning for implementation.

I have provided several marginal comments calling the basic structure and requirements into question. The agreement contains elements of both a Joint Powers Authority (separate governmental entity) formation and a Joint Powers Collaborative (non-entity cooperative/collaborative arrangement). For this reason it is very difficult to understand how plan implementation will occur and who will have what authority.

As written, I cannot advise that LMRWD be a “party” to the agreement. However, I do believe that the LMRWD can adopt the “plan” as it pertains to portions of the WD and as much as it does not conflict with the current LMRWD Comprehensive Watershed Management Plan (CWMP).

There is no definition given to the term fiscal agent, but I assume there is an intent to designate a fiscal agent to receive and administer the WBIF grant as a minimum.

I think the “entity” needs some help envisioning implementation. That visualization will lead, I believe, to a more coherent agreement and structure for plan implementation.”

Attachments

the Joint Powers Agreement for the Implementation of the Lower Minnesota River East Watershed Comprehensive Water Management Plan with comments by JKolb

Recommended Action

Motion to provide comments to Lower Minnesota River East One Watershed One Plan Steering Committee and Policy Committee

**JOINT POWERS AGREEMENT FOR THE IMPLEMENTATION OF
THE LOWER MINNESOTA RIVER EAST WATERSHED COMPREHENSIVE WATER
MANAGEMENT PLAN**

Pursuant to Minnesota Statutes, section 471.59, this Joint Powers Agreement (“Agreement”) is entered into by and among the political subdivisions, and local governmental units of the State of Minnesota identified as follows:

The Counties of Le Sueur and Rice each by and through its respective Board of Commissioners;

The Le Sueur, Rice, and Scott Soil and Water Conservation Districts, each by and through its respective Board of Supervisors (collectively referred to as the “SWCDs”); and

The Lower Minnesota River Watershed District, by and through its respective Board of Managers (referred to as the “Watershed District”).

Together, the above identified Counties, SWCD’s, and Watershed District collectively formed the Lower Minnesota River East Watershed Implementation Partnership and, for purposes of this Agreement, said political subdivisions, local units of government, and those added in accordance with the terms of this Agreement, are herein collectively referred to as “Parties” and individually as a “Party.”

Recitals

WHEREAS, pursuant to Minnesota Statutes, sections 103B.305, subdivision 5 and 103B.3363, each of the Parties to this Agreement is a local unit of government having the responsibility and authority to separately or cooperatively, by joint agreement pursuant to Minnesota Statutes, section 471.59, to prepare, develop, adopt, implement, and administer a comprehensive local water management plan, or a substitute thereof, and carry out implementation actions, programs, and projects toward achievement of goals and objectives of such plans; and

WHEREAS, pursuant to Minnesota Statutes, sections 103B.101 and 103B.801, the Minnesota Board of Water and Soil Resources (BWSR) is authorized, to coordinate the water and resource planning and implementation activities of counties, SWCDs, watershed management organizations, and watershed districts and to administer and oversee the Minnesota Comprehensive Watershed Management Planning Program, known as the One Watershed, One Plan program; and

WHEREAS, each of the Parties exercises water management authority and responsibility within the Lower Minnesota River East Watershed Management Area, a geographical area consisting of those portions of Le Sueur, Rice, and Scott counties that drain into the Lower Minnesota River East Watershed as depicted on Exhibit A, attached hereto and incorporated herein; and

WHEREAS, some of the Parties had previously entered into the Lower Minnesota River East Watershed Memorandum of Agreement (“MOA”) with the last date of signature being April 11, 2022, to develop the Comprehensive Watershed Management Plan (“Plan”) for the Lower Minnesota River East Watershed. Under the terms of the MOA, the Plan will be completed, be submitted to the Minnesota Board of Water and Soil Resources (“BWSR”) for approval and will then be considered for adoption by the Parties to this Agreement. Those governmental entities

that approve the Plan shall be eligible to be a part of this Agreement. The terms of the MOA also require that the structure for administration of the Plan be determined. The MOA will expire on June 30, 2025 which is one year after the term of the BWSR the One Watershed, One Plan grant dated June 30, 2024. This Agreement shall not be construed as to modify or supplant the terms or provisions of the MOA; and

WHEREAS, with matters that relate to coordination of water management authorities pursuant to Minnesota Statutes, chapters 103B, 103C, and 103D, and with public drainage systems pursuant to Minnesota Statutes, chapter 103E, this Agreement does not change the rights or obligations of the public drainage system authorities; and

WHEREAS, this Agreement and the Lower Minnesota River East Comprehensive Watershed Management Plan does not replace or supplant local land use, planning/zoning authority of the respective Parties, existing watershed management plans of the respective Parties that are a part of the 7 County Metro Area, and the Parties intend that this Agreement shall not be construed in that manner.

TERMS AND CONDITIONS

NOW THEREFORE, pursuant to Minnesota Statutes, section 471.59 and other relevant state law and in consideration of the mutual promise and benefits that the Parties shall derive herefrom, all Parties hereby agree:

1. Purpose and Establishment

- a) Purpose: This Agreement establishes the terms and conditions, governing structure, and processes by which the Parties will institute the implementation of the Plan. The Plan provides a framework for consistency and cooperation for entities that operate within the Lower Minnesota River East Watershed to allow for the implementation of projects within the watershed that provide the highest return on investment for addressing water quality, water quantity, and habitat issues within the watershed, and to allow the funding from the Minnesota Board of Water and Soil Resources (“BWSR”), the Minnesota Department of Natural Resources (“MNDNR”), the Minnesota Pollution Control Agency (“MPCA”), the Minnesota Department of Health (“MDH”), the Minnesota Department of Agriculture (“MDA”), or any other local, state, federal and nonprofit funding to be passed through to the Parties for administration consistent with State statutes and guidelines and the Plan. Consistent with its terms and conditions, this Agreement authorizes the Parties to cooperatively exercise their common and similar power of local water planning and management notwithstanding the territorial limits within which they may otherwise exercise separately and to take action that will promote the goals listed in Minnesota Statutes, section 103B.801 and fulfill responsibilities under Minnesota Statutes, chapter 103B.
- b) Established: This Agreement establishes a joint powers entity (hereinafter, the “Entity”). The name of the Entity is “Lower Minnesota River East Partnership (LoMRE).”

Commented [JK1]: Is it possible for an entity to approve the plan and not be part of the agreement? What is the status of such parties? Would one be able to nominate projects, programs or activities for funding under the CWMP and access WBIF without becoming a party to this agreement?

Commented [JK2]: Again, what about non-parties to the agreement that have otherwise adopted the plan and committed to implementing its priorities within their boundary?

Commented [JK3]: Query whether it is the actual intent of the parties to form a joint powers authority (entity) or collaboration providing framework for plan implementation and fiscal administration for WBIF.

- c) Recitals: All recitals set forth above are hereby incorporated into this Agreement.

2. Eligibility and Procedure to Become A Party

- a) Qualifying Party: A county, SWCD, watershed management organization, watershed district, or tribal government authorized to carry out water planning and resource management responsibilities and are located within the Lower Minnesota River East Management Area is eligible to become a Party to this Agreement. To become a Party, the county, SWCD, watershed management organization, watershed district or tribal government shall have first adopted the Plan.
- b) Initial Parties: A county, SWCD, watershed management organization, watershed district, or tribal government may be an Initial Party by qualifying under section 2(a), by adopting the Plan and by its governing board agreeing to become a Party and be bound by the terms of this Agreement within 60 days of State approval of the Plan. Such local unit of government shall also give notice of plan adoption in accordance with provisions of Minnesota Statutes, chapters 103B and 103D. Any qualifying county, SWCD, or water management organization, watershed district, or tribal government that desires to become a Party after expiration of the 60-day period for joining as an Initial Party, will be eligible to become a Party as an additional party pursuant to Section 2.c., below.
- c) Adding Additional Parties: A qualifying local unit of government or tribal government that desires to become a Party to this Agreement at any time later than 60-days following State approval of the Plan, may become a Party upon the adoption of the Plan by the Party’s governing board and by submitting to the Entity evidence its governing board agrees to the terms and conditions of this Agreement and to be bound by the same.

Commented [JK4]: Same comment

Upon receipt of such evidence, the governing board shall issue a signature page to the local government unit or tribal government and instructions to execute and return the same to the Entity along with the name and contact data of the representatives appointed by the local government unit or tribal government to serve on the governing board.

3. Powers and Formation of the Governing Board

- a) Board: A joint powers board, known as the Lower Minnesota River East Watershed Joint Powers Board (LMREWJPB), shall be formed to oversee the implementation of the Plan. The Board shall consist of one individual selected by each Party to the Agreement. The Party shall determine its representative and an alternate to serve in the absence of the representative. Members of the Board are neither deemed employees of the Board nor entitled to any compensation from the Entity.

Commented [JK5]: Is this individual to be an elected or appointed member of the governing board of a party or any individual selected by a party?

- b) Board Term and Vacancy: The term of a Board representative shall be staggered with 50% of the board members serving a period of two years and 50% of the board members serving a period for four years with the ability of the Party to appoint a representative to successive terms. If the Party fails to appoint a representative, the incumbent shall serve until such appointment occurs. If a representative resigns or is no longer able to serve, the alternate shall serve until a representative is appointed.
- c) Officers: The Board shall elect from its members a Chair and a Vice Chair at the first meeting of each new calendar year. The duties of the Chair include presiding at all meetings, acting as the administrative leader of the Entity, and carrying out such functions as the Board assigns to the Chair. The Vice Chair shall act as the Chair in the Chair's absence. The Board may elect or appoint such other officers as it deems necessary to conduct the affairs of the Entity.
- d) Meetings: The Board shall comply with all statutes and rules requiring open and public meetings. The conduct of all meetings of the LMREWJPB shall be generally governed by the most recent edition of Robert's Rules of Parliamentary Law. A quorum of the LMREWJPB shall consist of a simple majority of the members; 50 percent, plus one of the total membership. All votes by LMREWJPB members or alternate member shall be made in person or virtually. Notice of LMREWJPB meetings and a proposed agenda shall be emailed to all Board members not less than five (5) days prior to the scheduled meeting date of the Joint Powers Board meeting. The minutes of any meeting shall be made available to all LMREWJPB members prior to the next meeting.
- e) Voting: Each representative who is present shall be entitled to one vote. A motion or resolution shall be approved by a favorable vote of a simple majority of the members present, provided enough members are present to make a quorum. A supermajority vote of 66 percent of those members present shall be required for final plan submittal, comprehensive watershed management plan amendments, changes to the bylaws, or changes to the Joint Powers Agreement.
- f) Operations: The Board shall meet twice a year or more often as deemed necessary by the Board.
- g) Bylaws: The Board may adopt bylaws consistent with this Agreement and applicable law and may amend the same on a vote of simple majority of all the Board representatives. The Board may act only if there is a quorum.
- h) Budgeting and Funding:
 - i. Annually, the LMREWJPB shall adopt a budget, and at a minimum biennially approve a work plan to implement the Comprehensive Watershed Management Plan.

- ii. The LMREWJPB has no authority to levy taxes.
- iii. Local funding may be provided by establishing a “membership dues” system payable by January 31st of each year. The amount of membership dues will be based on a tiered approach established by the percentage of land each member has within the Lower Minnesota River East Watershed Planning Area subject to this agreement. The LMREWJPB will have the authority to establish annual dues for each Member. When establishing annual dues, the following limits shall apply:
 - Tier 1. Membership Dues will not exceed \$4,000 annually. Tier 1 shall consist of members with more than 8% of total land within the Planning Area and includes Le Sueur County, Le Sueur SWCD, and Scott SWCD.
 - Tier 2. Membership Dues will not exceed \$2,000 annually. Tier 2 shall consist of members with less than 8% of total land within the Planning Area and includes Rice County, Rice SWCD, and the Lower Minnesota River Watershed District.
- iv. Accountability
 - 1. All funds shall be accounted for according to generally accepted accounting principles and will administered through the Fiscal Agent.
- i) Committees: The Board may create committees as it deems necessary to review and examine specific issues, topics of concern, and carry out implementation of this plan. The Chair, or by a majority vote of the LMREWJPB, may appoint standing or ad hoc committees to address issues or facilitate the LMREWJPB activities.
 - i. Any committee must include at least one LMREW board and/or staff member or proxy.
 - ii. A committee should also include other related service providers and subject matter experts.
 - iii. The LMREWJPB Chair may appoint the Chair and Vice Chair of a committee or a pair of Co-Chairs at his/her discretion.
 - iv. A committee member may resign at any time from the subcommittee upon providing 30 days written notice.
- j) Powers: The Board shall have the following powers:

Commented [JK6]: What is the purpose of the "dues"? How will they be used? WBIF grant agreement allow a portion of the funds to be used for administration. This would appear to eliminate the need for dues.

Commented [JK7]: This will be defined later. There should be a clear delegation of responsibilities and authority

Commented [JK8]: The proxy process should be clearly defined.

- i. The Board may apply for and accept gifts, grants or money, other personal property or assistance that is available through the United States government, the State of Minnesota or any person, association or agency in the furtherance of the goals and objectives of the Plan;
- ii. Agreements and Contracts: The Board may enter into such agreements or contracts as necessary to implement the terms of the Plan including the contracting for a project coordinator, administrative, legal or expert services. The Board may contract with a Party to implement a Project set forth in the biennial Implementation plan;
- iii. Insurance: The Board shall obtain any liability insurance or other insurance it deems necessary to insure itself for any action arising out of this Agreement.
- iv. The Board shall pay for services performed consistent with the purpose of the Agreement and the Plan. The Board may develop a process to expedite the payment of invoices provided that all payments shall be subject to ratification by the Board at the next meeting. The Board shall account for disbursement of funds in a manner consistent with generally accepted accounting practices; and
- v. Property: The LMREWJPB has no authority to purchase property, equipment, or an easement right. Any property or equipment that is provided to the LMREWJPB to accomplish the goals of the Comprehensive Watershed Management Plan shall continue to be owned by the entity providing such property or equipment for use by the LMREWJPB . Any easements that are provided to the LMREWJPB to accomplish the goals of Comprehensive Watershed Management Plan shall be held with the respective member entity in which the easement is located.
- vi. Staff: The LMREWJPB shall not have the authority to hire staff. Any staff providing services in conjunction with this Agreement shall remain an employee of the respective member entity.
- vii. Reservation of Powers: All responsibilities and powers not specifically set out to be jointly exercised by the LMREWJPB under this Agreement, Bylaws, or Watershed Policies are hereby reserved to the respective governing bodies of the members.
- viii. Funding of Operations: The funding of the Entity and the implementation of the plan shall be limited to grant revenues, gifts, or monies from any person, entity, or association. The Parties shall

Commented [JK9]: Much of this could be eliminated from the Board's obligation and delegated to the fiscal agent in implementing a Board-adopted biennial work plan.

Commented [JK10]: This begs the question of how technical review and decision making occurs and the relative burden being place upon each entity.

only be responsible for agreed upon contributions of in-kind services and staff time, unless the Party's governing board, in its sole discretion, affirmatively elects to do otherwise.

4. Term and Termination

- a) Effective Date: This Agreement is effective upon signature of all Initial Parties and will remain in effect unless terminated consistent with terms of this Agreement or as otherwise provided under the law.
- b) Termination: The Parties acknowledge their respective and applicable obligations, if any, under Minnesota Statutes, section 471.59, subdivision 5 after the Agreement has been terminated or the purpose of the Agreement has been completed. This Agreement terminates upon the occurrence of any one of the following events, whichever occurs first:
 - i. By motion or resolution adopted by the governing bodies of all then-existing Parties;
 - ii. By resolution or motion by the Board upon ongoing failure to obtain adequate funding for Plan implementation;
 - iii. By order of a Court of competent jurisdiction.
- c) Asset Disbursement: Upon termination, any assets remaining shall be disbursed as follows:
 - i. Assets that have been purchased with pass through funding wherein the agreement requires tracing of the asset and specific disposal requirement shall be disposed of in accord with the funding agreement;
 - ii. Remaining assets shall be liquidated and any monies shall first be applied to any debt or obligation remaining;
 - iii. After satisfaction of any debt or obligation there remains any assets, it shall be divided evenly to the then remaining Parties to the Agreement at the time of termination.
- d) Withdrawal: Any member may withdraw from this Agreement upon 60 days written notice. A withdrawing member shall not be entitled to the distribution of any assets or funds. In the event of withdrawal by any member, this Agreement shall remain in full force and effect as to all remaining members. The withdrawal shall not relieve any Party of an obligation in effect for the existing terms of a grant agreement nor shall it relieve LMREWJPB of paying for any obligation assumed by the Party until such time as the withdrawal is effective. Notice shall be done by certified US Mail delivered to the fiscal agent and the current Board Chair.

5. General Provisions

- a) Compliance with Laws/Standards: The Parties agree to abide by all applicable federal, state, and local laws, statutes, ordinances, rules, and regulations.
- b) Timeliness: The Parties agree to perform obligations under this Agreement in a timely manner and inform each other about delays that may occur.
- c) Applicability: The Entity shall be considered a separate and distinct public entity to which the Parties have transferred all responsibility and control for actions taken pursuant to this Agreement. The Entity shall comply with all laws and rules that govern a public entity in the State of Minnesota and shall be entitled to the protections of Minnesota Statutes, chapter 466.
- d) Indemnification and Hold Harmless: The Entity shall fully defend, indemnify, and hold harmless the Parties against all claims, losses, liability, suits, judgments, costs and expenses by reason of the action or inaction of the Governing Board and/or employees and/or the agents of the Entity. This Agreement to indemnify and hold harmless does not constitute a waiver by any participant on limitations on liability provided under Minnesota Statutes, section 466.04 or any other statutes regarding the limitation of liability for political subdivisions of the State of Minnesota.

To the full extent permitted by law, actions by the Parties pursuant to this Agreement are intended to be and shall be construed as a “cooperative activity” and it is the intent of the Parties that they shall be deemed a “single governmental unit” for the purpose of liability, as set forth in Minnesota Statutes, section 471.59, subdivision 1a(a); provided further that for purposes of the statute, each Party to this Agreement expressly declines responsibility for the acts or omissions of the other Party.

The Parties of this Agreement are not liable for the acts or omissions of the other participants to this Agreement except to the extent to which they have agreed in writing to be responsible for acts or omissions of the other Parties.

- e) Records Retention and Data Practices: The parties agree that records created pursuant to the terms of this Agreement will be retained in a manner that meets their respective entity's records retention schedules that have been reviewed and approved by the State in accordance with Minnesota Statutes§ 138.17. The Parties further agree that records prepared or maintained in furtherance of the agreement shall be subject to the Minnesota Government Data Practices Act.
- f) Amendments: Any proposed amendments to this Agreement may be initiated by the Board and, if approved by the Board by a supermajority of

Commented [JK11]: I question, given the disparity of authority between the various entities purporting to be a part of this agreement, whether, as an entity, this JPA will be operating in a manner consistent with chapter 471.

Commented [JK12]: This, again, begs the question: is a separate entity really being formed with a separate, joint powers authority governing board, or is this really just a collaborative/cooperative agreement to facilitate plan implementation and fiscal/grant administration for WBIF and other funds that might support implementation of the plan?

66 percent, the Board may send the same to the Parties' governing bodies for consideration. No amendment to this Agreement is effective until all Parties' governing boards have approved the amendment.

- g) Dispute Resolution: If a dispute arises out of or relates to this Agreement, or the alleged breach thereof, and if the Parties to the dispute are unable to resolve the issue through good faith discussions, the Parties may agree to attempt to resolve the dispute by mediation within 30 days of notice of the dispute. If the Parties to the dispute agree to mediation, they shall work cooperatively to select a mediator, the cost of which shall be shared equally among the Parties to the dispute.

6. Miscellaneous

- a) Counterparts: This Agreement may be executed in one or more counterparts, each of which shall be deemed an original and all of which when taken together shall constitute one and the same Agreement. Any counterpart signature transmitted by facsimile or by sending a scanned copy by electronic mail or similar electronic transmission shall be deemed an original signature. This executed Agreement, including all counterparts, shall be filed with each Party to this Agreement with a notification of the Agreement's effective date.
- b) Savings Clause: In the event any provision of this Agreement is determined by a court of law to be null and void, the remaining provisions of this Agreement shall continue in full force and effect.

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UPDATE WITH YOUR SIGNATURE BLOCK, BELOW IS AN EXAMPLE

County of NAME

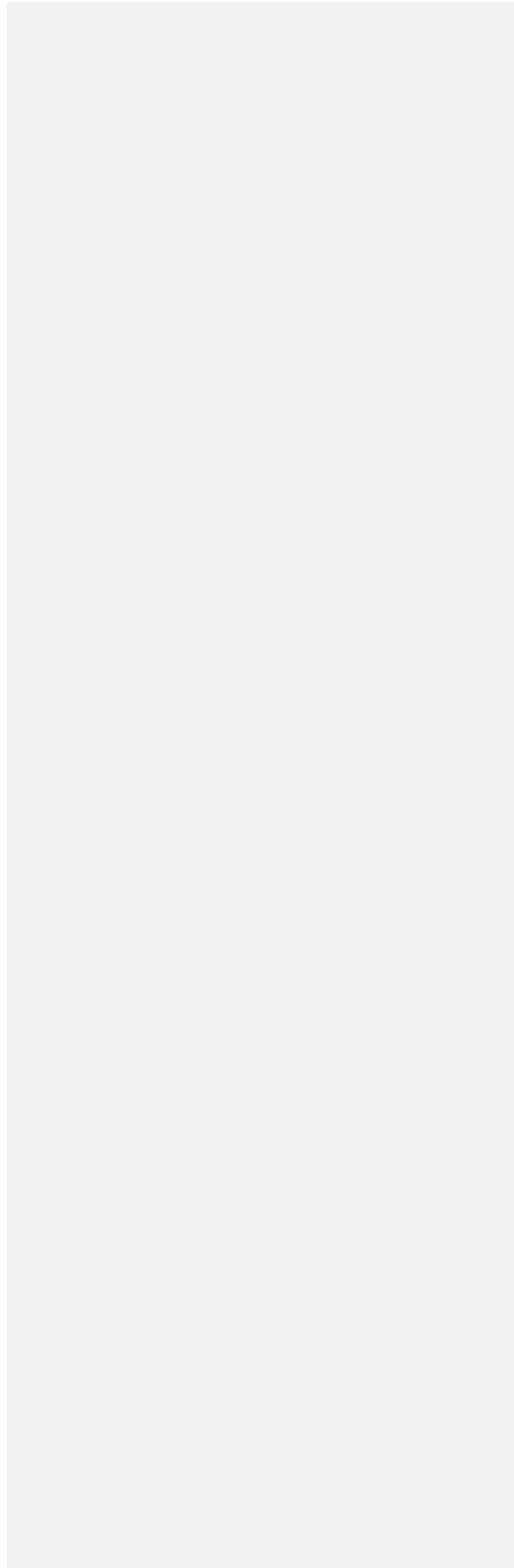
Chair

Dated: _____

Approved as to form and execution:

NAME County Attorney

Dated: _____



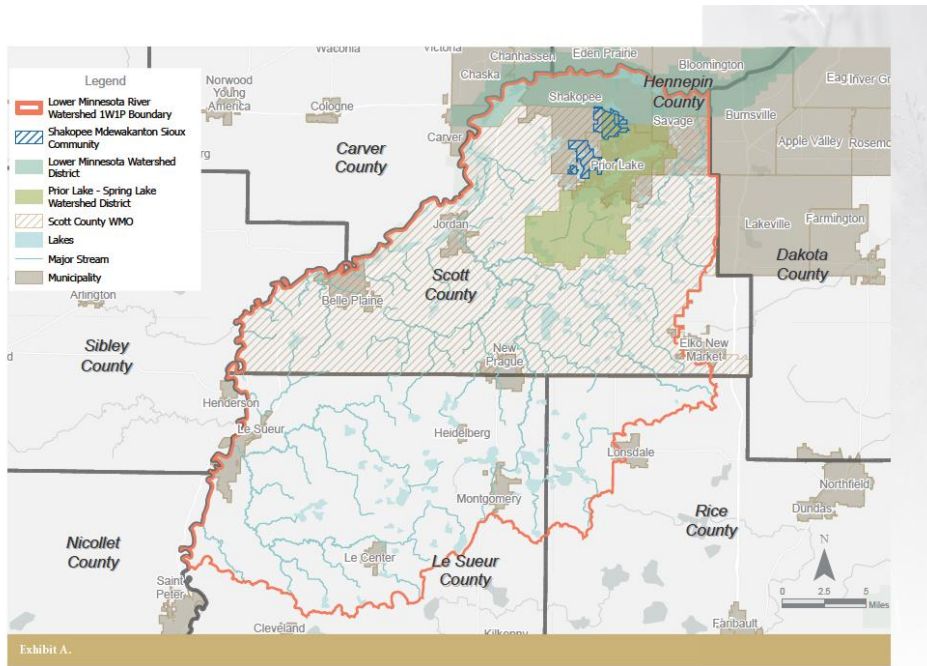


Exhibit A.



LOWER MINNESOTA RIVER WATERSHED DISTRICT

Executive Summary for Action

Lower Minnesota River Watershed District Board of Managers Meeting
Wednesday, April 17, 2024

Agenda Item

Item 9. A. – 535 Lakota Lane, Chanhassen – work without a permit

Prepared By

Linda Loomis, Administrator

Summary

LMRWD staff has met several times with the property owner and his contractor that will be providing plans to bring the property into compliance with LMRWD standards.

There is one aspect of the work that has been done on the property that is not able to meet LMRWD standards and that is construction of the retaining wall. The owner is not able to find a qualified professional to certify that the retaining wall (which is in the LMRWD steep slope overlay zone) meets the LMRWD standards. It has been recommended that investigation necessary to make such certification are very expensive and there is no guarantee that even after investigation that the certification can be made. Removal of the retaining wall may lead to questionable results; in that it may make the slope more unstable than leaving the retaining wall intact. No permit was issued by the City of Chanhassen for the retaining wall, and it is likely that no city permit was required. The LMRWD makes no determination as to permits required by other land use authorities.

LMRWD legal counsel has recommended that the LMRWD issue a permit for the work that does meet the LMRWD standards, but that we do not permit the retaining wall. Legal counsel further recommends that notation of this failure to meet LMRWD standards be recorded against the property so future owners will be informed.

This permit application will come before the LMRWD Board of Managers at the May meeting, assuming the LMRWD receives all the necessary documentation by April 17, 2024.

Attachments

No attachments

Recommended Action

No action recommended



LOWER MINNESOTA RIVER WATERSHED DISTRICT

Executive Summary for Action

Lower Minnesota River Watershed District Board of Managers Meeting
Wednesday, April 17, 2024

Agenda Item

Item 9. B. – Dredge Management

Prepared By

Linda Loomis, Administrator

Summary

Vernon Avenue Improvement Project

The LMRWD has been working on improvements to Vernon Avenue. The project has gone through the investigation, design and permitting process. It is now ready to go out for bids. Staff has prepared an update on this project for the Board to review.

The engineer's estimate of the cost to construct the project exceeds LMRWD's ability to pay for the project. We had anticipated that we would be able to provide guidance to the Board with options for financing the project, however, we have not been able to get answers to certain questions from the Board of Water and Soil Resources.

Shannon Sweeney, from David Drown Associates, is working on financing options and has engaged Taft law firm as bond counsel. Once we have some answers from BWSR, Mr. Sweeney will be able to provide the Board with options and recommendations as to how to finance the project.

In the meantime, the Board should consider authorizing moving ahead with preparations to go out for bids.

Attachments

Technical Memorandum – Vernon Avenue Improvements – Project Summary and Bidding Instructions, dated April 10, 2024

Recommended Action

Motion to conditionally approve to advertise for bids with modifications to the dates in the attachments one the funding strategy is approved.

Technical Memorandum



To: Linda Loomis, Administrator
Lower Minnesota River Watershed District

From: Hannah LeClaire, PE, Project Manager
Della Schall Young, CPESC, PMP, CTF, Principal Scientist

Date: April 10, 2024

Re: Vernon Avenue Improvements—Project Summary and Bidding Instructions

This memorandum summarizes the work completed for the Vernon Avenue Improvements Project (“Project”) and the next steps to execute bidding and project award. The Project began in January 2023. The timeline shown in Table 1 summarizes the work completed thus far.

Table 1. Project Timeline

| | |
|---------------|---|
| January 2023 | Project workplan approved by the LMRWD Board of Managers |
| March 2023 | Project jointly awarded to Bolton & Menk Inc. (BMI, design) and ISG (environmental permitting) |
| May 2023 | Cultural Resources Review awarded to the 106 Group |
| July 2023 | <ul style="list-style-type: none">• 60 percent design completed• Archaeology literature review and assessment completed—no further action recommended• Architectural history literature review and assessment completed—reconnaissance survey recommended |
| August 2023 | <ul style="list-style-type: none">• TEP and City of Savage approved wetland delineation boundaries• 90 percent plans completed |
| October 2023 | U.S. Army Corp of Engineers verifies that work is authorized by Transportation Regional General Permit |
| November 2023 | <ul style="list-style-type: none">• LMRWD granted conditional approval of the individual project permit• Architectural history reconnaissance survey completed—no potential effects assessed |
| January 2024 | 100 percent of plans, bid package, and engineer’s opinion of probable cost completed |

The next step in the project is to advertise the project for bids. The LMRWD will follow the procedures stipulated in Minnesota Statute 103D.811. The project will be advertised online through QuestCDN.com, an online interface for bidding. Additionally, a bid notice will be published in the Star Tribune. A copy of the advertisement is in Attachment 1. Proposals for the project will be received online through QuestCDN.com until a specified time and date. Subsequently, the bids will be opened and publicly read during a Microsoft Teams meeting. Bidders must submit all items as required by the Project Manual (Attachment 2) to be considered, including the Bid Form, Bid Security Form, and Responsible Contractor Verification and Certification of Compliance form. Young Environmental Consulting Group (Young Environmental) and BMI will review the lowest bidder for compliance with the prescribed requirements and evaluate the qualifications and experience of the primary bidder, subcontractors, and suppliers. After the bid opening, Young Environmental and BMI may request Bidder Qualifications to aid in their review. If any of the bids exceed the estimated construction cost by more than 30 percent, they will not be considered. The engineer's estimate for construction is \$814,641.30, which includes a 10 percent contingency (Attachment 3). Young Environmental will provide a memorandum recommending the lowest responsible bidder. The LMRWD's board of managers will have the opportunity to approve the contractor. After the contractor is approved, the LMRWD will send the Notice of Award.

The selected contractor will be required to provide the signed agreement, performance and payment bonds, insurance documentation, and subcontractors list within 15 days of the date of receipt of the Notice of Award. The LMRWD will then sign the Agreement and the Contract and share copies with the contractor. The construction of the Project will have a flexible start date but must be substantially completed on or before September 27, 2024, and completed and ready for final payment on or before October 11, 2024.

Recommendation

We recommend conditional approval to advertise the Project for bids with modifications to the dates in the attachments once the funding strategy is approved.

Attachments

- Attachment 1—Advertisement
- Attachment 2—Project Manual
- Attachment 3—Engineer's Cost Estimate

PROJECT MANUAL

Vernon Avenue Improvements

OT1.129866

Lower Minnesota River Watershed District

Savage, MN



Real People. Real Solutions.

Bolton-Menk.com

CERTIFICATIONS PAGE

PROJECT MANUAL

FOR

VERNON AVENUE IMPROVEMENTS

OT1.129866

LOWER MINNESOTA RIVER WATERSHED DISTRICT

SAVAGE, MN

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

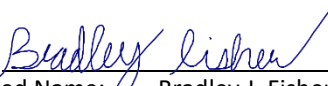
Signature: 
Typed or Printed Name: Bradley J. Fisher
Date: 02/21/2024 License Number: 56595

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Vernon Avenue Improvements
OT1.129866
Lower Minnesota River Watershed District

This Project Manual incorporates, either in full or in part, various EJCDC copyrighted documents. Documents incorporated in full are subject to the copyright notice in the EJCDC document footnotes. For those EJCDC documents excerpted, modified, or incorporated in part, those portions of the text that originated in copyrighted EJCDC documents remain subject to the EJCDC license and copyright. Copyright © 2018 National Society of Professional Engineers, American Council of Engineering Companies, and American Society of Civil Engineers. All rights reserved.

CONTRACT DOCUMENTS:

PROJECT MANUAL:

Introductory Information, Bidding Requirements, Contract Forms and Conditions of Contract

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Appendices

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APPENDIX B - WORK IN UP RAILROAD ROW ASSOCIATED DOCUMENTS

DRAWINGS (UNDER SEPARATE COVER):

36 sheets numbered G0.01 through C8.13, inclusive, dated 02/21/2024, and with each sheet bearing the following general title:

Vernon Avenue Improvements
Lower Minnesota River Watershed District

*******END OF SECTION*******

INSTRUCTIONS TO BIDDERS

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ARTICLE 1—DEFINED TERMS

- 1.01 Terms used in these Instructions to Bidders have the meanings indicated in the General Conditions and Supplementary Conditions. Additional terms used in these Instructions to Bidders have the meanings indicated below:
- A. Issuing Office—The office from which the Bidding Documents are to be issued, and which registers plan holders.

ARTICLE 2—BIDDING DOCUMENTS

- 2.01 Bidder shall obtain a complete set of Bidding Requirements and proposed Contract Documents (together, the Bidding Documents). See the Agreement for a list of the Contract Documents. It is Bidder's responsibility to determine that it is using a complete set of documents in the preparation of a Bid. Bidder assumes sole responsibility for errors or misinterpretations resulting from the use of incomplete documents, by Bidder itself or by its prospective Subcontractors and Suppliers.
- 2.02 Bidding Documents are made available for the sole purpose of obtaining Bids for completion of the Project and permission to download or distribution of the Bidding Documents does not confer a license or grant permission or authorization for any other use. Authorization to download documents, or other distribution, includes the right for plan holders to print documents solely for their use, and the use of their prospective Subcontractors and Suppliers, provided the plan holder pays all costs associated with printing or reproduction. Printed documents may not be re-sold under any circumstances.
- 2.03 Bidder may register as a plan holder and obtain complete sets of Bidding Documents, in the number and format stated in the Advertisement or invitation to bid. Bidders may rely that sets of Bidding Documents obtained in this manner are complete unless an omission is blatant. Registered plan holders will receive Addenda issued by Owner.
- 2.04 Owner is not responsible for omissions in Bidding Documents or other documents obtained from plan rooms or other sources, or for a Bidder's failure to obtain Addenda if they are not a registered plan holder.
- 2.05 *Electronic Documents*
- A. When the Bidding Requirements indicate that electronic (digital) copies of the Bidding Documents are available, such documents will be made available to the Bidders as Electronic Documents in the manner specified.
1. Bidding Documents will be provided in Adobe PDF (Portable Document Format) (.pdf) that is readable by Adobe Acrobat Reader. It is the intent of the Engineer and Owner that such Electronic Documents are to be exactly representative of the paper copies of the documents. However, because the Owner and Engineer cannot totally control the transmission and receipt of Electronic Documents nor the Contractor's means of reproduction of such documents, the Owner and Engineer cannot and do not guarantee that Electronic Documents and reproductions prepared from those versions are identical in every manner to the paper copies.
- B. Unless otherwise stated in the Bidding Documents, the Bidder may use and rely upon complete sets of Electronic Documents of the Bidding Documents, described in Paragraph 2.06.A above. However, Bidder assumes all risks associated with differences arising from transmission/receipt of Electronic Documents versions of Bidding Documents and reproductions prepared from those versions and, further, assumes all risks, costs, and responsibility associated with use of the Electronic Documents versions to derive information that is not explicitly contained in printed paper versions of the documents, and for Bidder's reliance upon such derived information.

ARTICLE 3—QUALIFICATIONS OF BIDDERS

To demonstrate Bidder’s qualifications to perform the Work, after submitting its Bid and within 5 days of Owner’s request, Bidder must submit the following information:

- A. Written evidence establishing its qualifications such as financial data, previous experience, and present commitments.
- B. A written statement that Bidder is authorized to do business in the state where the Project is located, or a written certification that Bidder will obtain such authority prior to the Effective Date of the Contract.
- C. Bidder’s state or other contractor license number, if applicable.
- D. Subcontractor and Supplier qualification information.
- E. Other required information regarding qualifications.

ARTICLE 4—PRE-BID CONFERENCE

4.01 A pre-bid conference will not be conducted for this Project.

ARTICLE 5—SITE AND OTHER AREAS; EXISTING SITE CONDITIONS; EXAMINATION OF SITE; OWNER’S SAFETY PROGRAM; OTHER WORK AT THE SITE

5.01 Site and Other Areas

- A. The Site is identified in the Bidding Documents. By definition, the Site includes rights-of-way, easements, and other lands furnished by Owner for the use of the Contractor. Any additional lands required for temporary construction facilities, construction equipment, or storage of materials and equipment, and any access needed for such additional lands, are to be obtained and paid for by Contractor.

5.02 Existing Site Conditions

- A. Subsurface and Physical Conditions; Hazardous Environmental Conditions
 - 1. The Supplementary Conditions identify the following regarding existing conditions at or adjacent to the Site:
 - a. Those reports of explorations and tests of subsurface conditions at or adjacent to the Site that contain Technical Data.
 - b. Those drawings known to Owner of existing physical conditions at or adjacent to the Site, including those drawings depicting existing surface or subsurface structures at or adjacent to the Site (except Underground Facilities), that contain Technical Data.
 - c. Reports and drawings known to Owner relating to Hazardous Environmental Conditions that have been identified at or adjacent to the Site.
 - 1) Technical Data contained in such reports and drawings.
 - 2. Owner will make copies of reports and drawings referenced above available to any Bidder on request. These reports and drawings are not part of the Contract Documents, but the Technical Data contained therein upon whose accuracy Bidder is entitled to rely, as provided in the General Conditions, has been identified and established in the Supplementary Conditions. Bidder is responsible for any interpretation or conclusion Bidder draws from any Technical Data or any other data, interpretations, opinions, or information contained in such reports or shown or indicated in such drawings.

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3. If the Supplementary Conditions do not identify Technical Data, the default definition of Technical Data set forth in Article 1 of the General Conditions will apply.

- B. *Underground Facilities:* Underground Facilities are shown or indicated on the Drawings, pursuant to Paragraph 5.05 of the General Conditions, and not in the drawings referred to in Paragraph 5.02.A of these Instructions to Bidders. Information and data regarding the presence or location of Underground Facilities are not intended to be categorized, identified, or defined as Technical Data.

5.03 *Other Site-related Documents*

- A. In addition to the documents regarding existing Site conditions referred to in Paragraph 5.02.A, the following other documents relating to conditions at or adjacent to the Site are known to Owner and made available to Bidders for reference:

1. No other site related documents are available.

5.04 *Site Visit and Testing by Bidders*

- A. Bidder is required to visit the Site and conduct a thorough visual examination of the Site and adjacent areas. During the visit, the Bidder must not disturb any ongoing operations at the Site.
- B. Bidder shall conduct the required Site visit during normal working hours.
- C. Bidder is not required to conduct any subsurface testing, or exhaustive investigations of Site conditions.
- D. On request, and to the extent Owner has control over the Site, and schedule permitting, the Owner will provide Bidder general access to the Site to conduct such additional examinations, investigations, explorations, tests, and studies as Bidder deems necessary for preparing and submitting a successful Bid. Owner will not have any obligation to grant such access if doing so is not practical because of existing operations, security or safety concerns, or restraints on Owner's authority regarding the Site. Bidder is responsible for establishing access needed to reach specific selected test sites.
- E. Bidder must comply with all applicable Laws and Regulations regarding excavation and location of utilities, obtain all permits, and comply with all terms and conditions established by Owner or by property owners or other entities controlling the Site with respect to schedule, access, existing operations, security, liability insurance, and applicable safety programs.
- F. Bidder must fill all holes and clean up and restore the Site to its former condition upon completion of such explorations, investigations, tests, and studies.

5.05 *Owner's Safety Program*

- A. Site visits and work at the Site may be governed by an Owner safety program. If an Owner safety program exists, it will be noted in the Supplementary Conditions.

5.06 *Other Work at the Site*

- A. Reference is made to Article 8 of the Supplementary Conditions for the identification of the general nature of other work of which Owner is aware (if any) that is to be performed at the Site by Owner or others (such as utilities and other prime contractors) and relates to the Work contemplated by these Bidding Documents. If Owner is party to a written contract for such other work, then on request, Owner will provide to each Bidder access to examine such contracts (other than portions thereof related to price and other confidential matters), if any.

ARTICLE 6—BIDDER'S REPRESENTATIONS AND CERTIFICATIONS

6.01 Express Representations and Certifications in Bid Form, Agreement

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- A. The Bid Form that each Bidder will submit contains express representations regarding the Bidder's examination of Project documentation, Site visit, and preparation of the Bid, and certifications regarding lack of collusion or fraud in connection with the Bid. Bidder should review these representations and certifications and assure that Bidder can make the representations and certifications in good faith, before executing and submitting its Bid.
- B. If Bidder is awarded the Contract, Bidder (as Contractor) will make similar express representations and certifications when it executes the Agreement.

ARTICLE 7—INTERPRETATIONS AND ADDENDA

- 7.01 Owner on its own initiative may issue Addenda to clarify, correct, supplement, or change the Bidding Documents.
- 7.02 Bidder shall submit all questions about the meaning or intent of the Bidding Documents to Engineer in writing to the Issuing Office. Contact information and submittal procedures for such questions are as follows:

12224 Nicollet Avenue, Burnsville, MN 55337-1649, (952) 890-0509, fax (952) 890-8065
- 7.03 Interpretations or clarifications considered necessary by Engineer in response to such questions will be issued by Addenda delivered to all registered plan holders. Questions received less than seven days prior to the date for opening of Bids may not be answered.
- 7.04 Only responses set forth in an Addendum will be binding. Oral and other interpretations or clarifications will be without legal effect. Responses to questions are not part of the Contract Documents unless set forth in an Addendum that expressly modifies or supplements the Contract Documents.

ARTICLE 8—BID SECURITY

- 8.01 A Bid must be accompanied by Bid security made payable to Owner in an amount of 5 percent of Bidder's maximum Bid price (determined by adding the base bid and all alternates) and in the form of a Bid bond issued by a surety meeting the requirements of Paragraph 6.01 of the General Conditions. Such Bid bond will be issued in the form included in the Bidding Documents or the unmodified EJCDC version of the same form.
- 8.02 The Bid security of the apparent Successful Bidder will be retained until Owner awards the contract to such Bidder, and such Bidder has executed the Contract, furnished the required Contract security, and met the other conditions of the Notice of Award, whereupon the Bid security will be released. If the Successful Bidder fails to execute and deliver the Contract and furnish the required Contract security within 15 days after the Notice of Award, Owner may consider Bidder to be in default, annul the Notice of Award, and the Bid security of that Bidder will be forfeited, in whole in the case of a penal sum bid bond, and to the extent of Owner's damages in the case of a damages-form bond. Such forfeiture will be Owner's exclusive remedy if Bidder defaults.
- 8.03 The Bid security of other Bidders that Owner believes to have a reasonable chance of receiving the award may be retained by Owner until the earlier of 7 days after the Effective Date of the Contract or 61 days after the Bid opening, whereupon Bid security furnished by such Bidders will be released.
- 8.04 Bid security of other Bidders that Owner believes do not have a reasonable chance of receiving the award will be released within 7 days after the Bid opening.

ARTICLE 9—CONTRACT TIMES

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- 9.01 The number of days within which, or the dates by which, the Work is to be (a) substantially completed and (b) ready for final payment, and (c) Milestones (if any) are to be achieved, are set forth in the Agreement.
- 9.02 Provisions for liquidated damages, if any, for failure to timely attain a Milestone, Substantial Completion, or completion of the Work in readiness for final payment, are set forth in the Agreement.

ARTICLE 10—SUBSTITUTE AND “OR EQUAL” ITEMS

- 10.01 The Contract for the Work, as awarded, will be on the basis of materials and equipment specified or described in the Bidding Documents without consideration during the bidding and Contract award process of possible substitute or “or-equal” items. In cases in which the Contract allows the Contractor to request that Engineer authorize the use of a substitute or “or-equal” item of material or equipment, application for such acceptance may not be made to and will not be considered by Engineer until after the Effective Date of the Contract.
- 10.02 The Contract for the Work, as awarded, will be on the basis of materials and equipment specified or described in the Bidding Documents, and those “or-equal” or substitute or materials and equipment subsequently approved by Engineer prior to the submittal of Bids and identified by Addendum. No item of material or equipment will be considered by Engineer as an “or-equal” or substitute unless written request for approval has been submitted by Bidder and has been received by Engineer within 10 days of the issuance of the Advertisement for Bids or invitation to Bidders. Each such request must comply with the requirements of Paragraphs 7.05 and 7.06 of the General Conditions, and the review of the request will be governed by the principles in those paragraphs. The burden of proof of the merit of the proposed item is upon Bidder. Engineer’s decision of approval or disapproval of a proposed item will be final. If Engineer approves any such proposed item, such approval will be set forth in an Addendum issued to all registered Bidders. Bidders cannot rely upon approvals made in any other manner.
- 10.03 All prices that Bidder sets forth in its Bid will be based on the presumption that the Contractor will furnish the materials and equipment specified or described in the Bidding Documents, as supplemented by Addenda. Any assumptions regarding the possibility of post-Bid approvals of “or-equal” or substitution requests are made at Bidder’s sole risk.

ARTICLE 11—SUBCONTRACTORS, SUPPLIERS, AND OTHERS

- 11.01 A Bidder must be prepared to retain specific Subcontractors and Suppliers for the performance of the Work if required to do so by the Bidding Documents or in the Specifications. If a prospective Bidder objects to retaining any such Subcontractor or Supplier and the concern is not relieved by an Addendum, then the prospective Bidder should refrain from submitting a Bid.
- 11.02 The apparent Successful Bidder, and any other Bidder so requested, must submit to Owner a list of the Subcontractors or Suppliers proposed for the following portions of the Work within five days after Bid opening:
- A. There are no key categories of work.
- 11.03 If requested by Owner, such list must be accompanied by an experience statement with pertinent information regarding similar projects and other evidence of qualification for each such Subcontractor or Supplier. If Owner or Engineer, after due investigation, has reasonable objection to any proposed Subcontractor or Supplier, Owner may, before the Notice of Award is given, request apparent Successful Bidder to submit an acceptable substitute, in which case apparent Successful Bidder will submit a substitute, Bidder’s Bid price will be increased (or decreased) by the difference in cost occasioned by such substitution, and Owner may consider such price adjustment in evaluating Bids and making the Contract award.

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- 11.04 If apparent Successful Bidder declines to make any such substitution, Owner may award the Contract to the next lowest Bidder that proposes to use acceptable Subcontractors and Suppliers. Declining to make requested substitutions will constitute grounds for forfeiture of the Bid security of any Bidder. Any Subcontractor or Supplier, so listed and against which Owner or Engineer makes no written objection prior to the giving of the Notice of Award will be deemed acceptable to Owner and Engineer subject to subsequent revocation of such acceptance as provided in Paragraph 7.07 of the General Conditions.

ARTICLE 12—PREPARATION OF BID

- 12.01 The Bid Form is included with the Bidding Documents.
- A. All blanks on the Bid Form must be completed.
 - B. Paper bids, if applicable, must be completed in ink and the Bid Form signed in ink. Erasures or alterations must be initialed in ink by the person signing the Bid Form.
 - C. A Bid price must be indicated for each section, bid item, alternate, adjustment unit price item, and unit price item listed therein.
 - D. If the Bid Form expressly indicates that submitting pricing on a specific alternate item is optional, and Bidder elects to not furnish pricing for such optional alternate item, then Bidder may enter the words “No Bid” or “Not Applicable.”
- 12.02 When submitting a paper bid, if Bidder has obtained the Bidding Documents as Electronic Documents, then Bidder shall prepare its Bid on a paper copy of the Bid Form printed from the Electronic Documents version of the Bidding Documents. The printed copy of the Bid Form must be clearly legible, printed on 8½ inch by 11-inch paper and as closely identical in appearance to the Electronic Document version of the Bid Form as may be practical. The Owner reserves the right to accept Bid Forms which nominally vary in appearance from the original paper version of the Bid Form, providing that all required information and submittals are included with the Bid.
- 12.03 A Bid by a corporation must be executed in the corporate name by a corporate officer (whose title must appear under the signature), accompanied by evidence of authority to sign. The corporate address and state of incorporation must be shown.
- 12.04 A Bid by a partnership must be executed in the partnership name and signed by a partner (whose title must appear under the signature), accompanied by evidence of authority to sign. The official address of the partnership must be shown.
- 12.05 A Bid by a limited liability company must be executed in the name of the firm by a member or other authorized person and accompanied by evidence of authority to sign. The state of formation of the firm and the official address of the firm must be shown.
- 12.06 A Bid by an individual must show the Bidder’s name and official address.
- 12.07 A Bid by a joint venture must be executed by an authorized representative of each joint venturer in the manner indicated on the Bid Form. The joint venture must have been formally established prior to submittal of a Bid, and the official address of the joint venture must be shown.
- 12.08 When submitting a paper bid, all names must be printed in ink below the signatures.
- 12.09 The Bid must contain an acknowledgment of receipt of all Addenda, the numbers of which must be filled in on the Bid Form.
- 12.10 Postal and e mail addresses and telephone number for communications regarding the Bid must be shown.

- 12.11 The Bid must contain evidence of Bidder’s authority to do business in the state where the Project is located, or Bidder must certify in writing that it will obtain such authority within the time for acceptance of Bids and attach such certification to the Bid.
- 12.12 If Bidder is required to be licensed to submit a Bid or perform the Work in the state where the Project is located, the Bid must contain evidence of Bidder’s licensure, or Bidder must certify in writing that it will obtain such licensure within the time for acceptance of Bids and attach such certification to the Bid. Bidder’s state contractor license number, if any, must also be shown on the Bid Form.

ARTICLE 13—BASIS OF BID

Unit Price

- 13.01 Bidders must submit a Bid on a unit price basis for each item of Work listed in the unit price section of the Bid Form.
- A. The “Bid Price” (sometimes referred to as the extended price) for each unit price Bid item will be the product of the “Estimated Quantity”, which Owner or its representative has set forth in the Bid Form, for the item and the corresponding “Bid Unit Price” offered by the Bidder. The total of all unit price Bid items will be the sum of these “Bid Prices”; such total will be used by Owner for Bid comparison purposes. The final quantities and Contract Price will be determined in accordance with Paragraph 13.03 of the General Conditions.
- B. Discrepancies between the multiplication of units of Work and unit prices will be resolved in favor of the unit prices. Discrepancies between the indicated sum of any column of figures and the correct sum thereof will be resolved in favor of the correct sum.

ARTICLE 14—SUBMITTAL OF BID

- 14.01 The Bid Form is to be completed and submitted with the Bid security and the other documents required to be submitted under the terms of Article 2 of the Bid Form.
- 14.02 A Bid must be received no later than the date and time prescribed and at the place indicated in the Advertisement or invitation to bid. Paper bids, if applicable, must be enclosed in a plainly marked package with the Project title, and, if applicable, the designated portion of the Project for which the Bid is submitted, the name and address of Bidder, and must be accompanied by the Bid security and other required documents. If a Bid is sent by mail or other delivery system, the sealed envelope containing the Bid must be enclosed in a separate package plainly marked on the outside with the notation “BID ENCLOSED.” A mailed Bid must be addressed to the location designated in the Advertisement.
- 14.03 Bids received after the date and time prescribed for the opening of bids, or not submitted at the correct location or in the designated manner, will not be accepted. Paper bids that are not accepted will be returned to the Bidder unopened.

ARTICLE 15—MODIFICATION AND WITHDRAWAL OF BID

- 15.01 An unopened Bid may be withdrawn by an appropriate document duly executed in the same manner that a Bid must be executed and delivered to the place where Bids are to be submitted prior to the date and time for the opening of Bids. Upon receipt of such notice, the unopened Bid will be returned to the Bidder.
- 15.02 If a Bidder wishes to modify its Bid prior to Bid opening, Bidder must withdraw its initial Bid in the manner specified in Paragraph 15.01 and submit a new Bid prior to the date and time for the opening of Bids.
- 15.03 If within 24 hours after Bids are opened any Bidder files a duly signed written notice with Owner and promptly thereafter demonstrates to the reasonable satisfaction of Owner that there was a material and substantial mistake in the preparation of its Bid, the Bidder may withdraw its Bid, and the Bid security will

be returned. Thereafter, if the Work is rebid, the Bidder will be disqualified from further bidding on the Work.

ARTICLE 16—OPENING OF BIDS

16.01 Bids will be opened at the time and place indicated in the advertisement or invitation to bid and, unless obviously non-responsive, read aloud publicly. A tabulation of the total amounts of the base Bids and major alternates, if any, will be made available to Bidders after the opening of Bids.

ARTICLE 17—BIDS TO REMAIN SUBJECT TO ACCEPTANCE

17.01 All Bids will remain subject to acceptance for the period of time stated in the Bid Form, but Owner may, in its sole discretion, release any Bid and return the Bid security prior to the end of this period.

ARTICLE 18—EVALUATION OF BIDS AND AWARD OF CONTRACT

18.01 Owner reserves the right to reject any or all Bids, including without limitation, nonconforming, nonresponsive, unbalanced, or conditional Bids. Owner also reserves the right to waive all minor Bid informalities not involving price, time, or changes in the Work.

18.02 Owner will reject the Bid of any Bidder that Owner finds, after reasonable inquiry and evaluation, to not be responsible.

18.03 If Bidder purports to add terms or conditions to its Bid, takes exception to any provision of the Bidding Documents, or attempts to alter the contents of the Contract Documents for purposes of the Bid, whether in the Bid itself or in a separate communication to Owner or Engineer, then Owner will reject the Bid as nonresponsive.

18.04 If Owner awards the contract for the Work, such award will be to the responsible Bidder submitting the lowest responsive Bid.

18.05 Evaluation of Bids

A. In evaluating Bids, Owner will consider whether the Bids comply with the prescribed requirements, and such alternates, unit prices, and other data, as may be requested in the Bid Form or prior to the Notice of Award.

B. For the determination of the apparent low Bidder(s) when alternate(s) are submitted, Bids will be compared on the basis of the sum of the base bid and the alternate(s) selected by the Owner for award.

C. For determination of the apparent low Bidder(s) when sectional bids are submitted, Bids will be compared on the basis of the aggregate of the Bids for separate sections and the Bids for combined sections that result in the lowest total amount for all of the Work.

D. For the determination of the apparent low Bidder when unit price bids are submitted, Bids will be compared on the basis of the total of the products of the estimated quantity of each item and unit price Bid for that item, together with any lump sum items.

E. For the determination of the apparent low Bidder when cost-plus-fee bids are submitted, Bids will be compared on the basis of the Guaranteed Maximum Price set forth by Bidder on the Bid Form.

18.06 In evaluating whether a Bidder is responsible, Owner will consider the qualifications of the Bidder and may consider the qualifications and experience of Subcontractors and Suppliers proposed for those portions of the Work for which the identity of Subcontractors and Suppliers must be submitted as provided in the Bidding Documents.

18.07 Owner may conduct such investigations as Owner deems necessary to establish the responsibility, qualifications, and financial ability of Bidders and any proposed Subcontractors or Suppliers.

ARTICLE 19—BONDS AND INSURANCE

19.01 Article 6 of the General Conditions, as may be modified by the Supplementary Conditions, sets forth Owner’s requirements as to performance and payment bonds, other required bonds (if any), and insurance. When the Successful Bidder delivers the executed Agreement to Owner, it must be accompanied by required bonds and insurance documentation.

19.02 Article 8, Bid Security, of these Instructions, addresses any requirements for providing bid bonds as part of the bidding process.

ARTICLE 20—SIGNING OF AGREEMENT

20.01 When Owner issues a Notice of Award to the Successful Bidder, it will be accompanied by the unexecuted counterparts of the Agreement along with the other Contract Documents as identified in the Agreement. Within 15 days thereafter, Successful Bidder must execute and deliver the required number of counterparts of the Agreement and any bonds and insurance documentation required to be delivered by the Contract Documents to Owner. Within 10 days thereafter, Owner will deliver one fully executed counterpart of the Agreement to Successful Bidder, together with printed and electronic copies of the Contract Documents as stated in Paragraph 2.02 of the General Conditions.

ARTICLE 21—SALES AND USE TAXES

21.01 Sales tax is to be included in the Bid.

ARTICLE 22—CONTRACTS TO BE ASSIGNED

ARTICLE 23—22.01 No Supplementary Conditions in this Article.

Items to Be Submitted with the Bid

for

Vernon Avenue Improvements

0T1.129866

Lower Minnesota River Watershed District

Savage, MN

BID FORMS

Vernon Avenue Improvements
OT1.129866

The terms used in this Bid with initial capital letters have the meanings stated in the Instructions to Bidders, the General Conditions, and the Conditions.

ARTICLE 1—OWNER AND BIDDER

- 1.01 This Bid is submitted to: Lower Minnesota River Watershed District, 112 E. 5th St, Suite #102, Chaska, MN 55318. Refer to the Advertisement for Bids for submittal location, format, and deadline for consideration.
- 1.02 This bid form is provided for Bidders reference. The Bid must be submitted to Lower Minnesota River Watershed District electronically through QuestCDN.
- 1.03 The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an Agreement with Owner in the form included in the Bidding Documents to perform all Work as specified or indicated in the Bidding Documents for the prices and within the times indicated in this Bid and in accordance with the other terms and conditions of the Bidding Documents.

ARTICLE 2—ATTACHMENTS TO THIS BID

- 2.01 The following documents are submitted with and made a condition of this Bid:
 - A. Required Bid security;
 - B. Section 00 45 11 Responsible Contractor Verification and Certification of Compliance Prime Contractor Bid Form Attachment of this Project Manual.

ARTICLE 3—BASIS OF BID

- 3.01 Unit Price Bids
- 3.02 Bidder will perform the Work listed in the Bid Schedule at the indicated unit prices.
 - A. Bidder acknowledges that:
 1. Each Bid Unit Price includes an amount considered by Bidder to be adequate to cover Contractor's overhead and profit for each separately identified item, and
 2. Estimated quantities are not guaranteed, and are solely for the purpose of comparison of Bids, and final payment for all Unit Price Work will be based on actual quantities, determined as provided in the Contract Documents.

ARTICLE 4—TIME OF COMPLETION

- 4.01 Bidder agrees that the Work will be substantially complete and will be completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions on or before the dates or within the number of calendar days indicated in the Agreement.

ARTICLE 5—BIDDER'S ACKNOWLEDGEMENTS: ACCEPTANCE PERIOD, INSTRUCTIONS, AND RECEIPT OF ADDENDA

- 5.01 Bid Acceptance Period
 - A. This Bid will remain subject to acceptance for 61 days after the Bid opening, or for such longer period of time that Bidder may agree to in writing upon request of Owner.

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5.02 Instructions to Bidders

- A. Bidder accepts all of the terms and conditions of the Instructions to Bidders, including without limitation those dealing with the disposition of Bid security.

5.03 Receipt of Addenda

- A. Bidder hereby acknowledges receipt of the following Addenda:

| Addendum Number | Addendum Date |
|-----------------|---------------|
| | |
| | |
| | |

ARTICLE 6—BIDDER’S REPRESENTATIONS AND CERTIFICATIONS

6.01 Bidder’s Representations

- A. In submitting this Bid, Bidder represents the following:
 - 1. Bidder has examined and carefully studied the Bidding Documents, including Addenda.
 - 2. Bidder has visited the Site, conducted a thorough visual examination of the Site and adjacent areas, and become familiar with the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
 - 3. Bidder is familiar with all Laws and Regulations that may affect cost, progress, and performance of the Work.
 - 4. Bidder has carefully studied the reports of explorations and tests of subsurface conditions at or adjacent to the Site and the drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the Supplementary Conditions, with respect to the Technical Data in such reports and drawings.
 - 5. Bidder has carefully studied the reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site that have been identified in the Supplementary Conditions, with respect to Technical Data in such reports and drawings.
 - 6. Bidder has considered the information known to Bidder itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Bidding Documents; and the Technical Data identified in the Supplementary Conditions or by definition, with respect to the effect of such information, observations, and Technical Data on (a) the cost, progress, and performance of the Work; (b) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder, if selected as Contractor; and (c) Bidder’s (Contractor’s) safety precautions and programs.
 - 7. Based on the information and observations referred to in the preceding paragraph, Bidder agrees that no further examinations, investigations, explorations, tests, studies,

or data are necessary for the performance of the Work at the Contract Price, within the Contract Times, and in accordance with the other terms and conditions of the Contract.

8. Bidder is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents.
9. Bidder has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Bidding Documents, and of discrepancies between Site conditions and the Contract Documents, and the written resolution thereof by Engineer is acceptable to Contractor.
10. The Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.
11. The submission of this Bid constitutes an incontrovertible representation by Bidder that without exception the Bid and all prices in the Bid are premised upon performing and furnishing the Work required by the Bidding Documents.

6.02 Bidder's Certifications

A. The Bidder certifies the following:

1. This Bid is genuine and not made in the interest of or on behalf of any undisclosed individual or entity and is not submitted in conformity with any collusive agreement or rules of any group, association, organization, or corporation.
2. Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid.
3. Bidder has not solicited or induced any individual or entity to refrain from bidding.
4. Bidder has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for the Contract. For the purposes of this Paragraph 8.02.A:
 - a. Corrupt practice means the offering, giving, receiving, or soliciting of anything of value likely to influence the action of a public official in the bidding process.
 - b. Fraudulent practice means an intentional misrepresentation of facts made (a) to influence the bidding process to the detriment of Owner, (b) to establish bid prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition.
 - c. Collusive practice means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish bid prices at artificial, non-competitive levels.
 - d. Coercive practice means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

BIDDER hereby submits this Bid as set forth above:

Bidder:

(typed or printed name of organization)

By: _____
(individual's signature)

Name: _____
(typed or printed)

Title: _____
(typed or printed)

Date: _____
(typed or printed)

If Bidder is a corporation, a partnership, or a joint venture, attach evidence of authority to sign.

Attest: _____
(individual's signature)

Name: _____
(typed or printed)

Title: _____
(typed or printed)

Date: _____
(typed or printed)

Address for giving notices:

Bidder's Contact:

Name: _____
(typed or printed)

Title: _____
(typed or printed)

Phone: _____

Email: _____

Address: _____

Bidder's Contractor License No.: (if applicable) _____

SCHEDULE OF BID PRICES

LOWER MINNESOTA RIVER WATERSHED DISTRICT
 VERNON AVENUE IMPROVEMENTS
 CITY OF SAVAGE, MINNESOTA
 BMI PROJECT NO. 0T1.129866

BIDDER agrees to perform all of the work described in the CONTRACT DOCUMENTS for the following unit prices:

NOTE: BIDS shall include sales tax and all applicable taxes and fees.

BIDDER must fill in unit prices in numerals, make extension for each item, and total.

- (1) INCLUDES REMOVAL OF PIPE APRONS AND ASSOCIATED APPURTENANCES.
- (2) PAVEMENT DEPTHS ARE APPROXIMATE AND ARE REFERENCED IN THE GEOTECHNICAL REPORT. VARIANCE IN PAVEMENT THICKNESS WILL NOT BE COMPENSATED AND IS TO BE USED AS DIRECTED BY THE ENGINEER.
- (3) TO BE USED AS DIRECTED BY THE ENGINEER.
- (4) INCLUDES ALL WORK NECESSARY TO PROVIDE A STREAM/DITCH BYPASS AND DEWATERING, AS NECESSARY, TO ALLOW FOR CONSTRUCTION OF THE STORM CULVERT
- (5) INCLUDES THE CLEARING OF ACCUMULATED DEBRIS AND RE-GRADING DITCHES TO PROVIDE PROPER DRAINAGE AS THEY APPROACH THE NEW CULVERT APRONS.
- (6) INCLUDES FURNISHING & INSTALLATION OF TRASH GUARD, AS INDICATED IN THE DETAILS.
- (7) INCLUDES FURNISHING & INSTALLATION OF PIPE TIES ON ALL PIPE JOINTS ALONG THE CULVERT AND INSTALLATION OF FINE AGGREGATE BEDDING, AS INDICATED IN THE
- (8) INCLUDES THE FURNISHING AND INSTALLATION OF GEOTEXTILE FABRIC, AS SPECIFIED.
- (9) NEW SIGN PANELS AND SALVAGED SIGNS TO BE REINSTALLED SHALL INCLUDE NEW SIGN POSTS, HARDWARE, AND INSTALLATION AS REQUIRED AND SHALL BE INCLUDED IN
- (10) INCLUDES THE FURNISHING AND INSTALLATION OF FERTILIZER AND SEED MIXTURE, AS SPECIFIED.
- (CV) COMPACTED VOLUME
- (EV) EXCAVATED VOLUME
- (LV) LOOSE VOLUME
- (P) PLAN QUANTITY

| ITEM NO. | MNDOT SPEC NO. | ITEM | NOTES | UNIT | EST. QTY | UNIT PRICE | AMOUNT |
|----------|----------------|--|---------|----------|----------|------------|-------------|
| 1 | 2021.501 | MOBILIZATION | | LUMP SUM | 1.00 | | |
| 2 | 2101.502 | CLEARING | | EACH | 48.0 | | |
| 3 | 2101.502 | GRUBBING | | EACH | 48.0 | | |
| 4 | 2104.502 | SALVAGE SIGN | | EACH | 1.0 | | |
| 5 | 2104.503 | SAWING BITUMINOUS PAVEMENT (FULL DEPTH) | | LIN FT | 26.0 | | |
| 6 | 2104.503 | REMOVE SEWER PIPE (STORM) | (1) | LIN FT | 96.0 | | |
| 7 | 2104.504 | REMOVE BITUMINOUS PAVEMENT | (P)(2) | SQ YD | 9,320.0 | | |
| 8 | 2104.507 | REMOVE RIPRAP | (EV) | CU YD | 40.0 | | |
| 9 | 2106.507 | EXCAVATION - COMMON | (EV)(P) | CU YD | 6,358.0 | | |
| 10 | 2106.507 | EXCAVATION - SUBGRADE | (EV)(3) | CU YD | 262.0 | | |
| 11 | 2106.507 | SELECT GRANULAR EMBANKMENT | (CV)(P) | CU YD | 3,366.0 | | |
| 12 | 2106.507 | STABILIZING AGGREGATE | (CV)(3) | CU YD | 262.0 | | |
| 13 | 2106.601 | DEWATERING | (4) | LUMP SUM | 1.0 | | |
| 14 | 2106.603 | MINOR GRADING | (5) | LIN FT | 80.0 | | |
| 15 | 2118.507 | AGGREGATE SURFACING CLASS 2 | (CV)(P) | CU YD | 188.0 | | |
| 16 | 2123.510 | COMMON LABORERS | (3) | HOUR | 15.0 | | |
| 17 | 2123.510 | DOZER | (3) | HOUR | 5.0 | | |
| 18 | 2123.610 | CRAWLER MOUNTED BACKHOE | (3) | HOUR | 5.0 | | |
| 19 | 2211.507 | AGGREGATE BASE CLASS 5 | (CV)(P) | CU YD | 2,244.0 | | |
| 20 | 2357.506 | BITUMINOUS MATERIAL FOR TACK COAT | | GAL | 550.0 | | |
| 21 | 2360.509 | TYPE SP 9.5 WEARING COURSE MIXTURE (3,C) | | TON | 1,848.0 | | |
| 22 | 2501.502 | 48" RC PIPE APRON | (6)(7) | EACH | 2.0 | | |
| 23 | 2503.503 | 48" RC PIPE SEWER CLASS III | (7) | LIN FT | 84.0 | | |
| 24 | 2511.507 | RANDOM RIPRAP CLASS III | (8) | CU YD | 80.0 | | |
| 25 | 2563.601 | TRAFFIC CONTROL | | LUMP SUM | 1.0 | | |
| 26 | 2564.602 | INSTALL SIGN | (9) | EACH | 1.0 | | |
| 27 | 2572.602 | TREE PRUNING | (3) | HOUR | 12.0 | | |
| 28 | 2573.501 | STABILIZED CONSTRUCTION EXIT | | LUMP SUM | 1.0 | | |
| 29 | 2573.502 | STORM DRAIN INLET PROTECTION | | EACH | 3.0 | | |
| 30 | 2573.503 | FLOTATION SILT CURTAIN TYPE STILL WATER | | LIN FT | 40.0 | | |
| 31 | 2573.503 | SEDIMENT CONTROL LOG TYPE WOOD FIBER | | LIN FT | 14,000.0 | | |
| 32 | 2574.507 | COMMON TOPSOIL BORROW | (LV) | CU YD | 1,426.0 | | |
| 33 | 2575.504 | ROLLED EROSION PREVENTION CATEGORY 20 W/ SEED MIX (25-141) | (10) | SQ YD | 8,295.0 | | |
| 34 | 2575.504 | ROLLED EROSION PREVENTION CATEGORY 20 W/ SEED MIX (34-181) | (10) | SQ YD | 257.0 | | |
| 35 | 2563.621 | TRAFFIC CONTROL SPECIAL (RR FLAGGING) | | DOL | 15,000.0 | \$1.00 | \$15,000.00 |

TOTAL PROJECT BID =

BID SECURITY FORM

| | |
|---|--|
| Bidder Name: Address <i>(principal place of business)</i> : | Surety Name: Address <i>(principal place of business)</i> : |
| Owner Name: Lower Minnesota River Watershed District Address <i>(principal place of business)</i> : 112 E. 5th St, Suite #102 Chaska, MN 55318 | Bid Project <i>(name and location)</i> : Vernon Avenue Improvements Bid Due Date: 03/14/2024 |
| Bond Penal Sum: Date of Bond: | |
| Surety and Bidder, intending to be legally bound hereby, subject to the terms set forth in this Bid Bond, do each cause this Bid Bond to be duly executed by an authorized officer, agent, or representative. | |
| Bidder _____ <i>(Full formal name of Bidder)</i> | Surety _____ <i>(Full formal name of Surety) (corporate seal)</i> |
| By: _____ <i>(Signature)</i> | By: _____ <i>(Signature) (Attach Power of Attorney)</i> |
| Name: _____ <i>(Printed or typed)</i> | Name: _____ <i>(Printed or typed)</i> |
| Title: _____ | Title: _____ |
| Attest: _____ <i>(Signature)</i> | Attest: _____ <i>(Signature)</i> |
| Name: _____ <i>(Printed or typed)</i> | Name: _____ <i>(Printed or typed)</i> |
| Title: _____ | Title: _____ |
| <i>Notes: (1) Note: Addresses are to be used for giving any required notice. (2) Provide execution by any additional parties, such as joint venturers, if necessary.</i> | |

1. Bidder and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to pay to Owner upon default of Bidder the penal sum set forth on the face of this Bond. Payment of the penal sum is the extent of Bidder's and Surety's liability. Recovery of such penal sum under the terms of this Bond will be Owner's sole and exclusive remedy upon default of Bidder.
2. Default of Bidder occurs upon the failure of Bidder to deliver within the time required by the Bidding Documents (or any extension thereof agreed to in writing by Owner) the executed Agreement required by the Bidding Documents and any performance and payment bonds required by the Bidding Documents.
3. This obligation will be null and void if:
 - 3.1. Owner accepts Bidder's Bid and Bidder delivers within the time required by the Bidding Documents (or any extension thereof agreed to in writing by Owner) the executed Agreement required by the Bidding Documents and any performance and payment bonds required by the Bidding Documents, or
 - 3.2. All Bids are rejected by Owner, or
 - 3.3. Owner fails to issue a Notice of Award to Bidder within the time specified in the Bidding Documents (or any extension thereof agreed to in writing by Bidder and, if applicable, consented to by Surety when required by Paragraph 5 hereof).
4. Payment under this Bond will be due and payable upon default of Bidder and within 30 calendar days after receipt by Bidder and Surety of written notice of default from Owner, which notice will be given with reasonable promptness, identifying this Bond and the Project and including a statement of the amount due.
5. Surety waives notice of any and all defenses based on or arising out of any time extension to issue Notice of Award agreed to in writing by Owner and Bidder, provided that the total time for issuing Notice of Award including extensions does not in the aggregate exceed 120 days from the Bid due date without Surety's written consent.
6. No suit or action will be commenced under this Bond prior to 30 calendar days after the notice of default required in Paragraph 4 above is received by Bidder and Surety, and in no case later than one year after the Bid due date.
7. Any suit or action under this Bond will be commenced only in a court of competent jurisdiction located in the state in which the Project is located.
8. Notices required hereunder must be in writing and sent to Bidder and Surety at their respective addresses shown on the face of this Bond. Such notices may be sent by personal delivery, commercial courier, or by United States Postal Service registered or certified mail, return receipt requested, postage pre-paid, and will be deemed to be effective upon receipt by the party concerned.
9. Surety shall cause to be attached to this Bond a current and effective Power of Attorney evidencing the authority of the officer, agent, or representative who executed this Bond on behalf of Surety to execute, seal, and deliver such Bond and bind the Surety thereby.
10. This Bond is intended to conform to all applicable statutory requirements. Any applicable requirement of any applicable statute that has been omitted from this Bond will be deemed to be included herein as if set forth at length. If any provision of this Bond conflicts with any applicable statute, then the provision of said statute governs and the remainder of this Bond that is not in conflict therewith continues in full force and effect.
11. The term "Bid" as used herein includes a Bid, offer, or proposal as applicable.

RESPONSIBLE CONTRACTOR VERIFICATION AND CERTIFICATION OF COMPLIANCE

PRIME CONTRACTOR BID FORM ATTACHMENT

PROJECT NUMBER: OT1.129866

This form includes changes by statutory references from the Laws of Minnesota 2015, chapter 64, sections 1-9. This form must be submitted with the bid form submitted for this project. A bid form received without this form, may be rejected.

| | |
|---|--|
| Minn. Stat. § 16C.285, Subd. 7. IMPLEMENTATION. ... any prime contractor or subcontractor or motor carrier that does not meet the minimum criteria in subdivision 3 or fails to verify that it meets those criteria is not a responsible contractor and is not eligible to be awarded a construction contract for the project or to perform work on the project... | |
| Minn. Stat. § 16C.285, Subd. 3. RESPONSIBLE CONTRACTOR, MINIMUM CRITERIA. "Responsible contractor" means a contractor that conforms to the responsibility requirements in the solicitation document for its portion of the work on the project and verifies that it meets the following minimum criteria: | |
| (1) | The Contractor: <ul style="list-style-type: none">(i) is in compliance with workers' compensation and unemployment insurance requirements;(ii) is in compliance with Department of Revenue and Department of Employment and Economic Development registration requirements if it has employees;(iii) has a valid federal tax identification number or a valid Social Security number if an individual; and(iv) has filed a certificate of authority to transact business in Minnesota with the Secretary of State if a foreign corporation or cooperative. |
| (2) | The contractor or related entity is in compliance with and, during the three-year period before submitting the verification, has not violated section 177.24, 177.25, 177.41 to 177.44, 181.03, 181.101, 181.13, 181.14, or 181.722, and has not violated United States Code, title 29, sections 201 to 219, or United States Code, title 40, sections 3141 to 3148. For purposes of this clause, a violation occurs when a contractor or related entity: <ul style="list-style-type: none">(i) repeatedly fails to pay statutorily required wages or penalties on one or more separate projects for a total underpayment of \$25,000 or more within the three-year period, provided that a failure to pay is "repeated" only if it involves two or more separate and distinct occurrences of underpayment during the three-year period;(ii) has been issued an order to comply by the commissioner of Labor and Industry that has become final;(iii) has been issued at least two determination letters within the three-year period by the Department of Transportation finding an underpayment by the contractor or related entity to its own employees;(iv) has been found by the commissioner of Labor and Industry to have repeatedly or willfully violated any of the sections referenced in this clause pursuant to section 177.27;(v) has been issued a ruling or findings of underpayment by the administrator of the Wage and Hour Division of the United States Department of Labor that have become final or have been upheld by an administrative law judge or the Administrative Review Board; or(vi) has been found liable for underpayment of wages or penalties or misrepresenting a construction worker as an independent contractor in an action brought in a court having jurisdiction. Provided that, if the contractor or related entity contests a determination of underpayment by the Department of Transportation in a contested case proceeding, a violation does not occur until the contested case proceeding has concluded with a determination that the contractor or related entity underpaid wages or penalties;* |

This document is a MODIFIED version of the MnDOT Responsible Contractor Verification and Certification of Compliance form

Lower Minnesota River Watershed District - OT1.129866

RESPONSIBLE CONTRACTOR VERIFICATION AND
CERTIFICATION OF COMPLIANCE

February 21, 2024

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| | |
|-----|---|
| (3) | The contractor or related entity is in compliance with and, during the three-year period before submitting the verification, has not violated section 181.723 or chapter 326B. For purposes of this clause, a violation occurs when a contractor or related entity has been issued a final administrative or licensing order;* |
| (4) | The contractor or related entity has not, more than twice during the three-year period before submitting the verification, had a certificate of compliance under section 363A.36 revoked or suspended based on the provisions of section 363A.36, with the revocation or suspension becoming final because it was upheld by the Office of Administrative Hearings or was not appealed to the office;* |
| (5) | The contractor or related entity has not received a final determination assessing a monetary sanction from the Department of Administration or Transportation for failure to meet targeted group business, disadvantaged business enterprise, or veteran-owned business goals, due to a lack of good faith effort, more than once during the three-year period before submitting the verification;* |
| | *Any violations, suspensions, revocations, or sanctions, as defined in clauses (2) to (5), occurring prior to July 1, 2014, shall not be considered in determining whether a contractor or related entity meets the minimum criteria. |
| (6) | The contractor or related entity is not currently suspended or debarred by the federal government or the state of Minnesota or any of its departments, commissions, agencies, or political subdivisions that have authority to debar a contractor; and |
| (7) | All subcontractors and motor carriers that the contractor intends to use to perform project work have verified to the contractor through a signed statement under oath by an owner or officer that they meet the minimum criteria listed in clauses (1) to (6). |

Minn. Stat. § 16C.285, Subd. 5. **SUBCONTRACTOR VERIFICATION.**

A prime contractor or subcontractor shall include in its verification of compliance under subdivision 4 a list of all of its first-tier subcontractors that it intends to retain for work on the project. Prior to execution of a construction contract, and as a condition precedent to the execution of a construction contract, the apparent successful prime contractor shall submit to the contracting authority a supplemental verification under oath confirming compliance with subdivision 3, clause (7). Each contractor or subcontractor shall obtain from all subcontractors with which it will have a direct contractual relationship a signed statement under oath by an owner or officer verifying that they meet all of the minimum criteria in subdivision 3 prior to execution of a construction contract with each subcontractor.

If a prime contractor or any subcontractor retains additional subcontractors on the project after submitting its verification of compliance, the prime contractor or subcontractor shall obtain verifications of compliance from each additional subcontractor with which it has a direct contractual relationship and shall submit a supplemental verification confirming compliance with subdivision 3, clause (7), within 14 days of retaining the additional subcontractors.

A prime contractor shall submit to the contracting authority upon request copies of the signed verifications of compliance from all subcontractors of any tier pursuant to subdivision 3, clause (7). A prime contractor and subcontractors shall not be responsible for the false statements of any subcontractor with which they do not have a direct contractual relationship. A prime contractor and subcontractors shall be responsible for false statements by their first-tier subcontractors with which they have a direct contractual relationship only if they accept the verification of compliance with actual knowledge that it contains a false statement.

Subd. 5a. Motor carrier verification. A prime contractor or subcontractor shall obtain annually from all motor carriers with which it will have a direct contractual relationship a signed statement under oath by an owner or officer verifying that they meet all of the minimum criteria in subdivision 3 prior to execution of a construction contract with each motor carrier. A prime contractor or subcontractor shall require each such motor carrier to provide it with immediate written notification in the event that the motor carrier no longer meets one or more of the minimum criteria in subdivision 3 after submitting its annual verification. A motor carrier shall be ineligible to perform work on a project covered by this section if it does not meet all the minimum criteria in subdivision 3. Upon request, a prime contractor

or subcontractor shall submit to the contracting authority the signed verifications of compliance from all motor carriers providing for-hire transportation of materials, equipment, or supplies for a project.

Minn. Stat. § 16C.285, Subd. 4. **VERIFICATION OF COMPLIANCE.**

A contractor responding to a solicitation document of a contracting authority shall submit to the contracting authority a signed statement under oath by an owner or officer verifying compliance with each of the minimum criteria in subdivision 3, with the exception of clause (7), at the time that it responds to the solicitation document.

A contracting authority may accept a signed statement under oath as sufficient to demonstrate that a contractor is a responsible contractor and shall not be held liable for awarding a contract in reasonable reliance on that statement. A prime contractor, subcontractor, or motor carrier that fails to verify compliance with any one of the required minimum criteria or makes a false statement under oath in a verification of compliance shall be ineligible to be awarded a construction contract on the project for which the verification was submitted.

A false statement under oath verifying compliance with any of the minimum criteria may result in termination of a construction contract that has already been awarded to a prime contractor or subcontractor or motor carrier that submits a false statement. A contracting authority shall not be liable for declining to award a contract or terminating a contract based on a reasonable determination that the contractor failed to verify compliance with the minimum criteria or falsely stated that it meets the minimum criteria. A verification of compliance need not be notarized. An electronic verification of compliance made and submitted as part of an electronic bid shall be an acceptable verification of compliance under this section provided that it contains an electronic signature as defined in section 325L.02, paragraph (h).

CERTIFICATION

By signing this document I certify that I am an owner or officer of the company, and I certify under oath that:

- 1) My company meets each of the Minimum Criteria to be a responsible contractor as defined herein and is in compliance with Minn. Stat. § 16C.285, and**
- 2) if my company is awarded a contract, I will submit Attachment A-1 prior to contract execution, and**
- 3) if my company is awarded a contract, I will also submit Attachment A-2 as required.**

Authorized Signature of Owner or Officer:

Printed Name:

Title:

Date:

Company Name:

NOTE: Minn. Stat. § 16C.285, Subd. 2, (c) If only one prime contractor responds to a solicitation document, a contracting authority may award a construction contract to the responding prime contractor even if the minimum criteria in subdivision 3 are not met.

This document is a MODIFIED version of the MnDOT Responsible Contractor Verification and Certification of Compliance form

Lower Minnesota River Watershed District - OT1.129866

RESPONSIBLE CONTRACTOR VERIFICATION AND
CERTIFICATION OF COMPLIANCE

February 21, 2024

PAGE 00 45 11-3

******END OF SECTION******

This document is a MODIFIED version of the MnDOT Responsible Contractor Verification and Certification of Compliance form

Lower Minnesota River Watershed District - OT1.129866

RESPONSIBLE CONTRACTOR VERIFICATION AND
CERTIFICATION OF COMPLIANCE

February 21, 2024

PAGE 00 45 11-4

Items to Be Executed After Bid Opening
for
Vernon Avenue Improvements
OT1.129866

Lower Minnesota River Watershed District
Savage, MN

(The Low Bidder May Be Requested to Provide This Information After
the Bids Are Received But Prior to Issuing the Notice of Award)

BIDDERS QUALIFICATIONS

GENERAL INFORMATION

The low bidder is requested to furnish the following information. Additional sheets shall be attached as required.

Contractor's name and address: _____

Number of years as a Contractor in construction work of this type: _____

Names and titles of all officers of Contractor's firm: _____

SUBMIT a list of three construction contracts completed by the Contractor during the last five years involving work of similar type and comparable value. The list shall include the following information as a minimum:

- Name, address, and telephone number of owner.
- Name of project.
- Location of project.
- Brief description of the work involved.
- Contract amount.
- Date of completion of contract.
- Name, address and telephone number of architect or engineer.
- Name of owner's project engineer.

EQUIPMENT/MATERIAL SOURCE INFORMATION

The low bidder is requested to list the name of the manufacturer or supplier and catalog numbers of the equipment or material proposed to be furnished under the bid. Awarding of a contract under this bid will not imply approval by the Owner of the manufacturers or suppliers listed by the low bidder.

- Plant Mix Bituminous
- Aggregates

****END OF SECTION****

NOTICE OF AWARD

Date of Issuance:

Owner: Lower Minnesota River Watershed District
Owner's Project No.:
Engineer: Bolton & Menk, Inc. Engineer's Project No.: OT1.129866
Project: Vernon Avenue Improvements
Contract Name:
Bidder:
Bidder's Address:

You are notified that Owner has accepted your Bid dated _____ for the above Contract, and that you are the Successful Bidder and are awarded a Contract for:

- Vernon Avenue Improvements

The Contract Price of the awarded Contract is \$_____. Contract Price is subject to adjustment based on the provisions of the Contract, including but not limited to those governing changes, Unit Price Work, and Work performed on a cost-plus-fee basis, as applicable.

4 unexecuted counterparts of the Agreement accompany this Notice of Award, and one copy of the Contract Documents accompanies this Notice of Award or has been transmitted or made available to Bidder electronically.

Drawings will be delivered separately from the other Contract Documents.

You must comply with the following conditions precedent within 15 days of the date of receipt of this Notice of Award:

1. Deliver to Owner 4 counterparts of the Agreement, signed by Bidder (as Contractor).
2. Deliver with the signed Agreement(s) the Contract security (such as required performance and payment bonds) and insurance documentation, as specified in the Instructions to Bidders and in the General Conditions, Articles 2 and 6.
3. Deliver to Owner executed Section 00 51 11 "ADDITIONAL SUBCONTRACTORS LIST" in accordance with Minn. Stat. 16C.285 subd.3 Subclauses (1) to (7). Delivery is a condition precedent to execution of this contract and failure to submit this form shall be cause for the Owner to cancel Award of Contract and declare your Bid security forfeited.
4. Other conditions precedent (if any): [Describe other conditions that require Successful Bidder's compliance]

Failure to comply with these conditions within the time specified will entitle Owner to consider you in default, annul this Notice of Award, and declare your Bid security forfeited.

Within 10 days after you comply with the above conditions, Owner will return to you one fully signed counterpart of the Agreement, together with any additional copies of the Contract Documents as indicated in Paragraph 2.02 of the General Conditions.

Owner: Lower Minnesota River Watershed District

By (signature): _____

Name (printed): _____

Title: _____

Copy: Engineer

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**RESPONSIBLE CONTRACTOR VERIFICATION AND CERTIFICATION OF COMPLIANCE
ATTACHMENT A-1
FIRST-TIER SUBCONTRACTORS LIST**

SUBMIT PRIOR TO EXECUTION OF A CONSTRUCTION CONTRACT

PROJECT NUMBER: OT1.129866

Minn. Stat. § 16C.285, Subd. 5. A prime contractor or subcontractor shall include in its verification of compliance under subdivision 4 a list of all of its first-tier subcontractors that it intends to retain for work on the project. Prior to execution of a construction contract, and as a condition precedent to the execution of a construction contract, the apparent successful prime contractor shall submit to the contracting authority a supplemental verification under oath confirming compliance with subdivision 3, clause (7). Each contractor or subcontractor shall obtain from all subcontractors with which it will have a direct contractual relationship a signed statement under oath by an owner or officer verifying that they meet all of the minimum criteria in subdivision 3 prior to execution of a construction contract with each subcontractor.

| FIRST TIER SUBCONTRACTOR NAMES* (Legal name of company as registered with the Secretary of State) | Name of city where company home office is located |
|--|--|
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| | |
| | |

*Attach additional sheets as needed for submission of all first-tier subcontractors.

| SUPPLEMENTAL CERTIFICATION FOR ATTACHMENT A-1 | |
|--|----------------------|
| By signing this document I certify that I am an owner or officer of the company, and I certify under oath that: All first-tier subcontractors listed on attachment A-1 have verified through a signed statement under oath by an owner or officer that they meet the minimum criteria to be a responsible contractor as defined in Minn. Stat. § 16C.285. | |
| Authorized Signature of Owner or Officer: | Printed Name: |
| Title: | Date: |
| Company Name: | |

**ADDITIONAL SUBCONTRACTORS LIST
ATTACHMENT A-2
ADDITIONAL SUBCONTRACTORS LIST**

**PRIME CONTRACTOR TO SUBMIT AS SUBCONTRACTORS ARE ADDED TO THE PROJECT
PROJECT NUMBER: OT1.129866**

This form must be submitted to the Project Manager or individual as identified in the solicitation document.

Minn. Stat. § 16C.285, Subd. 5. If a prime contractor or any subcontractor retains additional subcontractors on the project after submitting its verification of compliance, the prime contractor or subcontractor shall obtain verifications of compliance from each additional subcontractor with which it has a direct contractual relationship and shall submit a supplemental verification confirming compliance with subdivision 3, clause (7), within 14 days of retaining the additional subcontractors.

| ADDITIONAL SUBCONTRACTOR NAMES* (Legal name of company as registered with the Secretary of State) | Name of city where company home office is located |
|--|--|
| | |
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| | |
| | |
| | |

*Attach additional sheets as needed for submission of all additional subcontractors.

| SUPPLEMENTAL CERTIFICATION FOR ATTACHMENT A-2 | |
|--|----------------------|
| By signing this document I certify that I am an owner or officer of the company, and I certify under oath that: All additional subcontractors listed on Attachment A-2 have verified through a signed statement under oath by an owner or officer that they meet the minimum criteria to be a responsible contractor as defined in Minn. Stat. § 16C.285. | |
| Authorized Signature of Owner or Officer: | Printed Name: |
| Title: | Date: |
| Company Name: | |

AGREEMENT FORMS

This Agreement is by and between Lower Minnesota River Watershed District (“Owner”) and _____ (“Contractor”).

Terms used in this Agreement have the meanings stated in the General Conditions and the Supplementary Conditions.

Owner and Contractor hereby agree as follows:

ARTICLE 1—WORK

1.01 Contractor shall complete all Work as specified or indicated in the Contract Documents. The Work is generally described as follows:

- Project OT1.129866 - Vernon Avenue Improvements

ARTICLE 2—THE PROJECT

2.01 The Project, of which the Work under the Contract Documents is a part, is generally described as follows:

- Vernon Avenue Improvements

ARTICLE 3—ENGINEER

3.01 The Owner has retained Bolton & Menk, Inc. (“Engineer”) to act as Owner’s representative, assume all duties and responsibilities of Engineer, and have the rights and authority assigned to Engineer in the Contract.

3.02 The part of the Project that pertains to the Work has been designed by Bolton & Menk, Inc.

ARTICLE 4—CONTRACT TIMES

4.01 Time Is of The Essence

- A. All time limits for Milestones, if any, Substantial Completion, and completion and readiness for final payment as stated in the Contract Documents are of the essence of the Contract.

4.02 Substantial Completion

- A. Substantial completion shall be defined as:
 1. The date when all work under the contract with the exception of minor punchlist items and final clean up.
 2. The Contractor acknowledges that ongoing inspections are required until the conditions of all construction permits for this project are met and specifically during the following work activities: excavation, backfilling, underground utilities including water, sanitary, and storm sewer, compaction, aggregate base, paving, and removal of all traffic control signage and erosion control temporary best management practices.

4.03 Contract Times: Dates

- A. The work will be substantially completed on or before 09/27/2024, and completed and ready for final payment in accordance with Paragraph 15.06 of Section 00 72 00 “General Conditions” of this Project Manual on or before 10/11/2024.

4.04 Milestones

- A. Parts of the Work must be substantially completed on or before the following Milestone(s):

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1. **The work must reach substantial completion within 42 calendar days of commencement of earth disturbing activities; and final completion within 14 calendar days of substantial completion, unless otherwise approved by the Engineer in writing.**

4.05 Liquidated Damages

- A. Contractor and Owner recognize that time is of the essence as stated in Paragraph 4.01 above and that Owner will suffer financial and other losses if the Work is not completed and Milestones not achieved within the Contract Times, as duly modified. The parties also recognize the delays, expense, and difficulties involved in proving, in a legal or arbitration proceeding, the actual loss suffered by Owner if the Work is not completed on time. Accordingly, instead of requiring any such proof, Owner and Contractor agree that as liquidated damages for delay (but not as a penalty):
 1. Substantial Completion: Contractor shall pay Owner \$1,500.00 for each day that expires after the time (as duly adjusted pursuant to the Contract) specified above for Substantial Completion, until the Work is substantially complete.
 2. Completion of Remaining Work: After Substantial Completion, if Contractor shall neglect, refuse, or fail to complete the remaining Work within the Contract Times (as duly adjusted pursuant to the Contract) for completion and readiness for final payment, Contractor shall pay Owner \$350.00 for each day that expires after such time until the Work is completed and ready for final payment.
 3. Milestones: Contractor shall pay Owner \$1,500.00 for each day that expires after the time (as duly adjusted pursuant to the Contract) specified above for achievement of Milestone 1, until Milestone 1 is achieved, or until the time specified for Substantial Completion is reached, at which time the rate indicated in Paragraph 4.05.A.1 will apply, rather than the Milestone rate.
 4. Liquidated damages for failing to timely attain completion are not additive and will not be imposed concurrently.
- B. If Owner recovers liquidated damages for a delay in completion by Contractor, then such liquidated damages are Owner's sole and exclusive remedy for such delay, and Owner is precluded from recovering any other damages, whether actual, direct, excess, or consequential, for such delay, except for special damages (if any) specified in this Agreement.

ARTICLE 5—CONTRACT PRICE

- 5.01 Owner shall pay Contractor for completion of the Work in accordance with the Contract Documents, the amounts that follow, subject to adjustment under the Contract:
 - A. For all Unit Price Work, an amount equal to the sum of the extended prices (established for each separately identified item of Unit Price Work by multiplying the unit price times the actual quantity of that item).
 - B. The extended prices for Unit Price Work set forth as of the Effective Date of the Contract are based on estimated quantities. As provided in Paragraph 13.03 of the General Conditions, estimated quantities are not guaranteed, and determinations of actual quantities and classifications are to be made by Engineer.
 - C. For all awarded Work, at the prices stated in Contractor's Bid, attached hereto as an exhibit.
 - D. The Work awarded shall include:
 1. Base Bid

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ARTICLE 6—PAYMENT PROCEDURES

6.01 Submittal and Processing of Payments

- A. Applications for Payment shall be submitted and processed in accordance with Article 15 of the General Conditions or as modified by the Supplemental Conditions.

6.02 Progress Payments; Retainage

- A. Owner shall make progress payments during performance of the work on the basis of Contractor's Applications for Payment dated on or about the 30th day of each month of the Work as provided in Paragraph 6.02.A.1 below, provided that such Applications for Payment have been submitted in a timely manner and otherwise meet the requirements of the Contract. All such payments will be measured by the Schedule of Values established as provided in the General Conditions (and in the case of Unit Price Work based on the number of units completed) or, in the event there is no Schedule of Values, as provided elsewhere in the Contract.
 1. Prior to Substantial Completion, progress payments will be made in an amount equal to the percentage indicated below but, in each case, less the aggregate of payments previously made and less such amounts as Owner may withhold, including but not limited to liquidated damages, in accordance with the Contract.
 - a. 95% percent of the value of the Work completed (with the balance being retainage).
 - b. 95% percent of cost of materials and equipment not incorporated in the Work (with the balance being retainage).
- B. Within 60 days of the date of Substantial Completion, Owner shall pay an amount sufficient to increase total payments to Contractor to 99 percent of the Work completed, less such amounts set off by Owner pursuant to Paragraph 15.01.E of the General Conditions, and less 250 percent of Engineer's estimate of the value of Work to be completed or corrected as shown on the punch list of items to be completed or corrected prior to final payment and all final paperwork is completed. Final paperwork is defined as documents required by the contract which may include but are not limited to:
 1. Operations Manuals, as built drawings, and submittals required by the contract documents, and
 2. Payroll documents for projects with prevailing wage requirements, and
 3. IC 134, and
 4. Lien Releases, if required.
 - a. Mn Department of Commerce Form 40.5.1.
 - b. <http://www.commerce.state.mn.us/UCB/40.5.1.pdf> or equal.

6.03 Progress Payment to Subcontractors

- A. For contracts within the State of Minnesota, MN Statute 471.425 Subd. 4a. shall apply. MN Statute 471.425 Subd. 4a. requires:
 1. The prime contractor shall pay any subcontractor within ten days of the prime contractor's receipt of payment for undisputed services provided by the subcontractor.
 2. The prime contractor shall pay interest of 1-1/2 percent per month or any part of a month to the subcontractor on any undisputed amount not paid on time to the subcontractor.

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3. The minimum monthly interest penalty payment for an unpaid balance of \$100 or more is \$10. For an unpaid balance of less than \$100, the prime contractor shall pay the actual penalty due to the subcontractor.
4. A subcontractor who prevails in a civil action to collect interest penalties from a prime contractor must be awarded its costs and disbursements, including attorney's fees, incurred in bringing the action."

6.04 Final Payment

- A. Upon final completion and acceptance of the Work, Owner shall pay the remainder of the Contract Price in accordance with Paragraph 15.06 of the General Conditions.

6.05 Consent of Surety

- A. Owner will not make final payment or return or release retainage at Substantial Completion or any other time, unless Contractor submits written consent of the surety to such payment, return, or release.

6.06 Interest

- A. All amounts not paid when due will bear interest at the rate of 1.5 percent per month.

ARTICLE 7—CONTRACT DOCUMENTS

7.01 Contents

- A. The Contract Documents consist of all the following:
 1. This Agreement.
 2. Bonds:
 - a. Performance bond (together with power of attorney).
 - b. Payment bond (together with power of attorney).
 3. General Conditions.
 4. Supplementary Conditions.
 5. Specifications as listed in the table of contents of the project manual (copy of list attached).
 6. Drawings as listed in the table of contents of the project manual (copy of list attached.)
 7. _____
 8. Addenda (numbers ___ to ___, inclusive).
 9. Exhibits to this Agreement (enumerated as follows):
 - a. Contractor's Bid (pages ___ to ___, inclusive).
 10. The following which may be delivered or issued on or after the Effective Date of the Contract and are not attached hereto:
 - a. Notice to Proceed.
 - b. Work Change Directives.
 - c. Change Orders.
 - d. Field Orders.

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- e. Warranty Bond, if any.
- B. The Contract Documents listed in Paragraph 7.01.A are attached to this Agreement (except as expressly noted otherwise above).
- C. There are no Contract Documents other than those listed above in this Article 7.
- D. The Contract Documents may only be amended, modified, or supplemented as provided in the Contract.

ARTICLE 8—REPRESENTATIONS, CERTIFICATIONS, AND STIPULATIONS

8.01 Contractor's Representations

- A. In order to induce Owner to enter into this Contract, Contractor makes the following representations:
 - 1. Contractor has examined and carefully studied the Contract Documents, including Addenda.
 - 2. Contractor has visited the Site, conducted a thorough visual examination of the Site and adjacent areas, and become familiar with the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
 - 3. Contractor is familiar with all Laws and Regulations that may affect cost, progress, and performance of the Work.
 - 4. Contractor has carefully studied the reports of explorations and tests of subsurface conditions at or adjacent to the Site and the drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the Supplementary Conditions, with respect to the Technical Data in such reports and drawings.
 - 5. Contractor has carefully studied the reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site that have been identified in the Supplementary Conditions, with respect to Technical Data in such reports and drawings.
 - 6. Contractor has considered the information known to Contractor itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Contract Documents; and the Technical Data identified in the Supplementary Conditions or by definition, with respect to the effect of such information, observations, and Technical Data on (a) the cost, progress, and performance of the Work; (b) the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor; and (c) Contractor's safety precautions and programs.
 - 7. Based on the information and observations referred to in the preceding paragraph, Contractor agrees that no further examinations, investigations, explorations, tests, studies, or data are necessary for the performance of the Work at the Contract Price, within the Contract Times, and in accordance with the other terms and conditions of the Contract.
 - 8. Contractor is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Contract Documents.
 - 9. Contractor has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Contractor has discovered in the Contract Documents, and of discrepancies between Site conditions and the Contract Documents, and the written resolution thereof by Engineer is acceptable to Contractor.
 - 10. The Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.

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11. Contractor's entry into this Contract constitutes an incontrovertible representation by Contractor that without exception all prices in the Agreement are premised upon performing and furnishing the Work required by the Contract Documents.

8.02 Contractor's Certifications

- A. Contractor certifies that it has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for or in executing the Contract. For the purposes of this Paragraph 8.02:
 1. "corrupt practice" means the offering, giving, receiving, or soliciting of anything of value likely to influence the action of a public official in the bidding process or in the Contract execution;
 2. "fraudulent practice" means an intentional misrepresentation of facts made (a) to influence the bidding process or the execution of the Contract to the detriment of Owner, (b) to establish Bid or Contract prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition;
 3. "collusive practice" means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish Bid prices at artificial, non-competitive levels; and
 4. "coercive practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

8.03 Standard General Conditions

- A. Owner stipulates that if the General Conditions that are made a part of this Contract are EJCDC® C 700, Standard General Conditions for the Construction Contract (2018), published by the Engineers Joint Contract Documents Committee, and if Owner is the party that has furnished said General Conditions, then Owner has plainly shown all modifications to the standard wording of such published document to the Contractor, through a process such as highlighting or "track changes" (redline/strikeout), or in the Supplementary Conditions.

IN WITNESS WHEREOF, Owner and Contractor have signed this Agreement.

This Agreement will be effective on _____ (which is the Effective Date of the Contract).

OWNER:

CONTRACTOR:

Lower Minnesota River Watershed District
(typed or printed name of organization)

(typed or printed name of organization)

By: _____
(individual's signature)

By: _____
(individual's signature)

Date: _____
(date signed)

Date: _____
(date signed)

Name: _____
(typed or printed)

Name: _____
(typed or printed)

Title: _____
(typed or printed)

Title: _____
(typed or printed)

(If Contractor is a corporation, a partnership, or a joint venture, attach evidence of authority to sign.)

Attest: _____
(individual's signature)

Attest: _____
(individual's signature)

Title: _____
(typed or printed)

Title: _____
(typed or printed)

Address for giving notices:
112 E. 5th St, Suite #102
Chaska, MN 55318

Address for giving notices:

Designated Representative:

Designated Representative

Name: _____
(typed or printed)

Name: _____
(typed or printed)

Title: _____
(typed or printed)

Title: _____
(typed or printed)

Address: _____

Address: _____

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NOTICE TO PROCEED

Owner: Lower Minnesota River Watershed Owner's Project No.: _____
Engineer: Bolton & Menk, Inc. Engineer's Project No.: 0T1.129866
Contractor: _____ Contractor's Project No.: _____
Project: Vernon Avenue Improvements
Contract Name: _____
Effective Date of Contract: _____

Owner hereby notifies Contractor that the Contract Times under the above Contract will commence to run on _____ pursuant to Paragraph 4.01 of the General Conditions.

On that date, Contractor shall start performing its obligations under the Contract Documents. No Work will be done at the Site prior to such date.

The Substantial Completion and Final Completion must be achieved in accordance with the requirements of the Agreement.

Before starting any Work at the Site, Contractor must comply with the following: None

Owner: Lower Minnesota River Watershed District

By (signature): _____

Name (printed): _____

Title: _____

Date Issued: _____

Copy: Engineer

PERFORMANCE BOND FORM

| | |
|--|---|
| Contractor Name: Address <i>(principal place of business)</i> : | Surety Name: Address <i>(principal place of business)</i> : |
| Owner Name: Lower Minnesota River Watershed District Mailing address <i>(principal place of business)</i> : 112 E. 5th St, Suite #102 Chaska, MN 55318 | Contract Description <i>(name and location)</i> : Vernon Avenue Improvements Contract Price: Effective Date of Contract: |
| Bond Bond Amount: Date of Bond: <i>(Date of Bond cannot be earlier than Effective Date of Contract)</i> Modifications to this Bond form: <input type="checkbox"/> None <input type="checkbox"/> See Paragraph 16 | |
| Surety and Contractor, intending to be legally bound hereby, subject to the terms set forth in this Performance Bond, do each cause this Performance Bond to be duly executed by an authorized officer, agent, or representative. | |
| Contractor as Principal | Surety |
| _____ <i>(Full formal name of Contractor)</i> | _____ <i>(Full formal name of Surety) (corporate seal)</i> |
| By: _____ <i>(Signature)</i> | By: _____ <i>(Signature)(Attach Power of Attorney)</i> |
| Name: _____ <i>(Printed or typed)</i> | Name: _____ <i>(Printed or typed)</i> |
| Title: _____ | Title: _____ |
| Attest: _____ <i>(Signature)</i> | Attest: _____ <i>(Signature)</i> |
| Name: _____ <i>(Printed or typed)</i> | Name: _____ <i>(Printed or typed)</i> |
| Title: _____ | Title: _____ |
| <i>Notes: (1) Provide supplemental execution by any additional parties, such as joint venturers. (2) Any singular reference to Contractor, Surety, Owner, or other party is considered plural where applicable.</i> | |

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1. The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to the Owner for the performance of the Construction Contract, which is incorporated herein by reference.
2. If the Contractor performs the Construction Contract, the Surety and the Contractor shall have no obligation under this Bond, except when applicable to participate in a conference as provided in Paragraph 3.
3. If there is no Owner Default under the Construction Contract, the Surety's obligation under this Bond will arise after:
 - 3.1. The Owner first provides notice to the Contractor and the Surety that the Owner is considering declaring a Contractor Default. Such notice may indicate whether the Owner is requesting a conference among the Owner, Contractor, and Surety to discuss the Contractor's performance. If the Owner does not request a conference, the Surety may, within five (5) business days after receipt of the Owner's notice, request such a conference. If the Surety timely requests a conference, the Owner shall attend. Unless the Owner agrees otherwise, any conference requested under this Paragraph 3.1 will be held within ten (10) business days of the Surety's receipt of the Owner's notice. If the Owner, the Contractor, and the Surety agree, the Contractor shall be allowed a reasonable time to perform the Construction Contract, but such an agreement does not waive the Owner's right, if any, subsequently to declare a Contractor Default;
 - 3.2. The Owner declares a Contractor Default, terminates the Construction Contract, and notifies the Surety; and
 - 3.3. The Owner has agreed to pay the Balance of the Contract Price in accordance with the terms of the Construction Contract to the Surety or to a contractor selected to perform the Construction Contract.
4. Failure on the part of the Owner to comply with the notice requirement in Paragraph 3.1 does not constitute a failure to comply with a condition precedent to the Surety's obligations, or release the Surety from its obligations, except to the extent the Surety demonstrates actual prejudice.
5. When the Owner has satisfied the conditions of Paragraph 3, the Surety shall promptly and at the Surety's expense take one of the following actions:
 - 5.1. Arrange for the Contractor, with the consent of the Owner, to perform and complete the Construction Contract;
 - 5.2. Undertake to perform and complete the Construction Contract itself, through its agents or independent contractors;
 - 5.3. Obtain bids or negotiated proposals from qualified contractors acceptable to the Owner for a contract for performance and completion of the Construction Contract, arrange for a contract to be prepared for execution by the Owner and a contractor selected with the Owners concurrence, to be secured with performance and payment bonds executed by a qualified surety equivalent to the bonds issued on the Construction Contract, and pay to the Owner the amount of damages as described in Paragraph 7 in excess of the Balance of the Contract Price incurred by the Owner as a result of the Contractor Default; or
 - 5.4. Waive its right to perform and complete, arrange for completion, or obtain a new contractor, and with reasonable promptness under the circumstances:

5.4.1 After investigation, determine the amount for which it may be liable to the Owner and, as soon as practicable after the amount is determined, make payment to the Owner; or

5.4.2 Deny liability in whole or in part and notify the Owner, citing the reasons for denial.

6. If the Surety does not proceed as provided in Paragraph 5 with reasonable promptness, the Surety shall be deemed to be in default on this Bond seven days after receipt of an additional written notice from the Owner to the Surety demanding that the Surety perform its obligations under this Bond, and the Owner shall be entitled to enforce any remedy available to the Owner. If the Surety proceeds as provided in Paragraph 5.4, and the Owner refuses the payment, or the Surety has denied liability, in whole or in part, without further notice, the Owner shall be entitled to enforce any remedy available to the Owner.
7. If the Surety elects to act under Paragraph 5.1, 5.2, or 5.3, then the responsibilities of the Surety to the Owner will not be greater than those of the Contractor under the Construction Contract, and the responsibilities of the Owner to the Surety will not be greater than those of the Owner under the Construction Contract. Subject to the commitment by the Owner to pay the Balance of the Contract Price, the Surety is obligated, without duplication for:
 - 7.1. the responsibilities of the Contractor for correction of defective work and completion of the Construction Contract;
 - 7.2. additional legal, design professional, and delay costs resulting from the Contractor's Default, and resulting from the actions or failure to act of the Surety under Paragraph 5; and
 - 7.3. liquidated damages, or if no liquidated damages are specified in the Construction Contract, actual damages caused by delayed performance or non-performance of the Contractor.
8. If the Surety elects to act under Paragraph 5.1, 5.3, or 5.4, the Surety's liability is limited to the amount of this Bond.
9. The Surety shall not be liable to the Owner or others for obligations of the Contractor that are unrelated to the Construction Contract, and the Balance of the Contract Price will not be reduced or set off on account of any such unrelated obligations. No right of action will accrue on this Bond to any person or entity other than the Owner or its heirs, executors, administrators, successors, and assigns.
10. The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders, and other obligations.
11. Any proceeding, legal or equitable, under this Bond must be instituted in any court of competent jurisdiction in the location in which the work or part of the work is located and must be instituted within two years after a declaration of Contractor Default or within two years after the Contractor ceased working or within two years after the Surety refuses or fails to perform its obligations under this Bond, whichever occurs first. If the provisions of this paragraph are void or prohibited by law, the minimum periods of limitations available to sureties as a defense in the jurisdiction of the suit will be applicable.
12. Notice to the Surety, the Owner, or the Contractor must be mailed or delivered to the address shown on the page on which their signature appears.
13. When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement will be deemed deleted therefrom and provisions conforming to such statutory or other legal requirement will be deemed incorporated herein. When so furnished, the intent is that this Bond will be construed as a statutory bond and not as a common law bond.
14. Definitions

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- 14.1. Balance of the Contract Price—The total amount payable by the Owner to the Contractor under the Construction Contract after all proper adjustments have been made including allowance for the Contractor for any amounts received or to be received by the Owner in settlement of insurance or other claims for damages to which the Contractor is entitled, reduced by all valid and proper payments made to or on behalf of the Contractor under the Construction Contract.
- 14.2. Construction Contract—The agreement between the Owner and Contractor identified on the cover page, including all Contract Documents and changes made to the agreement and the Contract Documents.
- 14.3. Contractor Default—Failure of the Contractor, which has not been remedied or waived, to perform or otherwise to comply with a material term of the Construction Contract.
- 14.4. Owner Default—Failure of the Owner, which has not been remedied or waived, to pay the Contractor as required under the Construction Contract or to perform and complete or comply with the other material terms of the Construction Contract.
- 14.5. Contract Documents—All the documents that comprise the agreement between the Owner and Contractor.
15. If this Bond is issued for an agreement between a contractor and subcontractor, the term Contractor in this Bond will be deemed to be Subcontractor and the term Owner will be deemed to be Contractor.
16. Modifications to this Bond are as follows: None

PAYMENT BOND FORM

| | |
|--|---|
| Contractor Name: Address <i>(principal place of business)</i> : | Surety Name: Address <i>(principal place of business)</i> : |
| Owner Lower Minnesota River Watershed Name: District Mailing address <i>(principal place of business)</i> : 112 E. 5th St, Suite #102 Chaska, MN 55318 | Contract Description <i>(name and location)</i> : Vernon Avenue Improvements Contract Price: Effective Date of Contract: |
| Bond Bond Amount: Date of Bond: <i>(Date of Bond cannot be earlier than Effective Date of Contract)</i> Modifications to this Bond form: <input type="checkbox"/> None <input type="checkbox"/> See Paragraph 18 | |
| Surety and Contractor, intending to be legally bound hereby, subject to the terms set forth in this Payment Bond, do each cause this Payment Bond to be duly executed by an authorized officer, agent, or representative. | |
| Contractor as Principal | Surety |
| _____ <i>(Full formal name of Contractor)</i> | _____ <i>(Full formal name of Surety) (corporate seal)</i> |
| By: _____ <i>(Signature)</i> | By: _____ <i>(Signature)(Attach Power of Attorney)</i> |
| Name: _____ <i>(Printed or typed)</i> | Name: _____ <i>(Printed or typed)</i> |
| Title: _____ | Title: _____ |
| Attest: _____ <i>(Signature)</i> | Attest: _____ <i>(Signature)</i> |
| Name: _____ <i>(Printed or typed)</i> | Name: _____ <i>(Printed or typed)</i> |
| Title: _____ | Title: _____ |
| <i>Notes: (1) Provide supplemental execution by any additional parties, such as joint venturers. (2) Any singular reference to Contractor, Surety, Owner, or other party is considered plural where applicable.</i> | |

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1. The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to the Owner to pay for labor, materials, and equipment furnished for use in the performance of the Construction Contract, which is incorporated herein by reference, subject to the following terms.
2. If the Contractor promptly makes payment of all sums due to Claimants, and defends, indemnifies, and holds harmless the Owner from claims, demands, liens, or suits by any person or entity seeking payment for labor, materials, or equipment furnished for use in the performance of the Construction Contract, then the Surety and the Contractor shall have no obligation under this Bond.
3. If there is no Owner Default under the Construction Contract, the Surety's obligation to the Owner under this Bond will arise after the Owner has promptly notified the Contractor and the Surety (at the address described in Paragraph 13) of claims, demands, liens, or suits against the Owner or the Owner's property by any person or entity seeking payment for labor, materials, or equipment furnished for use in the performance of the Construction Contract, and tendered defense of such claims, demands, liens, or suits to the Contractor and the Surety.
4. When the Owner has satisfied the conditions in Paragraph 3, the Surety shall promptly and at the Surety's expense defend, indemnify, and hold harmless the Owner against a duly tendered claim, demand, lien, or suit.
5. The Surety's obligations to a Claimant under this Bond will arise after the following:
 - 5.1. Claimants who do not have a direct contract with the Contractor
 - 5.1.1. have furnished a written notice of non-payment to the Contractor, stating with substantial accuracy the amount claimed and the name of the party to whom the materials were, or equipment was, furnished or supplied or for whom the labor was done or performed, within ninety (90) days after having last performed labor or last furnished materials or equipment included in the Claim; and
 - 5.1.2. have sent a Claim to the Surety (at the address described in Paragraph 13).
 - 5.2. Claimants who are employed by or have a direct contract with the Contractor have sent a Claim to the Surety (at the address described in Paragraph 13).
6. If a notice of non-payment required by Paragraph 5.1.1 is given by the Owner to the Contractor, that is sufficient to satisfy a Claimant's obligation to furnish a written notice of non-payment under Paragraph 5.1.1.
7. When a Claimant has satisfied the conditions of Paragraph 5.1 or 5.2, whichever is applicable, the Surety shall promptly and at the Surety's expense take the following actions:
 - 7.1. Send an answer to the Claimant, with a copy to the Owner, within sixty (60) days after receipt of the Claim, stating the amounts that are undisputed and the basis for challenging any amounts that are disputed; and
 - 7.2. Pay or arrange for payment of any undisputed amounts.
 - 7.3. The Surety's failure to discharge its obligations under Paragraph 7.1 or 7.2 will not be deemed to constitute a waiver of defenses the Surety or Contractor may have or acquire as to a Claim, except as to undisputed amounts for which the Surety and Claimant have reached agreement. If, however, the Surety fails to discharge its obligations under Paragraph 7.1 or 7.2, the Surety shall indemnify the Claimant for the reasonable attorney's fees the Claimant incurs thereafter to recover any sums found to be due and owing to the Claimant.

8. The Surety's total obligation will not exceed the amount of this Bond, plus the amount of reasonable attorney's fees provided under Paragraph 7.3, and the amount of this Bond will be credited for any payments made in good faith by the Surety.
9. Amounts owed by the Owner to the Contractor under the Construction Contract will be used for the performance of the Construction Contract and to satisfy claims, if any, under any construction performance bond. By the Contractor furnishing and the Owner accepting this Bond, they agree that all funds earned by the Contractor in the performance of the Construction Contract are dedicated to satisfying obligations of the Contractor and Surety under this Bond, subject to the Owner's priority to use the funds for the completion of the work.
10. The Surety shall not be liable to the Owner, Claimants, or others for obligations of the Contractor that are unrelated to the Construction Contract. The Owner shall not be liable for the payment of any costs or expenses of any Claimant under this Bond and shall have under this Bond no obligation to make payments to or give notice on behalf of Claimants, or otherwise have any obligations to Claimants under this Bond.
11. The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders, and other obligations.
12. No suit or action will be commenced by a Claimant under this Bond other than in a court of competent jurisdiction in the state in which the project that is the subject of the Construction Contract is located or after the expiration of one year from the date (1) on which the Claimant sent a Claim to the Surety pursuant to Paragraph 5.1.2 or 5.2, or (2) on which the last labor or service was performed by anyone or the last materials or equipment were furnished by anyone under the Construction Contract, whichever of (1) or (2) first occurs. If the provisions of this paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit will be applicable.
13. Notice and Claims to the Surety, the Owner, or the Contractor must be mailed or delivered to the address shown on the page on which their signature appears. Actual receipt of notice or Claims, however accomplished, will be sufficient compliance as of the date received.
14. When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement will be deemed deleted here from and provisions conforming to such statutory or other legal requirement will be deemed incorporated herein. When so furnished, the intent is that this Bond will be construed as a statutory bond and not as a common law bond.
15. Upon requests by any person or entity appearing to be a potential beneficiary of this Bond, the Contractor and Owner shall promptly furnish a copy of this Bond or shall permit a copy to be made.
16. Definitions
 - 16.1. Claim—A written statement by the Claimant including at a minimum:
 - 16.1.1. The name of the Claimant;
 - 16.1.2. The name of the person for whom the labor was done, or materials or equipment furnished;
 - 16.1.3. A copy of the agreement or purchase order pursuant to which labor, materials, or equipment was furnished for use in the performance of the Construction Contract;
 - 16.1.4. A brief description of the labor, materials, or equipment furnished;

- 16.1.5. The date on which the Claimant last performed labor or last furnished materials or equipment for use in the performance of the Construction Contract;
 - 16.1.6. The total amount earned by the Claimant for labor, materials, or equipment furnished as of the date of the Claim;
 - 16.1.7. The total amount of previous payments received by the Claimant; and
 - 16.1.8. The total amount due and unpaid to the Claimant for labor, materials, or equipment furnished as of the date of the Claim.
- 16.2. Claimant—An individual or entity having a direct contract with the Contractor or with a subcontractor of the Contractor to furnish labor, materials, or equipment for use in the performance of the Construction Contract. The term Claimant also includes any individual or entity that has rightfully asserted a claim under an applicable mechanic’s lien or similar statute against the real property upon which the Project is located. The intent of this Bond is to include without limitation in the terms of “labor, materials, or equipment” that part of the water, gas, power, light, heat, oil, gasoline, telephone service, or rental equipment used in the Construction Contract, architectural and engineering services required for performance of the work of the Contractor and the Contractor’s subcontractors, and all other items for which a mechanic’s lien may be asserted in the jurisdiction where the labor, materials, or equipment were furnished.
- 16.3. Construction Contract—The agreement between the Owner and Contractor identified on the cover page, including all Contract Documents and all changes made to the agreement and the Contract Documents.
- 16.4. Owner Default—Failure of the Owner, which has not been remedied or waived, to pay the Contractor as required under the Construction Contract or to perform and complete or comply with the other material terms of the Construction Contract.
- 16.5. Contract Documents—All the documents that comprise the agreement between the Owner and Contractor.
17. If this Bond is issued for an agreement between a contractor and subcontractor, the term Contractor in this Bond will be deemed to be Subcontractor and the term Owner will be deemed to be Contractor.
18. Modifications to this Bond are as follows: **None**

WARRANTY BOND FORM

| | |
|--|---|
| <p>Contractor</p> <p>Name: _____</p> <p>Address (principal place of business): _____</p> | <p>Surety</p> <p>Name: _____</p> <p>Address (principal place of business): _____</p> |
| <p>Owner</p> <p>Name: Lower Minnesota River Watershed District</p> <p>Address (principal place of business): 112 E. 5th St, Suite #102 Chaska, MN 55318</p> | <p>Construction Contract</p> <p>Description (name and location): Vernon Avenue Improvements</p> <p>Contract Price: _____</p> <p>Effective Date of Contract: _____</p> <p>Contract's Date of Substantial Completion: 09/27/2024</p> |
| <p>Bond</p> <p>Bond Amount: _____ Bond Period: Commencing 364 days after Substantial Completion of the Work under the Construction Contract, and continuing until 2 year(s) after such Substantial Completion.</p> <p>Date of Bond: _____</p> <p>Modifications to this Bond form: <input type="checkbox"/> None <input type="checkbox"/> See Paragraph 9</p> | |
| <p>Surety and Contractor, intending to be legally bound hereby, subject to the terms set forth herein, do each cause this Warranty Bond to be duly executed by an authorized officer, agent, or representative.</p> | |
| Contractor as Principal | Surety |
| _____ <i>(Full formal name of Contractor)</i> | _____ <i>(Full formal name of Surety) (corporate seal)</i> |
| By: _____ <i>(Signature)</i> | By: _____ <i>(Signature) (Attach Power of Attorney)</i> |
| Name: _____ <i>(Printed or typed)</i> | Name: _____ <i>(Printed or typed)</i> |
| Title: _____ | Title: _____ |
| Attest: _____ <i>(Signature)</i> | Attest: _____ <i>(Signature)</i> |
| Name: _____ <i>(Printed or typed)</i> | Name: _____ <i>(Printed or typed)</i> |
| Title: _____ | Title: _____ |
| <p><i>Notes: (1) Provide supplemental execution by any additional parties, such as joint venturers. (2) Any singular reference to Contractor, Surety, Owner, or other party is considered plural where applicable.</i></p> | |

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1. The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to the Owner for the performance of the Construction Contract's Correction Period Obligations. The Construction Contract is incorporated herein by reference.
2. If the Contractor performs the Correction Period Obligations, the Surety and the Contractor shall have no obligation under this Warranty Bond.
3. If Owner gives written notice to Contractor and Surety during the Bond Period of Contractor's obligation under the Correction Period Obligations, and Contractor does not fulfill such obligation, then Surety shall be responsible for fulfillment of such Correction Period Obligations. Surety shall either fulfill the Correction Period Obligations itself, through its agents or contractors, or, in the alternative, Surety may waive the right to fulfill the Correction Period Obligations itself and reimburse the Owner for all resulting costs incurred by Owner in performing Contractor's Correction Period Obligations, including but not limited to correction, removal, replacement, and repair costs.
4. The Surety's liability is limited to the amount of this Warranty Bond. Renewal or continuation of the Warranty Bond will not modify such amount unless expressly agreed to by Surety in writing.
5. The Surety shall have no liability under this Warranty Bond for obligations of the Contractor that are unrelated to the Construction Contract. No right of action will accrue on this Warranty Bond to any person or entity other than the Owner or its heirs, executors, administrators, successors, and assigns.
6. Any proceeding, legal or equitable, under this Warranty Bond may be instituted in any court of competent jurisdiction in the location in which the Work or part of the Work is located and must be instituted within two years after the Surety refuses or fails to perform its obligations under this Warranty Bond.
7. Written notice to the Surety, the Owner, or the Contractor must be mailed or delivered to the address shown in this Warranty Bond.
8. Definitions
 - 8.1. Construction Contract—The agreement between the Owner and Contractor identified on the cover page of this Warranty Bond, including all Contract Documents and changes made to the agreement and the Contract Documents.
 - 8.2. Contract Documents—All the documents that comprise the agreement between the Owner and Contractor.
 - 8.3. Correction Period Obligations—The duties, responsibilities, commitments, and obligations of the Contractor with respect to correction or replacement of defective Work, as set forth in the Construction Contract's Correction Period clause, EJCDC® C 700, Standard General Conditions of the Construction Contract (2018), Paragraph 15.08, as duly modified.
 - 8.4. Substantial Completion—As defined in the Construction Contract.
 - 8.5. Work—As defined in the Construction Contract.
9. Modifications to this Bond are as follows: **None**

**C-700 2018
Standard General Conditions
of the Construction Contract**

Vernon Avenue Improvements

OT1.129866

Lower Minnesota River Watershed District

Savage, MN

This document has important legal consequences; consultation with an attorney is encouraged with respect to its use or modification. This document should be adapted to the particular circumstances of the contemplated Project and the controlling Laws and Regulations.

STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

Prepared By



Endorsed By



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STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

ARTICLE 1—DEFINITIONS AND TERMINOLOGY

1.01 *Defined Terms*

- A. Wherever used in the Bidding Requirements or Contract Documents, a term printed with initial capital letters, including the term's singular and plural forms, will have the meaning indicated in the definitions below. In addition to terms specifically defined, terms with initial capital letters in the Contract Documents include references to identified articles and paragraphs, and the titles of other documents or forms.
1. *Addenda*—Written or graphic instruments issued prior to the opening of Bids which clarify, correct, or change the Bidding Requirements or the proposed Contract Documents.
 2. *Agreement*—The written instrument, executed by Owner and Contractor, that sets forth the Contract Price and Contract Times, identifies the parties and the Engineer, and designates the specific items that are Contract Documents.
 3. *Application for Payment*—The document prepared by Contractor, in a form acceptable to Engineer, to request progress or final payments, and which is to be accompanied by such supporting documentation as is required by the Contract Documents.
 4. *Bid*—The offer of a Bidder submitted on the prescribed form setting forth the prices for the Work to be performed.
 5. *Bidder*—An individual or entity that submits a Bid to Owner.
 6. *Bidding Documents*—The Bidding Requirements, the proposed Contract Documents, and all Addenda.
 7. *Bidding Requirements*—The Advertisement or invitation to bid, Instructions to Bidders, Bid Bond or other Bid security, if any, the Bid Form, and the Bid with any attachments.
 8. *Change Order*—A document which is signed by Contractor and Owner and authorizes an addition, deletion, or revision in the Work or an adjustment in the Contract Price or the Contract Times, or other revision to the Contract, issued on or after the Effective Date of the Contract.
 9. *Change Proposal*—A written request by Contractor, duly submitted in compliance with the procedural requirements set forth herein, seeking an adjustment in Contract Price or Contract Times; contesting an initial decision by Engineer concerning the requirements of the Contract Documents or the acceptability of Work under the Contract Documents; challenging a set-off against payments due; or seeking other relief with respect to the terms of the Contract.
 10. *Claim*
 - a. A demand or assertion by Owner directly to Contractor, duly submitted in compliance with the procedural requirements set forth herein, seeking an adjustment of Contract Price or Contract Times; contesting an initial decision by Engineer concerning the

- requirements of the Contract Documents or the acceptability of Work under the Contract Documents; contesting Engineer's decision regarding a Change Proposal; seeking resolution of a contractual issue that Engineer has declined to address; or seeking other relief with respect to the terms of the Contract.
- b. A demand or assertion by Contractor directly to Owner, duly submitted in compliance with the procedural requirements set forth herein, contesting Engineer's decision regarding a Change Proposal, or seeking resolution of a contractual issue that Engineer has declined to address.
 - c. A demand or assertion by Owner or Contractor, duly submitted in compliance with the procedural requirements set forth herein, made pursuant to Paragraph 12.01.A.4, concerning disputes arising after Engineer has issued a recommendation of final payment.
 - d. A demand for money or services by a third party is not a Claim.
11. *Constituent of Concern*—Asbestos, petroleum, radioactive materials, polychlorinated biphenyls (PCBs), lead-based paint (as defined by the HUD/EPA standard), hazardous waste, and any substance, product, waste, or other material of any nature whatsoever that is or becomes listed, regulated, or addressed pursuant to Laws and Regulations regulating, relating to, or imposing liability or standards of conduct concerning, any hazardous, toxic, or dangerous waste, substance, or material.
12. *Contract*—The entire and integrated written contract between Owner and Contractor concerning the Work.
13. *Contract Documents*—Those items so designated in the Agreement, and which together comprise the Contract.
14. *Contract Price*—The money that Owner has agreed to pay Contractor for completion of the Work in accordance with the Contract Documents.
15. *Contract Times*—The number of days or the dates by which Contractor shall: (a) achieve Milestones, if any; (b) achieve Substantial Completion; and (c) complete the Work.
16. *Contractor*—The individual or entity with which Owner has contracted for performance of the Work.
17. *Cost of the Work*—See Paragraph 13.01 for definition.
18. *Drawings*—The part of the Contract that graphically shows the scope, extent, and character of the Work to be performed by Contractor.
19. *Effective Date of the Contract*—The date, indicated in the Agreement, on which the Contract becomes effective.
20. *Electronic Document*—Any Project-related correspondence, attachments to correspondence, data, documents, drawings, information, or graphics, including but not limited to Shop Drawings and other Submittals, that are in an electronic or digital format.
21. *Electronic Means*—Electronic mail (email), upload/download from a secure Project website, or other communications methods that allow: (a) the transmission or communication of Electronic Documents; (b) the documentation of transmissions, including sending and receipt; (c) printing of the transmitted Electronic Document by the

recipient; (d) the storage and archiving of the Electronic Document by sender and recipient; and (e) the use by recipient of the Electronic Document for purposes permitted by this Contract. Electronic Means does not include the use of text messaging, or of Facebook, Twitter, Instagram, or similar social media services for transmission of Electronic Documents.

22. *Engineer*—The individual or entity named as such in the Agreement.
23. *Field Order*—A written order issued by Engineer which requires minor changes in the Work but does not change the Contract Price or the Contract Times.
24. *Hazardous Environmental Condition*—The presence at the Site of Constituents of Concern in such quantities or circumstances that may present a danger to persons or property exposed thereto.
 - a. The presence at the Site of materials that are necessary for the execution of the Work, or that are to be incorporated into the Work, and that are controlled and contained pursuant to industry practices, Laws and Regulations, and the requirements of the Contract, is not a Hazardous Environmental Condition.
 - b. The presence of Constituents of Concern that are to be removed or remediated as part of the Work is not a Hazardous Environmental Condition.
 - c. The presence of Constituents of Concern as part of the routine, anticipated, and obvious working conditions at the Site, is not a Hazardous Environmental Condition.
25. *Laws and Regulations; Laws or Regulations*—Any and all applicable laws, statutes, rules, regulations, ordinances, codes, and binding decrees, resolutions, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction.
26. *Liens*—Charges, security interests, or encumbrances upon Contract-related funds, real property, or personal property.
27. *Milestone*—A principal event in the performance of the Work that the Contract requires Contractor to achieve by an intermediate completion date, or by a time prior to Substantial Completion of all the Work.
28. *Notice of Award*—The written notice by Owner to a Bidder of Owner's acceptance of the Bid.
29. *Notice to Proceed*—A written notice by Owner to Contractor fixing the date on which the Contract Times will commence to run and on which Contractor shall start to perform the Work.
30. *Owner*—The individual or entity with which Contractor has contracted regarding the Work, and which has agreed to pay Contractor for the performance of the Work, pursuant to the terms of the Contract.
31. *Progress Schedule*—A schedule, prepared and maintained by Contractor, describing the sequence and duration of the activities comprising Contractor's plan to accomplish the Work within the Contract Times.
32. *Project*—The total undertaking to be accomplished for Owner by engineers, contractors, and others, including planning, study, design, construction, testing, commissioning, and start-up, and of which the Work to be performed under the Contract Documents is a part.

33. *Resident Project Representative*—The authorized representative of Engineer assigned to assist Engineer at the Site. As used herein, the term Resident Project Representative (RPR) includes any assistants or field staff of Resident Project Representative.
34. *Samples*—Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and that establish the standards by which such portion of the Work will be judged.
35. *Schedule of Submittals*—A schedule, prepared and maintained by Contractor, of required submittals and the time requirements for Engineer’s review of the submittals.
36. *Schedule of Values*—A schedule, prepared and maintained by Contractor, allocating portions of the Contract Price to various portions of the Work and used as the basis for reviewing Contractor’s Applications for Payment.
37. *Shop Drawings*—All drawings, diagrams, illustrations, schedules, and other data or information that are specifically prepared or assembled by or for Contractor and submitted by Contractor to illustrate some portion of the Work. Shop Drawings, whether approved or not, are not Drawings and are not Contract Documents.
38. *Site*—Lands or areas indicated in the Contract Documents as being furnished by Owner upon which the Work is to be performed, including rights-of-way and easements, and such other lands or areas furnished by Owner which are designated for the use of Contractor.
39. *Specifications*—The part of the Contract that consists of written requirements for materials, equipment, systems, standards, and workmanship as applied to the Work, and certain administrative requirements and procedural matters applicable to the Work.
40. *Subcontractor*—An individual or entity having a direct contract with Contractor or with any other Subcontractor for the performance of a part of the Work.
41. *Submittal*—A written or graphic document, prepared by or for Contractor, which the Contract Documents require Contractor to submit to Engineer, or that is indicated as a Submittal in the Schedule of Submittals accepted by Engineer. Submittals may include Shop Drawings and Samples; schedules; product data; Owner-delegated designs; sustainable design information; information on special procedures; testing plans; results of tests and evaluations, source quality-control testing and inspections, and field or Site quality-control testing and inspections; warranties and certifications; Suppliers’ instructions and reports; records of delivery of spare parts and tools; operations and maintenance data; Project photographic documentation; record documents; and other such documents required by the Contract Documents. Submittals, whether or not approved or accepted by Engineer, are not Contract Documents. Change Proposals, Change Orders, Claims, notices, Applications for Payment, and requests for interpretation or clarification are not Submittals.
42. *Substantial Completion*—The time at which the Work (or a specified part thereof) has progressed to the point where, in the opinion of Engineer, the Work (or a specified part thereof) is sufficiently complete, in accordance with the Contract Documents, so that the Work (or a specified part thereof) can be utilized for the purposes for which it is intended. The terms “substantially complete” and “substantially completed” as applied to all or part of the Work refer to Substantial Completion of such Work.

43. *Successful Bidder*—The Bidder to which the Owner makes an award of contract.
44. *Supplementary Conditions*—The part of the Contract that amends or supplements these General Conditions.
45. *Supplier*—A manufacturer, fabricator, supplier, distributor, or vendor having a direct contract with Contractor or with any Subcontractor to furnish materials or equipment to be incorporated in the Work by Contractor or a Subcontractor.
46. *Technical Data*
- a. Those items expressly identified as Technical Data in the Supplementary Conditions, with respect to either (1) existing subsurface conditions at or adjacent to the Site, or existing physical conditions at or adjacent to the Site including existing surface or subsurface structures (except Underground Facilities) or (2) Hazardous Environmental Conditions at the Site.
 - b. If no such express identifications of Technical Data have been made with respect to conditions at the Site, then Technical Data is defined, with respect to conditions at the Site under Paragraphs 5.03, 5.04, and 5.06, as the data contained in boring logs, recorded measurements of subsurface water levels, assessments of the condition of subsurface facilities, laboratory test results, and other factual, objective information regarding conditions at the Site that are set forth in any geotechnical, environmental, or other Site or facilities conditions report prepared for the Project and made available to Contractor.
 - c. Information and data regarding the presence or location of Underground Facilities are not intended to be categorized, identified, or defined as Technical Data, and instead Underground Facilities are shown or indicated on the Drawings.
47. *Underground Facilities*—All active or not-in-service underground lines, pipelines, conduits, ducts, encasements, cables, wires, manholes, vaults, tanks, tunnels, or other such facilities or systems at the Site, including but not limited to those facilities or systems that produce, transmit, distribute, or convey telephone or other communications, cable television, fiber optic transmissions, power, electricity, light, heat, gases, oil, crude oil products, liquid petroleum products, water, steam, waste, wastewater, storm water, other liquids or chemicals, or traffic or other control systems. An abandoned facility or system is not an Underground Facility.
48. *Unit Price Work*—Work to be paid for on the basis of unit prices.
49. *Work*—The entire construction or the various separately identifiable parts thereof required to be provided under the Contract Documents. Work includes and is the result of performing or providing all labor, services, and documentation necessary to produce such construction; furnishing, installing, and incorporating all materials and equipment into such construction; and may include related services such as testing, start-up, and commissioning, all as required by the Contract Documents.
50. *Work Change Directive*—A written directive to Contractor issued on or after the Effective Date of the Contract, signed by Owner and recommended by Engineer, ordering an addition, deletion, or revision in the Work.

1.02 Terminology

- A. The words and terms discussed in Paragraphs 1.02.B, C, D, and E are not defined terms that require initial capital letters, but, when used in the Bidding Requirements or Contract Documents, have the indicated meaning.
- B. *Intent of Certain Terms or Adjectives:* The Contract Documents include the terms “as allowed,” “as approved,” “as ordered,” “as directed” or terms of like effect or import to authorize an exercise of professional judgment by Engineer. In addition, the adjectives “reasonable,” “suitable,” “acceptable,” “proper,” “satisfactory,” or adjectives of like effect or import are used to describe an action or determination of Engineer as to the Work. It is intended that such exercise of professional judgment, action, or determination will be solely to evaluate, in general, the Work for compliance with the information in the Contract Documents and with the design concept of the Project as a functioning whole as shown or indicated in the Contract Documents (unless there is a specific statement indicating otherwise). The use of any such term or adjective is not intended to and shall not be effective to assign to Engineer any duty or authority to supervise or direct the performance of the Work, or any duty or authority to undertake responsibility contrary to the provisions of Article 10 or any other provision of the Contract Documents.
- C. *Day:* The word “day” means a calendar day of 24 hours measured from midnight to the next midnight.
- D. *Defective:* The word “defective,” when modifying the word “Work,” refers to Work that is unsatisfactory, faulty, or deficient in that it:
1. does not conform to the Contract Documents;
 2. does not meet the requirements of any applicable inspection, reference standard, test, or approval referred to in the Contract Documents; or
 3. has been damaged prior to Engineer’s recommendation of final payment (unless responsibility for the protection thereof has been assumed by Owner at Substantial Completion in accordance with Paragraph 15.03 or Paragraph 15.04).
- E. *Furnish, Install, Perform, Provide*
1. The word “furnish,” when used in connection with services, materials, or equipment, means to supply and deliver said services, materials, or equipment to the Site (or some other specified location) ready for use or installation and in usable or operable condition.
 2. The word “install,” when used in connection with services, materials, or equipment, means to put into use or place in final position said services, materials, or equipment complete and ready for intended use.
 3. The words “perform” or “provide,” when used in connection with services, materials, or equipment, means to furnish and install said services, materials, or equipment complete and ready for intended use.
 4. If the Contract Documents establish an obligation of Contractor with respect to specific services, materials, or equipment, but do not expressly use any of the four words “furnish,” “install,” “perform,” or “provide,” then Contractor shall furnish and install said services, materials, or equipment complete and ready for intended use.

- F. *Contract Price or Contract Times*: References to a change in “Contract Price or Contract Times” or “Contract Times or Contract Price” or similar, indicate that such change applies to (1) Contract Price, (2) Contract Times, or (3) both Contract Price and Contract Times, as warranted, even if the term “or both” is not expressed.
- G. Unless stated otherwise in the Contract Documents, words or phrases that have a well-known technical or construction industry or trade meaning are used in the Contract Documents in accordance with such recognized meaning.

ARTICLE 2—PRELIMINARY MATTERS

2.01 *Delivery of Performance and Payment Bonds; Evidence of Insurance*

- A. *Performance and Payment Bonds*: When Contractor delivers the signed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner the performance bond and payment bond (if the Contract requires Contractor to furnish such bonds).
- B. *Evidence of Contractor’s Insurance*: When Contractor delivers the signed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner, with copies to each additional insured (as identified in the Contract), the certificates, endorsements, and other evidence of insurance required to be provided by Contractor in accordance with Article 6, except to the extent the Supplementary Conditions expressly establish other dates for delivery of specific insurance policies.
- C. *Evidence of Owner’s Insurance*: After receipt of the signed counterparts of the Agreement and all required bonds and insurance documentation, Owner shall promptly deliver to Contractor, with copies to each additional insured (as identified in the Contract), the certificates and other evidence of insurance required to be provided by Owner under Article 6.

2.02 *Copies of Documents*

- A. Owner shall furnish to Contractor four printed copies of the Contract (including one fully signed counterpart of the Agreement), and one copy in electronic portable document format (PDF). Additional printed copies will be furnished upon request at the cost of reproduction.
- B. Owner shall maintain and safeguard at least one original printed record version of the Contract, including Drawings and Specifications signed and sealed by Engineer and other design professionals. Owner shall make such original printed record version of the Contract available to Contractor for review. Owner may delegate the responsibilities under this provision to Engineer.

2.03 *Before Starting Construction*

- A. *Preliminary Schedules*: Within 10 days after the Effective Date of the Contract (or as otherwise required by the Contract Documents), Contractor shall submit to Engineer for timely review:
 - 1. a preliminary Progress Schedule indicating the times (numbers of days or dates) for starting and completing the various stages of the Work, including any Milestones specified in the Contract;
 - 2. a preliminary Schedule of Submittals; and
 - 3. a preliminary Schedule of Values for all of the Work which includes quantities and prices of items which when added together equal the Contract Price and subdivides the Work

into component parts in sufficient detail to serve as the basis for progress payments during performance of the Work. Such prices will include an appropriate amount of overhead and profit applicable to each item of Work.

2.04 *Preconstruction Conference; Designation of Authorized Representatives*

- A. Before any Work at the Site is started, a conference attended by Owner, Contractor, Engineer, and others as appropriate will be held to establish a working understanding among the parties as to the Work, and to discuss the schedules referred to in Paragraph 2.03.A, procedures for handling Shop Drawings, Samples, and other Submittals, processing Applications for Payment, electronic or digital transmittals, and maintaining required records.
- B. At this conference Owner and Contractor each shall designate, in writing, a specific individual to act as its authorized representative with respect to the services and responsibilities under the Contract. Such individuals shall have the authority to transmit and receive information, render decisions relative to the Contract, and otherwise act on behalf of each respective party.

2.05 *Acceptance of Schedules*

- A. At least 10 days before submission of the first Application for Payment a conference, attended by Contractor, Engineer, and others as appropriate, will be held to review the schedules submitted in accordance with Paragraph 2.03.A. No progress payment will be made to Contractor until acceptable schedules are submitted to Engineer.
 - 1. The Progress Schedule will be acceptable to Engineer if it provides an orderly progression of the Work to completion within the Contract Times. Such acceptance will not impose on Engineer responsibility for the Progress Schedule, for sequencing, scheduling, or progress of the Work, nor interfere with or relieve Contractor from Contractor's full responsibility therefor.
 - 2. Contractor's Schedule of Submittals will be acceptable to Engineer if it provides a workable arrangement for reviewing and processing the required submittals.
 - 3. Contractor's Schedule of Values will be acceptable to Engineer as to form and substance if it provides a reasonable allocation of the Contract Price to the component parts of the Work.
 - 4. If a schedule is not acceptable, Contractor will have an additional 10 days to revise and resubmit the schedule.

2.06 *Electronic Transmittals*

- A. Except as otherwise stated elsewhere in the Contract, the Owner, Engineer, and Contractor may send, and shall accept, Electronic Documents transmitted by Electronic Means.
- B. If the Contract does not establish protocols for Electronic Means, then Owner, Engineer, and Contractor shall jointly develop such protocols.
- C. Subject to any governing protocols for Electronic Means, when transmitting Electronic Documents by Electronic Means, the transmitting party makes no representations as to long-term compatibility, usability, or readability of the Electronic Documents resulting from the recipient's use of software application packages, operating systems, or computer hardware differing from those used in the drafting or transmittal of the Electronic Documents.

ARTICLE 3—CONTRACT DOCUMENTS: INTENT, REQUIREMENTS, REUSE

3.01 *Intent*

- A. The Contract Documents are complementary; what is required by one Contract Document is as binding as if required by all.
- B. It is the intent of the Contract Documents to describe a functionally complete Project (or part thereof) to be constructed in accordance with the Contract Documents.
- C. Unless otherwise stated in the Contract Documents, if there is a discrepancy between the electronic versions of the Contract Documents (including any printed copies derived from such electronic versions) and the printed record version, the printed record version will govern.
- D. The Contract supersedes prior negotiations, representations, and agreements, whether written or oral.
- E. Engineer will issue clarifications and interpretations of the Contract Documents as provided herein.
- F. Any provision or part of the Contract Documents held to be void or unenforceable under any Law or Regulation will be deemed stricken, and all remaining provisions will continue to be valid and binding upon Owner and Contractor, which agree that the Contract Documents will be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.
- G. Nothing in the Contract Documents creates:
 - 1. any contractual relationship between Owner or Engineer and any Subcontractor, Supplier, or other individual or entity performing or furnishing any of the Work, for the benefit of such Subcontractor, Supplier, or other individual or entity; or
 - 2. any obligation on the part of Owner or Engineer to pay or to see to the payment of any money due any such Subcontractor, Supplier, or other individual or entity, except as may otherwise be required by Laws and Regulations.

3.02 *Reference Standards*

- A. *Standards Specifications, Codes, Laws and Regulations*
 - 1. Reference in the Contract Documents to standard specifications, manuals, reference standards, or codes of any technical society, organization, or association, or to Laws or Regulations, whether such reference be specific or by implication, means the standard specification, manual, reference standard, code, or Laws or Regulations in effect at the time of opening of Bids (or on the Effective Date of the Contract if there were no Bids), except as may be otherwise specifically stated in the Contract Documents.
 - 2. No provision of any such standard specification, manual, reference standard, or code, and no instruction of a Supplier, will be effective to change the duties or responsibilities of Owner, Contractor, or Engineer from those set forth in the part of the Contract Documents prepared by or for Engineer. No such provision or instruction shall be effective to assign to Owner or Engineer any duty or authority to supervise or direct the performance of the Work, or any duty or authority to undertake responsibility

inconsistent with the provisions of the part of the Contract Documents prepared by or for Engineer.

3.03 *Reporting and Resolving Discrepancies*

A. *Reporting Discrepancies*

1. *Contractor's Verification of Figures and Field Measurements:* Before undertaking each part of the Work, Contractor shall carefully study the Contract Documents, and check and verify pertinent figures and dimensions therein, particularly with respect to applicable field measurements. Contractor shall promptly report in writing to Engineer any conflict, error, ambiguity, or discrepancy that Contractor discovers, or has actual knowledge of, and shall not proceed with any Work affected thereby until the conflict, error, ambiguity, or discrepancy is resolved by a clarification or interpretation by Engineer, or by an amendment or supplement to the Contract issued pursuant to Paragraph 11.01.
2. *Contractor's Review of Contract Documents:* If, before or during the performance of the Work, Contractor discovers any conflict, error, ambiguity, or discrepancy within the Contract Documents, or between the Contract Documents and (a) any applicable Law or Regulation, (b) actual field conditions, (c) any standard specification, manual, reference standard, or code, or (d) any instruction of any Supplier, then Contractor shall promptly report it to Engineer in writing. Contractor shall not proceed with the Work affected thereby (except in an emergency as required by Paragraph 7.15) until the conflict, error, ambiguity, or discrepancy is resolved, by a clarification or interpretation by Engineer, or by an amendment or supplement to the Contract issued pursuant to Paragraph 11.01.
3. Contractor shall not be liable to Owner or Engineer for failure to report any conflict, error, ambiguity, or discrepancy in the Contract Documents unless Contractor had actual knowledge thereof.

B. *Resolving Discrepancies*

1. Except as may be otherwise specifically stated in the Contract Documents, the provisions of the part of the Contract Documents prepared by or for Engineer take precedence in resolving any conflict, error, ambiguity, or discrepancy between such provisions of the Contract Documents and:
 - a. the provisions of any standard specification, manual, reference standard, or code, or the instruction of any Supplier (whether or not specifically incorporated by reference as a Contract Document); or
 - b. the provisions of any Laws or Regulations applicable to the performance of the Work (unless such an interpretation of the provisions of the Contract Documents would result in violation of such Law or Regulation).

3.04 *Requirements of the Contract Documents*

- A. During the performance of the Work and until final payment, Contractor and Owner shall submit to the Engineer in writing all matters in question concerning the requirements of the Contract Documents (sometimes referred to as requests for information or interpretation—RFIs), or relating to the acceptability of the Work under the Contract Documents, as soon as possible after such matters arise. Engineer will be the initial interpreter of the requirements of the Contract Documents, and judge of the acceptability of the Work.

- B. Engineer will, with reasonable promptness, render a written clarification, interpretation, or decision on the issue submitted, or initiate an amendment or supplement to the Contract Documents. Engineer's written clarification, interpretation, or decision will be final and binding on Contractor, unless it appeals by submitting a Change Proposal, and on Owner, unless it appeals by filing a Claim.
- C. If a submitted matter in question concerns terms and conditions of the Contract Documents that do not involve (1) the performance or acceptability of the Work under the Contract Documents, (2) the design (as set forth in the Drawings, Specifications, or otherwise), or (3) other engineering or technical matters, then Engineer will promptly notify Owner and Contractor in writing that Engineer is unable to provide a decision or interpretation. If Owner and Contractor are unable to agree on resolution of such a matter in question, either party may pursue resolution as provided in Article 12.

3.05 *Reuse of Documents*

- A. Contractor and its Subcontractors and Suppliers shall not:
 - 1. have or acquire any title to or ownership rights in any of the Drawings, Specifications, or other documents (or copies of any thereof) prepared by or bearing the seal of Engineer or its consultants, including electronic media versions, or reuse any such Drawings, Specifications, other documents, or copies thereof on extensions of the Project or any other project without written consent of Owner and Engineer and specific written verification or adaptation by Engineer; or
 - 2. have or acquire any title or ownership rights in any other Contract Documents, reuse any such Contract Documents for any purpose without Owner's express written consent, or violate any copyrights pertaining to such Contract Documents.
- B. The prohibitions of this Paragraph 3.05 will survive final payment, or termination of the Contract. Nothing herein precludes Contractor from retaining copies of the Contract Documents for record purposes.

ARTICLE 4—COMMENCEMENT AND PROGRESS OF THE WORK

4.01 *Commencement of Contract Times; Notice to Proceed*

- A. The Contract Times will commence to run on the 30th day after the Effective Date of the Contract or, if a Notice to Proceed is given, on the day indicated in the Notice to Proceed. A Notice to Proceed may be given at any time within 30 days after the Effective Date of the Contract. In no event will the Contract Times commence to run later than the 60th day after the day of Bid opening or the 30th day after the Effective Date of the Contract, whichever date is earlier.

4.02 *Starting the Work*

- A. Contractor shall start to perform the Work on the date when the Contract Times commence to run. No Work may be done at the Site prior to such date.

4.03 *Reference Points*

- A. Owner shall provide engineering surveys to establish reference points for construction which in Engineer's judgment are necessary to enable Contractor to proceed with the Work. Contractor shall be responsible for laying out the Work, shall protect and preserve the

established reference points and property monuments, and shall make no changes or relocations without the prior written approval of Owner. Contractor shall report to Engineer whenever any reference point or property monument is lost or destroyed or requires relocation because of necessary changes in grades or locations, and shall be responsible for the accurate replacement or relocation of such reference points or property monuments by professionally qualified personnel.

4.04 *Progress Schedule*

- A. Contractor shall adhere to the Progress Schedule established in accordance with Paragraph 2.05 as it may be adjusted from time to time as provided below.
 - 1. Contractor shall submit to Engineer for acceptance (to the extent indicated in Paragraph 2.05) proposed adjustments in the Progress Schedule that will not result in changing the Contract Times.
 - 2. Proposed adjustments in the Progress Schedule that will change the Contract Times must be submitted in accordance with the requirements of Article 11.
- B. Contractor shall carry on the Work and adhere to the Progress Schedule during all disputes or disagreements with Owner. No Work will be delayed or postponed pending resolution of any disputes or disagreements, or during any appeal process, except as permitted by Paragraph 16.04, or as Owner and Contractor may otherwise agree in writing.

4.05 *Delays in Contractor's Progress*

- A. If Owner, Engineer, or anyone for whom Owner is responsible, delays, disrupts, or interferes with the performance or progress of the Work, then Contractor shall be entitled to an equitable adjustment in Contract Price or Contract Times.
- B. Contractor shall not be entitled to an adjustment in Contract Price or Contract Times for delay, disruption, or interference caused by or within the control of Contractor. Delay, disruption, and interference attributable to and within the control of a Subcontractor or Supplier shall be deemed to be within the control of Contractor.
- C. If Contractor's performance or progress is delayed, disrupted, or interfered with by unanticipated causes not the fault of and beyond the control of Owner, Contractor, and those for which they are responsible, then Contractor shall be entitled to an equitable adjustment in Contract Times. Such an adjustment will be Contractor's sole and exclusive remedy for the delays, disruption, and interference described in this paragraph. Causes of delay, disruption, or interference that may give rise to an adjustment in Contract Times under this paragraph include but are not limited to the following:
 - 1. Severe and unavoidable natural catastrophes such as fires, floods, epidemics, and earthquakes;
 - 2. Abnormal weather conditions;
 - 3. Acts or failures to act of third-party utility owners or other third-party entities (other than those third-party utility owners or other third-party entities performing other work at or adjacent to the Site as arranged by or under contract with Owner, as contemplated in Article 8); and
 - 4. Acts of war or terrorism.

- D. Contractor's entitlement to an adjustment of Contract Times or Contract Price is limited as follows:
1. Contractor's entitlement to an adjustment of the Contract Times is conditioned on the delay, disruption, or interference adversely affecting an activity on the critical path to completion of the Work, as of the time of the delay, disruption, or interference.
 2. Contractor shall not be entitled to an adjustment in Contract Price for any delay, disruption, or interference if such delay is concurrent with a delay, disruption, or interference caused by or within the control of Contractor. Such a concurrent delay by Contractor shall not preclude an adjustment of Contract Times to which Contractor is otherwise entitled.
 3. Adjustments of Contract Times or Contract Price are subject to the provisions of Article 11.
- E. Each Contractor request or Change Proposal seeking an increase in Contract Times or Contract Price must be supplemented by supporting data that sets forth in detail the following:
1. The circumstances that form the basis for the requested adjustment;
 2. The date upon which each cause of delay, disruption, or interference began to affect the progress of the Work;
 3. The date upon which each cause of delay, disruption, or interference ceased to affect the progress of the Work;
 4. The number of days' increase in Contract Times claimed as a consequence of each such cause of delay, disruption, or interference; and
 5. The impact on Contract Price, in accordance with the provisions of Paragraph 11.07.
- Contractor shall also furnish such additional supporting documentation as Owner or Engineer may require including, where appropriate, a revised progress schedule indicating all the activities affected by the delay, disruption, or interference, and an explanation of the effect of the delay, disruption, or interference on the critical path to completion of the Work.
- F. Delays, disruption, and interference to the performance or progress of the Work resulting from the existence of a differing subsurface or physical condition, an Underground Facility that was not shown or indicated by the Contract Documents, or not shown or indicated with reasonable accuracy, and those resulting from Hazardous Environmental Conditions, are governed by Article 5, together with the provisions of Paragraphs 4.05.D and 4.05.E.
- G. Paragraph 8.03 addresses delays, disruption, and interference to the performance or progress of the Work resulting from the performance of certain other work at or adjacent to the Site.

ARTICLE 5—SITE; SUBSURFACE AND PHYSICAL CONDITIONS; HAZARDOUS ENVIRONMENTAL CONDITIONS

5.01 *Availability of Lands*

- A. Owner shall furnish the Site. Owner shall notify Contractor in writing of any encumbrances or restrictions not of general application but specifically related to use of the Site with which Contractor must comply in performing the Work.

- B. Upon reasonable written request, Owner shall furnish Contractor with a current statement of record legal title and legal description of the lands upon which permanent improvements are to be made and Owner's interest therein as necessary for giving notice of or filing a mechanic's or construction lien against such lands in accordance with applicable Laws and Regulations.
- C. Contractor shall provide for all additional lands and access thereto that may be required for temporary construction facilities or storage of materials and equipment.

5.02 *Use of Site and Other Areas*

A. *Limitation on Use of Site and Other Areas*

1. Contractor shall confine construction equipment, temporary construction facilities, the storage of materials and equipment, and the operations of workers to the Site, adjacent areas that Contractor has arranged to use through construction easements or otherwise, and other adjacent areas permitted by Laws and Regulations, and shall not unreasonably encumber the Site and such other adjacent areas with construction equipment or other materials or equipment. Contractor shall assume full responsibility for (a) damage to the Site; (b) damage to any such other adjacent areas used for Contractor's operations; (c) damage to any other adjacent land or areas, or to improvements, structures, utilities, or similar facilities located at such adjacent lands or areas; and (d) for injuries and losses sustained by the owners or occupants of any such land or areas; provided that such damage or injuries result from the performance of the Work or from other actions or conduct of the Contractor or those for which Contractor is responsible.
 2. If a damage or injury claim is made by the owner or occupant of any such land or area because of the performance of the Work, or because of other actions or conduct of the Contractor or those for which Contractor is responsible, Contractor shall (a) take immediate corrective or remedial action as required by Paragraph 7.13, or otherwise; (b) promptly attempt to settle the claim as to all parties through negotiations with such owner or occupant, or otherwise resolve the claim by arbitration or other dispute resolution proceeding, or in a court of competent jurisdiction; and (c) to the fullest extent permitted by Laws and Regulations, indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them, from and against any such claim, and against all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any claim or action, legal or equitable, brought by any such owner or occupant against Owner, Engineer, or any other party indemnified hereunder to the extent caused directly or indirectly, in whole or in part by, or based upon, Contractor's performance of the Work, or because of other actions or conduct of the Contractor or those for which Contractor is responsible.
- B. *Removal of Debris During Performance of the Work:* During the progress of the Work the Contractor shall keep the Site and other adjacent areas free from accumulations of waste materials, rubbish, and other debris. Removal and disposal of such waste materials, rubbish, and other debris will conform to applicable Laws and Regulations.
 - C. *Cleaning:* Prior to Substantial Completion of the Work Contractor shall clean the Site and the Work and make it ready for utilization by Owner. At the completion of the Work Contractor shall remove from the Site and adjacent areas all tools, appliances, construction equipment

and machinery, and surplus materials and shall restore to original condition all property not designated for alteration by the Contract Documents.

- D. *Loading of Structures:* Contractor shall not load nor permit any part of any structure to be loaded in any manner that will endanger the structure, nor shall Contractor subject any part of the Work or adjacent structures or land to stresses or pressures that will endanger them.

5.03 *Subsurface and Physical Conditions*

- A. *Reports and Drawings:* The Supplementary Conditions identify:

1. Those reports of explorations and tests of subsurface conditions at or adjacent to the Site that contain Technical Data;
2. Those drawings of existing physical conditions at or adjacent to the Site, including those drawings depicting existing surface or subsurface structures at or adjacent to the Site (except Underground Facilities), that contain Technical Data; and
3. Technical Data contained in such reports and drawings.

- B. *Underground Facilities:* Underground Facilities are shown or indicated on the Drawings, pursuant to Paragraph 5.05, and not in the drawings referred to in Paragraph 5.03.A. Information and data regarding the presence or location of Underground Facilities are not intended to be categorized, identified, or defined as Technical Data.

- C. *Reliance by Contractor on Technical Data:* Contractor may rely upon the accuracy of the Technical Data expressly identified in the Supplementary Conditions with respect to such reports and drawings, but such reports and drawings are not Contract Documents. If no such express identification has been made, then Contractor may rely upon the accuracy of the Technical Data as defined in Paragraph 1.01.A.46.b.

- D. *Limitations of Other Data and Documents:* Except for such reliance on Technical Data, Contractor may not rely upon or make any claim against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, with respect to:

1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor, and safety precautions and programs incident thereto;
2. other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings;
3. the contents of other Site-related documents made available to Contractor, such as record drawings from other projects at or adjacent to the Site, or Owner's archival documents concerning the Site; or
4. any Contractor interpretation of or conclusion drawn from any Technical Data or any such other data, interpretations, opinions, or information.

5.04 *Differing Subsurface or Physical Conditions*

- A. *Notice by Contractor:* If Contractor believes that any subsurface or physical condition that is uncovered or revealed at the Site:
1. is of such a nature as to establish that any Technical Data on which Contractor is entitled to rely as provided in Paragraph 5.03 is materially inaccurate;
 2. is of such a nature as to require a change in the Drawings or Specifications;
 3. differs materially from that shown or indicated in the Contract Documents; or
 4. is of an unusual nature, and differs materially from conditions ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents;

then Contractor shall, promptly after becoming aware thereof and before further disturbing the subsurface or physical conditions or performing any Work in connection therewith (except in an emergency as required by Paragraph 7.15), notify Owner and Engineer in writing about such condition. Contractor shall not further disturb such condition or perform any Work in connection therewith (except with respect to an emergency) until receipt of a written statement permitting Contractor to do so.

- B. *Engineer's Review:* After receipt of written notice as required by the preceding paragraph, Engineer will promptly review the subsurface or physical condition in question; determine whether it is necessary for Owner to obtain additional exploration or tests with respect to the condition; conclude whether the condition falls within any one or more of the differing site condition categories in Paragraph 5.04.A; obtain any pertinent cost or schedule information from Contractor; prepare recommendations to Owner regarding the Contractor's resumption of Work in connection with the subsurface or physical condition in question and the need for any change in the Drawings or Specifications; and advise Owner in writing of Engineer's findings, conclusions, and recommendations.
- C. *Owner's Statement to Contractor Regarding Site Condition:* After receipt of Engineer's written findings, conclusions, and recommendations, Owner shall issue a written statement to Contractor (with a copy to Engineer) regarding the subsurface or physical condition in question, addressing the resumption of Work in connection with such condition, indicating whether any change in the Drawings or Specifications will be made, and adopting or rejecting Engineer's written findings, conclusions, and recommendations, in whole or in part.
- D. *Early Resumption of Work:* If at any time Engineer determines that Work in connection with the subsurface or physical condition in question may resume prior to completion of Engineer's review or Owner's issuance of its statement to Contractor, because the condition in question has been adequately documented, and analyzed on a preliminary basis, then the Engineer may at its discretion instruct Contractor to resume such Work.
- E. *Possible Price and Times Adjustments*
1. Contractor shall be entitled to an equitable adjustment in Contract Price or Contract Times, to the extent that the existence of a differing subsurface or physical condition, or any related delay, disruption, or interference, causes an increase or decrease in

Contractor's cost of, or time required for, performance of the Work; subject, however, to the following:

- a. Such condition must fall within any one or more of the categories described in Paragraph 5.04.A;
 - b. With respect to Work that is paid for on a unit price basis, any adjustment in Contract Price will be subject to the provisions of Paragraph 13.03; and,
 - c. Contractor's entitlement to an adjustment of the Contract Times is subject to the provisions of Paragraphs 4.05.D and 4.05.E.
2. Contractor shall not be entitled to any adjustment in the Contract Price or Contract Times with respect to a subsurface or physical condition if:
- a. Contractor knew of the existence of such condition at the time Contractor made a commitment to Owner with respect to Contract Price and Contract Times by the submission of a Bid or becoming bound under a negotiated contract, or otherwise;
 - b. The existence of such condition reasonably could have been discovered or revealed as a result of any examination, investigation, exploration, test, or study of the Site and contiguous areas expressly required by the Bidding Requirements or Contract Documents to be conducted by or for Contractor prior to Contractor's making such commitment; or
 - c. Contractor failed to give the written notice required by Paragraph 5.04.A.
3. If Owner and Contractor agree regarding Contractor's entitlement to and the amount or extent of any adjustment in the Contract Price or Contract Times, then any such adjustment will be set forth in a Change Order.
4. Contractor may submit a Change Proposal regarding its entitlement to or the amount or extent of any adjustment in the Contract Price or Contract Times, no later than 30 days after Owner's issuance of the Owner's written statement to Contractor regarding the subsurface or physical condition in question.
- F. *Underground Facilities; Hazardous Environmental Conditions*: Paragraph 5.05 governs rights and responsibilities regarding the presence or location of Underground Facilities. Paragraph 5.06 governs rights and responsibilities regarding Hazardous Environmental Conditions. The provisions of Paragraphs 5.03 and 5.04 are not applicable to the presence or location of Underground Facilities, or to Hazardous Environmental Conditions.

5.05 *Underground Facilities*

- A. *Contractor's Responsibilities*: Unless it is otherwise expressly provided in the Supplementary Conditions, the cost of all of the following are included in the Contract Price, and Contractor shall have full responsibility for:
1. reviewing and checking all information and data regarding existing Underground Facilities at the Site;
 2. complying with applicable state and local utility damage prevention Laws and Regulations;

3. verifying the actual location of those Underground Facilities shown or indicated in the Contract Documents as being within the area affected by the Work, by exposing such Underground Facilities during the course of construction;
 4. coordination of the Work with the owners (including Owner) of such Underground Facilities, during construction; and
 5. the safety and protection of all existing Underground Facilities at the Site, and repairing any damage thereto resulting from the Work.
- B. *Notice by Contractor:* If Contractor believes that an Underground Facility that is uncovered or revealed at the Site was not shown or indicated on the Drawings, or was not shown or indicated on the Drawings with reasonable accuracy, then Contractor shall, promptly after becoming aware thereof and before further disturbing conditions affected thereby or performing any Work in connection therewith (except in an emergency as required by Paragraph 7.15), notify Owner and Engineer in writing regarding such Underground Facility.
- C. *Engineer's Review:* Engineer will:
1. promptly review the Underground Facility and conclude whether such Underground Facility was not shown or indicated on the Drawings, or was not shown or indicated with reasonable accuracy;
 2. identify and communicate with the owner of the Underground Facility; prepare recommendations to Owner (and if necessary issue any preliminary instructions to Contractor) regarding the Contractor's resumption of Work in connection with the Underground Facility in question;
 3. obtain any pertinent cost or schedule information from Contractor; determine the extent, if any, to which a change is required in the Drawings or Specifications to reflect and document the consequences of the existence or location of the Underground Facility; and
 4. advise Owner in writing of Engineer's findings, conclusions, and recommendations.

During such time, Contractor shall be responsible for the safety and protection of such Underground Facility.

- D. *Owner's Statement to Contractor Regarding Underground Facility:* After receipt of Engineer's written findings, conclusions, and recommendations, Owner shall issue a written statement to Contractor (with a copy to Engineer) regarding the Underground Facility in question addressing the resumption of Work in connection with such Underground Facility, indicating whether any change in the Drawings or Specifications will be made, and adopting or rejecting Engineer's written findings, conclusions, and recommendations in whole or in part.
- E. *Early Resumption of Work:* If at any time Engineer determines that Work in connection with the Underground Facility may resume prior to completion of Engineer's review or Owner's issuance of its statement to Contractor, because the Underground Facility in question and conditions affected by its presence have been adequately documented, and analyzed on a preliminary basis, then the Engineer may at its discretion instruct Contractor to resume such Work.
- F. *Possible Price and Times Adjustments*
1. Contractor shall be entitled to an equitable adjustment in the Contract Price or Contract Times, to the extent that any existing Underground Facility at the Site that was not shown

or indicated on the Drawings, or was not shown or indicated with reasonable accuracy, or any related delay, disruption, or interference, causes an increase or decrease in Contractor's cost of, or time required for, performance of the Work; subject, however, to the following:

- a. With respect to Work that is paid for on a unit price basis, any adjustment in Contract Price will be subject to the provisions of Paragraph 13.03;
 - b. Contractor's entitlement to an adjustment of the Contract Times is subject to the provisions of Paragraphs 4.05.D and 4.05.E; and
 - c. Contractor gave the notice required in Paragraph 5.05.B.
2. If Owner and Contractor agree regarding Contractor's entitlement to and the amount or extent of any adjustment in the Contract Price or Contract Times, then any such adjustment will be set forth in a Change Order.
 3. Contractor may submit a Change Proposal regarding its entitlement to or the amount or extent of any adjustment in the Contract Price or Contract Times, no later than 30 days after Owner's issuance of the Owner's written statement to Contractor regarding the Underground Facility in question.
 4. The information and data shown or indicated on the Drawings with respect to existing Underground Facilities at the Site is based on information and data (a) furnished by the owners of such Underground Facilities, or by others, (b) obtained from available records, or (c) gathered in an investigation conducted in accordance with the current edition of ASCE 38, Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data, by the American Society of Civil Engineers. If such information or data is incorrect or incomplete, Contractor's remedies are limited to those set forth in this Paragraph 5.05.F.

5.06 *Hazardous Environmental Conditions at Site*

A. *Reports and Drawings:* The Supplementary Conditions identify:

1. those reports known to Owner relating to Hazardous Environmental Conditions that have been identified at or adjacent to the Site;
2. drawings known to Owner relating to Hazardous Environmental Conditions that have been identified at or adjacent to the Site; and
3. Technical Data contained in such reports and drawings.

B. *Reliance by Contractor on Technical Data Authorized:* Contractor may rely upon the accuracy of the Technical Data expressly identified in the Supplementary Conditions with respect to such reports and drawings, but such reports and drawings are not Contract Documents. If no such express identification has been made, then Contractor may rely on the accuracy of the Technical Data as defined in Paragraph 1.01.A.46.b. Except for such reliance on Technical Data, Contractor may not rely upon or make any claim against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, with respect to:

1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences and procedures

- of construction to be employed by Contractor, and safety precautions and programs incident thereto;
2. other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings; or
 3. any Contractor interpretation of or conclusion drawn from any Technical Data or any such other data, interpretations, opinions or information.
- C. Contractor shall not be responsible for removing or remediating any Hazardous Environmental Condition encountered, uncovered, or revealed at the Site unless such removal or remediation is expressly identified in the Contract Documents to be within the scope of the Work.
- D. Contractor shall be responsible for controlling, containing, and duly removing all Constituents of Concern brought to the Site by Contractor, Subcontractors, Suppliers, or anyone else for whom Contractor is responsible, and for any associated costs; and for the costs of removing and remediating any Hazardous Environmental Condition created by the presence of any such Constituents of Concern.
- E. If Contractor encounters, uncovers, or reveals a Hazardous Environmental Condition whose removal or remediation is not expressly identified in the Contract Documents as being within the scope of the Work, or if Contractor or anyone for whom Contractor is responsible creates a Hazardous Environmental Condition, then Contractor shall immediately: (1) secure or otherwise isolate such condition; (2) stop all Work in connection with such condition and in any area affected thereby (except in an emergency as required by Paragraph 7.15); and (3) notify Owner and Engineer (and promptly thereafter confirm such notice in writing). Owner shall promptly consult with Engineer concerning the necessity for Owner to retain a qualified expert to evaluate such condition or take corrective action, if any. Promptly after consulting with Engineer, Owner shall take such actions as are necessary to permit Owner to timely obtain required permits and provide Contractor the written notice required by Paragraph 5.06.F. If Contractor or anyone for whom Contractor is responsible created the Hazardous Environmental Condition in question, then Owner may remove and remediate the Hazardous Environmental Condition, and impose a set-off against payments to account for the associated costs.
- F. Contractor shall not resume Work in connection with such Hazardous Environmental Condition or in any affected area until after Owner has obtained any required permits related thereto, and delivered written notice to Contractor either (1) specifying that such condition and any affected area is or has been rendered safe for the resumption of Work, or (2) specifying any special conditions under which such Work may be resumed safely.
- G. If Owner and Contractor cannot agree as to entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times, as a result of such Work stoppage, such special conditions under which Work is agreed to be resumed by Contractor, or any costs or expenses incurred in response to the Hazardous Environmental Condition, then within 30 days of Owner's written notice regarding the resumption of Work, Contractor may submit a Change Proposal, or Owner may impose a set-off. Entitlement to any such adjustment is subject to the provisions of Paragraphs 4.05.D, 4.05.E, 11.07, and 11.08.
- H. If, after receipt of such written notice, Contractor does not agree to resume such Work based on a reasonable belief it is unsafe, or does not agree to resume such Work under such special

conditions, then Owner may order the portion of the Work that is in the area affected by such condition to be deleted from the Work, following the contractual change procedures in Article 11. Owner may have such deleted portion of the Work performed by Owner's own forces or others in accordance with Article 8.

- I. To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Contractor, Subcontractors, and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court, arbitration, or other dispute resolution costs) arising out of or relating to a Hazardous Environmental Condition, provided that such Hazardous Environmental Condition (1) was not shown or indicated in the Drawings, Specifications, or other Contract Documents, identified as Technical Data entitled to limited reliance pursuant to Paragraph 5.06.B, or identified in the Contract Documents to be included within the scope of the Work, and (2) was not created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 5.06.I obligates Owner to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.
- J. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to the failure to control, contain, or remove a Constituent of Concern brought to the Site by Contractor or by anyone for whom Contractor is responsible, or to a Hazardous Environmental Condition created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 5.06.J obligates Contractor to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.
- K. The provisions of Paragraphs 5.03, 5.04, and 5.05 do not apply to the presence of Constituents of Concern or to a Hazardous Environmental Condition uncovered or revealed at the Site.

ARTICLE 6—BONDS AND INSURANCE

6.01 *Performance, Payment, and Other Bonds*

- A. Contractor shall furnish a performance bond and a payment bond, each in an amount at least equal to the Contract Price, as security for the faithful performance and payment of Contractor's obligations under the Contract. These bonds must remain in effect until one year after the date when final payment becomes due or until completion of the correction period specified in Paragraph 15.08, whichever is later, except as provided otherwise by Laws or Regulations, the terms of a prescribed bond form, the Supplementary Conditions, or other provisions of the Contract.
- B. Contractor shall also furnish such other bonds (if any) as are required by the Supplementary Conditions or other provisions of the Contract.
- C. All bonds must be in the form included in the Bidding Documents or otherwise specified by Owner prior to execution of the Contract, except as provided otherwise by Laws or

Regulations, and must be issued and signed by a surety named in “Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies” as published in Department Circular 570 (as amended and supplemented) by the Bureau of the Fiscal Service, U.S. Department of the Treasury. A bond signed by an agent or attorney-in-fact must be accompanied by a certified copy of that individual’s authority to bind the surety. The evidence of authority must show that it is effective on the date the agent or attorney-in-fact signed the accompanying bond.

- D. Contractor shall obtain the required bonds from surety companies that are duly licensed or authorized, in the state or jurisdiction in which the Project is located, to issue bonds in the required amounts.
- E. If the surety on a bond furnished by Contractor is declared bankrupt or becomes insolvent, or the surety ceases to meet the requirements above, then Contractor shall promptly notify Owner and Engineer in writing and shall, within 20 days after the event giving rise to such notification, provide another bond and surety, both of which must comply with the bond and surety requirements above.
- F. If Contractor has failed to obtain a required bond, Owner may exclude the Contractor from the Site and exercise Owner’s termination rights under Article 16.
- G. Upon request to Owner from any Subcontractor, Supplier, or other person or entity claiming to have furnished labor, services, materials, or equipment used in the performance of the Work, Owner shall provide a copy of the payment bond to such person or entity.
- H. Upon request to Contractor from any Subcontractor, Supplier, or other person or entity claiming to have furnished labor, services, materials, or equipment used in the performance of the Work, Contractor shall provide a copy of the payment bond to such person or entity.

6.02 *Insurance—General Provisions*

- A. Owner and Contractor shall obtain and maintain insurance as required in this article and in the Supplementary Conditions.
- B. All insurance required by the Contract to be purchased and maintained by Owner or Contractor shall be obtained from insurance companies that are duly licensed or authorized in the state or jurisdiction in which the Project is located to issue insurance policies for the required limits and coverages. Unless a different standard is indicated in the Supplementary Conditions, all companies that provide insurance policies required under this Contract shall have an A.M. Best rating of A-VII or better.
- C. Alternative forms of insurance coverage, including but not limited to self-insurance and “Occupational Accident and Excess Employer’s Indemnity Policies,” are not sufficient to meet the insurance requirements of this Contract, unless expressly allowed in the Supplementary Conditions.
- D. Contractor shall deliver to Owner, with copies to each additional insured identified in the Contract, certificates of insurance and endorsements establishing that Contractor has obtained and is maintaining the policies and coverages required by the Contract. Upon request by Owner or any other insured, Contractor shall also furnish other evidence of such required insurance, including but not limited to copies of policies, documentation of applicable self-insured retentions (if allowed) and deductibles, full disclosure of all relevant exclusions, and evidence of insurance required to be purchased and maintained by

Subcontractors or Suppliers. In any documentation furnished under this provision, Contractor, Subcontractors, and Suppliers may block out (redact) (1) any confidential premium or pricing information and (2) any wording specific to a project or jurisdiction other than those applicable to this Contract.

- E. Owner shall deliver to Contractor, with copies to each additional insured identified in the Contract, certificates of insurance and endorsements establishing that Owner has obtained and is maintaining the policies and coverages required of Owner by the Contract (if any). Upon request by Contractor or any other insured, Owner shall also provide other evidence of such required insurance (if any), including but not limited to copies of policies, documentation of applicable self-insured retentions (if allowed) and deductibles, and full disclosure of all relevant exclusions. In any documentation furnished under this provision, Owner may block out (redact) (1) any confidential premium or pricing information and (2) any wording specific to a project or jurisdiction other than those relevant to this Contract.
- F. Failure of Owner or Contractor to demand such certificates or other evidence of the other party's full compliance with these insurance requirements, or failure of Owner or Contractor to identify a deficiency in compliance from the evidence provided, will not be construed as a waiver of the other party's obligation to obtain and maintain such insurance.
- G. In addition to the liability insurance required to be provided by Contractor, the Owner, at Owner's option, may purchase and maintain Owner's own liability insurance. Owner's liability policies, if any, operate separately and independently from policies required to be provided by Contractor, and Contractor cannot rely upon Owner's liability policies for any of Contractor's obligations to the Owner, Engineer, or third parties.
- H. Contractor shall require:
 - 1. Subcontractors to purchase and maintain worker's compensation, commercial general liability, and other insurance that is appropriate for their participation in the Project, and to name as additional insureds Owner and Engineer (and any other individuals or entities identified in the Supplementary Conditions as additional insureds on Contractor's liability policies) on each Subcontractor's commercial general liability insurance policy; and
 - 2. Suppliers to purchase and maintain insurance that is appropriate for their participation in the Project.
- I. If either party does not purchase or maintain the insurance required of such party by the Contract, such party shall notify the other party in writing of such failure to purchase prior to the start of the Work, or of such failure to maintain prior to any change in the required coverage.
- J. If Contractor has failed to obtain and maintain required insurance, Contractor's entitlement to enter or remain at the Site will end immediately, and Owner may impose an appropriate set-off against payment for any associated costs (including but not limited to the cost of purchasing necessary insurance coverage), and exercise Owner's termination rights under Article 16.
- K. Without prejudice to any other right or remedy, if a party has failed to obtain required insurance, the other party may elect (but is in no way obligated) to obtain equivalent insurance to protect such other party's interests at the expense of the party who was required to provide such coverage, and the Contract Price will be adjusted accordingly.

- L. Owner does not represent that insurance coverage and limits established in this Contract necessarily will be adequate to protect Contractor or Contractor's interests. Contractor is responsible for determining whether such coverage and limits are adequate to protect its interests, and for obtaining and maintaining any additional insurance that Contractor deems necessary.
- M. The insurance and insurance limits required herein will not be deemed as a limitation on Contractor's liability, or that of its Subcontractors or Suppliers, under the indemnities granted to Owner and other individuals and entities in the Contract or otherwise.
- N. All the policies of insurance required to be purchased and maintained under this Contract will contain a provision or endorsement that the coverage afforded will not be canceled, or renewal refused, until at least 10 days prior written notice has been given to the purchasing policyholder. Within three days of receipt of any such written notice, the purchasing policyholder shall provide a copy of the notice to each other insured and Engineer.

6.03 Contractor's Insurance

- A. *Required Insurance:* Contractor shall purchase and maintain Worker's Compensation, Commercial General Liability, and other insurance pursuant to the specific requirements of the Supplementary Conditions.
- B. *General Provisions:* The policies of insurance required by this Paragraph 6.03 as supplemented must:
 - 1. include at least the specific coverages required;
 - 2. be written for not less than the limits provided, or those required by Laws or Regulations, whichever is greater;
 - 3. remain in effect at least until the Work is complete (as set forth in Paragraph 15.06.D), and longer if expressly required elsewhere in this Contract, and at all times thereafter when Contractor may be correcting, removing, or replacing defective Work as a warranty or correction obligation, or otherwise, or returning to the Site to conduct other tasks arising from the Contract;
 - 4. apply with respect to the performance of the Work, whether such performance is by Contractor, any Subcontractor or Supplier, or by anyone directly or indirectly employed by any of them to perform any of the Work, or by anyone for whose acts any of them may be liable; and
 - 5. include all necessary endorsements to support the stated requirements.
- C. *Additional Insureds:* The Contractor's commercial general liability, automobile liability, employer's liability, umbrella or excess, pollution liability, and unmanned aerial vehicle liability policies, if required by this Contract, must:
 - 1. include and list as additional insureds Owner and Engineer, and any individuals or entities identified as additional insureds in the Supplementary Conditions;
 - 2. include coverage for the respective officers, directors, members, partners, employees, and consultants of all such additional insureds;
 - 3. afford primary coverage to these additional insureds for all claims covered thereby (including as applicable those arising from both ongoing and completed operations);

4. not seek contribution from insurance maintained by the additional insured; and
5. as to commercial general liability insurance, apply to additional insureds with respect to liability caused in whole or in part by Contractor's acts or omissions, or the acts and omissions of those working on Contractor's behalf, in the performance of Contractor's operations.

6.04 *Builder's Risk and Other Property Insurance*

- A. *Builder's Risk*: Unless otherwise provided in the Supplementary Conditions, Contractor shall purchase and maintain builder's risk insurance upon the Work on a completed value basis, in the amount of the Work's full insurable replacement cost (subject to such deductible amounts as may be provided in the Supplementary Conditions or required by Laws and Regulations). The specific requirements applicable to the builder's risk insurance are set forth in the Supplementary Conditions.
- B. *Property Insurance for Facilities of Owner Where Work Will Occur*: Owner is responsible for obtaining and maintaining property insurance covering each existing structure, building, or facility in which any part of the Work will occur, or to which any part of the Work will attach or be adjoined. Such property insurance will be written on a special perils (all-risk) form, on a replacement cost basis, providing coverage consistent with that required for the builder's risk insurance, and will be maintained until the Work is complete, as set forth in Paragraph 15.06.D.
- C. *Property Insurance for Substantially Complete Facilities*: Promptly after Substantial Completion, and before actual occupancy or use of the substantially completed Work, Owner will obtain property insurance for such substantially completed Work, and maintain such property insurance at least until the Work is complete, as set forth in Paragraph 15.06.D. Such property insurance will be written on a special perils (all-risk) form, on a replacement cost basis, and provide coverage consistent with that required for the builder's risk insurance. The builder's risk insurance may terminate upon written confirmation of Owner's procurement of such property insurance.
- D. *Partial Occupancy or Use by Owner*: If Owner will occupy or use a portion or portions of the Work prior to Substantial Completion of all the Work, as provided in Paragraph 15.04, then Owner (directly, if it is the purchaser of the builder's risk policy, or through Contractor) will provide advance notice of such occupancy or use to the builder's risk insurer, and obtain an endorsement consenting to the continuation of coverage prior to commencing such partial occupancy or use.
- E. *Insurance of Other Property; Additional Insurance*: If the express insurance provisions of the Contract do not require or address the insurance of a property item or interest, then the entity or individual owning such property item will be responsible for insuring it. If Contractor elects to obtain other special insurance to be included in or supplement the builder's risk or property insurance policies provided under this Paragraph 6.04, it may do so at Contractor's expense.

6.05 *Property Losses; Subrogation*

- A. The builder's risk insurance policy purchased and maintained in accordance with Paragraph 6.04 (or an installation floater policy if authorized by the Supplementary Conditions), will contain provisions to the effect that in the event of payment of any loss or damage the insurer will have no rights of recovery against any insureds thereunder, or against

Engineer or its consultants, or their officers, directors, members, partners, employees, agents, consultants, or subcontractors.

1. Owner and Contractor waive all rights against each other and the respective officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, for all losses and damages caused by, arising out of, or resulting from any of the perils, risks, or causes of loss covered by such policies and any other property insurance applicable to the Work; and, in addition, waive all such rights against Engineer, its consultants, all individuals or entities identified in the Supplementary Conditions as builder's risk or installation floater insureds, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, under such policies for losses and damages so caused.
 2. None of the above waivers extends to the rights that any party making such waiver may have to the proceeds of insurance held by Owner or Contractor as trustee or fiduciary, or otherwise payable under any policy so issued.
- B. Any property insurance policy maintained by Owner covering any loss, damage, or consequential loss to Owner's existing structures, buildings, or facilities in which any part of the Work will occur, or to which any part of the Work will attach or adjoin; to adjacent structures, buildings, or facilities of Owner; or to part or all of the completed or substantially completed Work, during partial occupancy or use pursuant to Paragraph 15.04, after Substantial Completion pursuant to Paragraph 15.03, or after final payment pursuant to Paragraph 15.06, will contain provisions to the effect that in the event of payment of any loss or damage the insurer will have no rights of recovery against any insureds thereunder, or against Contractor, Subcontractors, or Engineer, or the officers, directors, members, partners, employees, agents, consultants, or subcontractors of each and any of them, and that the insured is allowed to waive the insurer's rights of subrogation in a written contract executed prior to the loss, damage, or consequential loss.
1. Owner waives all rights against Contractor, Subcontractors, and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them, for all losses and damages caused by, arising out of, or resulting from fire or any of the perils, risks, or causes of loss covered by such policies.
- C. The waivers in this Paragraph 6.05 include the waiver of rights due to business interruption, loss of use, or other consequential loss extending beyond direct physical loss or damage to Owner's property or the Work caused by, arising out of, or resulting from fire or other insured peril, risk, or cause of loss.
- D. Contractor shall be responsible for assuring that each Subcontract contains provisions whereby the Subcontractor waives all rights against Owner, Contractor, all individuals or entities identified in the Supplementary Conditions as insureds, the Engineer and its consultants, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, for all losses and damages caused by, arising out of, relating to, or resulting from fire or other peril, risk, or cause of loss covered by builder's risk insurance, installation floater, and any other property insurance applicable to the Work.

6.06 *Receipt and Application of Property Insurance Proceeds*

- A. Any insured loss under the builder's risk and other policies of property insurance required by Paragraph 6.04 will be adjusted and settled with the named insured that purchased the policy. Such named insured shall act as fiduciary for the other insureds, and give notice to such other insureds that adjustment and settlement of a claim is in progress. Any other insured may state its position regarding a claim for insured loss in writing within 15 days after notice of such claim.
- B. Proceeds for such insured losses may be made payable by the insurer either jointly to multiple insureds, or to the named insured that purchased the policy in its own right and as fiduciary for other insureds, subject to the requirements of any applicable mortgage clause. A named insured receiving insurance proceeds under the builder's risk and other policies of insurance required by Paragraph 6.04 shall maintain such proceeds in a segregated account, and distribute such proceeds in accordance with such agreement as the parties in interest may reach, or as otherwise required under the dispute resolution provisions of this Contract or applicable Laws and Regulations.
- C. If no other special agreement is reached, Contractor shall repair or replace the damaged Work, using allocated insurance proceeds.

ARTICLE 7—CONTRACTOR'S RESPONSIBILITIES

7.01 *Contractor's Means and Methods of Construction*

- A. Contractor shall be solely responsible for the means, methods, techniques, sequences, and procedures of construction.
- B. If the Contract Documents note, or Contractor determines, that professional engineering or other design services are needed to carry out Contractor's responsibilities for construction means, methods, techniques, sequences, and procedures, or for Site safety, then Contractor shall cause such services to be provided by a properly licensed design professional, at Contractor's expense. Such services are not Owner-delegated professional design services under this Contract, and neither Owner nor Engineer has any responsibility with respect to (1) Contractor's determination of the need for such services, (2) the qualifications or licensing of the design professionals retained or employed by Contractor, (3) the performance of such services, or (4) any errors, omissions, or defects in such services.

7.02 *Supervision and Superintendence*

- A. Contractor shall supervise, inspect, and direct the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with the Contract Documents.
- B. At all times during the progress of the Work, Contractor shall assign a competent resident superintendent who will not be replaced without written notice to Owner and Engineer except under extraordinary circumstances.

7.03 *Labor; Working Hours*

- A. Contractor shall provide competent, suitably qualified personnel to survey and lay out the Work and perform construction as required by the Contract Documents. Contractor shall maintain good discipline and order at the Site.

- B. Contractor shall be fully responsible to Owner and Engineer for all acts and omissions of Contractor's employees; of Suppliers and Subcontractors, and their employees; and of any other individuals or entities performing or furnishing any of the Work, just as Contractor is responsible for Contractor's own acts and omissions.
- C. Except as otherwise required for the safety or protection of persons or the Work or property at the Site or adjacent thereto, and except as otherwise stated in the Contract Documents, all Work at the Site will be performed during regular working hours, Monday through Friday. Contractor will not perform Work on a Saturday, Sunday, or any legal holiday. Contractor may perform Work outside regular working hours or on Saturdays, Sundays, or legal holidays only with Owner's written consent, which will not be unreasonably withheld.

7.04 *Services, Materials, and Equipment*

- A. Unless otherwise specified in the Contract Documents, Contractor shall provide and assume full responsibility for all services, materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities, and all other facilities and incidentals necessary for the performance, testing, start up, and completion of the Work, whether or not such items are specifically called for in the Contract Documents.
- B. All materials and equipment incorporated into the Work must be new and of good quality, except as otherwise provided in the Contract Documents. All special warranties and guarantees required by the Specifications will expressly run to the benefit of Owner. If required by Engineer, Contractor shall furnish satisfactory evidence (including reports of required tests) as to the source, kind, and quality of materials and equipment.
- C. All materials and equipment must be stored, applied, installed, connected, erected, protected, used, cleaned, and conditioned in accordance with instructions of the applicable Supplier, except as otherwise may be provided in the Contract Documents.

7.05 *"Or Equals"*

- A. *Contractor's Request; Governing Criteria:* Whenever an item of equipment or material is specified or described in the Contract Documents by using the names of one or more proprietary items or specific Suppliers, the Contract Price has been based upon Contractor furnishing such item as specified. The specification or description of such an item is intended to establish the type, function, appearance, and quality required. Unless the specification or description contains or is followed by words reading that no like, equivalent, or "or equal" item is permitted, Contractor may request that Engineer authorize the use of other items of equipment or material, or items from other proposed Suppliers, under the circumstances described below.
 - 1. If Engineer in its sole discretion determines that an item of equipment or material proposed by Contractor is functionally equal to that named and sufficiently similar so that no change in related Work will be required, Engineer will deem it an "or equal" item. For the purposes of this paragraph, a proposed item of equipment or material will be considered functionally equal to an item so named if:
 - a. in the exercise of reasonable judgment Engineer determines that the proposed item:
 - 1) is at least equal in materials of construction, quality, durability, appearance, strength, and design characteristics;

- 2) will reliably perform at least equally well the function and achieve the results imposed by the design concept of the completed Project as a functioning whole;
 - 3) has a proven record of performance and availability of responsive service; and
 - 4) is not objectionable to Owner.
- b. Contractor certifies that, if the proposed item is approved and incorporated into the Work:
- 1) there will be no increase in cost to the Owner or increase in Contract Times; and
 - 2) the item will conform substantially to the detailed requirements of the item named in the Contract Documents.
- B. *Contractor's Expense:* Contractor shall provide all data in support of any proposed "or equal" item at Contractor's expense.
- C. *Engineer's Evaluation and Determination:* Engineer will be allowed a reasonable time to evaluate each "or-equal" request. Engineer may require Contractor to furnish additional data about the proposed "or-equal" item. Engineer will be the sole judge of acceptability. No "or-equal" item will be ordered, furnished, installed, or utilized until Engineer's review is complete and Engineer determines that the proposed item is an "or-equal," which will be evidenced by an approved Shop Drawing or other written communication. Engineer will advise Contractor in writing of any negative determination.
- D. *Effect of Engineer's Determination:* Neither approval nor denial of an "or-equal" request will result in any change in Contract Price. The Engineer's denial of an "or-equal" request will be final and binding, and may not be reversed through an appeal under any provision of the Contract.
- E. *Treatment as a Substitution Request:* If Engineer determines that an item of equipment or material proposed by Contractor does not qualify as an "or-equal" item, Contractor may request that Engineer consider the item a proposed substitute pursuant to Paragraph 7.06.

7.06 *Substitutes*

- A. *Contractor's Request; Governing Criteria:* Unless the specification or description of an item of equipment or material required to be furnished under the Contract Documents contains or is followed by words reading that no substitution is permitted, Contractor may request that Engineer authorize the use of other items of equipment or material under the circumstances described below. To the extent possible such requests must be made before commencement of related construction at the Site.
1. Contractor shall submit sufficient information as provided below to allow Engineer to determine if the item of material or equipment proposed is functionally equivalent to that named and an acceptable substitute therefor. Engineer will not accept requests for review of proposed substitute items of equipment or material from anyone other than Contractor.
 2. The requirements for review by Engineer will be as set forth in Paragraph 7.06.B, as supplemented by the Specifications, and as Engineer may decide is appropriate under the circumstances.

3. Contractor shall make written application to Engineer for review of a proposed substitute item of equipment or material that Contractor seeks to furnish or use. The application:
 - a. will certify that the proposed substitute item will:
 - 1) perform adequately the functions and achieve the results called for by the general design;
 - 2) be similar in substance to the item specified; and
 - 3) be suited to the same use as the item specified.
 - b. will state:
 - 1) the extent, if any, to which the use of the proposed substitute item will necessitate a change in Contract Times;
 - 2) whether use of the proposed substitute item in the Work will require a change in any of the Contract Documents (or in the provisions of any other direct contract with Owner for other work on the Project) to adapt the design to the proposed substitute item; and
 - 3) whether incorporation or use of the proposed substitute item in connection with the Work is subject to payment of any license fee or royalty.
 - c. will identify:
 - 1) all variations of the proposed substitute item from the item specified; and
 - 2) available engineering, sales, maintenance, repair, and replacement services.
 - d. will contain an itemized estimate of all costs or credits that will result directly or indirectly from use of such substitute item, including but not limited to changes in Contract Price, shared savings, costs of redesign, and claims of other contractors affected by any resulting change.
- B. *Engineer's Evaluation and Determination*: Engineer will be allowed a reasonable time to evaluate each substitute request, and to obtain comments and direction from Owner. Engineer may require Contractor to furnish additional data about the proposed substitute item. Engineer will be the sole judge of acceptability. No substitute will be ordered, furnished, installed, or utilized until Engineer's review is complete and Engineer determines that the proposed item is an acceptable substitute. Engineer's determination will be evidenced by a Field Order or a proposed Change Order accounting for the substitution itself and all related impacts, including changes in Contract Price or Contract Times. Engineer will advise Contractor in writing of any negative determination.
- C. *Special Guarantee*: Owner may require Contractor to furnish at Contractor's expense a special performance guarantee or other surety with respect to any substitute.
- D. *Reimbursement of Engineer's Cost*: Engineer will record Engineer's costs in evaluating a substitute proposed or submitted by Contractor. Whether or not Engineer approves a substitute so proposed or submitted by Contractor, Contractor shall reimburse Owner for the reasonable charges of Engineer for evaluating each such proposed substitute. Contractor shall also reimburse Owner for the reasonable charges of Engineer for making changes in the Contract Documents (or in the provisions of any other direct contract with Owner) resulting from the acceptance of each proposed substitute.

- E. *Contractor's Expense*: Contractor shall provide all data in support of any proposed substitute at Contractor's expense.
- F. *Effect of Engineer's Determination*: If Engineer approves the substitution request, Contractor shall execute the proposed Change Order and proceed with the substitution. The Engineer's denial of a substitution request will be final and binding, and may not be reversed through an appeal under any provision of the Contract. Contractor may challenge the scope of reimbursement costs imposed under Paragraph 7.06.D, by timely submittal of a Change Proposal.

7.07 *Concerning Subcontractors and Suppliers*

- A. Contractor may retain Subcontractors and Suppliers for the performance of parts of the Work. Such Subcontractors and Suppliers must be acceptable to Owner. The Contractor's retention of a Subcontractor or Supplier for the performance of parts of the Work will not relieve Contractor's obligation to Owner to perform and complete the Work in accordance with the Contract Documents.
- B. Contractor shall retain specific Subcontractors and Suppliers for the performance of designated parts of the Work if required by the Contract to do so.
- C. Subsequent to the submittal of Contractor's Bid or final negotiation of the terms of the Contract, Owner may not require Contractor to retain any Subcontractor or Supplier to furnish or perform any of the Work against which Contractor has reasonable objection.
- D. Prior to entry into any binding subcontract or purchase order, Contractor shall submit to Owner the identity of the proposed Subcontractor or Supplier (unless Owner has already deemed such proposed Subcontractor or Supplier acceptable during the bidding process or otherwise). Such proposed Subcontractor or Supplier shall be deemed acceptable to Owner unless Owner raises a substantive, reasonable objection within 5 days.
- E. Owner may require the replacement of any Subcontractor or Supplier. Owner also may require Contractor to retain specific replacements; provided, however, that Owner may not require a replacement to which Contractor has a reasonable objection. If Contractor has submitted the identity of certain Subcontractors or Suppliers for acceptance by Owner, and Owner has accepted it (either in writing or by failing to make written objection thereto), then Owner may subsequently revoke the acceptance of any such Subcontractor or Supplier so identified solely on the basis of substantive, reasonable objection after due investigation. Contractor shall submit an acceptable replacement for the rejected Subcontractor or Supplier.
- F. If Owner requires the replacement of any Subcontractor or Supplier retained by Contractor to perform any part of the Work, then Contractor shall be entitled to an adjustment in Contract Price or Contract Times, with respect to the replacement; and Contractor shall initiate a Change Proposal for such adjustment within 30 days of Owner's requirement of replacement.
- G. No acceptance by Owner of any such Subcontractor or Supplier, whether initially or as a replacement, will constitute a waiver of the right of Owner to the completion of the Work in accordance with the Contract Documents.

- H. On a monthly basis, Contractor shall submit to Engineer a complete list of all Subcontractors and Suppliers having a direct contract with Contractor, and of all other Subcontractors and Suppliers known to Contractor at the time of submittal.
- I. Contractor shall be solely responsible for scheduling and coordinating the work of Subcontractors and Suppliers.
- J. The divisions and sections of the Specifications and the identifications of any Drawings do not control Contractor in dividing the Work among Subcontractors or Suppliers, or in delineating the Work to be performed by any specific trade.
- K. All Work performed for Contractor by a Subcontractor or Supplier must be pursuant to an appropriate contractual agreement that specifically binds the Subcontractor or Supplier to the applicable terms and conditions of the Contract for the benefit of Owner and Engineer.
- L. Owner may furnish to any Subcontractor or Supplier, to the extent practicable, information about amounts paid to Contractor for Work performed for Contractor by the Subcontractor or Supplier.
- M. Contractor shall restrict all Subcontractors and Suppliers from communicating with Engineer or Owner, except through Contractor or in case of an emergency, or as otherwise expressly allowed in this Contract.

7.08 *Patent Fees and Royalties*

- A. Contractor shall pay all license fees and royalties and assume all costs incident to the use in the performance of the Work or the incorporation in the Work of any invention, design, process, product, or device which is the subject of patent rights or copyrights held by others. If an invention, design, process, product, or device is specified in the Contract Documents for use in the performance of the Work and if, to the actual knowledge of Owner or Engineer, its use is subject to patent rights or copyrights calling for the payment of any license fee or royalty to others, the existence of such rights will be disclosed in the Contract Documents.
- B. To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Contractor, and its officers, directors, members, partners, employees, agents, consultants, and subcontractors, from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court or arbitration or other dispute resolution costs) arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device specified in the Contract Documents, but not identified as being subject to payment of any license fee or royalty to others required by patent rights or copyrights.
- C. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them, from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device not specified in the Contract Documents.

7.09 *Permits*

- A. Unless otherwise provided in the Contract Documents, Contractor shall obtain and pay for all construction permits, licenses, and certificates of occupancy. Owner shall assist Contractor, when necessary, in obtaining such permits and licenses. Contractor shall pay all governmental charges and inspection fees necessary for the prosecution of the Work which are applicable at the time of the submission of Contractor's Bid (or when Contractor became bound under a negotiated contract). Owner shall pay all charges of utility owners for connections for providing permanent service to the Work.

7.10 *Taxes*

- A. Contractor shall pay all sales, consumer, use, and other similar taxes required to be paid by Contractor in accordance with the Laws and Regulations of the place of the Project which are applicable during the performance of the Work.

7.11 *Laws and Regulations*

- A. Contractor shall give all notices required by and shall comply with all Laws and Regulations applicable to the performance of the Work. Neither Owner nor Engineer shall be responsible for monitoring Contractor's compliance with any Laws or Regulations.
- B. If Contractor performs any Work or takes any other action knowing or having reason to know that it is contrary to Laws or Regulations, Contractor shall bear all resulting costs and losses, and shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such Work or other action. It is not Contractor's responsibility to make certain that the Work described in the Contract Documents is in accordance with Laws and Regulations, but this does not relieve Contractor of its obligations under Paragraph 3.03.
- C. Owner or Contractor may give written notice to the other party of any changes after the submission of Contractor's Bid (or after the date when Contractor became bound under a negotiated contract) in Laws or Regulations having an effect on the cost or time of performance of the Work, including but not limited to changes in Laws or Regulations having an effect on procuring permits and on sales, use, value-added, consumption, and other similar taxes. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times resulting from such changes, then within 30 days of such written notice Contractor may submit a Change Proposal, or Owner may initiate a Claim.

7.12 *Record Documents*

- A. Contractor shall maintain in a safe place at the Site one printed record copy of all Drawings, Specifications, Addenda, Change Orders, Work Change Directives, Field Orders, written interpretations and clarifications, and approved Shop Drawings. Contractor shall keep such record documents in good order and annotate them to show changes made during construction. These record documents, together with all approved Samples, will be available to Engineer for reference. Upon completion of the Work, Contractor shall deliver these record documents to Engineer.

7.13 *Safety and Protection*

- A. Contractor shall be solely responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the Work. Such responsibility does not relieve Subcontractors of their responsibility for the safety of persons or property in the performance of their work, nor for compliance with applicable safety Laws and Regulations.
- B. Contractor shall designate a qualified and experienced safety representative whose duties and responsibilities are the prevention of Work-related accidents and the maintenance and supervision of safety precautions and programs.
- C. Contractor shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury, or loss to:
 - 1. all persons on the Site or who may be affected by the Work;
 - 2. all the Work and materials and equipment to be incorporated therein, whether in storage on or off the Site; and
 - 3. other property at the Site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, other work in progress, utilities, and Underground Facilities not designated for removal, relocation, or replacement in the course of construction.
- D. All damage, injury, or loss to any property referred to in Paragraph 7.13.C.2 or 7.13.C.3 caused, directly or indirectly, in whole or in part, by Contractor, any Subcontractor, Supplier, or any other individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, shall be remedied by Contractor at its expense (except damage or loss attributable to the fault of Drawings or Specifications or to the acts or omissions of Owner or Engineer or anyone employed by any of them, or anyone for whose acts any of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of Contractor or any Subcontractor, Supplier, or other individual or entity directly or indirectly employed by any of them).
- E. Contractor shall comply with all applicable Laws and Regulations relating to the safety of persons or property, or to the protection of persons or property from damage, injury, or loss; and shall erect and maintain all necessary safeguards for such safety and protection.
- F. Contractor shall notify Owner; the owners of adjacent property; the owners of Underground Facilities and other utilities (if the identity of such owners is known to Contractor); and other contractors and utility owners performing work at or adjacent to the Site, in writing, when Contractor knows that prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation, and replacement of their property or work in progress.
- G. Contractor shall comply with the applicable requirements of Owner's safety programs, if any. Any Owner's safety programs that are applicable to the Work are identified or included in the Supplementary Conditions or Specifications.
- H. Contractor shall inform Owner and Engineer of the specific requirements of Contractor's safety program with which Owner's and Engineer's employees and representatives must comply while at the Site.

- I. Contractor's duties and responsibilities for safety and protection will continue until all the Work is completed, Engineer has issued a written notice to Owner and Contractor in accordance with Paragraph 15.06.C that the Work is acceptable, and Contractor has left the Site (except as otherwise expressly provided in connection with Substantial Completion).
- J. Contractor's duties and responsibilities for safety and protection will resume whenever Contractor or any Subcontractor or Supplier returns to the Site to fulfill warranty or correction obligations, or to conduct other tasks arising from the Contract Documents.

7.14 *Hazard Communication Programs*

- A. Contractor shall be responsible for coordinating any exchange of safety data sheets (formerly known as material safety data sheets) or other hazard communication information required to be made available to or exchanged between or among employers at the Site in accordance with Laws or Regulations.

7.15 *Emergencies*

- A. In emergencies affecting the safety or protection of persons or the Work or property at the Site or adjacent thereto, Contractor is obligated to act to prevent damage, injury, or loss. Contractor shall give Engineer prompt written notice if Contractor believes that any significant changes in the Work or variations from the Contract Documents have been caused by an emergency, or are required as a result of Contractor's response to an emergency. If Engineer determines that a change in the Contract Documents is required because of an emergency or Contractor's response, a Work Change Directive or Change Order will be issued.

7.16 *Submittals*

A. *Shop Drawing and Sample Requirements*

- 1. Before submitting a Shop Drawing or Sample, Contractor shall:
 - a. review and coordinate the Shop Drawing or Sample with other Shop Drawings and Samples and with the requirements of the Work and the Contract Documents;
 - b. determine and verify:
 - 1) all field measurements, quantities, dimensions, specified performance and design criteria, installation requirements, materials, catalog numbers, and similar information with respect to the Submittal;
 - 2) the suitability of all materials and equipment offered with respect to the indicated application, fabrication, shipping, handling, storage, assembly, and installation pertaining to the performance of the Work; and
 - 3) all information relative to Contractor's responsibilities for means, methods, techniques, sequences, and procedures of construction, and safety precautions and programs incident thereto;
 - c. confirm that the Submittal is complete with respect to all related data included in the Submittal.
- 2. Each Shop Drawing or Sample must bear a stamp or specific written certification that Contractor has satisfied Contractor's obligations under the Contract Documents with respect to Contractor's review of that Submittal, and that Contractor approves the Submittal.

3. With each Shop Drawing or Sample, Contractor shall give Engineer specific written notice of any variations that the Submittal may have from the requirements of the Contract Documents. This notice must be set forth in a written communication separate from the Submittal; and, in addition, in the case of a Shop Drawing by a specific notation made on the Shop Drawing itself.
- B. *Submittal Procedures for Shop Drawings and Samples:* Contractor shall label and submit Shop Drawings and Samples to Engineer for review and approval in accordance with the accepted Schedule of Submittals.
1. *Shop Drawings*
 - a. Contractor shall submit the number of copies required in the Specifications.
 - b. Data shown on the Shop Drawings must be complete with respect to quantities, dimensions, specified performance and design criteria, materials, and similar data to show Engineer the services, materials, and equipment Contractor proposes to provide, and to enable Engineer to review the information for the limited purposes required by Paragraph 7.16.C.
 2. *Samples*
 - a. Contractor shall submit the number of Samples required in the Specifications.
 - b. Contractor shall clearly identify each Sample as to material, Supplier, pertinent data such as catalog numbers, the use for which intended and other data as Engineer may require to enable Engineer to review the Submittal for the limited purposes required by Paragraph 7.16.C.
 3. Where a Shop Drawing or Sample is required by the Contract Documents or the Schedule of Submittals, any related Work performed prior to Engineer's review and approval of the pertinent submittal will be at the sole expense and responsibility of Contractor.
- C. *Engineer's Review of Shop Drawings and Samples*
1. Engineer will provide timely review of Shop Drawings and Samples in accordance with the accepted Schedule of Submittals. Engineer's review and approval will be only to determine if the items covered by the Submittals will, after installation or incorporation in the Work, comply with the requirements of the Contract Documents, and be compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents.
 2. Engineer's review and approval will not extend to means, methods, techniques, sequences, or procedures of construction, or to safety precautions or programs incident thereto.
 3. Engineer's review and approval of a separate item as such will not indicate approval of the assembly in which the item functions.
 4. Engineer's review and approval of a Shop Drawing or Sample will not relieve Contractor from responsibility for any variation from the requirements of the Contract Documents unless Contractor has complied with the requirements of Paragraph 7.16.A.3 and Engineer has given written approval of each such variation by specific written notation thereof incorporated in or accompanying the Shop Drawing or Sample. Engineer will

document any such approved variation from the requirements of the Contract Documents in a Field Order or other appropriate Contract modification.

5. Engineer's review and approval of a Shop Drawing or Sample will not relieve Contractor from responsibility for complying with the requirements of Paragraphs 7.16.A and B.
6. Engineer's review and approval of a Shop Drawing or Sample, or of a variation from the requirements of the Contract Documents, will not, under any circumstances, change the Contract Times or Contract Price, unless such changes are included in a Change Order.
7. Neither Engineer's receipt, review, acceptance, or approval of a Shop Drawing or Sample will result in such item becoming a Contract Document.
8. Contractor shall perform the Work in compliance with the requirements and commitments set forth in approved Shop Drawings and Samples, subject to the provisions of Paragraph 7.16.C.4.

D. Resubmittal Procedures for Shop Drawings and Samples

1. Contractor shall make corrections required by Engineer and shall return the required number of corrected copies of Shop Drawings and submit, as required, new Samples for review and approval. Contractor shall direct specific attention in writing to revisions other than the corrections called for by Engineer on previous Submittals.
2. Contractor shall furnish required Shop Drawing and Sample submittals with sufficient information and accuracy to obtain required approval of an item with no more than two resubmittals. Engineer will record Engineer's time for reviewing a third or subsequent resubmittal of a Shop Drawing or Sample, and Contractor shall be responsible for Engineer's charges to Owner for such time. Owner may impose a set-off against payments due Contractor to secure reimbursement for such charges.
3. If Contractor requests a change of a previously approved Shop Drawing or Sample, Contractor shall be responsible for Engineer's charges to Owner for its review time, and Owner may impose a set-off against payments due Contractor to secure reimbursement for such charges, unless the need for such change is beyond the control of Contractor.

E. Submittals Other than Shop Drawings, Samples, and Owner-Delegated Designs

1. The following provisions apply to all Submittals other than Shop Drawings, Samples, and Owner-delegated designs:
 - a. Contractor shall submit all such Submittals to the Engineer in accordance with the Schedule of Submittals and pursuant to the applicable terms of the Contract Documents.
 - b. Engineer will provide timely review of all such Submittals in accordance with the Schedule of Submittals and return such Submittals with a notation of either Accepted or Not Accepted. Any such Submittal that is not returned within the time established in the Schedule of Submittals will be deemed accepted.
 - c. Engineer's review will be only to determine if the Submittal is acceptable under the requirements of the Contract Documents as to general form and content of the Submittal.

- d. If any such Submittal is not accepted, Contractor shall confer with Engineer regarding the reason for the non-acceptance, and resubmit an acceptable document.
 2. Procedures for the submittal and acceptance of the Progress Schedule, the Schedule of Submittals, and the Schedule of Values are set forth in Paragraphs 2.03, 2.04, and 2.05.
- F. Owner-delegated Designs: Submittals pursuant to Owner-delegated designs are governed by the provisions of Paragraph 7.19.

7.17 Contractor's General Warranty and Guarantee

- A. Contractor warrants and guarantees to Owner that all Work will be in accordance with the Contract Documents and will not be defective. Engineer is entitled to rely on Contractor's warranty and guarantee.
- B. Owner's rights under this warranty and guarantee are in addition to, and are not limited by, Owner's rights under the correction period provisions of Paragraph 15.08. The time in which Owner may enforce its warranty and guarantee rights under this Paragraph 7.17 is limited only by applicable Laws and Regulations restricting actions to enforce such rights; provided, however, that after the end of the correction period under Paragraph 15.08:
1. Owner shall give Contractor written notice of any defective Work within 60 days of the discovery that such Work is defective; and
 2. Such notice will be deemed the start of an event giving rise to a Claim under Paragraph 12.01.B, such that any related Claim must be brought within 30 days of the notice.
- C. Contractor's warranty and guarantee hereunder excludes defects or damage caused by:
1. abuse, or improper modification, maintenance, or operation, by persons other than Contractor, Subcontractors, Suppliers, or any other individual or entity for whom Contractor is responsible; or
 2. normal wear and tear under normal usage.
- D. Contractor's obligation to perform and complete the Work in accordance with the Contract Documents is absolute. None of the following will constitute an acceptance of Work that is not in accordance with the Contract Documents, a release of Contractor's obligation to perform the Work in accordance with the Contract Documents, or a release of Owner's warranty and guarantee rights under this Paragraph 7.17:
1. Observations by Engineer;
 2. Recommendation by Engineer or payment by Owner of any progress or final payment;
 3. The issuance of a certificate of Substantial Completion by Engineer or any payment related thereto by Owner;
 4. Use or occupancy of the Work or any part thereof by Owner;
 5. Any review and approval of a Shop Drawing or Sample submittal;
 6. The issuance of a notice of acceptability by Engineer;
 7. The end of the correction period established in Paragraph 15.08;
 8. Any inspection, test, or approval by others; or

9. Any correction of defective Work by Owner.
- E. If the Contract requires the Contractor to accept the assignment of a contract entered into by Owner, then the specific warranties, guarantees, and correction obligations contained in the assigned contract will govern with respect to Contractor's performance obligations to Owner for the Work described in the assigned contract.

7.18 *Indemnification*

- A. To the fullest extent permitted by Laws and Regulations, and in addition to any other obligations of Contractor under the Contract or otherwise, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them, from losses, damages, costs, and judgments (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court or arbitration or other dispute resolution costs) arising from third-party claims or actions relating to or resulting from the performance or furnishing of the Work, provided that any such claim, action, loss, cost, judgment or damage is attributable to bodily injury, sickness, disease, or death, or to damage to or destruction of tangible property (other than the Work itself), including the loss of use resulting therefrom, but only to the extent caused by any negligent act or omission of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable.
- B. In any and all claims against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, by any employee (or the survivor or personal representative of such employee) of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, the indemnification obligation under Paragraph 7.18.A will not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for Contractor or any such Subcontractor, Supplier, or other individual or entity under workers' compensation acts, disability benefit acts, or other employee benefit acts.

7.19 *Delegation of Professional Design Services*

- A. Owner may require Contractor to provide professional design services for a portion of the Work by express delegation in the Contract Documents. Such delegation will specify the performance and design criteria that such services must satisfy, and the Submittals that Contractor must furnish to Engineer with respect to the Owner-delegated design.
- B. Contractor shall cause such Owner-delegated professional design services to be provided pursuant to the professional standard of care by a properly licensed design professional, whose signature and seal must appear on all drawings, calculations, specifications, certifications, and Submittals prepared by such design professional. Such design professional must issue all certifications of design required by Laws and Regulations.
- C. If a Shop Drawing or other Submittal related to the Owner-delegated design is prepared by Contractor, a Subcontractor, or others for submittal to Engineer, then such Shop Drawing or other Submittal must bear the written approval of Contractor's design professional when submitted by Contractor to Engineer.

- D. Owner and Engineer shall be entitled to rely upon the adequacy, accuracy, and completeness of the services, certifications, and approvals performed or provided by the design professionals retained or employed by Contractor under an Owner-delegated design, subject to the professional standard of care and the performance and design criteria stated in the Contract Documents.
- E. Pursuant to this Paragraph 7.19, Engineer's review, approval, and other determinations regarding design drawings, calculations, specifications, certifications, and other Submittals furnished by Contractor pursuant to an Owner-delegated design will be only for the following limited purposes:
 - 1. Checking for conformance with the requirements of this Paragraph 7.19;
 - 2. Confirming that Contractor (through its design professionals) has used the performance and design criteria specified in the Contract Documents; and
 - 3. Establishing that the design furnished by Contractor is consistent with the design concept expressed in the Contract Documents.
- F. Contractor shall not be responsible for the adequacy of performance or design criteria specified by Owner or Engineer.
- G. Contractor is not required to provide professional services in violation of applicable Laws and Regulations.

ARTICLE 8—OTHER WORK AT THE SITE

8.01 *Other Work*

- A. In addition to and apart from the Work under the Contract Documents, the Owner may perform other work at or adjacent to the Site. Such other work may be performed by Owner's employees, or through contracts between the Owner and third parties. Owner may also arrange to have third-party utility owners perform work on their utilities and facilities at or adjacent to the Site.
- B. If Owner performs other work at or adjacent to the Site with Owner's employees, or through contracts for such other work, then Owner shall give Contractor written notice thereof prior to starting any such other work. If Owner has advance information regarding the start of any third-party utility work that Owner has arranged to take place at or adjacent to the Site, Owner shall provide such information to Contractor.
- C. Contractor shall afford proper and safe access to the Site to each contractor that performs such other work, each utility owner performing other work, and Owner, if Owner is performing other work with Owner's employees, and provide a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such other work.
- D. Contractor shall do all cutting, fitting, and patching of the Work that may be required to properly connect or otherwise make its several parts come together and properly integrate with such other work. Contractor shall not endanger any work of others by cutting, excavating, or otherwise altering such work; provided, however, that Contractor may cut or alter others' work with the written consent of Engineer and the others whose work will be affected.

- E. If the proper execution or results of any part of Contractor's Work depends upon work performed by others, Contractor shall inspect such other work and promptly report to Engineer in writing any delays, defects, or deficiencies in such other work that render it unavailable or unsuitable for the proper execution and results of Contractor's Work. Contractor's failure to so report will constitute an acceptance of such other work as fit and proper for integration with Contractor's Work except for latent defects and deficiencies in such other work.
- F. The provisions of this article are not applicable to work that is performed by third-party utilities or other third-party entities without a contract with Owner, or that is performed without having been arranged by Owner. If such work occurs, then any related delay, disruption, or interference incurred by Contractor is governed by the provisions of Paragraph 4.05.C.3.

8.02 *Coordination*

- A. If Owner intends to contract with others for the performance of other work at or adjacent to the Site, to perform other work at or adjacent to the Site with Owner's employees, or to arrange to have utility owners perform work at or adjacent to the Site, the following will be set forth in the Supplementary Conditions or provided to Contractor prior to the start of any such other work:
 - 1. The identity of the individual or entity that will have authority and responsibility for coordination of the activities among the various contractors;
 - 2. An itemization of the specific matters to be covered by such authority and responsibility; and
 - 3. The extent of such authority and responsibilities.
- B. Unless otherwise provided in the Supplementary Conditions, Owner shall have sole authority and responsibility for such coordination.

8.03 *Legal Relationships*

- A. If, in the course of performing other work for Owner at or adjacent to the Site, the Owner's employees, any other contractor working for Owner, or any utility owner that Owner has arranged to perform work, causes damage to the Work or to the property of Contractor or its Subcontractors, or delays, disrupts, interferes with, or increases the scope or cost of the performance of the Work, through actions or inaction, then Contractor shall be entitled to an equitable adjustment in the Contract Price or the Contract Times. Contractor must submit any Change Proposal seeking an equitable adjustment in the Contract Price or the Contract Times under this paragraph within 30 days of the damaging, delaying, disrupting, or interfering event. The entitlement to, and extent of, any such equitable adjustment will take into account information (if any) regarding such other work that was provided to Contractor in the Contract Documents prior to the submittal of the Bid or the final negotiation of the terms of the Contract, and any remedies available to Contractor under Laws or Regulations concerning utility action or inaction. When applicable, any such equitable adjustment in Contract Price will be conditioned on Contractor assigning to Owner all Contractor's rights against such other contractor or utility owner with respect to the damage, delay, disruption, or interference that is the subject of the adjustment. Contractor's entitlement to an adjustment of the Contract Times or Contract Price is subject to the provisions of Paragraphs 4.05.D and 4.05.E.

- B. Contractor shall take reasonable and customary measures to avoid damaging, delaying, disrupting, or interfering with the work of Owner, any other contractor, or any utility owner performing other work at or adjacent to the Site.
 - 1. If Contractor fails to take such measures and as a result damages, delays, disrupts, or interferes with the work of any such other contractor or utility owner, then Owner may impose a set-off against payments due Contractor, and assign to such other contractor or utility owner the Owner's contractual rights against Contractor with respect to the breach of the obligations set forth in this Paragraph 8.03.B.
 - 2. When Owner is performing other work at or adjacent to the Site with Owner's employees, Contractor shall be liable to Owner for damage to such other work, and for the reasonable direct delay, disruption, and interference costs incurred by Owner as a result of Contractor's failure to take reasonable and customary measures with respect to Owner's other work. In response to such damage, delay, disruption, or interference, Owner may impose a set-off against payments due Contractor.
- C. If Contractor damages, delays, disrupts, or interferes with the work of any other contractor, or any utility owner performing other work at or adjacent to the Site, through Contractor's failure to take reasonable and customary measures to avoid such impacts, or if any claim arising out of Contractor's actions, inactions, or negligence in performance of the Work at or adjacent to the Site is made by any such other contractor or utility owner against Contractor, Owner, or Engineer, then Contractor shall (1) promptly attempt to settle the claim as to all parties through negotiations with such other contractor or utility owner, or otherwise resolve the claim by arbitration or other dispute resolution proceeding or at law, and (2) indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them from and against any such claims, and against all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such damage, delay, disruption, or interference.

ARTICLE 9—OWNER'S RESPONSIBILITIES

9.01 *Communications to Contractor*

- A. Except as otherwise provided in these General Conditions, Owner shall issue all communications to Contractor through Engineer.

9.02 *Replacement of Engineer*

- A. Owner may at its discretion appoint an engineer to replace Engineer, provided Contractor makes no reasonable objection to the replacement engineer. The replacement engineer's status under the Contract Documents will be that of the former Engineer.

9.03 *Furnish Data*

- A. Owner shall promptly furnish the data required of Owner under the Contract Documents.

9.04 *Pay When Due*

- A. Owner shall make payments to Contractor when they are due as provided in the Agreement.

- 9.05 *Lands and Easements; Reports, Tests, and Drawings*
- A. Owner's duties with respect to providing lands and easements are set forth in Paragraph 5.01.
 - B. Owner's duties with respect to providing engineering surveys to establish reference points are set forth in Paragraph 4.03.
 - C. Article 5 refers to Owner's identifying and making available to Contractor copies of reports of explorations and tests of conditions at the Site, and drawings of physical conditions relating to existing surface or subsurface structures at the Site.
- 9.06 *Insurance*
- A. Owner's responsibilities, if any, with respect to purchasing and maintaining liability and property insurance are set forth in Article 6.
- 9.07 *Change Orders*
- A. Owner's responsibilities with respect to Change Orders are set forth in Article 11.
- 9.08 *Inspections, Tests, and Approvals*
- A. Owner's responsibility with respect to certain inspections, tests, and approvals is set forth in Paragraph 14.02.B.
- 9.09 *Limitations on Owner's Responsibilities*
- A. The Owner shall not supervise, direct, or have control or authority over, nor be responsible for, Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Owner will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.
- 9.10 *Undisclosed Hazardous Environmental Condition*
- A. Owner's responsibility in respect to an undisclosed Hazardous Environmental Condition is set forth in Paragraph 5.06.
- 9.11 *Evidence of Financial Arrangements*
- A. Upon request of Contractor, Owner shall furnish Contractor reasonable evidence that financial arrangements have been made to satisfy Owner's obligations under the Contract (including obligations under proposed changes in the Work).
- 9.12 *Safety Programs*
- A. While at the Site, Owner's employees and representatives shall comply with the specific applicable requirements of Contractor's safety programs of which Owner has been informed.
 - B. Owner shall furnish copies of any applicable Owner safety programs to Contractor.

ARTICLE 10—ENGINEER'S STATUS DURING CONSTRUCTION

10.01 *Owner's Representative*

- A. Engineer will be Owner's representative during the construction period. The duties and responsibilities and the limitations of authority of Engineer as Owner's representative during construction are set forth in the Contract.

10.02 *Visits to Site*

- A. Engineer will make visits to the Site at intervals appropriate to the various stages of construction as Engineer deems necessary in order to observe, as an experienced and qualified design professional, the progress that has been made and the quality of the various aspects of Contractor's executed Work. Based on information obtained during such visits and observations, Engineer, for the benefit of Owner, will determine, in general, if the Work is proceeding in accordance with the Contract Documents. Engineer will not be required to make exhaustive or continuous inspections on the Site to check the quality or quantity of the Work. Engineer's efforts will be directed toward providing for Owner a greater degree of confidence that the completed Work will conform generally to the Contract Documents. On the basis of such visits and observations, Engineer will keep Owner informed of the progress of the Work and will endeavor to guard Owner against defective Work.
- B. Engineer's visits and observations are subject to all the limitations on Engineer's authority and responsibility set forth in Paragraph 10.07. Particularly, but without limitation, during or as a result of Engineer's visits or observations of Contractor's Work, Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work.

10.03 *Resident Project Representative*

- A. If Owner and Engineer have agreed that Engineer will furnish a Resident Project Representative to represent Engineer at the Site and assist Engineer in observing the progress and quality of the Work, then the authority and responsibilities of any such Resident Project Representative will be as provided in the Supplementary Conditions, and limitations on the responsibilities thereof will be as provided in the Supplementary Conditions and in Paragraph 10.07.
- B. If Owner designates an individual or entity who is not Engineer's consultant, agent, or employee to represent Owner at the Site, then the responsibilities and authority of such individual or entity will be as provided in the Supplementary Conditions.

10.04 *Engineer's Authority*

- A. Engineer has the authority to reject Work in accordance with Article 14.
- B. Engineer's authority as to Submittals is set forth in Paragraph 7.16.
- C. Engineer's authority as to design drawings, calculations, specifications, certifications and other Submittals from Contractor in response to Owner's delegation (if any) to Contractor of professional design services, is set forth in Paragraph 7.19.
- D. Engineer's authority as to changes in the Work is set forth in Article 11.

E. Engineer's authority as to Applications for Payment is set forth in Article 15.

10.05 *Determinations for Unit Price Work*

A. Engineer will determine the actual quantities and classifications of Unit Price Work performed by Contractor as set forth in Paragraph 13.03.

10.06 *Decisions on Requirements of Contract Documents and Acceptability of Work*

A. Engineer will render decisions regarding the requirements of the Contract Documents, and judge the acceptability of the Work, pursuant to the specific procedures set forth herein for initial interpretations, Change Proposals, and acceptance of the Work. In rendering such decisions and judgments, Engineer will not show partiality to Owner or Contractor, and will not be liable to Owner, Contractor, or others in connection with any proceedings, interpretations, decisions, or judgments conducted or rendered in good faith.

10.07 *Limitations on Engineer's Authority and Responsibilities*

A. Neither Engineer's authority or responsibility under this Article 10 or under any other provision of the Contract, nor any decision made by Engineer in good faith either to exercise or not exercise such authority or responsibility or the undertaking, exercise, or performance of any authority or responsibility by Engineer, will create, impose, or give rise to any duty in contract, tort, or otherwise owed by Engineer to Contractor, any Subcontractor, any Supplier, any other individual or entity, or to any surety for or employee or agent of any of them.

B. Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Engineer will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.

C. Engineer will not be responsible for the acts or omissions of Contractor or of any Subcontractor, any Supplier, or of any other individual or entity performing any of the Work.

D. Engineer's review of the final Application for Payment and accompanying documentation, and all maintenance and operating instructions, schedules, guarantees, bonds, certificates of inspection, tests and approvals, and other documentation required to be delivered by Contractor under Paragraph 15.06.A, will only be to determine generally that their content complies with the requirements of, and in the case of certificates of inspections, tests, and approvals, that the results certified indicate compliance with the Contract Documents.

E. The limitations upon authority and responsibility set forth in this Paragraph 10.07 also apply to the Resident Project Representative, if any.

10.08 *Compliance with Safety Program*

A. While at the Site, Engineer's employees and representatives will comply with the specific applicable requirements of Owner's and Contractor's safety programs of which Engineer has been informed.

ARTICLE 11—CHANGES TO THE CONTRACT

11.01 *Amending and Supplementing the Contract*

- A. The Contract may be amended or supplemented by a Change Order, a Work Change Directive, or a Field Order.
- B. If an amendment or supplement to the Contract includes a change in the Contract Price or the Contract Times, such amendment or supplement must be set forth in a Change Order.
- C. All changes to the Contract that involve (1) the performance or acceptability of the Work, (2) the design (as set forth in the Drawings, Specifications, or otherwise), or (3) other engineering or technical matters, must be supported by Engineer's recommendation. Owner and Contractor may amend other terms and conditions of the Contract without the recommendation of the Engineer.

11.02 *Change Orders*

- A. Owner and Contractor shall execute appropriate Change Orders covering:
 - 1. Changes in Contract Price or Contract Times which are agreed to by the parties, including any undisputed sum or amount of time for Work actually performed in accordance with a Work Change Directive;
 - 2. Changes in Contract Price resulting from an Owner set-off, unless Contractor has duly contested such set-off;
 - 3. Changes in the Work which are: (a) ordered by Owner pursuant to Paragraph 11.05, (b) required because of Owner's acceptance of defective Work under Paragraph 14.04 or Owner's correction of defective Work under Paragraph 14.07, or (c) agreed to by the parties, subject to the need for Engineer's recommendation if the change in the Work involves the design (as set forth in the Drawings, Specifications, or otherwise) or other engineering or technical matters; and
 - 4. Changes that embody the substance of any final and binding results under: Paragraph 11.03.B, resolving the impact of a Work Change Directive; Paragraph 11.09, concerning Change Proposals; Article 12, Claims; Paragraph 13.02.D, final adjustments resulting from allowances; Paragraph 13.03.D, final adjustments relating to determination of quantities for Unit Price Work; and similar provisions.
- B. If Owner or Contractor refuses to execute a Change Order that is required to be executed under the terms of Paragraph 11.02.A, it will be deemed to be of full force and effect, as if fully executed.

11.03 *Work Change Directives*

- A. A Work Change Directive will not change the Contract Price or the Contract Times but is evidence that the parties expect that the modification ordered or documented by a Work Change Directive will be incorporated in a subsequently issued Change Order, following negotiations by the parties as to the Work Change Directive's effect, if any, on the Contract Price and Contract Times; or, if negotiations are unsuccessful, by a determination under the terms of the Contract Documents governing adjustments, expressly including Paragraph 11.07 regarding change of Contract Price.

- B. If Owner has issued a Work Change Directive and:
 - 1. Contractor believes that an adjustment in Contract Times or Contract Price is necessary, then Contractor shall submit any Change Proposal seeking such an adjustment no later than 30 days after the completion of the Work set out in the Work Change Directive.
 - 2. Owner believes that an adjustment in Contract Times or Contract Price is necessary, then Owner shall submit any Claim seeking such an adjustment no later than 60 days after issuance of the Work Change Directive.

11.04 *Field Orders*

- A. Engineer may authorize minor changes in the Work if the changes do not involve an adjustment in the Contract Price or the Contract Times and are compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. Such changes will be accomplished by a Field Order and will be binding on Owner and also on Contractor, which shall perform the Work involved promptly.
- B. If Contractor believes that a Field Order justifies an adjustment in the Contract Price or Contract Times, then before proceeding with the Work at issue, Contractor shall submit a Change Proposal as provided herein.

11.05 *Owner-Authorized Changes in the Work*

- A. Without invalidating the Contract and without notice to any surety, Owner may, at any time or from time to time, order additions, deletions, or revisions in the Work. Changes involving the design (as set forth in the Drawings, Specifications, or otherwise) or other engineering or technical matters will be supported by Engineer's recommendation.
- B. Such changes in the Work may be accomplished by a Change Order, if Owner and Contractor have agreed as to the effect, if any, of the changes on Contract Times or Contract Price; or by a Work Change Directive. Upon receipt of any such document, Contractor shall promptly proceed with the Work involved; or, in the case of a deletion in the Work, promptly cease construction activities with respect to such deleted Work. Added or revised Work must be performed under the applicable conditions of the Contract Documents.
- C. Nothing in this Paragraph 11.05 obligates Contractor to undertake work that Contractor reasonably concludes cannot be performed in a manner consistent with Contractor's safety obligations under the Contract Documents or Laws and Regulations.

11.06 *Unauthorized Changes in the Work*

- A. Contractor shall not be entitled to an increase in the Contract Price or an extension of the Contract Times with respect to any work performed that is not required by the Contract Documents, as amended, modified, or supplemented, except in the case of an emergency as provided in Paragraph 7.15 or in the case of uncovering Work as provided in Paragraph 14.05.C.2.

11.07 *Change of Contract Price*

- A. The Contract Price may only be changed by a Change Order. Any Change Proposal for an adjustment in the Contract Price must comply with the provisions of Paragraph 11.09. Any Claim for an adjustment of Contract Price must comply with the provisions of Article 12.
- B. An adjustment in the Contract Price will be determined as follows:

1. Where the Work involved is covered by unit prices contained in the Contract Documents, then by application of such unit prices to the quantities of the items involved (subject to the provisions of Paragraph 13.03);
 2. Where the Work involved is not covered by unit prices contained in the Contract Documents, then by a mutually agreed lump sum (which may include an allowance for overhead and profit not necessarily in accordance with Paragraph 11.07.C.2); or
 3. Where the Work involved is not covered by unit prices contained in the Contract Documents and the parties do not reach mutual agreement to a lump sum, then on the basis of the Cost of the Work (determined as provided in Paragraph 13.01) plus a Contractor's fee for overhead and profit (determined as provided in Paragraph 11.07.C).
- C. *Contractor's Fee:* When applicable, the Contractor's fee for overhead and profit will be determined as follows:
1. A mutually acceptable fixed fee; or
 2. If a fixed fee is not agreed upon, then a fee based on the following percentages of the various portions of the Cost of the Work:
 - a. For costs incurred under Paragraphs 13.01.B.1 and 13.01.B.2, the Contractor's fee will be 15 percent;
 - b. For costs incurred under Paragraph 13.01.B.3, the Contractor's fee will be 5 percent;
 - c. Where one or more tiers of subcontracts are on the basis of Cost of the Work plus a fee and no fixed fee is agreed upon, the intent of Paragraphs 11.07.C.2.a and 11.07.C.2.b is that the Contractor's fee will be based on: (1) a fee of 15 percent of the costs incurred under Paragraphs 13.01.B.1 and 13.01.B.2 by the Subcontractor that actually performs the Work, at whatever tier, and (2) with respect to Contractor itself and to any Subcontractors of a tier higher than that of the Subcontractor that actually performs the Work, a fee of 5 percent of the amount (fee plus underlying costs incurred) attributable to the next lower tier Subcontractor; provided, however, that for any such subcontracted Work the maximum total fee to be paid by Owner will be no greater than 27 percent of the costs incurred by the Subcontractor that actually performs the Work;
 - d. No fee will be payable on the basis of costs itemized under Paragraphs 13.01.B.4, 13.01.B.5, and 13.01.C;
 - e. The amount of credit to be allowed by Contractor to Owner for any change which results in a net decrease in Cost of the Work will be the amount of the actual net decrease in Cost of the Work and a deduction of an additional amount equal to 5 percent of such actual net decrease in Cost of the Work; and
 - f. When both additions and credits are involved in any one change or Change Proposal, the adjustment in Contractor's fee will be computed by determining the sum of the costs in each of the cost categories in Paragraph 13.01.B (specifically, payroll costs, Paragraph 13.01.B.1; incorporated materials and equipment costs, Paragraph 13.01.B.2; Subcontract costs, Paragraph 13.01.B.3; special consultants costs, Paragraph 13.01.B.4; and other costs, Paragraph 13.01.B.5) and applying to each such cost category sum the appropriate fee from Paragraphs 11.07.C.2.a through 11.07.C.2.e, inclusive.

11.08 *Change of Contract Times*

- A. The Contract Times may only be changed by a Change Order. Any Change Proposal for an adjustment in the Contract Times must comply with the provisions of Paragraph 11.09. Any Claim for an adjustment in the Contract Times must comply with the provisions of Article 12.
- B. Delay, disruption, and interference in the Work, and any related changes in Contract Times, are addressed in and governed by Paragraph 4.05.

11.09 *Change Proposals*

A. *Purpose and Content:* Contractor shall submit a Change Proposal to Engineer to request an adjustment in the Contract Times or Contract Price; contest an initial decision by Engineer concerning the requirements of the Contract Documents or relating to the acceptability of the Work under the Contract Documents; challenge a set-off against payment due; or seek other relief under the Contract. The Change Proposal will specify any proposed change in Contract Times or Contract Price, or other proposed relief, and explain the reason for the proposed change, with citations to any governing or applicable provisions of the Contract Documents. Each Change Proposal will address only one issue, or a set of closely related issues.

B. *Change Proposal Procedures*

1. *Submittal:* Contractor shall submit each Change Proposal to Engineer within 30 days after the start of the event giving rise thereto, or after such initial decision.
2. *Supporting Data:* The Contractor shall submit supporting data, including the proposed change in Contract Price or Contract Time (if any), to the Engineer and Owner within 15 days after the submittal of the Change Proposal.
 - a. Change Proposals based on or related to delay, interruption, or interference must comply with the provisions of Paragraphs 4.05.D and 4.05.E.
 - b. Change proposals related to a change of Contract Price must include full and detailed accounts of materials incorporated into the Work and labor and equipment used for the subject Work.

The supporting data must be accompanied by a written statement that the supporting data are accurate and complete, and that any requested time or price adjustment is the entire adjustment to which Contractor believes it is entitled as a result of said event.

3. *Engineer's Initial Review:* Engineer will advise Owner regarding the Change Proposal, and consider any comments or response from Owner regarding the Change Proposal. If in its discretion Engineer concludes that additional supporting data is needed before conducting a full review and making a decision regarding the Change Proposal, then Engineer may request that Contractor submit such additional supporting data by a date specified by Engineer, prior to Engineer beginning its full review of the Change Proposal.
4. *Engineer's Full Review and Action on the Change Proposal:* Upon receipt of Contractor's supporting data (including any additional data requested by Engineer), Engineer will conduct a full review of each Change Proposal and, within 30 days after such receipt of the Contractor's supporting data, either approve the Change Proposal in whole, deny it in whole, or approve it in part and deny it in part. Such actions must be in writing, with a copy provided to Owner and Contractor. If Engineer does not take action on the Change

Proposal within 30 days, then either Owner or Contractor may at any time thereafter submit a letter to the other party indicating that as a result of Engineer's inaction the Change Proposal is deemed denied, thereby commencing the time for appeal of the denial under Article 12.

5. *Binding Decision*: Engineer's decision is final and binding upon Owner and Contractor, unless Owner or Contractor appeals the decision by filing a Claim under Article 12.
- C. *Resolution of Certain Change Proposals*: If the Change Proposal does not involve the design (as set forth in the Drawings, Specifications, or otherwise), the acceptability of the Work, or other engineering or technical matters, then Engineer will notify the parties in writing that the Engineer is unable to resolve the Change Proposal. For purposes of further resolution of such a Change Proposal, such notice will be deemed a denial, and Contractor may choose to seek resolution under the terms of Article 12.
- D. *Post-Completion*: Contractor shall not submit any Change Proposals after Engineer issues a written recommendation of final payment pursuant to Paragraph 15.06.B.

11.10 *Notification to Surety*

- A. If the provisions of any bond require notice to be given to a surety of any change affecting the general scope of the Work or the provisions of the Contract Documents (including, but not limited to, Contract Price or Contract Times), the giving of any such notice will be Contractor's responsibility. The amount of each applicable bond will be adjusted to reflect the effect of any such change.

ARTICLE 12—CLAIMS

12.01 *Claims*

- A. *Claims Process*: The following disputes between Owner and Contractor are subject to the Claims process set forth in this article:
 1. Appeals by Owner or Contractor of Engineer's decisions regarding Change Proposals;
 2. Owner demands for adjustments in the Contract Price or Contract Times, or other relief under the Contract Documents;
 3. Disputes that Engineer has been unable to address because they do not involve the design (as set forth in the Drawings, Specifications, or otherwise), the acceptability of the Work, or other engineering or technical matters; and
 4. Subject to the waiver provisions of Paragraph 15.07, any dispute arising after Engineer has issued a written recommendation of final payment pursuant to Paragraph 15.06.B.
- B. *Submittal of Claim*: The party submitting a Claim shall deliver it directly to the other party to the Contract promptly (but in no event later than 30 days) after the start of the event giving rise thereto; in the case of appeals regarding Change Proposals within 30 days of the decision under appeal. The party submitting the Claim shall also furnish a copy to the Engineer, for its information only. The responsibility to substantiate a Claim rests with the party making the Claim. In the case of a Claim by Contractor seeking an increase in the Contract Times or Contract Price, Contractor shall certify that the Claim is made in good faith, that the supporting data are accurate and complete, and that to the best of Contractor's knowledge

and belief the amount of time or money requested accurately reflects the full amount to which Contractor is entitled.

- C. *Review and Resolution*: The party receiving a Claim shall review it thoroughly, giving full consideration to its merits. The two parties shall seek to resolve the Claim through the exchange of information and direct negotiations. The parties may extend the time for resolving the Claim by mutual agreement. All actions taken on a Claim will be stated in writing and submitted to the other party, with a copy to Engineer.
- D. *Mediation*
 - 1. At any time after initiation of a Claim, Owner and Contractor may mutually agree to mediation of the underlying dispute. The agreement to mediate will stay the Claim submittal and response process.
 - 2. If Owner and Contractor agree to mediation, then after 60 days from such agreement, either Owner or Contractor may unilaterally terminate the mediation process, and the Claim submittal and decision process will resume as of the date of the termination. If the mediation proceeds but is unsuccessful in resolving the dispute, the Claim submittal and decision process will resume as of the date of the conclusion of the mediation, as determined by the mediator.
 - 3. Owner and Contractor shall each pay one-half of the mediator's fees and costs.
- E. *Partial Approval*: If the party receiving a Claim approves the Claim in part and denies it in part, such action will be final and binding unless within 30 days of such action the other party invokes the procedure set forth in Article 17 for final resolution of disputes.
- F. *Denial of Claim*: If efforts to resolve a Claim are not successful, the party receiving the Claim may deny it by giving written notice of denial to the other party. If the receiving party does not take action on the Claim within 90 days, then either Owner or Contractor may at any time thereafter submit a letter to the other party indicating that as a result of the inaction, the Claim is deemed denied, thereby commencing the time for appeal of the denial. A denial of the Claim will be final and binding unless within 30 days of the denial the other party invokes the procedure set forth in Article 17 for the final resolution of disputes.
- G. *Final and Binding Results*: If the parties reach a mutual agreement regarding a Claim, whether through approval of the Claim, direct negotiations, mediation, or otherwise; or if a Claim is approved in part and denied in part, or denied in full, and such actions become final and binding; then the results of the agreement or action on the Claim will be incorporated in a Change Order or other written document to the extent they affect the Contract, including the Work, the Contract Times, or the Contract Price.

ARTICLE 13—COST OF THE WORK; ALLOWANCES; UNIT PRICE WORK

13.01 *Cost of the Work*

- A. *Purposes for Determination of Cost of the Work*: The term Cost of the Work means the sum of all costs necessary for the proper performance of the Work at issue, as further defined below. The provisions of this Paragraph 13.01 are used for two distinct purposes:
 - 1. To determine Cost of the Work when Cost of the Work is a component of the Contract Price, under cost-plus-fee, time-and-materials, or other cost-based terms; or

2. When needed to determine the value of a Change Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price. When the value of any such adjustment is determined on the basis of Cost of the Work, Contractor is entitled only to those additional or incremental costs required because of the change in the Work or because of the event giving rise to the adjustment.
- B. *Costs Included:* Except as otherwise may be agreed to in writing by Owner, costs included in the Cost of the Work will be in amounts no higher than those commonly incurred in the locality of the Project, will not include any of the costs itemized in Paragraph 13.01.C, and will include only the following items:
1. Payroll costs for employees in the direct employ of Contractor in the performance of the Work under schedules of job classifications agreed upon by Owner and Contractor in advance of the subject Work. Such employees include, without limitation, superintendents, foremen, safety managers, safety representatives, and other personnel employed full time on the Work. Payroll costs for employees not employed full time on the Work will be apportioned on the basis of their time spent on the Work. Payroll costs include, but are not limited to, salaries and wages plus the cost of fringe benefits, which include social security contributions, unemployment, excise, and payroll taxes, workers' compensation, health and retirement benefits, sick leave, and vacation and holiday pay applicable thereto. The expenses of performing Work outside of regular working hours, on Saturday, Sunday, or legal holidays, will be included in the above to the extent authorized by Owner.
 2. Cost of all materials and equipment furnished and incorporated in the Work, including costs of transportation and storage thereof, and Suppliers' field services required in connection therewith. All cash discounts accrue to Contractor unless Owner deposits funds with Contractor with which to make payments, in which case the cash discounts will accrue to Owner. All trade discounts, rebates, and refunds and returns from sale of surplus materials and equipment will accrue to Owner, and Contractor shall make provisions so that they may be obtained.
 3. Payments made by Contractor to Subcontractors for Work performed by Subcontractors. If required by Owner, Contractor shall obtain competitive bids from subcontractors acceptable to Owner and Contractor and shall deliver such bids to Owner, which will then determine, with the advice of Engineer, which bids, if any, will be acceptable. If any subcontract provides that the Subcontractor is to be paid on the basis of Cost of the Work plus a fee, the Subcontractor's Cost of the Work and fee will be determined in the same manner as Contractor's Cost of the Work and fee as provided in this Paragraph 13.01.
 4. Costs of special consultants (including but not limited to engineers, architects, testing laboratories, surveyors, attorneys, and accountants) employed or retained for services specifically related to the Work.
 5. Other costs consisting of the following:
 - a. The proportion of necessary transportation, travel, and subsistence expenses of Contractor's employees incurred in discharge of duties connected with the Work.
 - b. Cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office, and temporary facilities at the Site, which are

consumed in the performance of the Work, and cost, less market value, of such items used but not consumed which remain the property of Contractor.

- 1) In establishing included costs for materials such as scaffolding, plating, or sheeting, consideration will be given to the actual or the estimated life of the material for use on other projects; or rental rates may be established on the basis of purchase or salvage value of such items, whichever is less. Contractor will not be eligible for compensation for such items in an amount that exceeds the purchase cost of such item.

c. *Construction Equipment Rental*

- 1) Rentals of all construction equipment and machinery, and the parts thereof, in accordance with rental agreements approved by Owner as to price (including any surcharge or special rates applicable to overtime use of the construction equipment or machinery), and the costs of transportation, loading, unloading, assembly, dismantling, and removal thereof. All such costs will be in accordance with the terms of said rental agreements. The rental of any such equipment, machinery, or parts must cease when the use thereof is no longer necessary for the Work.
- 2) Costs for equipment and machinery owned by Contractor or a Contractor-related entity will be paid at a rate shown for such equipment in the equipment rental rate book specified in the Supplementary Conditions. An hourly rate will be computed by dividing the monthly rates by 176. These computed rates will include all operating costs.
- 3) With respect to Work that is the result of a Change Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price ("changed Work"), included costs will be based on the time the equipment or machinery is in use on the changed Work and the costs of transportation, loading, unloading, assembly, dismantling, and removal when directly attributable to the changed Work. The cost of any such equipment or machinery, or parts thereof, must cease to accrue when the use thereof is no longer necessary for the changed Work.

- d. Sales, consumer, use, and other similar taxes related to the Work, and for which Contractor is liable, as imposed by Laws and Regulations.
- e. Deposits lost for causes other than negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, and royalty payments and fees for permits and licenses.
- f. Losses and damages (and related expenses) caused by damage to the Work, not compensated by insurance or otherwise, sustained by Contractor in connection with the performance of the Work (except losses and damages within the deductible amounts of builder's risk or other property insurance established in accordance with Paragraph 6.04), provided such losses and damages have resulted from causes other than the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable. Such losses include settlements made with the written consent and approval of Owner. No such losses, damages, and expenses will be included in the Cost of the Work for the purpose of determining Contractor's fee.

- g. The cost of utilities, fuel, and sanitary facilities at the Site.
- h. Minor expenses such as communication service at the Site, express and courier services, and similar petty cash items in connection with the Work.
- i. The costs of premiums for all bonds and insurance that Contractor is required by the Contract Documents to purchase and maintain.

C. *Costs Excluded*: The term Cost of the Work does not include any of the following items:

- 1. Payroll costs and other compensation of Contractor's officers, executives, principals, general managers, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agents, expeditors, timekeepers, clerks, and other personnel employed by Contractor, whether at the Site or in Contractor's principal or branch office for general administration of the Work and not specifically included in the agreed upon schedule of job classifications referred to in Paragraph 13.01.B.1 or specifically covered by Paragraph 13.01.B.4. The payroll costs and other compensation excluded here are to be considered administrative costs covered by the Contractor's fee.
- 2. The cost of purchasing, renting, or furnishing small tools and hand tools.
- 3. Expenses of Contractor's principal and branch offices other than Contractor's office at the Site.
- 4. Any part of Contractor's capital expenses, including interest on Contractor's capital employed for the Work and charges against Contractor for delinquent payments.
- 5. Costs due to the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, the correction of defective Work, disposal of materials or equipment wrongly supplied, and making good any damage to property.
- 6. Expenses incurred in preparing and advancing Claims.
- 7. Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in Paragraph 13.01.B.

D. *Contractor's Fee*

- 1. When the Work as a whole is performed on the basis of cost-plus-a-fee, then:
 - a. Contractor's fee for the Work set forth in the Contract Documents as of the Effective Date of the Contract will be determined as set forth in the Agreement.
 - b. for any Work covered by a Change Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price on the basis of Cost of the Work, Contractor's fee will be determined as follows:
 - 1) When the fee for the Work as a whole is a percentage of the Cost of the Work, the fee will automatically adjust as the Cost of the Work changes.
 - 2) When the fee for the Work as a whole is a fixed fee, the fee for any additions or deletions will be determined in accordance with Paragraph 11.07.C.2.
- 2. When the Work as a whole is performed on the basis of a stipulated sum, or any other basis other than cost-plus-a-fee, then Contractor's fee for any Work covered by a Change

Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price on the basis of Cost of the Work will be determined in accordance with Paragraph 11.07.C.2.

- E. *Documentation and Audit*: Whenever the Cost of the Work for any purpose is to be determined pursuant to this Article 13, Contractor and pertinent Subcontractors will establish and maintain records of the costs in accordance with generally accepted accounting practices. Subject to prior written notice, Owner will be afforded reasonable access, during normal business hours, to all Contractor's accounts, records, books, correspondence, instructions, drawings, receipts, vouchers, memoranda, and similar data relating to the Cost of the Work and Contractor's fee. Contractor shall preserve all such documents for a period of three years after the final payment by Owner. Pertinent Subcontractors will afford such access to Owner, and preserve such documents, to the same extent required of Contractor.

13.02 Allowances

- A. It is understood that Contractor has included in the Contract Price all allowances so named in the Contract Documents and shall cause the Work so covered to be performed for such sums and by such persons or entities as may be acceptable to Owner and Engineer.
- B. *Cash Allowances*: Contractor agrees that:
1. the cash allowances include the cost to Contractor (less any applicable trade discounts) of materials and equipment required by the allowances to be delivered at the Site, and all applicable taxes; and
 2. Contractor's costs for unloading and handling on the Site, labor, installation, overhead, profit, and other expenses contemplated for the cash allowances have been included in the Contract Price and not in the allowances, and no demand for additional payment for any of the foregoing will be valid.
- C. *Owner's Contingency Allowance*: Contractor agrees that an Owner's contingency allowance, if any, is for the sole use of Owner to cover unanticipated costs.
- D. Prior to final payment, an appropriate Change Order will be issued as recommended by Engineer to reflect actual amounts due Contractor for Work covered by allowances, and the Contract Price will be correspondingly adjusted.

13.03 Unit Price Work

- A. Where the Contract Documents provide that all or part of the Work is to be Unit Price Work, initially the Contract Price will be deemed to include for all Unit Price Work an amount equal to the sum of the unit price for each separately identified item of Unit Price Work times the estimated quantity of each item as indicated in the Agreement.
- B. The estimated quantities of items of Unit Price Work are not guaranteed and are solely for the purpose of comparison of Bids and determining an initial Contract Price. Payments to Contractor for Unit Price Work will be based on actual quantities.
- C. Each unit price will be deemed to include an amount considered by Contractor to be adequate to cover Contractor's overhead and profit for each separately identified item.
- D. Engineer will determine the actual quantities and classifications of Unit Price Work performed by Contractor. Engineer will review with Contractor the Engineer's preliminary determinations on such matters before rendering a written decision thereon (by recommendation of an Application for Payment or otherwise). Engineer's written decision

thereon will be final and binding (except as modified by Engineer to reflect changed factual conditions or more accurate data) upon Owner and Contractor, and the final adjustment of Contract Price will be set forth in a Change Order, subject to the provisions of the following paragraph.

E. *Adjustments in Unit Price*

1. Contractor or Owner shall be entitled to an adjustment in the unit price with respect to an item of Unit Price Work if:
 - a. the quantity of the item of Unit Price Work performed by Contractor differs materially and significantly from the estimated quantity of such item indicated in the Agreement; and
 - b. Contractor's unit costs to perform the item of Unit Price Work have changed materially and significantly as a result of the quantity change.
2. The adjustment in unit price will account for and be coordinated with any related changes in quantities of other items of Work, and in Contractor's costs to perform such other Work, such that the resulting overall change in Contract Price is equitable to Owner and Contractor.
3. Adjusted unit prices will apply to all units of that item.

ARTICLE 14—TESTS AND INSPECTIONS; CORRECTION, REMOVAL, OR ACCEPTANCE OF DEFECTIVE WORK

14.01 *Access to Work*

- A. Owner, Engineer, their consultants and other representatives and personnel of Owner, independent testing laboratories, and authorities having jurisdiction have access to the Site and the Work at reasonable times for their observation, inspection, and testing. Contractor shall provide them proper and safe conditions for such access and advise them of Contractor's safety procedures and programs so that they may comply with such procedures and programs as applicable.

14.02 *Tests, Inspections, and Approvals*

- A. Contractor shall give Engineer timely notice of readiness of the Work (or specific parts thereof) for all required inspections and tests, and shall cooperate with inspection and testing personnel to facilitate required inspections and tests.
- B. Owner shall retain and pay for the services of an independent inspector, testing laboratory, or other qualified individual or entity to perform all inspections and tests expressly required by the Contract Documents to be furnished and paid for by Owner, except that costs incurred in connection with tests or inspections of covered Work will be governed by the provisions of Paragraph 14.05.
- C. If Laws or Regulations of any public body having jurisdiction require any Work (or part thereof) specifically to be inspected, tested, or approved by an employee or other representative of such public body, Contractor shall assume full responsibility for arranging and obtaining such inspections, tests, or approvals, pay all costs in connection therewith, and furnish Engineer the required certificates of inspection or approval.

- D. Contractor shall be responsible for arranging, obtaining, and paying for all inspections and tests required:
1. by the Contract Documents, unless the Contract Documents expressly allocate responsibility for a specific inspection or test to Owner;
 2. to attain Owner's and Engineer's acceptance of materials or equipment to be incorporated in the Work;
 3. by manufacturers of equipment furnished under the Contract Documents;
 4. for testing, adjusting, and balancing of mechanical, electrical, and other equipment to be incorporated into the Work; and
 5. for acceptance of materials, mix designs, or equipment submitted for approval prior to Contractor's purchase thereof for incorporation in the Work.

Such inspections and tests will be performed by independent inspectors, testing laboratories, or other qualified individuals or entities acceptable to Owner and Engineer.

- E. If the Contract Documents require the Work (or part thereof) to be approved by Owner, Engineer, or another designated individual or entity, then Contractor shall assume full responsibility for arranging and obtaining such approvals.
- F. If any Work (or the work of others) that is to be inspected, tested, or approved is covered by Contractor without written concurrence of Engineer, Contractor shall, if requested by Engineer, uncover such Work for observation. Such uncovering will be at Contractor's expense unless Contractor had given Engineer timely notice of Contractor's intention to cover the same and Engineer had not acted with reasonable promptness in response to such notice.

14.03 *Defective Work*

- A. *Contractor's Obligation:* It is Contractor's obligation to assure that the Work is not defective.
- B. *Engineer's Authority:* Engineer has the authority to determine whether Work is defective, and to reject defective Work.
- C. *Notice of Defects:* Prompt written notice of all defective Work of which Owner or Engineer has actual knowledge will be given to Contractor.
- D. *Correction, or Removal and Replacement:* Promptly after receipt of written notice of defective Work, Contractor shall correct all such defective Work, whether or not fabricated, installed, or completed, or, if Engineer has rejected the defective Work, remove it from the Project and replace it with Work that is not defective.
- E. *Preservation of Warranties:* When correcting defective Work, Contractor shall take no action that would void or otherwise impair Owner's special warranty and guarantee, if any, on said Work.
- F. *Costs and Damages:* In addition to its correction, removal, and replacement obligations with respect to defective Work, Contractor shall pay all claims, costs, losses, and damages arising out of or relating to defective Work, including but not limited to the cost of the inspection, testing, correction, removal, replacement, or reconstruction of such defective Work, fines levied against Owner by governmental authorities because the Work is defective, and the costs of repair or replacement of work of others resulting from defective Work. Prior to final payment, if Owner and Contractor are unable to agree as to the measure of such claims, costs,

losses, and damages resulting from defective Work, then Owner may impose a reasonable set-off against payments due under Article 15.

14.04 *Acceptance of Defective Work*

- A. If, instead of requiring correction or removal and replacement of defective Work, Owner prefers to accept it, Owner may do so (subject, if such acceptance occurs prior to final payment, to Engineer's confirmation that such acceptance is in general accord with the design intent and applicable engineering principles, and will not endanger public safety). Contractor shall pay all claims, costs, losses, and damages attributable to Owner's evaluation of and determination to accept such defective Work (such costs to be approved by Engineer as to reasonableness), and for the diminished value of the Work to the extent not otherwise paid by Contractor. If any such acceptance occurs prior to final payment, the necessary revisions in the Contract Documents with respect to the Work will be incorporated in a Change Order. If the parties are unable to agree as to the decrease in the Contract Price, reflecting the diminished value of Work so accepted, then Owner may impose a reasonable set-off against payments due under Article 15. If the acceptance of defective Work occurs after final payment, Contractor shall pay an appropriate amount to Owner.

14.05 *Uncovering Work*

- A. Engineer has the authority to require additional inspection or testing of the Work, whether or not the Work is fabricated, installed, or completed.
- B. If any Work is covered contrary to the written request of Engineer, then Contractor shall, if requested by Engineer, uncover such Work for Engineer's observation, and then replace the covering, all at Contractor's expense.
- C. If Engineer considers it necessary or advisable that covered Work be observed by Engineer or inspected or tested by others, then Contractor, at Engineer's request, shall uncover, expose, or otherwise make available for observation, inspection, or testing as Engineer may require, that portion of the Work in question, and provide all necessary labor, material, and equipment.
 - 1. If it is found that the uncovered Work is defective, Contractor shall be responsible for all claims, costs, losses, and damages arising out of or relating to such uncovering, exposure, observation, inspection, and testing, and of satisfactory replacement or reconstruction (including but not limited to all costs of repair or replacement of work of others); and pending Contractor's full discharge of this responsibility the Owner shall be entitled to impose a reasonable set-off against payments due under Article 15.
 - 2. If the uncovered Work is not found to be defective, Contractor shall be allowed an increase in the Contract Price or an extension of the Contract Times, directly attributable to such uncovering, exposure, observation, inspection, testing, replacement, and reconstruction. If the parties are unable to agree as to the amount or extent thereof, then Contractor may submit a Change Proposal within 30 days of the determination that the Work is not defective.

14.06 *Owner May Stop the Work*

- A. If the Work is defective, or Contractor fails to supply sufficient skilled workers or suitable materials or equipment, or fails to perform the Work in such a way that the completed Work will conform to the Contract Documents, then Owner may order Contractor to stop the Work,

or any portion thereof, until the cause for such order has been eliminated; however, this right of Owner to stop the Work will not give rise to any duty on the part of Owner to exercise this right for the benefit of Contractor, any Subcontractor, any Supplier, any other individual or entity, or any surety for, or employee or agent of any of them.

14.07 Owner May Correct Defective Work

- A. If Contractor fails within a reasonable time after written notice from Engineer to correct defective Work, or to remove and replace defective Work as required by Engineer, then Owner may, after 7 days' written notice to Contractor, correct or remedy any such deficiency.
- B. In exercising the rights and remedies under this Paragraph 14.07, Owner shall proceed expeditiously. In connection with such corrective or remedial action, Owner may exclude Contractor from all or part of the Site, take possession of all or part of the Work and suspend Contractor's services related thereto, and incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere. Contractor shall allow Owner, Owner's representatives, agents and employees, Owner's other contractors, and Engineer and Engineer's consultants access to the Site to enable Owner to exercise the rights and remedies under this paragraph.
- C. All claims, costs, losses, and damages incurred or sustained by Owner in exercising the rights and remedies under this Paragraph 14.07 will be charged against Contractor as set-offs against payments due under Article 15. Such claims, costs, losses and damages will include but not be limited to all costs of repair, or replacement of work of others destroyed or damaged by correction, removal, or replacement of Contractor's defective Work.
- D. Contractor shall not be allowed an extension of the Contract Times because of any delay in the performance of the Work attributable to the exercise by Owner of Owner's rights and remedies under this Paragraph 14.07.

ARTICLE 15—PAYMENTS TO CONTRACTOR; SET-OFFS; COMPLETION; CORRECTION PERIOD

15.01 Progress Payments

- A. *Basis for Progress Payments:* The Schedule of Values established as provided in Article 2 will serve as the basis for progress payments and will be incorporated into a form of Application for Payment acceptable to Engineer. Progress payments for Unit Price Work will be based on the number of units completed during the pay period, as determined under the provisions of Paragraph 13.03. Progress payments for cost-based Work will be based on Cost of the Work completed by Contractor during the pay period.
- B. *Applications for Payments*
 - 1. At least 20 days before the date established in the Agreement for each progress payment (but not more often than once a month), Contractor shall submit to Engineer for review an Application for Payment filled out and signed by Contractor covering the Work completed as of the date of the Application and accompanied by such supporting documentation as is required by the Contract Documents.
 - 2. If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the Site or at another location agreed to in writing, the Application for Payment must also be accompanied by: (a) a bill of sale, invoice, copies of subcontract or purchase order payments, or other documentation

establishing full payment by Contractor for the materials and equipment; (b) at Owner's request, documentation warranting that Owner has received the materials and equipment free and clear of all Liens; and (c) evidence that the materials and equipment are covered by appropriate property insurance, a warehouse bond, or other arrangements to protect Owner's interest therein, all of which must be satisfactory to Owner.

3. Beginning with the second Application for Payment, each Application must include an affidavit of Contractor stating that all previous progress payments received by Contractor have been applied to discharge Contractor's legitimate obligations associated with prior Applications for Payment.
4. The amount of retainage with respect to progress payments will be as stipulated in the Agreement.

C. *Review of Applications*

1. Engineer will, within 10 days after receipt of each Application for Payment, including each resubmittal, either indicate in writing a recommendation of payment and present the Application to Owner, or return the Application to Contractor indicating in writing Engineer's reasons for refusing to recommend payment. In the latter case, Contractor may make the necessary corrections and resubmit the Application.
2. Engineer's recommendation of any payment requested in an Application for Payment will constitute a representation by Engineer to Owner, based on Engineer's observations of the executed Work as an experienced and qualified design professional, and on Engineer's review of the Application for Payment and the accompanying data and schedules, that to the best of Engineer's knowledge, information and belief:
 - a. the Work has progressed to the point indicated;
 - b. the quality of the Work is generally in accordance with the Contract Documents (subject to an evaluation of the Work as a functioning whole prior to or upon Substantial Completion, the results of any subsequent tests called for in the Contract Documents, a final determination of quantities and classifications for Unit Price Work under Paragraph 13.03, and any other qualifications stated in the recommendation); and
 - c. the conditions precedent to Contractor's being entitled to such payment appear to have been fulfilled in so far as it is Engineer's responsibility to observe the Work.
3. By recommending any such payment Engineer will not thereby be deemed to have represented that:
 - a. inspections made to check the quality or the quantity of the Work as it has been performed have been exhaustive, extended to every aspect of the Work in progress, or involved detailed inspections of the Work beyond the responsibilities specifically assigned to Engineer in the Contract; or
 - b. there may not be other matters or issues between the parties that might entitle Contractor to be paid additionally by Owner or entitle Owner to withhold payment to Contractor.

4. Neither Engineer's review of Contractor's Work for the purposes of recommending payments nor Engineer's recommendation of any payment, including final payment, will impose responsibility on Engineer:
 - a. to supervise, direct, or control the Work;
 - b. for the means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto;
 - c. for Contractor's failure to comply with Laws and Regulations applicable to Contractor's performance of the Work;
 - d. to make any examination to ascertain how or for what purposes Contractor has used the money paid by Owner; or
 - e. to determine that title to any of the Work, materials, or equipment has passed to Owner free and clear of any Liens.
5. Engineer may refuse to recommend the whole or any part of any payment if, in Engineer's opinion, it would be incorrect to make the representations to Owner stated in Paragraph 15.01.C.2.
6. Engineer will recommend reductions in payment (set-offs) necessary in Engineer's opinion to protect Owner from loss because:
 - a. the Work is defective, requiring correction or replacement;
 - b. the Contract Price has been reduced by Change Orders;
 - c. Owner has been required to correct defective Work in accordance with Paragraph 14.07, or has accepted defective Work pursuant to Paragraph 14.04;
 - d. Owner has been required to remove or remediate a Hazardous Environmental Condition for which Contractor is responsible; or
 - e. Engineer has actual knowledge of the occurrence of any of the events that would constitute a default by Contractor and therefore justify termination for cause under the Contract Documents.

D. *Payment Becomes Due*

1. Ten days after presentation of the Application for Payment to Owner with Engineer's recommendation, the amount recommended (subject to any Owner set-offs) will become due, and when due will be paid by Owner to Contractor.

E. *Reductions in Payment by Owner*

1. In addition to any reductions in payment (set-offs) recommended by Engineer, Owner is entitled to impose a set-off against payment based on any of the following:
 - a. Claims have been made against Owner based on Contractor's conduct in the performance or furnishing of the Work, or Owner has incurred costs, losses, or damages resulting from Contractor's conduct in the performance or furnishing of the Work, including but not limited to claims, costs, losses, or damages from workplace injuries, adjacent property damage, non-compliance with Laws and Regulations, and patent infringement;

- b. Contractor has failed to take reasonable and customary measures to avoid damage, delay, disruption, and interference with other work at or adjacent to the Site;
 - c. Contractor has failed to provide and maintain required bonds or insurance;
 - d. Owner has been required to remove or remediate a Hazardous Environmental Condition for which Contractor is responsible;
 - e. Owner has incurred extra charges or engineering costs related to submittal reviews, evaluations of proposed substitutes, tests and inspections, or return visits to manufacturing or assembly facilities;
 - f. The Work is defective, requiring correction or replacement;
 - g. Owner has been required to correct defective Work in accordance with Paragraph 14.07, or has accepted defective Work pursuant to Paragraph 14.04;
 - h. The Contract Price has been reduced by Change Orders;
 - i. An event has occurred that would constitute a default by Contractor and therefore justify a termination for cause;
 - j. Liquidated or other damages have accrued as a result of Contractor's failure to achieve Milestones, Substantial Completion, or final completion of the Work;
 - k. Liens have been filed in connection with the Work, except where Contractor has delivered a specific bond satisfactory to Owner to secure the satisfaction and discharge of such Liens; or
 - l. Other items entitle Owner to a set-off against the amount recommended.
2. If Owner imposes any set-off against payment, whether based on its own knowledge or on the written recommendations of Engineer, Owner will give Contractor immediate written notice (with a copy to Engineer) stating the reasons for such action and the specific amount of the reduction, and promptly pay Contractor any amount remaining after deduction of the amount so withheld. Owner shall promptly pay Contractor the amount so withheld, or any adjustment thereto agreed to by Owner and Contractor, if Contractor remedies the reasons for such action. The reduction imposed will be binding on Contractor unless it duly submits a Change Proposal contesting the reduction.
 3. Upon a subsequent determination that Owner's refusal of payment was not justified, the amount wrongfully withheld will be treated as an amount due as determined by Paragraph 15.01.D.1 and subject to interest as provided in the Agreement.

15.02 Contractor's Warranty of Title

- A. Contractor warrants and guarantees that title to all Work, materials, and equipment furnished under the Contract will pass to Owner free and clear of (1) all Liens and other title defects, and (2) all patent, licensing, copyright, or royalty obligations, no later than 7 days after the time of payment by Owner.

15.03 Substantial Completion

- A. When Contractor considers the entire Work ready for its intended use Contractor shall notify Owner and Engineer in writing that the entire Work is substantially complete and request that Engineer issue a certificate of Substantial Completion. Contractor shall at the same time

submit to Owner and Engineer an initial draft of punch list items to be completed or corrected before final payment.

- B. Promptly after Contractor's notification, Owner, Contractor, and Engineer shall make an inspection of the Work to determine the status of completion. If Engineer does not consider the Work substantially complete, Engineer will notify Contractor in writing giving the reasons therefor.
- C. If Engineer considers the Work substantially complete, Engineer will deliver to Owner a preliminary certificate of Substantial Completion which will fix the date of Substantial Completion. Engineer shall attach to the certificate a punch list of items to be completed or corrected before final payment. Owner shall have 7 days after receipt of the preliminary certificate during which to make written objection to Engineer as to any provisions of the certificate or attached punch list. If, after considering the objections to the provisions of the preliminary certificate, Engineer concludes that the Work is not substantially complete, Engineer will, within 14 days after submission of the preliminary certificate to Owner, notify Contractor in writing that the Work is not substantially complete, stating the reasons therefor. If Owner does not object to the provisions of the certificate, or if despite consideration of Owner's objections Engineer concludes that the Work is substantially complete, then Engineer will, within said 14 days, execute and deliver to Owner and Contractor a final certificate of Substantial Completion (with a revised punch list of items to be completed or corrected) reflecting such changes from the preliminary certificate as Engineer believes justified after consideration of any objections from Owner.
- D. At the time of receipt of the preliminary certificate of Substantial Completion, Owner and Contractor will confer regarding Owner's use or occupancy of the Work following Substantial Completion, review the builder's risk insurance policy with respect to the end of the builder's risk coverage, and confirm the transition to coverage of the Work under a permanent property insurance policy held by Owner. Unless Owner and Contractor agree otherwise in writing, Owner shall bear responsibility for security, operation, protection of the Work, property insurance, maintenance, heat, and utilities upon Owner's use or occupancy of the Work.
- E. After Substantial Completion the Contractor shall promptly begin work on the punch list of items to be completed or corrected prior to final payment. In appropriate cases Contractor may submit monthly Applications for Payment for completed punch list items, following the progress payment procedures set forth above.
- F. Owner shall have the right to exclude Contractor from the Site after the date of Substantial Completion subject to allowing Contractor reasonable access to remove its property and complete or correct items on the punch list.

15.04 *Partial Use or Occupancy*

- A. Prior to Substantial Completion of all the Work, Owner may use or occupy any substantially completed part of the Work which has specifically been identified in the Contract Documents, or which Owner, Engineer, and Contractor agree constitutes a separately functioning and usable part of the Work that can be used by Owner for its intended purpose without

significant interference with Contractor's performance of the remainder of the Work, subject to the following conditions:

1. At any time, Owner may request in writing that Contractor permit Owner to use or occupy any such part of the Work that Owner believes to be substantially complete. If and when Contractor agrees that such part of the Work is substantially complete, Contractor, Owner, and Engineer will follow the procedures of Paragraph 15.03.A through 15.03.E for that part of the Work.
2. At any time, Contractor may notify Owner and Engineer in writing that Contractor considers any such part of the Work substantially complete and request Engineer to issue a certificate of Substantial Completion for that part of the Work.
3. Within a reasonable time after either such request, Owner, Contractor, and Engineer shall make an inspection of that part of the Work to determine its status of completion. If Engineer does not consider that part of the Work to be substantially complete, Engineer will notify Owner and Contractor in writing giving the reasons therefor. If Engineer considers that part of the Work to be substantially complete, the provisions of Paragraph 15.03 will apply with respect to certification of Substantial Completion of that part of the Work and the division of responsibility in respect thereof and access thereto.
4. No use or occupancy or separate operation of part of the Work may occur prior to compliance with the requirements of Paragraph 6.04 regarding builder's risk or other property insurance.

15.05 *Final Inspection*

- A. Upon written notice from Contractor that the entire Work or an agreed portion thereof is complete, Engineer will promptly make a final inspection with Owner and Contractor and will notify Contractor in writing of all particulars in which this inspection reveals that the Work, or agreed portion thereof, is incomplete or defective. Contractor shall immediately take such measures as are necessary to complete such Work or remedy such deficiencies.

15.06 *Final Payment*

A. *Application for Payment*

1. After Contractor has, in the opinion of Engineer, satisfactorily completed all corrections identified during the final inspection and has delivered, in accordance with the Contract Documents, all maintenance and operating instructions, schedules, guarantees, bonds, certificates or other evidence of insurance, certificates of inspection, annotated record documents (as provided in Paragraph 7.12), and other documents, Contractor may make application for final payment.
2. The final Application for Payment must be accompanied (except as previously delivered) by:
 - a. all documentation called for in the Contract Documents;
 - b. consent of the surety, if any, to final payment;
 - c. satisfactory evidence that all title issues have been resolved such that title to all Work, materials, and equipment has passed to Owner free and clear of any Liens or other title defects, or will so pass upon final payment.

- d. a list of all duly pending Change Proposals and Claims; and
 - e. complete and legally effective releases or waivers (satisfactory to Owner) of all Lien rights arising out of the Work, and of Liens filed in connection with the Work.
3. In lieu of the releases or waivers of Liens specified in Paragraph 15.06.A.2 and as approved by Owner, Contractor may furnish receipts or releases in full and an affidavit of Contractor that: (a) the releases and receipts include all labor, services, material, and equipment for which a Lien could be filed; and (b) all payrolls, material and equipment bills, and other indebtedness connected with the Work for which Owner might in any way be responsible, or which might in any way result in liens or other burdens on Owner's property, have been paid or otherwise satisfied. If any Subcontractor or Supplier fails to furnish such a release or receipt in full, Contractor may furnish a bond or other collateral satisfactory to Owner to indemnify Owner against any Lien, or Owner at its option may issue joint checks payable to Contractor and specified Subcontractors and Suppliers.
- B. *Engineer's Review of Final Application and Recommendation of Payment:* If, on the basis of Engineer's observation of the Work during construction and final inspection, and Engineer's review of the final Application for Payment and accompanying documentation as required by the Contract Documents, Engineer is satisfied that the Work has been completed and Contractor's other obligations under the Contract have been fulfilled, Engineer will, within 10 days after receipt of the final Application for Payment, indicate in writing Engineer's recommendation of final payment and present the final Application for Payment to Owner for payment. Such recommendation will account for any set-offs against payment that are necessary in Engineer's opinion to protect Owner from loss for the reasons stated above with respect to progress payments. Otherwise, Engineer will return the Application for Payment to Contractor, indicating in writing the reasons for refusing to recommend final payment, in which case Contractor shall make the necessary corrections and resubmit the Application for Payment.
- C. *Notice of Acceptability:* In support of its recommendation of payment of the final Application for Payment, Engineer will also give written notice to Owner and Contractor that the Work is acceptable, subject to stated limitations in the notice and to the provisions of Paragraph 15.07.
- D. *Completion of Work:* The Work is complete (subject to surviving obligations) when it is ready for final payment as established by the Engineer's written recommendation of final payment and issuance of notice of the acceptability of the Work.
- E. *Final Payment Becomes Due:* Upon receipt from Engineer of the final Application for Payment and accompanying documentation, Owner shall set off against the amount recommended by Engineer for final payment any further sum to which Owner is entitled, including but not limited to set-offs for liquidated damages and set-offs allowed under the provisions of this Contract with respect to progress payments. Owner shall pay the resulting balance due to Contractor within 30 days of Owner's receipt of the final Application for Payment from Engineer.

15.07 *Waiver of Claims*

- A. By making final payment, Owner waives its claim or right to liquidated damages or other damages for late completion by Contractor, except as set forth in an outstanding Claim,

appeal under the provisions of Article 17, set-off, or express reservation of rights by Owner. Owner reserves all other claims or rights after final payment.

- B. The acceptance of final payment by Contractor will constitute a waiver by Contractor of all claims and rights against Owner other than those pending matters that have been duly submitted as a Claim, or appealed under the provisions of Article 17.

15.08 *Correction Period*

- A. If within one year after the date of Substantial Completion (or such longer period of time as may be prescribed by the Supplementary Conditions or the terms of any applicable special guarantee required by the Contract Documents), Owner gives Contractor written notice that any Work has been found to be defective, or that Contractor's repair of any damages to the Site or adjacent areas has been found to be defective, then after receipt of such notice of defect Contractor shall promptly, without cost to Owner and in accordance with Owner's written instructions:
 - 1. correct the defective repairs to the Site or such adjacent areas;
 - 2. correct such defective Work;
 - 3. remove the defective Work from the Project and replace it with Work that is not defective, if the defective Work has been rejected by Owner, and
 - 4. satisfactorily correct or repair or remove and replace any damage to other Work, to the work of others, or to other land or areas resulting from the corrective measures.
- B. Owner shall give any such notice of defect within 60 days of the discovery that such Work or repairs is defective. If such notice is given within such 60 days but after the end of the correction period, the notice will be deemed a notice of defective Work under Paragraph 7.17.B.
- C. If, after receipt of a notice of defect within 60 days and within the correction period, Contractor does not promptly comply with the terms of Owner's written instructions, or in an emergency where delay would cause serious risk of loss or damage, Owner may have the defective Work corrected or repaired or may have the rejected Work removed and replaced. Contractor shall pay all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or repair or such removal and replacement (including but not limited to all costs of repair or replacement of work of others). Contractor's failure to pay such costs, losses, and damages within 10 days of invoice from Owner will be deemed the start of an event giving rise to a Claim under Paragraph 12.01.B, such that any related Claim must be brought within 30 days of the failure to pay.
- D. In special circumstances where a particular item of equipment is placed in continuous service before Substantial Completion of all the Work, the correction period for that item may start to run from an earlier date if so provided in the Specifications.
- E. Where defective Work (and damage to other Work resulting therefrom) has been corrected or removed and replaced under this paragraph, the correction period hereunder with respect to such Work will be extended for an additional period of one year after such correction or removal and replacement has been satisfactorily completed.

- F. Contractor's obligations under this paragraph are in addition to all other obligations and warranties. The provisions of this paragraph are not to be construed as a substitute for, or a waiver of, the provisions of any applicable statute of limitation or repose.

ARTICLE 16—SUSPENSION OF WORK AND TERMINATION

16.01 *Owner May Suspend Work*

- A. At any time and without cause, Owner may suspend the Work or any portion thereof for a period of not more than 90 consecutive days by written notice to Contractor and Engineer. Such notice will fix the date on which Work will be resumed. Contractor shall resume the Work on the date so fixed. Contractor shall be entitled to an adjustment in the Contract Price or an extension of the Contract Times directly attributable to any such suspension. Any Change Proposal seeking such adjustments must be submitted no later than 30 days after the date fixed for resumption of Work.

16.02 *Owner May Terminate for Cause*

- A. The occurrence of any one or more of the following events will constitute a default by Contractor and justify termination for cause:
 - 1. Contractor's persistent failure to perform the Work in accordance with the Contract Documents (including, but not limited to, failure to supply sufficient skilled workers or suitable materials or equipment, or failure to adhere to the Progress Schedule);
 - 2. Failure of Contractor to perform or otherwise to comply with a material term of the Contract Documents;
 - 3. Contractor's disregard of Laws or Regulations of any public body having jurisdiction; or
 - 4. Contractor's repeated disregard of the authority of Owner or Engineer.
- B. If one or more of the events identified in Paragraph 16.02.A occurs, then after giving Contractor (and any surety) 10 days' written notice that Owner is considering a declaration that Contractor is in default and termination of the Contract, Owner may proceed to:
 - 1. declare Contractor to be in default, and give Contractor (and any surety) written notice that the Contract is terminated; and
 - 2. enforce the rights available to Owner under any applicable performance bond.
- C. Subject to the terms and operation of any applicable performance bond, if Owner has terminated the Contract for cause, Owner may exclude Contractor from the Site, take possession of the Work, incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere, and complete the Work as Owner may deem expedient.
- D. Owner may not proceed with termination of the Contract under Paragraph 16.02.B if Contractor within 7 days of receipt of notice of intent to terminate begins to correct its failure to perform and proceeds diligently to cure such failure.
- E. If Owner proceeds as provided in Paragraph 16.02.B, Contractor shall not be entitled to receive any further payment until the Work is completed. If the unpaid balance of the Contract Price exceeds the cost to complete the Work, including all related claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects,

attorneys, and other professionals) sustained by Owner, such excess will be paid to Contractor. If the cost to complete the Work including such related claims, costs, losses, and damages exceeds such unpaid balance, Contractor shall pay the difference to Owner. Such claims, costs, losses, and damages incurred by Owner will be reviewed by Engineer as to their reasonableness and, when so approved by Engineer, incorporated in a Change Order. When exercising any rights or remedies under this paragraph, Owner shall not be required to obtain the lowest price for the Work performed.

- F. Where Contractor's services have been so terminated by Owner, the termination will not affect any rights or remedies of Owner against Contractor then existing or which may thereafter accrue, or any rights or remedies of Owner against Contractor or any surety under any payment bond or performance bond. Any retention or payment of money due Contractor by Owner will not release Contractor from liability.
- G. If and to the extent that Contractor has provided a performance bond under the provisions of Paragraph 6.01.A, the provisions of that bond will govern over any inconsistent provisions of Paragraphs 16.02.B and 16.02.D.

16.03 *Owner May Terminate for Convenience*

- A. Upon 7 days' written notice to Contractor and Engineer, Owner may, without cause and without prejudice to any other right or remedy of Owner, terminate the Contract. In such case, Contractor shall be paid for (without duplication of any items):
 - 1. completed and acceptable Work executed in accordance with the Contract Documents prior to the effective date of termination, including fair and reasonable sums for overhead and profit on such Work;
 - 2. expenses sustained prior to the effective date of termination in performing services and furnishing labor, materials, or equipment as required by the Contract Documents in connection with uncompleted Work, plus fair and reasonable sums for overhead and profit on such expenses; and
 - 3. other reasonable expenses directly attributable to termination, including costs incurred to prepare a termination for convenience cost proposal.
- B. Contractor shall not be paid for any loss of anticipated profits or revenue, post-termination overhead costs, or other economic loss arising out of or resulting from such termination.

16.04 *Contractor May Stop Work or Terminate*

- A. If, through no act or fault of Contractor, (1) the Work is suspended for more than 90 consecutive days by Owner or under an order of court or other public authority, or (2) Engineer fails to act on any Application for Payment within 30 days after it is submitted, or (3) Owner fails for 30 days to pay Contractor any sum finally determined to be due, then Contractor may, upon 7 days' written notice to Owner and Engineer, and provided Owner or Engineer do not remedy such suspension or failure within that time, terminate the contract and recover from Owner payment on the same terms as provided in Paragraph 16.03.
- B. In lieu of terminating the Contract and without prejudice to any other right or remedy, if Engineer has failed to act on an Application for Payment within 30 days after it is submitted, or Owner has failed for 30 days to pay Contractor any sum finally determined to be due, Contractor may, 7 days after written notice to Owner and Engineer, stop the Work until payment is made of all such amounts due Contractor, including interest thereon. The

provisions of this paragraph are not intended to preclude Contractor from submitting a Change Proposal for an adjustment in Contract Price or Contract Times or otherwise for expenses or damage directly attributable to Contractor's stopping the Work as permitted by this paragraph.

ARTICLE 17—FINAL RESOLUTION OF DISPUTES

17.01 *Methods and Procedures*

- A. *Disputes Subject to Final Resolution:* The following disputed matters are subject to final resolution under the provisions of this article:
1. A timely appeal of an approval in part and denial in part of a Claim, or of a denial in full, pursuant to Article 12; and
 2. Disputes between Owner and Contractor concerning the Work, or obligations under the Contract Documents, that arise after final payment has been made.
- B. *Final Resolution of Disputes:* For any dispute subject to resolution under this article, Owner or Contractor may:
1. elect in writing to invoke the dispute resolution process provided for in the Supplementary Conditions;
 2. agree with the other party to submit the dispute to another dispute resolution process; or
 3. if no dispute resolution process is provided for in the Supplementary Conditions or mutually agreed to, give written notice to the other party of the intent to submit the dispute to a court of competent jurisdiction.

ARTICLE 18—MISCELLANEOUS

18.01 *Giving Notice*

- A. Whenever any provision of the Contract requires the giving of written notice to Owner, Engineer, or Contractor, it will be deemed to have been validly given only if delivered:
1. in person, by a commercial courier service or otherwise, to the recipient's place of business;
 2. by registered or certified mail, postage prepaid, to the recipient's place of business; or
 3. by e-mail to the recipient, with the words "Formal Notice" or similar in the e-mail's subject line.

18.02 *Computation of Times*

- A. When any period of time is referred to in the Contract by days, it will be computed to exclude the first and include the last day of such period. If the last day of any such period falls on a Saturday or Sunday or on a day made a legal holiday by the law of the applicable jurisdiction, such day will be omitted from the computation.

18.03 *Cumulative Remedies*

- A. The duties and obligations imposed by these General Conditions and the rights and remedies available hereunder to the parties hereto are in addition to, and are not to be construed in any way as a limitation of, any rights and remedies available to any or all of them which are otherwise imposed or available by Laws or Regulations, by special warranty or guarantee, or by other provisions of the Contract. The provisions of this paragraph will be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right, and remedy to which they apply.

18.04 *Limitation of Damages*

- A. With respect to any and all Change Proposals, Claims, disputes subject to final resolution, and other matters at issue, neither Owner nor Engineer, nor any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, shall be liable to Contractor for any claims, costs, losses, or damages sustained by Contractor on or in connection with any other project or anticipated project.

18.05 *No Waiver*

- A. A party's non-enforcement of any provision will not constitute a waiver of that provision, nor will it affect the enforceability of that provision or of the remainder of this Contract.

18.06 *Survival of Obligations*

- A. All representations, indemnifications, warranties, and guarantees made in, required by, or given in accordance with the Contract, as well as all continuing obligations indicated in the Contract, will survive final payment, completion, and acceptance of the Work or termination of the Contract or of the services of Contractor.

18.07 *Controlling Law*

- A. This Contract is to be governed by the law of the state in which the Project is located.

18.08 *Assignment of Contract*

- A. Unless expressly agreed to elsewhere in the Contract, no assignment by a party to this Contract of any rights under or interests in the Contract will be binding on the other party without the written consent of the party sought to be bound; and, specifically but without limitation, money that may become due and money that is due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under the Contract.

18.09 *Successors and Assigns*

- A. Owner and Contractor each binds itself, its successors, assigns, and legal representatives to the other party hereto, its successors, assigns, and legal representatives in respect to all covenants, agreements, and obligations contained in the Contract Documents.

18.10 *Headings*

- A. Article and paragraph headings are inserted for convenience only and do not constitute parts of these General Conditions.

**C-800 2018
Supplementary Conditions
of the Construction Contract**

Vernon Avenue Improvements

OT1.129866

Lower Minnesota River Watershed District

Savage, MN

Supplementary Conditions of the Construction Contract

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SUPPLEMENTARY CONDITIONS OF THE CONSTRUCTION CONTRACT

These Supplementary Conditions amend or supplement EJCDC® C 700, Standard General Conditions of the Construction Contract (2018). The General Conditions remain in full force and effect except as amended.

The terms used in these Supplementary Conditions have the meanings stated in the General Conditions. Additional terms used in these Supplementary Conditions have the meanings stated below, which are applicable to both the singular and plural thereof.

The address system used in these Supplementary Conditions is the same as the address system used in the General Conditions, with the prefix "SC" added—for example, "Paragraph SC-4.05."

ARTICLE 1—DEFINITIONS AND TERMINOLOGY

1.01 Defined Terms

SC-1.01.A.33 Insert the following sentence at the end of Paragraph 1.01.A.33:

The term Construction Project Representative (CPR) shall have the same meaning as RPR.

SC-1.01.A.42. Delete Paragraph 1.01.A.42 in its entirety and insert the following in its place:

42. Substantial Completion – Substantial Completion shall be as defined in the Agreement.

ARTICLE 2—PRELIMINARY MATTERS

2.01 Delivery of Bonds and Evidence of Insurance

SC-2.01 Delete Paragraphs 2.01.B. and C. in their entirety and insert the following in their place:

B. Evidence of Contractor's Insurance: When Contractor delivers the signed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner copies of the policies (including all endorsements, and identification of applicable self-insured retentions and deductibles) of insurance required to be provided by Contractor in this Contract.

Contractor may block out (redact) any confidential premium or pricing information contained in any policy or endorsement furnished under this provision.

C. Evidence of Owner's Insurance: After receipt from Contractor of the signed counterparts of the Agreement and all required bonds and insurance documentation, Owner shall promptly deliver to Contractor copies of the policies of insurance to be provided by Owner in this Contract (if any). Owner may block out (redact) any confidential premium or pricing information contained in any policy or endorsement furnished under this provision.

2.02 Copies of Documents

SC-2.02 Amend the first sentence of Paragraph 2.02.A. to read as follows:

A. Owner shall furnish to Contractor four printed copies of the Contract Documents (including one fully signed counterpart of the Agreement), and one in electronic portable document format (PDF).

2.06 Electronic Transmittals

SC-2.06 Delete Paragraphs 2.06.B and 2.06.C in their entirety and insert the following in their place:

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- B. Electronic Documents Protocol: The parties shall conform to the following provisions in Paragraphs 2.06.B and 2.06.C, together referred to as the Electronic Documents Protocol (“EDP” or “Protocol”) for exchange of electronic transmittals.
1. Basic Requirements
 - a. To the fullest extent practical, the parties agree to and will transmit and accept Electronic Documents in an electronic or digital format using the procedures described in this Protocol. Use of the Electronic Documents and any information contained therein is subject to the requirements of this Protocol and other provisions of the Contract.
 - b. The contents of the information in any Electronic Document will be the responsibility of the transmitting party.
 - c. Electronic Documents as exchanged by this Protocol may be used in the same manner as the printed versions of the same documents that are exchanged using non-electronic format and methods, subject to the same governing requirements, limitations, and restrictions, set forth in the Contract Documents.
 - d. Except as otherwise explicitly stated herein, the terms of this Protocol will be incorporated into any other agreement or subcontract between a party and any third party for any portion of the Work on the Project, or any Project-related services, where that third party is, either directly or indirectly, required to exchange Electronic Documents with a party or with Engineer. Nothing herein will modify the requirements of the Contract regarding communications between and among the parties and their subcontractors and consultants.
 - e. When transmitting Electronic Documents, the transmitting party makes no representations as to long term compatibility, usability, or readability of the items resulting from the receiving party’s use of software application packages, operating systems, or computer hardware differing from those established in this Protocol.
 - f. Nothing herein negates any obligation 1) in the Contract to create, provide, or maintain an original printed record version of Drawings and Specifications, signed, and sealed according to applicable Laws and Regulations; 2) to comply with any applicable Law or Regulation governing the signing and sealing of design documents or the signing and electronic transmission of any other documents; or 3) to comply with the notice requirements of Paragraph 18.01 of the General Conditions.
 2. System Infrastructure for Electronic Document Exchange
 - a. Each party will provide hardware, operating system(s) software, internet, e-mail, and large file transfer functions (“System Infrastructure”) at its own cost and sufficient for complying with the EDP requirements. With the exception of minimum standards set forth in this EDP, and any explicit system requirements specified by attachment to this EDP, it is the obligation of each party to determine, for itself, its own System Infrastructure.

- 1) The maximum size of an email attachment for exchange of Electronic Documents under this EDP is 5 MB. Attachments larger than that may be exchanged using large file transfer functions or physical media.
 - 2) Each Party assumes full and complete responsibility for any and all of its own costs, delays, deficiencies, and errors associated with converting, translating, updating, verifying, licensing, or otherwise enabling its System Infrastructure, including operating systems and software, for use with respect to this EDP.
- b. Each party is responsible for its own system operations, security, back-up, archiving, audits, printing resources, and other Information Technology (“IT”) for maintaining operations of its System Infrastructure during the Project, including coordination with the party’s individual(s) or entity responsible for managing its System Infrastructure and capable of addressing routine communications and other IT issues affecting the exchange of Electronic Documents.
 - c. Each party will operate and maintain industry-standard, industry-accepted, ISO standard, commercial-grade security software and systems that are intended to protect the other party from: software viruses and other malicious software like worms, trojans, adware; data breaches; loss of confidentiality; and other threats in the transmission to or storage of information from the other parties, including transmission of Electronic Documents by physical media such as CD/DVD/flash drive/hard drive. To the extent that a party maintains and operates such security software and systems, it shall not be liable to the other party for any breach of system security.
 - d. In the case of disputes, conflicts, or modifications to the EDP required to address issues affecting System Infrastructure, the parties shall cooperatively resolve the issues; but, failing resolution, the Owner is authorized to make and require reasonable and necessary changes to the EDP to effectuate its original intent. If the changes cause additional cost or time to Contractor, not reasonably anticipated under the original EDP, Contractor may seek an adjustment in price or time under the appropriate process in the Contract.
 - e. Each party is responsible for its own back-up and archive of documents sent and received during the term of the contract under this EDP, unless this EDP establishes a Project document archive, either as part of a mandatory Project website or other communications protocol, upon which the parties may rely for document archiving during the specified term of operation of such Project document archive. Further, each party remains solely responsible for its own post-Project back-up and archive of Project documents after the term of the Contract, or after termination of the Project document archive, if one is established, for as long as required by the Contract and as each party deems necessary for its own purposes.
 - f. If a receiving party receives an obviously corrupted, damaged, or unreadable Electronic Document, the receiving party will advise the sending party of the incomplete transmission.
 - g. The parties will bring any non-conforming Electronic Documents into compliance with the EDP. The parties will attempt to complete a successful transmission of

the Electronic Document or use an alternative delivery method to complete the communication.

C. Software Requirements for Electronic Document Exchange; Limitations

1. Each party will acquire the software and software licenses necessary to create and transmit Electronic Documents and to read and to use any Electronic Documents received from the other party (and if relevant from third parties), using the software formats required in this section of the EDP.
 - a. Prior to using any updated version of the software required in this section for sending Electronic Documents to the other party, the originating party will first notify and receive concurrence from the other party for use of the updated version or adjust its transmission to comply with this EDP.
2. The parties agree not to intentionally edit, reverse engineer, decrypt, remove security or encryption features, or convert to another format for modification purposes any Electronic Document or information contained therein that was transmitted in a software data format, including Portable Document Format (PDF), intended by sender not to be modified, unless the receiving party obtains the permission of the sending party or is citing or quoting excerpts of the Electronic Document for Project purposes.
3. Software and data formats for exchange of Electronic Documents will conform to the requirements set forth in Exhibit A to this EDP, including software versions, if listed.

SC-2.06 Supplement Paragraph 2.06 of the General Conditions by adding the following paragraph:

D. Requests by Contractor for Electronic Documents in Other Formats

1. Release of any Electronic Document versions of the Project documents in formats other than those identified in the Electronic Documents Protocol (if any) or elsewhere in the Contract will be at the sole discretion of the Owner.
2. To extent determined by Owner, in its sole discretion, to be prudent and necessary, release of Electronic Documents versions of Project documents and other Project information requested by Contractor ("Request") in formats other than those identified in the Electronic Documents Protocol (if any) or elsewhere in the Contract will be subject to the provisions of the Owner's response to the Request, and to the following conditions to which Contractor agrees:
 - a. The content included in the Electronic Documents created by Engineer and covered by the Request was prepared by Engineer as an internal working document for Engineer's purposes solely and is being provided to Contractor on an "AS IS" basis without any warranties of any kind, including, but not limited to any implied warranties of fitness for any purpose. As such, Contractor is advised and acknowledges that the content may not be suitable for Contractor's application or may require substantial modification and independent verification by Contractor. The content may include limited resolution of models, not-to-scale schematic representations and symbols, use of notes to convey design concepts in lieu of accurate graphics, approximations, graphical simplifications, undocumented intermediate revisions, and other devices that may affect subsequent reuse.

- b. Electronic Documents containing text, graphics, metadata, or other types of data that are provided by Engineer to Contractor under the request are only for convenience of Contractor. Any conclusion or information obtained or derived from such data will be at the Contractor’s sole risk and the Contractor waives any claims against Engineer or Owner arising from use of data in Electronic Documents covered by the Request.
 - c. Contractor shall indemnify and hold harmless Owner and Engineer and their subconsultants from all claims, damages, losses, and expenses, including attorneys' fees and defense costs arising out of or resulting from Contractor’s use, adaptation, or distribution of any Electronic Documents provided under the Request.
 - d. Contractor agrees not to sell, copy, transfer, forward, give away or otherwise distribute this information (in source or modified file format) to any third party without the direct written authorization of Engineer, unless such distribution is specifically identified in the Request and is limited to Contractor’s subcontractors. Contractor warrants that subsequent use by Contractor’s subcontractors complies with all terms of the Contract Documents and Owner’s response to Request.
3. In the event that Owner elects to provide or directs the Engineer to provide to Contractor any Contractor-requested Electronic Document versions of Project information that is not explicitly identified in the Contract Documents as being available to Contractor, the Owner shall be reimbursed by Contractor on an hourly basis (at \$150 per hour) for any engineering costs necessary to create or otherwise prepare the data in a manner deemed appropriate by Engineer.

ARTICLE 3—CONTRACT DOCUMENTS: INTENT, REQUIREMENTS, REUSE

3.01 Intent

No Supplementary Conditions in this Article.

ARTICLE 4—COMMENCEMENT AND PROGRESS OF THE WORK

4.03 Reference Points

4.03.A. Delete Paragraph 4.03.A of the General Conditions in its entirety and insert the following Paragraph 4.03.A in its place:

- A. The OWNER will provide engineering surveys to establish reference points for construction.

4.05 Delays in Contractor’s Progress

SC-4.05 Amend Paragraph 4.05.C by adding the following subparagraphs:

- 5. Weather-Related Delays
 - a. If “abnormal weather conditions” as set forth in Paragraph 4.05.C.2 of the General Conditions are the basis for a request for an equitable adjustment in the Contract Times, such request must be documented by data substantiating each of the following: 1) that weather conditions were abnormal for the period of time in which the delay occurred, 2) that such weather conditions could not have been reasonably anticipated, and 3) that such weather conditions had an adverse effect on the Work as scheduled.

- b. The existence of abnormal weather conditions will be determined on a month-by-month basis in accordance with the following:
- 1) Contractor shall anticipate the number of foreseeable bad weather days per month indicated in the Table 1803-2—Anticipated Work Days Lost Due to Weather in MnDOT Standard Specifications for Construction. The days in Table 1803-2 are cumulative and the number of allowable bad weather days will be determined by totaling the monthly number of days throughout the specified Contract Time. The days in Table 1803-2 will prorated when Contract Time starts or ends mid-month.
 - 2) Work days lost to inclement weather exceeding the allowable number, established as described in Paragraph 4.05.C.2 will be considered as “abnormal weather conditions.” The existence of abnormal weather conditions will not relieve Contractor of the obligation to demonstrate and document that delays caused by abnormal weather are specific to the planned work activities or that such activities thus delayed were on Contractor’s then-current Progress Schedule’s critical path for the Project.
 - 3) The Owner will not consider weekends or holidays, as eligible for extensions of Contract Time due to weather unless the Engineer or Owner directs the Contractor to work those days, or the Contractor’s accepted progress schedule in place at the time the delay occurred indicated that the Contractor intended to perform Critical Path Work on those days.

ARTICLE 5—SITE, SUBSURFACE AND PHYSICAL CONDITIONS, HAZARDOUS ENVIRONMENTAL CONDITIONS

5.03 Subsurface and Physical Conditions

SC-5.03 Add the following new paragraphs immediately after Paragraph 5.03.D:

- E. The following table lists the reports of explorations and tests of subsurface conditions at or adjacent to the Site that contain Technical Data, and specifically identifies the Technical Data in the report upon which Contractor may rely:

| Report Title | Date of Report | Technical Data |
|--------------------------------|----------------|---|
| Geotechnical Evaluation Report | 08/02/2023 | Data contained in boring logs, recorded measurements of subsurface water levels, and other factual, objective information regarding conditions at the Site. |

- F. The following table lists the drawings of existing physical conditions at or adjacent to the Site, including those drawings depicting existing surface or subsurface structures at or adjacent to the Site (except Underground Facilities), that contain Technical Data, and specifically identifies the Technical Data upon which Contractor may rely:

| Drawings Title | Date of Drawings | Technical Data |
|--|------------------|----------------|
| “There are no drawings the Contractor may rely.” | | |

- G. Contractor may examine copies of reports and drawings identified in SC-5.03.E and SC-5.03.F that were not included with the Bidding Documents at 12224 Nicollet Avenue, Burnsville, MN 55337-1649, (952) 890-0509, fax (952) 890-8065 during regular business hours or may request copies from Engineer.

5.06 Hazardous Environmental Conditions

SC-5.06 Add the following new paragraphs immediately after Paragraph 5.06.A.3:

- 4. The following table lists the reports known to Owner relating to Hazardous Environmental Conditions at or adjacent to the Site, and the Technical Data (if any) upon which Contractor may rely:

| Report Title | Date of Report | Technical Data |
|---|----------------|----------------|
| "There are no reports the Contractor may rely." | | |

- 5. The following table lists the drawings known to Owner relating to Hazardous Environmental Conditions at or adjacent to the Site, and Technical Data (if any) contained in such Drawings upon which Contractor may rely:

| Drawings Title | Date of Drawings | Technical Data |
|--|------------------|----------------|
| "There are no drawings the Contractor may rely." | | |

5.07 Add the following new section immediately after Section 5.06:

5.07 – *Inadvertent Discoveries*

- A. The contractor is cautioned that disturbance of historical objects may be subject to criminal or civil penalties.
- B. If potential historic objects are found within the project limits, the Contractor shall:
 - 1. Suspend operations in the immediate area of the discovery and protect from construction operations.
 - 2. Notify the Engineer of the presence of potential historical objects.
 - 3. The Contractor shall not perform work that the Contractor considers Extra Work without the written approval of the Engineer.
 - 4. Work may be restricted or suspended in the Immediate area of the historical objects for a period not to exceed 72 hours without a Contractor claim for damages. No restrictions or suspension shall be imposed over 72 hours unless agreed by the Contractor and the Owner in writing.

ARTICLE 6—BONDS AND INSURANCE

6.01 Performance, Payment, and Other Bonds

SC-6.01 Add the following paragraphs immediately after Paragraph 6.01.A:

- 1. Required Performance Bond Form: The performance bond that Contractor furnishes will be in the form of EJCDC® C 610, Performance Bond (2010, 2013, or 2018 edition).
- 2. Required Payment Bond Form: The payment bond that Contractor furnishes will be in the form of EJCDC® C 615, Payment Bond (2010, 2013, or 2018 edition).

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- SC-6.01 Add the following paragraphs immediately after Paragraph 6.01.B:
1. The correction period specified as one year after the date of Substantial Completion in Paragraph 15.08.A of the General Conditions is hereby revised to be 2 years after Substantial Completion.
 2. After Substantial Completion, Contractor shall furnish a warranty bond issued in the form of EJCDC® C 612, Warranty Bond (2018). The warranty bond must be in a bond amount of 10 percent of the final Contract Price. The warranty bond period will extend to a date 2 years after Substantial Completion of the Work. Contractor shall deliver the fully executed warranty bond to Owner prior to final payment, and in any event no later than 11 months after Substantial Completion.
 3. The warranty bond must be issued by the same surety that issues the performance bond required under Paragraph 6.01.A of the General Conditions.

6.02 Insurance—General Provisions

- SC-6.02 Add the following paragraph immediately after Paragraph 6.02.B:
1. Contractor may obtain worker’s compensation insurance from an insurance company that has not been rated by A.M. Best, provided that such company (a) is domiciled in the state in which the Project is located, (b) is certified or authorized as a worker’s compensation insurance provider by the appropriate state agency, and (c) has been accepted to provide worker’s compensation insurance for similar projects by the state within the last 12 months.

6.03 Contractor’s Insurance

- SC-6.03 Supplement Paragraph 6.03 with the following provisions after Paragraph 6.03.C:
- D. Other Additional Insureds: As a supplement to the provisions of Paragraph 6.03.C of the General Conditions, the commercial general liability, automobile liability, umbrella or excess, pollution liability, and unmanned aerial vehicle liability policies must include as additional insureds (in addition to Owner and Engineer) the following: City of Savage
 - E. Workers’ Compensation and Employer’s Liability: Contractor shall purchase and maintain workers’ compensation and employer’s liability insurance, including, as applicable, United States Longshoreman and Harbor Workers’ Compensation Act, Jones Act, stop-gap employer’s liability coverage for monopolistic states, and foreign voluntary workers’ compensation (from available sources, notwithstanding the jurisdictional requirement of Paragraph 6.02.B of the General Conditions).

| Workers’ Compensation and Related Policies | Policy limits of not less than: |
|---|--|
| Workers’ Compensation | |
| State | Statutory |
| Applicable Federal (e.g., Longshoreman’s) | Statutory |
| Foreign voluntary workers’ compensation (employer’s responsibility coverage), if applicable | Statutory |
| Jones Act (if applicable) | |
| Bodily injury by accident—each accident | Not Applicable |
| Bodily injury by disease—aggregate | Not Applicable |
| Employer’s Liability | |

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| Workers' Compensation and Related Policies | Policy limits of not less than: |
|---|--|
| Each accident | \$1,000,000.00 |
| Each employee | \$1,000,000.00 |
| Policy limit | \$1,000,000.00 |
| Stop-gap Liability Coverage | |
| For work performed in monopolistic states, stop-gap liability coverage must be endorsed to either the worker's compensation or commercial general liability policy with a minimum limit of: | Not Applicable |

- F. Commercial General Liability—Claims Covered: Contractor shall purchase and maintain commercial general liability insurance, covering all operations by or on behalf of Contractor, on an occurrence basis, against claims for:
1. damages because of bodily injury, sickness or disease, or death of any person other than Contractor's employees,
 2. damages insured by reasonably available personal injury liability coverage, and
 3. damages because of injury to or destruction of tangible property wherever located, including loss of use resulting therefrom.
- G. Commercial General Liability—Form and Content: Contractor's commercial liability policy must be written on a 1996 (or later) Insurance Services Organization, Inc. (ISO) commercial general liability form (occurrence form) and include the following coverages and endorsements:
1. Products and completed operations coverage.
 - a. Such insurance must be maintained for three years after final payment.
 - b. Contractor shall furnish Owner and each other additional insured (as identified in the Supplementary Conditions or elsewhere in the Contract) evidence of continuation of such insurance at final payment and three years thereafter.
 2. Blanket contractual liability coverage, including but not limited to coverage of Contractor's contractual indemnity obligations in Paragraph 7.18.
 3. Severability of interests and no insured-versus-insured or cross-liability exclusions.
 4. Underground, explosion, and collapse coverage.
 5. Personal injury coverage.
 6. Additional insured endorsements that include both ongoing operations and products and completed operations coverage through ISO Endorsements CG 20 10 10 01 and CG 20 37 10 01 (together). If Contractor demonstrates to Owner that the specified ISO endorsements are not commercially available, then Contractor may satisfy this requirement by providing equivalent endorsements.
 7. For design professional additional insureds, ISO Endorsement CG 20 32 07 04 "Additional Insured—Engineers, Architects or Surveyors Not Engaged by the Named Insured" or its equivalent.

- H. Commercial General Liability—Excluded Content: The commercial general liability insurance policy, including its coverages, endorsements, and incorporated provisions, must not include any of the following:
1. Any modification of the standard definition of “insured contract” (except to delete the railroad protective liability exclusion if Contractor is required to indemnify a railroad or others with respect to Work within 50 feet of railroad property).
 2. Any exclusion for water intrusion or water damage.
 3. Any provisions resulting in the erosion of insurance limits by defense costs other than those already incorporated in ISO form CG 00 01.
 4. Any exclusion of coverage relating to earth subsidence or movement.
 5. Any exclusion for the insured’s vicarious liability, strict liability, or statutory liability (other than worker’s compensation).
 6. Any limitation or exclusion based on the nature of Contractor’s work.
 7. Any professional liability exclusion broader in effect than the most recent edition of ISO form CG 22 79.

I. Commercial General Liability—Minimum Policy Limits

| Commercial General Liability | Policy limits of not less than: |
|---|--|
| General Aggregate | \$2,000,000.00 |
| Products—Completed Operations Aggregate | \$2,000,000.00 |
| Personal and Advertising Injury | \$1,000,000.00 |
| Bodily Injury and Property Damage—Each Occurrence | \$1,000,000.00 |

- J. Automobile Liability: Contractor shall purchase and maintain automobile liability insurance for damages because of bodily injury or death of any person or property damage arising out of the ownership, maintenance, or use of any motor vehicle. The automobile liability policy must be written on an occurrence basis.

| Automobile Liability | Policy limits of not less than: |
|---|--|
| Bodily Injury | |
| Each Person | \$1,000,000.00 |
| Each Accident | \$1,000,000.00 |
| Property Damage | |
| Each Accident | \$1,000,000.00 |
| [or] | |
| Combined Single Limit | |
| Combined Single Limit (Bodily Injury and Property Damage) | \$1,000,000.00 |

- K. Umbrella or Excess Liability: Contractor shall purchase and maintain umbrella or excess liability insurance written over the underlying employer’s liability, commercial general liability, and automobile liability insurance described in the Paragraphs above. The coverage afforded must be at least as broad as that of each and every one of the underlying policies.

| Excess or Umbrella Liability | Policy limits of not less than: |
|-------------------------------------|--|
| Each Occurrence | Not Applicable |
| General Aggregate | Not Applicable |

L. Using Umbrella or Excess Liability Insurance to Meet CGL and Other Policy Limit Requirements: Contractor may meet the policy limits specified for employer’s liability, commercial general liability, and automobile liability through the primary policies alone, or through combinations of the primary insurance policy’s policy limits and partial attribution of the policy limits of an umbrella or excess liability policy that is at least as broad in coverage as that of the underlying policy, as specified herein. If such umbrella or excess liability policy was required under this Contract, at a specified minimum policy limit, such umbrella or excess policy must retain a minimum limit of \$0 after accounting for partial attribution of its limits to underlying policies, as allowed above.

M. Contractor’s Pollution Liability Insurance: Contractor shall purchase and maintain a policy covering third-party injury and property damage, including cleanup costs, as a result of pollution conditions arising from Contractor’s operations and completed operations. This insurance must be maintained for no less than three years after final completion.

| Contractor’s Pollution Liability | Policy limits of not less than: |
|---|--|
| Each Occurrence/Claim | Not Applicable |
| General Aggregate | Not Applicable |

N. Contractor’s Professional Liability Insurance: If Contractor will provide or furnish professional services under this Contract, through a delegation of professional design services or otherwise, then Contractor shall be responsible for purchasing and maintaining applicable professional liability insurance. This insurance must cover negligent acts, errors, or omissions in the performance of professional design or related services by the insured or others for whom the insured is legally liable. The insurance must be maintained throughout the duration of the Contract and for a minimum of two years after Substantial Completion. The retroactive date on the policy must pre-date the commencement of furnishing services on the Project.

| Contractor’s Professional Liability | Policy limits of not less than: |
|--|--|
| Each Claim | Not Applicable |
| Annual Aggregate | Not Applicable |

O. Railroad Protective Liability Insurance: Prior to commencing any Work within 50 feet of railroad-owned and controlled property, Contractor shall (1) endorse its commercial general liability policy with ISO CG 24 17, removing the contractual liability exclusion for work within 50 feet of a railroad, (2) purchase and maintain railroad protective liability insurance meeting the following requirements, (3) furnish a copy of the endorsement to Owner, and (4) submit a copy of the railroad protective policy and other railroad-required documentation to the railroad, and notify Owner of such submittal.

See “Exhibit A – Insurance Provisions for Contractor Endorsement” included in Appendix B – Work in UP Railroad ROW Associated Documents for the specific additional railroad insurance requirements for this project. Additional railroad requirements are included in Section 01 41 26 (Permit Requirements) and Appendix B of this Project Manual.

P. Unmanned Aerial Vehicle Liability Insurance: No Supplementary Conditions in this Article.

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Q. Other Required Insurance: No Supplementary Conditions in this Article.

6.04 Builder's Risk and Other Property Insurance: No Supplementary Conditions in this Article.

ARTICLE 7—CONTRACTOR'S RESPONSIBILITIES

7.03 Labor; Working Hours

SC-7.03 Add the following new subparagraphs immediately after Paragraph 7.03.C:

1. Regular working hours will be 7:00 A.M. to 7:00 P.M. Monday - Friday and 8:00 A.M. to 6:00 P.M. Saturday with 48-hour notice and Owner Approval.
2. Owner's legal holidays are: New Year's Day, January 1; Martin Luther King's Birthday, the third Monday in January; Washington's and Lincoln's Birthday, the third Monday in February; Memorial Day, the last Monday in May; Juneteenth, June 19; Independence Day, July 4; Labor Day, the first Monday in September; Christopher Columbus Day, the second Monday in October; Veterans Day, November 11; Thanksgiving Day, the fourth Thursday in November; and Christmas Day, December 25.
3. When a legal holiday occurs on Sunday, the subsequent Monday shall be the observed holiday. When a legal holiday occurs on Saturday, the preceding Friday shall be the observed holiday.

ARTICLE 8—OTHER WORK AT THE SITE

No Supplementary Conditions in this Article.

ARTICLE 9—OWNER'S RESPONSIBILITIES

Owner's Site Representative. No Supplementary Conditions in this Article.

ARTICLE 10—ENGINEER'S STATUS DURING CONSTRUCTION

10.03 Resident Project Representative

SC-10.03 Add the following new paragraphs immediately after Paragraph 10.03.B:

- C. The Resident Project Representative (RPR) will be Engineer's representative at the Site. RPR's dealings in matters pertaining to the Work in general will be with Engineer and Contractor. RPR's dealings with Subcontractors will only be through or with the full knowledge or approval of Contractor. The RPR will:
 1. Conferences and Meetings: Attend meetings with Contractor, such as preconstruction conferences, progress meetings, job conferences, and other Project-related meetings (but not including Contractor's safety meetings), and as appropriate prepare and circulate copies of minutes thereof.
 2. Safety Compliance: Comply with Site safety programs, as they apply to RPR, and if required to do so by such safety programs, receive safety training specifically related to RPR's own personal safety while at the Site.
 3. Liaison
 - a. Serve as Engineer's liaison with Contractor. Working principally through Contractor's authorized representative or designee, assist in providing information regarding the provisions and intent of the Contract Documents.

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- b. Assist Engineer in serving as Owner's liaison with Contractor when Contractor's operations affect Owner's on-site operations.
 - c. Assist in obtaining from Owner additional details or information, when required for Contractor's proper execution of the Work.
4. Review of Work; Defective Work
- a. Conduct on-site observations of the Work to assist Engineer in determining, to the extent set forth in Paragraph 10.02 if the Work is in general proceeding in accordance with the Contract Documents.
 - b. Observe whether any Work in place appears to be defective.
 - c. Observe whether any Work in place should be uncovered for observation, or requires special testing, inspection, or approval.
5. Inspections and Tests
- a. Observe Contractor-arranged inspections required by Laws and Regulations, including but not limited to those performed by public or other agencies having jurisdiction over the Work.
 - b. Accompany visiting inspectors representing public or other agencies having jurisdiction over the Work.
6. Payment Requests: Review Applications for Payment with Contractor.
7. Completion
- a. Participate in Engineer's visits regarding Substantial Completion.
 - b. Assist in the preparation of a punch list of items to be completed or corrected.
 - c. Participate in Engineer's visit to the Site in the company of Owner and Contractor regarding completion of the Work and prepare a final punch list of items to be completed or corrected by Contractor.
 - d. Observe whether items on the final punch list have been completed or corrected.
- D. The RPR will not:
- 1. Authorize any deviation from the Contract Documents or substitution of materials or equipment (including "or-equal" items).
 - 2. Exceed limitations of Engineer's authority as set forth in the Contract Documents.
 - 3. Undertake any of the responsibilities of Contractor, Subcontractors, or Suppliers.
 - 4. Advise on, issue directions relative to, or assume control over any aspect of the means, methods, techniques, sequences, or procedures of construction.
 - 5. Advise on, issue directions regarding, or assume control over security or safety practices, precautions, and programs in connection with the activities or operations of Owner or Contractor.
 - 6. Participate in specialized field or laboratory tests or inspections conducted off-site by others except as specifically authorized by Engineer.

7. Authorize Owner to occupy the Project in whole or in part.

ARTICLE 11—CHANGES TO THE CONTRACT

SC-11.02.C Insert the following after 11.02.B

- C. In complying with any Minnesota Governmental Data Practices Act (MGDPA) request, Contractor will be reimbursed by Change Order only for its reasonable direct labor and other direct expenses, without mark-up or increase in 11.07.C. Fee; but only to the extent that the request is not due to a negligent, intentional, or willful act or omission by the Contractor or other failure to comply with its obligations under this contract.

ARTICLE 12—CLAIMS

No Supplementary Conditions in this Article.

ARTICLE 13—COST OF WORK; ALLOWANCES, UNIT PRICE WORK

SC-13.01 Supplement Paragraph 13.01.C.2 by adding the following definition of small tools and hand tools:

- a. For purposes of this paragraph, “small tools and hand tools” means any tool or equipment whose current price if it were purchased new at retail would be less than \$500.

13.03 Unit Price Work

SC-13.03 Delete Paragraph 13.03.E in its entirety and insert the following in its place:

- E. Adjustments in Unit Price
 1. Contractor or Owner shall be entitled to an adjustment in the unit price with respect to an item of Unit Price Work if:
 - a. the extended price of a particular item of Unit Price Work amounts to five percent or more of the Contract Price and the variation in the quantity of that particular item of Unit Price Work actually furnished or performed by Contractor differs by more than twenty percent from the estimated quantity of such item indicated in the Agreement; and
 - b. Contractor’s unit costs to perform the item of Unit Price Work have changed materially and significantly as a result of the quantity change.
 2. The adjustment in unit price will account for and be coordinated with any related changes in quantities of other items of Work, and in Contractor’s costs to perform such other Work, such that the resulting overall change in Contract Price is equitable to Owner and Contractor.
 3. Adjusted unit prices will apply to all units of that item.

ARTICLE 14—TESTS AND INSPECTIONS; CORRECTION, REMOVAL, OR ACCEPTANCE OF DEFECTIVE WORK

No Supplementary Conditions in this Article.

ARTICLE 15—PAYMENTS TO CONTRACTOR, SET OFFS; COMPLETIONS; CORRECTION PERIOD

15.01 Progress Payments

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SC-15.01.B Replace Paragraph 15.01.B.1 with the following:

1. The Engineer shall, in communication with Contractor, prepare a draft partial payment estimate on or about the day as specified in Article 6 of the Agreement in any given month where significant work has been completed. The Pay Estimate shall then be forwarded to the Contractor for its review, approval, and submittal. If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the Site or at another location agreed to in writing, the Application for Payment shall also be accompanied by a bill of sale, invoice, or other documentation warranting that Owner has received the materials and equipment free and clear of all liens and evidence that the materials and equipment are covered by appropriate property insurance or other arrangements to protect the Owner's interest therein, all of which must be satisfactory to Owner.

SC-15.01.C Delete paragraph 15.01.C.1 in its entirety.

SC-15.01.D Delete Paragraph 15.01.D.1 in its entirety and replace with the following:

1. The time period for payment shall be in accordance with the Agreement.

SC-15.01.E.1 Add the following new Paragraph 15-01.E.1.m

- m. All out-of-state contractors shall comply with all State of Minnesota surety deposit requirements. The OWNER may withhold an additional sum of 8 percent of the amount due the CONTRACTOR from each payment and forward it to the Department of Revenue until the CONTRACTOR's state tax obligations are considered fulfilled unless the CONTRACTOR can show reason for exemption. Exemption will be granted provided the out-of-state CONTRACTOR meets the exemption guidelines established for the Minnesota Department of Revenue. All necessary forms may be obtained from the Minnesota Department of Revenue, Mail Station 4450, St. Paul, Minnesota 55146-4450, or phone 1-800-657-3777 or online at:
<http://www.revenue.state.mn.us/businesses/withholding/Pages/Forms.aspx>.

SC-15.01 Add the following new Paragraph 15.01.F:

- F. For contracts in which the Contract Price is based on the Cost of Work, if Owner determines that progress payments made to date substantially exceed the actual progress of the Work (as measured by reference to the Schedule of Values), or present a potential conflict with the Guaranteed Maximum Price, then Owner may require that Contractor prepare and submit a plan for the remaining anticipated Applications for Payment that will bring payments and progress into closer alignment and take into account the Guaranteed Maximum Price (if any), through reductions in billings, increases in retainage, or other equitable measures. Owner will review the plan, discuss any necessary modifications, and implement the plan as modified for all remaining Applications for Payment.

15.03 Substantial Completion

SC-15.03.A. Delete Paragraph 15.03.A. in its entirety and replace with the following:

- A. When Contractor considers the entire Work to be substantially complete Contractor shall notify Owner and Engineer in writing that the entire Work is substantially complete and request that Engineer issue a certificate of Substantial Completion. Contractor shall at the

same time submit to Owner and Engineer an initial draft of punch list items to be completed or corrected before final payment.

SC-15.03.B. Add the following new subparagraph to Paragraph 15.03.B:

1. If some or all of the Work has been determined not to be at a point of Substantial Completion and will require re-inspection or re-testing by Engineer, the cost of such re-inspection or re-testing, including the cost of time, travel and living expenses, will be paid by Contractor to Owner. If Contractor does not pay, or the parties are unable to agree as to the amount owed, then Owner may impose a reasonable set-off against payments due under this Article 15.

15.06 Final Payment

SC-15.06 Add the following Paragraph 15.06.A.4. Immediately following Paragraph 15.06.A.3.

4. Final payment will not be made to the CONTRACTOR until a certificate showing that the CONTRACTOR has complied with the provisions of M.S.A. 290.92 requiring withholding of income tax on wages at the source. Said certificate shall be executed by the Commissioner of Revenue. Forms for certification may be obtained from the Commissioner of Revenue, Centennial Building, St. Paul, Minnesota 55145.

15.08 Correction Period

SC-15.08 Add the following new Paragraph 15.08.G:

- G. The correction period specified as one year after the date of Substantial Completion in Paragraph 15.08.A of the General Conditions is hereby revised to be the number of years set forth in SC-6.01.B.1; or if no such revision has been made in SC-6.01.B, then the correction period is hereby specified to be 2 years after Substantial Completion.

ARTICLE 16—SUSPENSION OF WORK AND TERMINATION

No Supplementary Conditions in this Article.

ARTICLE 17—FINAL RESOLUTIONS OF DISPUTES

No Supplementary Conditions in this Article.

ARTICLE 18—MISCELLANEOUS

No Supplementary Conditions in this Article.

EXHIBIT A —SOFTWARE REQUIREMENTS FOR ELECTRONIC DOCUMENT EXCHANGE

| Item | Electronic Documents | Transmittal Means | Data Format | Note (1) |
|-------|---|----------------------------|-------------|----------|
| a.1 | General communications, transmittal covers, meeting notices and responses to general information requests for which there is no specific prescribed form. | Email | Email | |
| a.2 | Meeting agendas, meeting minutes, RFI's and responses to RFI's, and Contract forms. | Email w/ Attachment | PDF | (2) |
| a.3 | Contractor's Submittals (Shop Drawings, "or equal" requests, substitution requests, documentation accompanying Sample submittals and other submittals) to Owner and Engineer, and Owner's and Engineer's responses to Contractor's Submittals, Shop Drawings, correspondence, and Applications for Payment. | Email w/ Attachment | PDF | |
| a.4 | Correspondence; milestone and final version Submittals of reports, layouts, Drawings, maps, calculations and spreadsheets, Specifications, Drawings and other Submittals from Contractor to Owner or Engineer and for responses from Engineer and Owner to Contractor regarding Submittals. | Email w/ Attachment or LFE | PDF | |
| a.5 | Layouts and drawings to be submitted to Owner for future use and modification. | Email w/ Attachment or LFE | DWG | |
| a.6 | Correspondence, reports, and Specifications to be submitted to Owner for future word processing use and modification. | Email w/ Attachment or LFE | DOC | |
| a.7 | Spreadsheets and data to be submitted to Owner for future data processing use and modification. | Email w/ Attachment or LFE | EXC | |
| a.8 | Database files and data to be submitted to Owner for future data processing use and modification. | Email w/ Attachment or LFE | DB | |
| Notes | | | | |
| (1) | All exchanges and uses of transmitted data are subject to the appropriate provisions of Contract Documents. | | | |
| (2) | Transmittal of written notices is governed by Paragraph 18.01 of the General Conditions. | | | |
| Key | | | | |
| Email | Standard Email formats (.htm, .rtf, or .txt). Do not use stationery formatting or other features that impair legibility of content on screen or in printed copies | | | |
| LFE | Agreed upon Large File Exchange method (FTP, CD, DVD, hard drive) | | | |
| PDF | Portable Document Format readable by Adobe® Acrobat Reader Version. | | | |
| DWG | Autodesk® AutoCAD .dwg format Version. | | | |
| DOC | Microsoft® Word .docx format Version. | | | |
| EXC | Microsoft® Excel .xls or .xml format Version. | | | |
| DB | Microsoft® Access .mdb format Version. | | | |

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CONDITIONS OF THE CONTRACT

for

Vernon Avenue Improvements

OT1.129866

Lower Minnesota River Watershed District

Savage, MN

FIELD ORDER FORM

NO.: _____

| | | | |
|----------------|---------------------------------|--------------------------------|------------|
| Owner: | Lower Minnesota River Watershed | Owner's Project No.: | |
| Engineer: | District | Engineer's Project No.: | OT1.129866 |
| Contractor: | | Contractor's Project No.: | |
| Project: | Vernon Avenue Improvements | | |
| Contract Name: | | | |
| Date Issued: | | Effective Date of Field Order: | |

Contractor is hereby directed to promptly perform the Work described in this Field Order, issued in accordance with Paragraph 11.04 of the General Conditions, for minor changes in the Work without changes in Contract Price or Contract Times. If Contractor considers that a change in Contract Price or Contract Times is required, submit a Change Proposal before proceeding with this Work.

Reference:

Specification Section(s):
 Drawing(s) / Details (s):

Description:

[Description of the change to the Work]

Attachments:

[List documents supporting change]

Issued by Engineer

By: _____
 Title: _____
 Date: _____

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WORK CHANGE DIRECTIVE FORM

NO.: _____

Owner:

Owner's Project No.:

Engineer:

Engineer's Project No.:

Contractor:

Contractor's Project No.:

Project:

Contract Name:

Effective Date of Work Change

Date Issued:

Directive:

Contractor is directed to proceed promptly with the following change(s):

Description:

[Description of the change to the Work]

Attachments:

[List documents related to the change to the Work]

Purpose for the Work Change Directive:

[Describe the purpose for the change to the Work]

Directive to proceed promptly with the Work described herein, prior to agreeing to change in Contract Price and Contract Time, is issued due to:

Notes to User—Check one or both of the following

Non-agreement on pricing of proposed change. Necessity to proceed for schedule or other reasons.

Estimated Change in Contract Price and Contract Times (non-binding, preliminary):

Contract Price: \$ _____ **[increase] [decrease] [not yet estimated].**

Contract Time: _____ days **[increase] [decrease] [not yet estimated].**

Basis of estimated change in Contract Price:

Lump Sum Unit Price Cost of the Work Other

Recommended by Engineer

Authorized by Owner

By: _____

Title: _____

Date: _____

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CHANGE ORDER FORM

NO.: _____

Owner: Lower Minnesota River Watershed
 District
 Engineer: _____
 Contractor: _____
 Project: Vernon Avenue Improvements
 Contract Name: _____
 Date Issued: _____

Owner's Project No.: _____
 Engineer's Project No.: OT1.129866
 Contractor's Project No.: _____

Effective Date of Change Order: _____

The Contract is modified as follows upon execution of this Change Order:

Description:

[Description of the change]

Attachments:

[List documents related to the change]

| Change in Contract Price | Change in Contract Times [State Contract Times as either a specific date or a number of days] |
|---|--|
| Original Contract Price: \$ _____ | Original Contract Times: Substantial Completion: _____ Ready for final payment: _____ |
| [Increase] [Decrease] from previously approved Change Orders No. 1 to No. [Number of previous Change Order] : \$ _____ | [Increase] [Decrease] from previously approved Change Orders No.1 to No. [Number of previousChange Order] : Substantial Completion: _____ Ready for final payment: _____ |
| Contract Price prior to this Change Order: \$ _____ | Contract Times prior to this Change Order: Substantial Completion: _____ Ready for final payment: _____ |
| [Increase] [Decrease] this Change Order: \$ _____ | [Increase] [Decrease] this Change Order: Substantial Completion: _____ Ready for final payment: _____ |
| Contract Price incorporating this Change Order: \$ _____ | Contract Times with all approved Change Orders: Substantial Completion: _____ Ready for final payment: _____ |

Recommended by Engineer (if required)

Accepted by Contractor

By: _____

Title: _____

Date: _____

Authorized by Owner

Approved by Funding Agency (if applicable)

By: _____

Title: _____

Date: _____

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CERTIFICATE OF SUBSTANTIAL COMPLETION

Owner: _____ Owner's Project No.: _____
Engineer: _____ Engineer's Project No.: _____
Contractor: _____ Contractor's Project No.: _____
Project: _____
Contract Name: _____

This Preliminary Final Certificate of Substantial Completion applies to:

All Work The following specified portions of the Work:

[Describe the portion of the work for which Certificate of Substantial Completion is issued]

Date of Substantial Completion: [Enter date, as determined by Engineer]

The Work to which this Certificate applies has been inspected by authorized representatives of Owner, Contractor, and Engineer, and found to be substantially complete. The Date of Substantial Completion of the Work or portion thereof designated above is hereby established, subject to the provisions of the Contract pertaining to Substantial Completion. The date of Substantial Completion in the final Certificate of Substantial Completion marks the commencement of the contractual correction period and applicable warranties required by the Contract.

A punch list of items to be completed or corrected is attached to this Certificate. This list may not be all-inclusive, and the failure to include any items on such list does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract Documents.

Amendments of contractual responsibilities recorded in this Certificate should be the product of mutual agreement of Owner and Contractor; see Paragraph 15.03.D of the General Conditions.

The responsibilities between Owner and Contractor for security, operation, safety, maintenance, heat, utilities, insurance, and warranties upon Owner's use or occupancy of the Work must be as provided in the Contract, except as amended as follows:

Amendments to Owner's Responsibilities: None As follows:

[List amendments to Owner's Responsibilities]

Amendments to Contractor's Responsibilities: None As follows:

[List amendments to Contractor's Responsibilities]

The following documents are attached to and made a part of this Certificate:

[List attachments such as punch list; other documents]

This Certificate does not constitute an acceptance of Work not in accordance with the Contract Documents, nor is it a release of Contractor's obligation to complete the Work in accordance with the Contract Documents.

Engineer

By (signature): _____

Name (printed): _____

Title: _____

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SECTION 01 11 00 - SUMMARY OF WORK

PART 1 - GENERAL

1.1 PROJECT LOCATION

- A. The project location is shown on the vicinity map in the design drawing set.

1.2 PROJECT DESCRIPTION

- A. The project involves but is not limited to the complete construction of public improvements for the reconstruction of street(s). Individual elements of work shall include, but are not limited to:
1. Removal of bituminous pavement, pipe and other miscellaneous items.
 2. Clearing and grubbing.
 3. Street excavation.
 4. Storm sewer construction.
 5. Bituminous street construction.
 6. Turf restoration and erosion control construction.
 7. Traffic Control.
 8. Other miscellaneous work shown on the plans or specified herein.

1.3 ALTERNATE MATERIALS & METHODS OF CONSTRUCTION

- A. The Contractor may present alternative materials and/or methods of construction for consideration by the Owner. Proposals for such alternatives shall be in accordance with the provisions of Section 01 23 00 "Alternates" of this Project Manual.

1.4 CONTRACTOR USE OF PROJECT SITE

- A. The Contractor's use of the project site shall be limited to its construction operations, including on-site storage of materials and field offices. No materials shall be stored in a location as to limit access to the affected public. Any damage caused by Contractor operations to private property, including but not limited to, parking lots, trees, shrubs, material spatter, etc. shall promptly be corrected at the Contractor's expense.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.1 OPERATIONAL LIMITATIONS AND REQUIREMENTS

- A. The Contractor shall confine its work within the limits of the easements, public rights-of-way, and/or construction limits as shown on the plans. If the Contractor desires additional space, it shall be the Contractor's responsibility to acquire easements and/or permission, as desired.

3.2 BARRICADES

- A. The Contractor shall furnish and install any necessary barricades to protect the public or workers during the project. Barricades to keep public out of construction areas shall be left in place until removed by Contractor after they are no longer required for protection. The Contractor is responsible to secure the site at all times during the demolition.
- B. The Contractor shall furnish names, addresses, and phone numbers of at least two local individuals capable of immediate response who will be responsible for the site security and traffic control devices to:

The Engineer
The Owner
Local Law Enforcement Agencies

- C. The Contractor shall respond with sufficient personnel, equipment and/or materials and conduct the required work or be subject to a **\$100 per hour deduction from the time of notification for non-attention to project security and safety.**

3.3 SAFETY HAZARDS

- A. The Owner, Engineer or their representatives may indicate potential safety hazards noticed at the Construction site. However, the Contractor shall remain the only party liable for the maintenance of safe construction practices.

3.4 INTERFERENCE WITH TREES

- A. The Contractor may be required to trim tree branches that overhang the work zone as specifically identified during construction by the Engineer, where branches are likely to be broken or excessively damaged by construction equipment and activities. Branches which are accidentally damaged during construction shall be trimmed immediately. All trimmed ends shall be coated with an appropriate coating material.
- B. The Contractor shall protect existing trees within close proximity of the construction from stripping and root damage. Roots extending into excavations shall be cut before excavating in their vicinity. Roots cut or otherwise damaged shall be coated with an appropriate protective dressing prior to backfilling.
- C. No direct compensation for tree protection and interference shall be made, unless specifically identified in the Schedule of Unit Prices.

******END OF SECTION******

SECTION 01 23 00 - ALTERNATES

PART 1 - GENERAL

1.1 SUMMARY

- A. This section shall govern the interpretation and evaluation of bid alternates and contractor proposed alternatives.
- B. The Owner reserves the right to reject any bids not complying with the requirements of this section.
- C. All bids must include a bid based on the "base bid" or the Contract Documents defined alternatives, as specified, without anticipation of the use of "or equal" items or contractor proposed alternatives. Bids solely based on the use of "or equal" items or contractor proposed alternatives may be rejected without consideration, at the discretion of the Owner.
- D. Qualification process
 - 1. Installers wishing to qualify alternate methods and/or materials for this project must submit a copy of the license or certificate verifying the manufacturer's or licensor's approval, and evidence of the installer's experience including the number, total length, and locations of trenchless construction projects installed to date using the proposed materials and methods together with the names and phone numbers of facility owners to the Engineer 10 days prior to the opening of bids to allow time for evaluation.
 - 2. The final decision to accept or reject the applicant lies solely with the Owner.

1.2 INTERPRETATION OF "OR EQUAL" CLAUSES

- A. The Contractor shall include in its base bid the items, as specified, without consideration of using the 'or equal' items and methods.
- B. The Contractor shall then include in its bid the amount of the deduction, increase or revised total bid to be applied if the 'or equal' items and methods are accepted.
- C. The Owner and Engineer shall evaluate the 'or equal' stature of the proposed materials and methods.
- D. The Owner reserves the right to accept or reject the proposed 'or equal' materials and methods at the appropriate adjustment to bid price.

1.3 PROPOSALS WITH SPECIFIED BID ALTERNATES

- A. The Owner reserves the right to select the bid alternate desired, regardless of the amount bid.
- B. The bid shall be awarded to the lowest and best bidder of the selected alternate.

1.4 CONTRACTOR PROPOSED ALTERNATIVES

- A. Contractor proposed alternative methods and techniques may be considered by the Owner, with the advice of the Engineer, after Award of Contract. No alternatives shall be accepted or considered as part of the bid.
- B. The Contractor shall include in its base bid the items, as specified, without consideration of using any proposed alternative materials and/or methods.
- C. The Contractor shall then include in its bid the amount of the deduction, increase or revised bid amount to be applied if the proposed alternative materials and methods are accepted.
- D. The Owner and Engineer shall evaluate the stature of the proposed materials and methods.
 - 1. Evaluation by the Owner and Engineer shall include the cost of modifying the design, as necessary and shall be at the discretion of the Owner and Engineer.

2. If the Contractor is proposing trenchless technology that is not included as a contract alternative, the following modifications to the original design shall be anticipated by the Contractor and included in the price differential or revised contract amount, as proposed:
 - (a) The actual inside pipe diameter included in the Contractor proposed alternative shall be equal to or larger than the original conduit design, as specified, unless approved by the Engineer.
 - (b) The minimum grade of all conduits installed by trenchless technologies for gravity sewers shall be 0.80 percent. This minimum may increase the depth required for structures. The Contractor shall include in the price differential or revised contract amount the cost of any such increases in structure depth.
 - (c) Proposed modifications which include changes in pipe size whether to meet the required actual inside pipe diameter or necessitated by proposed changes in pipe materials, etc. may require changes in manhole diameters to accommodate the necessary pipe entrances. The Contractor shall include in the price differential or revised contract amount the cost of any such increases in manhole size.
- E. The Owner reserves the right to accept or reject "Contractor Proposed Alternatives".

1.5 SPECIFICATION REFERENCES

- A. If the Bidder proposes an alternative:
1. The Bidder is required to request, in writing, a determination on the Specifications which will be enforced to govern the construction. This request shall be made directly to the Engineer at the time of bid opening or before.
 2. The Engineer shall provide a written response prior to the end of the next working day to allow the Contractor time to withdraw its bid, if requested by the Contractor.

1.6 SUBMITTALS

- A. "OR EQUAL" MATERIALS AND/OR METHODS
1. Unless otherwise specified, Contractors whose bids are based on "equal" materials and/or methods shall include with their bid the manufacturer name, address, product name, model, specification reference and/or testing certification of the items proposed to be used. The Contractor shall also include evidence of the 'equal' stature of the products proposed.
- B. PROPOSALS FOR SPECIFIED BID ALTERNATES
1. Unless otherwise specifically requested, no submittals are required.
 2. Unless otherwise specifically requested, the Contractor is required to bid at least one of the alternates included in the proposal form, and the Contractor may choose to bid other alternates or not.
- C. CONTRACTOR PROPOSED ALTERNATIVES
1. The Contractor shall contact the Engineer prior to bidding the job to discuss its proposed alternative approach to the methods and materials used or execution of the job. The Engineer shall evaluate the proposed methods and may at the Engineer's discretion choose to issue an addendum to all contractors or accept the conversation as privileged communication.
 2. Unless otherwise specified, the Contractors whose bid includes alternative materials and/or methods shall include with their bid the manufacturer name, address, product name, model, specification reference and/or testing certification of the items proposed to be used. The Contractor shall also include evidence of the 'equal' stature of the products and/or methods proposed.
 3. The Contractor shall mark the outside of the bid envelope that alternative methods are included.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

******END OF SECTION******

SECTION 01 29 00 - PAYMENT PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

- A. Methods of measurement and payment for all items not individually specified shall be according to the appropriate referenced specification standard.

1.2 MEASUREMENT & PAYMENT

- A. **Payment for Plan Quantity (P) Items:** Items designated as Plan Quantity (P) shall be measured and paid for based on the quantity listed in the plans and no field measurement shall be made. The Engineer will only adjust the quantities on Plan Quantity (P) designated Contract items when the Engineer authorizes changes to the dimensions of that work (in which case only the affected portion will be re-determined) or when the Engineer determines that the quantity designated as a Plan Quantity (P) is incorrect.
- B. **Payment for Hauled Materials:** No compensation will be paid for any weigh ticket received after the date shown on the ticket unless prior arrangements are made with the Engineer.
- C. **Payment for Major Lump Sum Items:** The Contractor shall submit a schedule of values for major items of construction that are bid as Lump Sum. The schedule shall identify major sections of work and the percentage of the bid price applied to each. Payment shall be made according to the percentage complete of each major section of work.

1.3 SUBMITTALS

- A. The Contractor shall submit a schedule of values for major items of construction that are bid as Lump Sum.
- B. The Contractor shall submit to the Engineer a "Certificate of Conformance" statement stating that the scale used to weigh hauled materials has been tested and calibrated for the current construction season. This Certificate shall be from MnDOT or other reliable scale servicing company. Providing a certified scale and obtaining such "Certificate of Conformance" is the sole responsibility of the Contractor and all costs associated are considered incidental to the materials being supplied.
- C. **Hauled Materials:** The Contractor shall furnish numbered weigh tickets which list the Date, Project, Type of Material, Gross Weight, Tare Weight, Material Weight in tons, and Truck Number for each load brought to the construction site. If the individual pay items are identified on a unit weight basis, the Contractor shall provide the Engineer with a summary type spreadsheet which provides accumulative job totals of all aggregate and bituminous materials hauled to the project. This spreadsheet shall be submitted to the Engineer on a weekly basis.
- D. **Procured Materials:** The Contractor shall furnish an insurance bond showing the type of material, the amount of material, the valuation of the material, the stored location, the project, the date, the name, and address of the surety.
- E. **Compacted Volume Materials:** When measurement is specified by the CUBIC YARD, (CY) COMPACTED VOLUME (CV), will be determined by length, width and depth measurements of the material in its placed and compacted position, according to the placement dimensions as shown in the Contract or as designated by the Engineer.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

*****END OF SECTION*****

SECTION 01 31 00 – PROJECT MANAGEMENT AND COORDINATION

PART 1 - GENERAL

1.1 SEQUENCE OF CONSTRUCTION

- A. A written project management scheduling tool (i.e., critical path (CPM), detailed bar chart, etc.) shall be employed by the Contractor for cost value reporting, planning, and scheduling of all work required under the Contract Documents. This schedule shall show the order in which the Contractor proposes to execute the work with dates on which it proposes to start the various phases of the work and the estimated completion date of each phase. The Contractor shall submit a preliminary version of its intended schedule within 10 working days following the *Notice of Award* on the attached form or a form of its own choosing. **The Contractor is required to show the initial critical path (CPM) of tasks to be performed.**
- B. Unless otherwise approved by the Engineer, the schedule shall also include an anticipated payment schedule for the volume of work to be completed each month. This schedule shall indicate the Contractor's intention and ability to complete the work within the contract times, as specified in Article 4 of Section 00 52 00 "Agreement Forms" of this Project Manual.
- C. The Preconstruction Conference as outlined in Section 01 31 19 "Project Meetings" of this Project Manual will not be conducted until the schedule is submitted. In addition, no construction staking shall be provided until the schedule is submitted by the Contractor and reviewed by the Engineer.

1.2 WORKING HOURS

- A. Except in connection with safety or emergencies, all work at the site shall be performed during normal working hours as defined in the Supplementary Conditions.
- B. The Contractor shall notify the Owner and Engineer of any work planned on Saturday, Sunday, or any legal holidays at least 48 hours prior to such work.
- C. The Contractor shall coordinate any construction or hauling activity in the vicinity of churches, schools, medical facilities, and funeral homes. The Contractor shall be cognizant of the disruptive effects of continued construction during funerals. The Owner reserves the right to temporarily stop construction within one block of, and during the time of, any funeral procession. No compensation shall be granted to the Contractor due to temporary delays caused by funerals.

1.3 TRAFFIC CONTROL

- A. Reference Section 01 55 26 "Traffic Control" of this Project Manual.

1.4 COORDINATION WITH BUSINESSES AND PRIVATE PROPERTY OWNERS ADJACENT TO THE PROJECT

- A. The Contractor shall notify all property owners and occupants adjacent to the project 2 days in advance to allow moving machinery and/or vehicles or other items that may be blocked in or damaged due to the upcoming construction in the area. Access to the properties shall be restored as soon as possible after each phase of construction.

1.5 COORDINATION WITH UTILITY COMPANIES

- A. The Contractor is responsible for working with public and private utility companies in protecting and/or relocating existing or new utility lines located near and affected by this construction.
 - 1. Coordination with the utility companies is very important and should be considered in planning the work and the associated extra costs involved.
 - 2. Private utility companies are responsible for their own lines and are so obligated under City Code Agreements to protect and/or relocate their utilities if required to install new City-owned utilities in a given area.

- B. The Contractor shall consult with the City’s maintenance personnel when working around or performing the required sanitary sewer installations.
- C. The Contractor shall also work with the City’s maintenance personnel to provide for scheduled water shut downs in a given area and to provide for continued water service to the properties along the project throughout the duration of the project.
- D. The Contractor shall work with all utility companies, as necessary, to allow for installation and maintenance of service of gas, power, lighting, telephone, cable TV, etc. in the boulevards or across the streets prior to final shaping of aggregate base and/or topsoil. This coordination with the utility companies is the responsibility of the Contractor and is considered incidental to the construction and no additional compensation shall be granted.
 - 1. **AT&T has approved plans to complete improvements to their fiber utility line along Vernon Avenue, currently scheduled for the spring/summer of 2024. Schedule coordination with AT&T’s contractor may be necessary for the orderly completion of the construction project(s).**
- E. **The Contractor shall coordinate their proposed construction schedule with LS Marine to ensure there is no conflict in schedules for planned dredge hauling operations. The proposed construction schedule must be submitted to the Engineer for approval, including the required coordination with LS Marine’s operations.**
 - 1. LS Marine operates the dredge site at the north end of Vernon Avenue and hauls dredge material off site at varying times throughout the year. Vernon Avenue is the only access to this site meaning that the proposed construction work will temporarily eliminate access. LS Marine does not have a set schedule of dates to complete the work, but have historically targeted May or June to complete hauling operations that typically take one to two weeks to complete.
 - 2. LS Marine Contact:
 - (a) Name: Taylor Luke
 - (b) Email: taylorl@lsmarine.com
 - (c) Main Phone: 651-653-6307
 - (d) Cell Phone: 612-554-9764
 - (e) [Marine Construction Company | Pile Driving | Channel Dredging \(lsmarine.com\)](https://www.lsmarine.com)

1.6 COOPERATION WITH FIRE & EMERGENCY DEPARTMENTS

- A. The Contractor shall coordinate all work requiring shutting down water service or limiting access to buildings by emergency equipment with the fire & emergency departments. This shall include notification of the daily construction schedule by the Contractor.

1.7 COOPERATION WITH OTHER CONTRACTORS

- A. The Contractor shall cooperate with other contractors performing construction on other projects in the vicinity of this project, including but not limited to allowing access for the delivery of equipment and materials.

1.8 COORDINATION WITH SERVICE PROVIDERS

- A. The Contractor shall coordinate with the postal service, recycling service, garbage collection service, school bus service, etc. to maintain continuous uninterrupted service to all residences and businesses throughout the duration of the project.
- B. The Contractor shall temporarily relocate mailboxes, haul recycling and garbage for residents to a designated pick-up location, etc., as required by the subject service provider. All equipment materials and labor required to coordinate with service providers and maintain services shall be incidental to the Contract.

1.9 SUBMITTALS

- A. Written Progress Management Schedule Tool- to be reviewed at the Preconstruction Conference. Notice to proceed will not be issued until a schedule is submitted to the Engineer. See Article 4 of Section 00 52 00 "Agreement Forms" of this Project Manual for contractual time requirements.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

******END OF SECTION******

SECTION 01 31 19 - PROJECT MEETINGS

PART 1 - GENERAL

1.1 SUMMARY

A. Pre-construction Conference

1. Prior to the start of the work, a joint meeting will be held with representatives of the Contractor, the Owner, the Engineer, and any other interested parties. This meeting is intended to introduce the various key personnel from each organization and to discuss the start of the work, order of work, labor and legal requirements, insurance requirements, method of payment, shop drawing requirements, protection of existing facilities, location of disposal and stockpile areas, and other pertinent items associated with the project.
2. The Contractor shall be prepared to discuss his proposed detailed construction progress schedule. The construction schedule shall be subject to the review of the Owner, Engineer and applicable agencies.

B. Construction Progress Meetings

1. These meetings will require the attendance of the Contractor's Project Manager or other designated staff authorized by the Contractor to discuss project status and negotiate agreements between the Contractor and Owner. Failure of the Contractor to attend scheduled project meetings as required may result in project delays expensed by the Contractor.
2. Meetings will be held between the Owner, Contractor and Engineer for the purpose of reviewing the project schedule or the status of the project. These meetings will be arranged by the Owner, and/or Engineer, as deemed necessary.

C. Safety Meetings

1. The Owner, Engineer or their representatives shall be allowed to attend Contractor's onsite safety meetings. The Contractor shall be responsible for meeting content and coordination and shall inform the Owner, Engineer or their representatives of the time and location of the meeting a minimum of two business days prior to the meeting.
2. The Contractor shall make additional copies of any safety related handouts or materials for distribution to the Owner, Engineer or their representatives. However, the Contractor shall remain the only party responsible for the maintenance of project safety materials.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

****END OF SECTION****

SECTION 01 33 00 – SUBMITTAL PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

- A. The Contractor shall submit all required submittals and sample items as noted below. The Engineer will review them with reasonable promptness. The Contractor shall make all required corrections and file with the Engineer three corrected sets for final review.
- B. Additional submittals are required in the technical specifications. The responsibility for completeness of submittals lies with the Contractor.
- C. If the Engineer and/or Owner sign the submittal with no exception taken, such action shall not absolve the responsibilities of the Contractor in any way.
- D. Emailed submittals to the Engineer in pdf format will be accepted.

1.2 ITEMS TO BE SUBMITTED

- A. Written Progress Management Schedule Tool - to be reviewed at the Preconstruction Conference. See Article 4 of Section 00 52 00 "Agreement Forms" of this Project Manual for contractual time requirements.
- B. Minnesota Pollution Control Agency (MPCA) - General Storm Water Permit for Construction Activity (MN R100001) – Reference Section 01 57 13 "Temporary Erosion & Sediment Control" of this Project Manual.
- C. Bituminous Mix Design (wear and non-wear)
- D. Gradation Test Results from 2 separate tests, as required in Source Quality Control provisions of individual sections contained herein, from material stockpiles of aggregates to be used on this project. These tests may be run by the Contractor or its supplier during aggregate production.
- E. Storm Sewer, Subdrain, and Sump Drain Lines
 - 1. Piping and fittings - Certificates of Compliance.
- F. Seeding - Certificates of Compliance for seed mixture.

1.3 MATERIAL SAFETY DATA SHEETS

- A. The Contractor shall submit two copies of Safety Data Sheets (SDSs) (formerly known as Material Safety Data Sheets or MSDSs) for each material on-site to the Owner.
- B. The Contractor shall maintain an orderly file of Safety Data Sheets at the job site.

1.4 RECORD DRAWINGS

- A. The Contractor shall maintain at the construction site one complete set of drawings suitably marked to show all deviations from the original set of drawings and other information as specified. Supplementary sketches shall be included, if necessary, to clearly indicate all work as constructed. Sanitary and water service tie-in or stub-out locations shall show station and distances left or right of the survey control centerline. Existing sanitary and water service piping material type and size at the tie-in locations shall be noted also.
- B. All manholes, watermain bends, and valves shall be located with tie-off dimensions to known items on the plans or in the field to enable the Contractor or City personnel to locate these structures for adjustment.
- C. The Contractor shall fill out a service record form for each water service and sanitary sewer service connection or stub out. A blank service record form will be supplied by the Engineer to be used by the Contractor. The completed service record forms and photos taken of the services shall be submitted to the Engineer in a digital format and in booklet form.

- D. All work shall be clearly shown, and the record drawings and service record forms shall be satisfactory to the Owner to ensure that adequate information is indicated to show the actual construction. The complete set of the record drawings shall be submitted to the Engineer prior to the submittal of the final Application for Payment. Failure of the Contractor to maintain an up-to-date set of record drawings on the project site shall be a reason to withhold payments. All underground lines shall be determined from the record drawings.

1.5 CONSTRUCTION PHOTOS

- A. The Contractor shall take digital photos during the course of construction using only cameras or smartphones with Global Positioning System (GPS) capabilities. GPS location settings shall be turned on at the time of taking each photo. The quality of the photos submitted shall be sufficient to clearly depict the focal points in the photo.
- B. The Contractor shall take photos of underground construction work prior to backfilling. Such items to be photographed include but are not limited to: connections to existing utilities, watermain fittings, small/private underground utilities, utility stub-outs, manholes, etc.
- C. The Contractor shall take photos of all water service and sanitary sewer service connections at the main and at the tie-in or stub-out locations prior to backfilling the service. The photo shall indicate the house address number or lot description of the service location.
- D. After the first couple of days of underground construction, the Contractor shall submit to the Engineer a sample set of digital photos. The test set of photos will be reviewed to verify that the date, GPS coordinates, and other photo features are being recorded.
- E. All photos shall be submitted to the Engineer in a digital format immediately upon completion of the utility installation. The digital properties of the photos, such as date and time taken and GPS coordinates, shall be full intact at the time of submittal. Failure of the Contractor to maintain a set of construction photos shall be reason to withhold payments.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.1 SUBMITTAL ROUTING

- A. Submittals shall be submitted via email or digital transfer method acceptable to the Engineer.
- B. Acceptable File Formats
 1. Reports: Searchable PDF
 2. Shop Drawings and Material Certifications: PDF
 3. Photos: JPG with GPS location
 4. Video: MP4 or WAV with both audio and video

3.2 SAMPLES

- A. Samples shall be delivered to the address specified in the Specification Section.

3.3 PHOTOS

- A. Photos shall be taken using a device with the Global Positioning System (GPS) setting enabled.
- B. The quality of the photos submitted shall be sufficient to clearly depict the focal points in the photo.

3.4 RESPONSIBILITY

- A. The Contractor shall allow a minimum of 5-business days for Engineer review unless otherwise agreed by the Engineer.

- B. Where review is required by a regulatory agency or permitting agency that is not the Owner, the Contractor shall allow additional time in the schedule to accommodate the agency review.
- C. All submittals shall be reviewed by the Engineer prior to their incorporation into the project. If materials are installed without prior review, they will be subject to removal, at the Contractor's expense, if the material is found to be non-conforming to the Specifications.
- D. Time delays or costs incurred by the Contractor due to late submittals by the Contractor shall not be acceptable cause for claims by the Contractor.
- E. Failure of the Contractor to make submittals may be cause to withhold payment until submittals are received.

****** END OF SECTION ******

SECTION 01 41 00 - REGULATORY REQUIREMENTS

PART 1 - GENERAL

1.1 SUMMARY

- A. Applicable codes and standards referred to in these specifications shall establish minimum requirements and shall be superseded by more stringent requirements of drawings and specifications when and where they occur.
- B. Any conflicts between specifications and applicable codes and standards shall be referred to the Engineer.

1.1 SUBMITTALS

- A. The Contractor shall submit copies of Safety Data Sheets (SDSs) for each material on site to the Engineer.

PART 2 - PRODUCTS

2.1 EQUIPMENT

- A. All equipment furnished and installed under the contract shall be designed, fabricated, assembled, installed, and placed into service. The equipment will conform to the applicable provisions of the Federal and State Safety and Health Standards, including but not limited to Federal Occupational Safety and Health Regulations for Construction; the Division of Environmental Health, Minnesota Department of Health; the Minnesota Pollution Control Agency; the Department of Natural Resources; the Minnesota Department of Transportation, Division of Highways; the Minnesota Industrial Commission and ordinances of the City that apply to this work.

PART 3 - EXECUTION

3.1 CONSTRUCTION

- A. All construction methods and tools shall comply with commonly accepted standards for safety and health of personnel engaged on construction, including but not limited to Federal Occupational Safety and Health Regulations for Construction; the Division of Environmental Health, Minnesota Department of Health; the Minnesota Pollution Control Agency; the Department of Natural Resources; the Minnesota Department of Transportation, Division of Highways; the Minnesota Industrial Commission and ordinances of the City that apply to this work.

****END OF SECTION****

SECTION 01 41 26 - PERMIT REQUIREMENTS

PART 4 - GENERAL

1.1 SUMMARY

- A. Any conflicts between specifications and permits for this project shall be referred to the Engineer.

1.2 PERMITS OBTAINED BY OWNER

- A. The Owner has applied for the following permits from appropriate authorities. It is anticipated that permission to proceed will be authorized prior to execution of Contract. The Contractor shall perform all work and conduct itself in full accordance with the requirements of the applicable permit:
1. Minnesota Pollution Control Agency (MPCA) - General Storm Water Permit for Construction Activity (MN R100001).
 2. Work within the City of Savage right-of-way.
 3. Work within the Union Pacific railroad right-of-way.
 - (a) Maintenance Consent Letter
- B. The Contractor shall be responsible for meeting any administrative fees, bonding, insurance requirements, etc. which may be required as a condition to any permit, listed above.
1. **Contractor shall familiarize themselves with the requirements of the Work within Union Pacific Railroad right-of-way permit, including the required administrative fee, insurance, training, notifications, and submittals.** These requirements are detailed further under Section 1.5 (Work Within a Railroad Right of Way), below.

1.3 PERMITS OBTAINED BY CONTRACTOR

- A. The Contractor shall secure and pay the cost of any other permits not mentioned above, which may be required for work within the project limits including but not limited to:
1. None.
- B. The Contractor shall identify, secure, and pay for any required permission, fee, or permit for work not within the project limits, but which may be considered a connected action. A connected action shall be defined as including but not limited to:
1. Obtaining borrow for the project,
 2. Disposal of any waste product or excess material resulting from the project, and
 3. Any action by the Contractor that is closely related by proximity in location and time to the project that may be perceived by the public or any regulatory body to be part of the project.

1.4 SUBMITTALS

- A. Contractor shall provide a draft copy of all notifications, submittals, and permit applications to the Engineer for review a minimum of 5-business days prior to submittal to any regulatory or permitting agency.
- B. Contractor shall copy the Engineer on all notifications, submittals, and permit applications at the time of submittal to the agency or permitting authority.
- C. If requested by the Owner, the Contractor shall provide copies of permits and/or permissions acquired for work.

1.5 WORK WITHIN A RAILROAD RIGHT OF WAY

- A. **This project includes work within the Union Pacific Railroad right of way. A copy of the Owner's permit or agreement with the railroad, and associated documents, is included in Appendix B – Work in UP Railroad ROW Associated Documents.**
1. Contractor shall familiarize themselves with all requirements of the Maintenance Consent Letter and the Contractor Endorsement.
 2. Contractor shall execute and return the Contractor Endorsement, with the required \$1,025.00 administrative fee, as indicated.
 3. Contractor shall familiarize themselves with the General Terms and Provisions of the Contractor Endorsement (www.up.com/ce-terms).
 4. Contractor shall submit insurance binders, policies, certificates, and endorsements, as identified in Exhibit A of the General Terms and Provisions for the Contractor Endorsement.
 5. Contractor shall complete Union Pacific's Property Access Training (UP-PAT).
 - (a) Go to the provided web address (www.up.com/up-pat), click on the Vendor Information Form, fill out the form, and submit the completed form with a pdf copy of the signed Contractor Endorsement to the email address at the bottom on the Vendor Information Form. The audit number that will be requested is the REMs/Project number at the top right on the Maintenance Consent Letter form. The badge required for this project is the Union Pacific Property Access Training. The full Erail will not be required for this project.
 6. Contractor shall provide 45 days advance notice to the Railroad Representative, Leo Craig at (817) 901-9560 or lcraig@olsson.com.
 - (a) Along with this notice, the contractor is required to schedule a short pre-construction meeting with the Railroad Representative prior to commencing work within UPRR ROW. The meeting will further discuss flagging, traffic control, insurance, safety and badging requirements. All personnel intended to be inside the UPRR ROW will need to complete badging, as identified above.
 7. The contractor shall contact one of the two 3rd party approved UP flagging companies directly to schedule flagging (www.up.com/flagging), and copy the Railroad Representative on the email.
 8. The contractor shall follow the UP procedures to Call Before You Dig, outlined at the following website: www.up.com/CBUD
- B. The Contractor is reminded that each railway has its own unique requirements and the Contractor is responsible for ascertaining what those requirements are prior to commencing work. While on or about railroad property, The Contractor shall fully comply with the railway's requirements, including (but not limited to) insurance requirements, bond requirements, flagging requirements, and safety requirements. The contractor shall be responsible for fully informing itself as to railroad requirements.
- C. The Contractor shall comply with all provisions of MnDOT Specification 1708 as revised below:
1. The Contractor shall be responsible for all costs associated with meeting the railroad's additional requirements, unless a specific bid item is provided. These costs shall be considered incidental to the contract.
 2. No work shall begin until the proof of insurance forms for all required coverages, and documentation of all required notifications and submittals, are received by the Engineer.

PART 5 - PRODUCTS (NOT USED)

PART 6 - EXECUTION (NOT USED)

******END OF SECTION******

SECTION 01 42 13 – ABBREVIATIONS AND ACRONYMS

PART 1 - GENERAL

1.1 WHEREVER THE FOLLOWING ABBREVIATIONS ARE USED, THEY SHALL HAVE THE MEANINGS INDICATED:

- A. AASHTO American Association of the State Highway and Transportation Officials
- B. ACI American Concrete Institute
- C. AI The Asphalt Institute
- D. ASTM American Society for Testing and Materials
- E. AWWA American Water Works Association
- F. CEAM City Engineer's Association of Minnesota
- G. CLFMI Chain Link Fence Manufacturers Institute
- H. MnDOT Minnesota Department of Transportation
- I. OSHA Occupational Safety and Health Administration
- J. PCA Portland Cement Association or Minnesota Pollution Control Agency (context obvious)
- K. SWPPP Storm Water Pollution Prevention Plan

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

*******END OF SECTION*******

SECTION 01 42 19 - REFERENCE STANDARDS

PART 1 - GENERAL

The references listed in this section are not all inclusive. There may be other references in individual specification sections that are not listed in this Section.

Portions of referenced specifications not specifically affected by the supplemented information of modification shall remain in effect as originally written.

It is the Contractor's responsibility to have these and all other referenced specifications listed in individual Sections available onsite and to be familiar with them.

- 1.1 ENGINEERS JOINT CONTRACT DOCUMENTS COMMITTEE (EJCDC)
 - A. Documents with the EJCDC copyright notice in the footer are used in this Project Manual under a licensing agreement with EJCDC.
- 1.2 SOIL DISTURBING ACTIVITIES
 - A. Minnesota Pollution Control Agency (MPCA) - General Storm Water Permit for Construction Activity (MN R100001) in force at the day of bid: <http://www.pca.state.mn.us/water/stormwater/stormwater-c.html>
- 1.3 WATERMAIN, SANITARY SEWER AND STORM SEWER CONSTRUCTION
 - A. "Construction Standard Specifications 2022" as published by the City Engineers Association of Minnesota: <http://www.ceam.org>
 - B. American Water Works Association (AWWA) Standards: <http://www.awwa.org/>
- 1.4 GRADING, STREET AND SURFACE IMPROVEMENTS
 - A. All of Divisions II and III, and any specifically referenced Division I sections of the Minnesota Department of Transportation (MnDOT), "MnDOT Standard Specifications for Construction 2020 edition", together with all the Supplemental Specifications in force 30 calendar days prior to bid date: <http://www.dot.state.mn.us/pre-letting/spec/>
 - B. MnDOT Technical Memoranda in force 30 calendar days prior to bid date and referencing the use of English units of measure: <http://www.dot.state.mn.us/design/tools/index.html>
 - C. MnDOT Standard Plans: <http://standardplans.dot.state.mn.us/>
 - D. MnDOT Standard Details: <http://standardplates.dot.state.mn.us/>
 - E. Whenever the word "Contracting Authority," "Department" or "Owner" is used in the sense of ownership as part of any of the MnDOT Documents, it shall mean Owner as defined in the Agreement.
- 1.5 TRAFFIC CONTROL
 - A. The Minnesota Manual of Uniform Traffic Control Devices (MMUTCD) shall apply to this project and is available at: <http://www.dot.state.mn.us/trafficeng/publ/mutcd/>.
 - B. The MnDOT's Temporary Traffic Control Zone Layouts Field available at: <http://www.dot.state.mn.us/trafficeng/publ/fieldmanual/>.
- 1.6 OTHER
 - A. None.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

- A. The Contractor shall have access to the reference documents at the site at all times during the construction either in paper or digital format.

******END OF SECTION******

SECTION 01 45 00 - QUALITY CONTROL

PART 1 - GENERAL

1.1 SCOPE OF TESTS

- A. All materials, equipment, installation, and workmanship included in this contract, if so required by the Engineer, shall be tested and inspected to prove compliance with the contract requirements.
- B. All tests and inspections shall be completed under the direct supervision of a licensed professional engineer. All tests and inspections shall be the responsibility as identified in the individual sections of these specifications and shall be reported directly to the Owner and Engineer.
- C. No tests specified herein shall be applied until the item to be tested has been inspected and approval given for the application of such tests.
- D. Tests and inspections shall include all those specified in the individual sections and shall be compensated in accordance with the individual sections.
- E. Tests and inspection, unless otherwise specified or accepted, shall be in accordance with the recognized standards of the industry.
- F. Soil compaction testing performed by the Owner is deemed to be for the convenience of the Owner for documentation of the progress and performance of the work. Soil compaction testing results will be made available to the Contractor. However, the Owner and Engineer make no representations that the number of tests taken will be sufficient to accurately characterize the condition of any trench, and the Contractor shall take any supplemental test it deems necessary to monitor its own performance. The Owner may, at its discretion, eliminate soil and compaction testing on any part or the entire project. The presence or absence of soil and compaction testing or the approval of the results thereof shall in no way reduce the Contractor's obligation to correct trench settlement as described in these Special Provisions.

1.2 FINAL TESTING AND START-UP

- A. If, under test, any portion of the work fails to fulfill the contract requirements and is altered, renewed or replaced, tests on that portion so altered, removed, replaced, together with all other portions of the work as are affected thereby, shall, if so required by the Engineer, be repeated within reasonable time and in accordance with the specified conditions and the Contractor shall pay to the Owner all reasonable expenses incurred by the Owner as a result of the carrying out of such tests.

1.3 TESTING AND LABORATORY SERVICES

- A. Independent Testing Laboratory
 - 1. Where in the individual sections of this Specification, tests or inspections are required to be furnished by the Contractor by an independent testing laboratory, the Contractor shall employ and arrange for, at its expense, the services of an approved independent testing laboratory satisfactory to the Engineer to perform the testing utilizing recognized standard procedures and criteria.
- B. Reports and Certificates
 - 1. The Contractor shall submit reports and certificates of all inspections and test to the Engineer in duplicate. The reports and certificates become the property of the Owner.
- C. Sample Materials
 - 1. The Contractor shall furnish all sample materials required for these tests and shall deliver the same without charge to the testing laboratory or other designated agency when and where directed by them.
- D. Additional Tests

1. In addition to those tests required by the individual technical specifications and/or referenced specifications:
 - (a) Additional tests required beyond these required under this specification may be ordered by the Engineer to settle disagreements with the Contractor regarding quality of work done. If the work is defective, the Contractor shall pay all costs of the additional tests and shall correct the work. If the work is satisfactory, the Owner will pay for the additional tests.
 - (b) The Owner may perform televised inspection of any and/or all underground construction included in this project, at its own expense, at any time prior to final payment. All deficiencies discovered in the course of such investigation shall be corrected at the Contractor's expense and, the Owner's satisfaction, prior to final payment.

1.4 ENGINEER'S REPRESENTATIVES AND TESTING

- A. The Engineer may provide a Resident Project Representative (RPR) to ascertain that the work is accomplished properly and in accordance with the plans and specifications. The RPR shall have full access to the work and shall be given full cooperation. The RPR shall have the authority, subject to the final decision of the Engineer, to reject any defective work or material. The RPR shall have no authority to permit any deviation from the plans and specifications except on written order from the Engineer.
- B. The presence of the Engineer or any RPRs, however, shall not relieve the Contractor of the responsibility for the proper execution of the work in accordance with all requirements of the Contract Documents. Compliance is a duty of the Contractor, and said duty shall not be avoided by any act or omission on the part of the Engineer or any RPRs.

1.5 SITE INVESTIGATION AND CONTROL

- A. The Contractor shall verify all dimensions in the field and shall check field conditions continuously during construction. The Contractor shall be solely responsible for any inaccuracies built into the work due to his failure to comply with this requirement.
- B. The Contractor shall inspect related and appurtenant work and shall report in writing to the Engineer any conditions, which will prevent proper completion of the work. Failure to report any such conditions shall constitute acceptance of all site conditions, and any required removal, repair or replacement caused by unsuitable conditions shall be performed by the Contractor at his sole cost and expense.

1.6 RIGHT OF REJECTION

- A. The Engineer, acting for the Owner, shall have the right, at all time and places, to reject any articles or materials to be furnished hereunder which in any respect, fail to meet the requirements of these specifications, regardless of whether the defects in such articles or materials are detected at the point of manufacture or after completion of the work at the site. If the Engineer or RPR, through an oversight or otherwise, has accepted materials or work which is defective or which is contrary to the specifications, such material, no matter in what stage or condition of manufacture, deliver, or erection, may be rejected by the Engineer for the Owner.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

******END OF SECTION******

SECTION 01 55 26 - TRAFFIC CONTROL

PART 1 - GENERAL

1.1 SUMMARY

A. Traffic Control

1. All traffic control methods shall conform to the provisions of the latest edition of the Minnesota Manual of Uniform Traffic Control Devices (MN MUTCD), including its supplements and Part VI, "Field Manual for Temporary Traffic Control Zone Layouts", the "Guide to Establishing Speed Limits in Highway Work Zones", the Minnesota Flagging Handbook, the provisions of MnDOT 1404 and 1710, the Minnesota Standard Signs Manuals Parts I and II, the Traffic Engineering Manual Chapter 8 Appendixes 8-8.02 and 8-8.03, the Traffic Control Layouts/Typical Traffic Control Layouts in the Plans.
2. The Contractor shall furnish, install, maintain and remove all traffic control devices including, but not limited to, construction signs, barricades and barricade weights, traffic marking tape, and warning lights which are needed for the guidance, warning and control of traffic adjacent to and through this project.
3. The Contractor shall provide sufficient surveillance of the traffic control devices to ensure compliance during the entire construction period. The Contractor shall furnish names, addresses, and phone numbers of at least two local individuals capable of immediate response who will be responsible for the site security and traffic control devices to:

The Engineer
The Owner
Local Law Enforcement Agencies

4. The Contractor shall respond with sufficient personnel, equipment and/or materials and conduct the required work or be subject to a \$100 per hour deduction from the time of notification for non-attention to project security and safety.
5. The Contractor shall schedule the work to cooperate fully with residential and business property owners abutting the project to minimize the time of restricted access to their property during the construction period. Driveway access to any property adjacent to the construction zone shall be restricted no more than seven days to allow for curing of the concrete curb and driveway pavement.
6. The cost of maintaining vehicular and pedestrian traffic on temporary aggregate surfaced drives, walkways, including the eventual removal of the aggregate material, shall be considered incidental to traffic control.
7. If it is necessary to enter upon a right-of-way controlled by the County or Minnesota Department of Transportation, the Contractor shall notify the appropriate agency before commencing construction within the right-of-way.
8. In the event that any of the above right-of-way require traffic to be detoured around the construction zone, the Contractor shall prepare the detour route with the appropriate Agency representatives. The Contractor shall provide and maintain all signing and other traffic control required. The affected Agency shall be notified by the Contractor before re-routing traffic. Dust control and road maintenance of the by-pass route shall be the Contractor's responsibility.
9. The Contractor shall be responsible for securing a site for storage of construction equipment and materials.

B. General Construction and Traffic Requirements

1. The parking of Contractor's Vehicles that obstruct any traffic control devices will not be permitted.

1.2 METHOD OF MEASUREMENT AND PAYMENT

- A. Traffic Control shall be measured by the Lump Sum and paid in accordance with the following schedule.
 - 1. First payment at 50 percent, then based on percent completed.
 - (a) 25 percent of contract earned up to 70 percent.
 - (b) 50 percent of contract earned up to 90 percent.
 - (c) 100 percent of contract earned up to 100 percent.

1.3 SUBMITTALS

- A. Proposed Traffic Control Plan
- B. Traffic Control – Contact information for (2) local individuals.
- C. Provide copies of the completed inspection logs on a weekly basis and at the request of the Engineer.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.1 CONSTRUCTION REQUIREMENTS

- A. The Contractor shall notify the Engineer in writing at least 72 hours prior to the start of any construction operation that will necessitate lane closure or internal traffic control signing.
- B. The traffic control devices required along the project corridor shall be delivered and installed prior to the start-up of the work.
- C. The Contractor shall maintain traffic through the intersections whenever possible.
- D. The Contractor shall monitor and maintain all traffic control devices.
- E. Immediately correct discrepancies between actual placement of devices and the traffic control plan.
- F. Immediately respond to requests from the Engineer to improve or correct the traffic control devices.

*******END OF SECTION*******

SECTION 01 55 26.44 - TRAFFIC CONTROL SPECIAL (RR FLAGGING)

PART 1 - GENERAL

1.1 SUMMARY

A. Traffic Control Special (RR Flagging)

1. An allowance is provided on the bid form for coordination of railroad flagging required to construct the project. The Contractor is responsible for all railroad flagging coordination with one of the two approved UP flagging for working within railroad ROW.

1.2 METHOD OF MEASUREMENT AND PAYMENT

A. Traffic Control Special (RR Flagging) shall be measured by the Dollar (DOL) and paid in accordance with the following schedule.

1. The Dollar amount paid of this allowance shall equal the actual costs of flagging to meet permitting requirements, as determined based on actual invoices provided to the owner, plus fifteen percent (15%) for overhead and profit.
2. The final Dollar amount paid will be based on the actual costs of railroad flagging required to construct the project. The allowance amount provided may not be paid in its entirety.

1.3 SUBMITTALS

A. Invoice(s) for Railroad Flagging paid by the Contractor to the selected flagging company

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.1 CONSTRUCTION REQUIREMENTS

- A. The Contractor shall familiarize themselves with the requirements of the Work within Union Pacific Railroad right-of-way permit, including the required administrative fee, insurance, training, notifications, and submittals. These requirements are detailed further under Section 1.5 (Work Within a Railroad Right of Way) of Section 01 41 26 – Permit Requirements, and in Appendix B – Work in UP Railroad ROW Associated Documents, of this Project Manual.
- B. The contractor shall contact one of the two 3rd party approved UP flagging companies directly to schedule flagging (www.up.com/flagging), and copy the Railroad Representative on the email.
 1. The project schedule will be dependent on flagging availability. The contractor is encouraged to reach out to coordinate a flagging schedule early, and shall immediately notify the Engineer of the proposed schedule.
 2. The Contractor shall coordinate their work schedule to complete all work within the railroad ROW within a one-week timeframe. This may require the contractor the bring the roadway up to top of class 5 grade everywhere outside of railroad ROW before commencing work within railroad ROW; then complete all removals, grading, subgrade preparation, road base installation, bituminous pavement, and aggregate shouldering within the railroad ROW concurrently.

****END OF SECTION****

SECTION 01 57 13 – TEMPORARY EROSION AND SEDIMENT CONTROL

PART 1 - GENERAL

1.1 SUMMARY

- A. This section covers the furnishing of all labor, materials, tools, equipment, and performances of all work and services necessary or incidental to stormwater management as indicated on the plans, as specified herein or as directed by the Engineer.
- B. The Contractor and Owner shall identify a person(s) knowledgeable and experienced in the application of erosion and sediment control Best Management Practices (BMPs) who will oversee the implementation of the SWPPP.
- C. Minnesota Pollution Control Agency (MPCA) - General Stormwater Permit for Construction Activity (MN R100001)
 1. The **Owner** has developed a **Stormwater Pollution Prevention Plan (SWPPP)** in accordance with Part III (Stormwater Discharge Design Requirements) of the National Pollutant Discharge Elimination System (NPDES)/State Disposal System Permit. The SWPPP is included in the project plans.
 2. As a condition of the Award, the Contractor shall be a co-permittee and assume the role of “**Operator**” under the NPDES Permit.
 3. The Owner shall initiate the permit and pay the required fee and submit the NPDES Permit using the data shown in the SWPPP located on Plan Sheets.
 4. **Permittee(s)** will ensure that their **SWPPP** meets all terms and conditions of this permit and that their activities do not render ineffective another party’s **Erosion Prevention and Sediment Control BMPs**.
 5. The Contractor shall maintain copies of the SWPPP on the project site at all times and comply with all provisions contained therein, including performing the required inspections of the erosion control devices and maintaining an Inspector’s Log for the MPCA Stormwater Permit. An Inspector’s Log form is attached at the end of this Section.
 6. The Contractor shall be responsible for keeping the on-site SWPPP documents current and updated to reflect changing conditions as construction progresses.
 7. Process Summary:
 - (a) Owner issues *Notice of Award* to Contractor.
 - (b) The Contractor shall review the SWPPP and may propose changes or a new SWPPP to the Engineer and Owner for review, comment, and Authorization. Changes may be recommended by the Contractor, Engineer, and/or Owner at any time during the construction period to address changing conditions.
 - (1) The responsibility for SWPPP amendments proposed by the Contractor lies with the Contractor. If the Engineer and/or Owner authorize the revisions with no exception taken, such action will not absolve the responsibilities of the Contractor in any way.
 - (2) During the review and modification period, on-site Erosion Control will comply with or exceed the current SWPPP. Pending review by the Engineer and/or Owner shall not alleviate the Contractor’s responsibility to install necessary BMPs to address site issues.
 - (3) Once a SWPPP is modified and/or amended, the Contractor shall distribute new copies to the Owner, the Engineer, the on-site project supervisor, and the resident project representative.
 - (c) The Contractor acknowledges the Notice of Award and provides the Owner with the contact information for the Contractor’s designated SWPPP contact to be used by the Owner for the online

Stormwater Permit Application. Required information includes; Name, Title, Business Mailing Address, Phone Number, and Email for the designated individual.

- (d) Within 7 days of acknowledgment of the Notice of Award by the Contractor, the Owner/Contractor shall submit the Online Stormwater Permit Application to the MPCA.
- (e) No earth disturbing work will begin until the permit coverage date shown on the Coverage Card issued by the MPCA.
- (f) Work will follow the sequence of major activities outlined in the SWPPP.

1.2 METHOD OF MEASUREMENT AND PAYMENT

- A. Measurement and compensation for erosion and sediment control will be paid according to the referenced specification or as modified below:
 - 1. Payment for all work associated with Erosion and Sediment Control will be at the contract unit price bid for that item and will be considered full compensation for furnishing, installing, maintaining, and utilizing stormwater best management practices and any work specified in conjunction therewith as well as removing temporary sediment control devices when no longer necessary.
- B. The furnishing and installing specific items and/or the performance of work under certain circumstances will not be individually paid in the absence of a specific bid item for the work. The costs will be included in the unit price bid for the associated erosion control and excavation items. Such items of work include but are not limited to:
 - 1. Complying with the Minnesota Pollution Control Agency (MPCA) - General Stormwater Permit for Construction Activity (MN R100001)
 - 2. Providing trained Construction SWPPP Manager and BMP Installer.
 - 3. Inspect, maintain, repair, and remove (if necessary) temporary surface stabilization practices throughout the project.
 - 4. Maintaining clean exit areas or roads from the site.
 - 5. Sweeping adjacent streets clean of excess soil.
 - 6. Cleaning storm sewers, drain tiles, and culverts that have been partially or completely obstructed by sediment that originated from the site.
 - 7. Geotextile fabric for rock installation.
 - 8. Geotextile fabric to wrap prefabricated inlet protection devices.
 - 9. Aggregate to anchor and act as a filter for prefabricated inlet protection devices.
 - 10. Aggregate associated with the construction of temporary sediment traps.
 - 11. Emergency erosion control mobilization.
 - 12. Construction, maintenance, and removal of rock construction entrance.
 - 13. Changing the type of inlet protection for different phases of construction.
- C. No additional payment will be made for Erosion Control BMPs necessary to accommodate Contractor phasing of the project.
 - 1. If the contractor's construction operations necessitate, the contractor shall provide additional temporary erosion control measures for areas of soil disturbance to meet the requirements of the Stormwater Pollution Prevention Plan and the Construction Stormwater Permit. Additional costs associated with temporary erosion control measures to meet these requirements due to the contractor's progression of work/schedule shall be the responsibility of the contractor and at no cost to the owner.

1.3 SPECIFICATION REFERENCES

- A. The following referenced Specifications will apply to this Section:
 - 1. MnDOT 1717
 - 2. MnDOT 2573
 - 3. MnDOT 2574
 - 4. MnDOT 2575
- B. Unless noted otherwise, the provisions in this section are in addition to the referenced specification.

1.4 SUBMITTALS

- A. Notice of Coverage from MPCA.
- B. Contact information and training documentation for Construction SWPPP Manager and BMP Installer.
- C. SWPPP Plan Amendments.
- D. Weekly Erosion and Sediment Control Schedule meeting the requirements of MnDOT 1717.
- E. Site Management Plans meeting the minimum requirements of MnDOT 1717. An updated Site Management Plan will be submitted as needed to reflect changes to:
 - 1. Types and/or Locations of BMPs
 - 2. Material Storage and Spill Response
 - 3. Fueling Plans
 - 4. Locations for Stockpiles, Concrete Washout, and Sanitation Facilities and
 - 5. Project Phasing
- F. PDF copies of all SWPPP Documentation including but not limited to:
 - 1. Field Copy of the SWPPP. If the Field Copy has been replaced during Construction with an updated SWPPP, a copy of both the final Field Copy and all intermediate copies will be provided.
 - 2. Inspection Logs including all supporting documents.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. For all materials not specifically discussed below no exceptions to the referenced specification are made.
- B. Bale checks shall not be used.

PART 3 - EXECUTION

3.1 GENERAL

- A. Construction and/or installation of all appropriate erosion & sediment control devices will be completed before any soil disturbing activities.
- B. Before construction, the Contractor shall observe and document the existing stormwater outfall system and discharge area. Sediment deposits not documented before the construction may be assumed to have originated from the project site and be required to be removed and disposed of by the Contractor.
- C. Before construction, the Owner, Engineer, and Contractor shall review the project to identify critical areas that could require rapid stabilization during the construction process, and develop mitigation and rapid stabilization plans to be incorporated into the SWPPP.

3.2 CONSTRUCTION REQUIREMENTS

- A. The Contractor shall provide one or more trained Construction SWPPP Manager(s). The Construction SWPPP Manager will be knowledgeable and experienced in the application of erosion prevention and sediment control BMPs and will oversee the implementation of the SWPPP, and the installation, inspection, and maintenance of the erosion prevention and sediment control BMPs. A Construction SWPPP Manager must be available for an on-site inspection within 72 hours upon request by the Owner and/or MPCA. Failure to provide a trained Construction SWPPP Manager or failure of the Contractor to rectify the situation within 24 hours of written notice if the provided Construction SWPPP Manager fails to adequately perform the duties of Construction SWPPP Manager may result in the Owner or Engineer arranging for the performance of these duties by others.
- B. If the Contractor fails to install and/or perform the appropriate erosion and sediment control practices, as determined by the Engineer, the Engineer may issue a written order to the Contractor. Failure to perform this work within 24 hours of the written notification may result in the Owner or Engineer arranging for the completion of the work by others.
- C. When the Engineer determines that the erosion and/or sediment control practices installed by the Contractor have failed, the Contractor shall correct the cause and alleviate all sediment deposition, to the fullest extent possible. If the corrective action is not taken promptly, the Engineer may issue a written order to the Contractor. Failure to perform this work within 24 hours of notification of non-compliance may result in the Owner or Engineer arranging for the completion of the work by others.
- D. **A contract deduction will be made equal to the total of all costs incurred by the Owner due to the failure of the Contractor to take corrective action within the timeframe of any written notice of non-compliance. Such costs include but are not limited to labor, materials, equipment, and administrative costs.**

3.3 TRAINING

- A. The Contractor shall ensure the individual(s) designated by the Contractor for this project to perform the Construction SWPPP Manager and Installation Supervision duties have been trained in accordance with Minnesota Pollution Control Agency (MPCA) General Stormwater Permit for Construction Activity (MN R100001) training requirements.
- B. Documentation incorporated by the Contractor into the SWPPP must include either:
 - 1. Proof of current certification through the University of Minnesota Erosion and Stormwater Management Certification Program, or
 - 2. Documentation of training satisfactory to the MN Pollution Control Agency showing training is commensurate with the individual's job duties.

3.4 TERMINATION OF COVERAGE

- A. Upon completion of all final stabilization, the Contractor shall provide the Engineer a signed MN MPCA Notice of Termination (NOT) form and a PDF copy of the SWPPP Documentation. Final payment will not be made for the project until the NOT is submitted and the SWPPP Documentation is received.
- B. The NOT form is available on the MPCA website at: <http://www.pca.state.mn.us/index.php/water/water-types-and-programs/stormwater/construction-stormwater/index.html>

****END OF SECTION****

STORMWATER POLLUTION PREVENTION PLAN - INSPECTION LOG

Project Title: Vernon Avenue Improvements, Owner: Lower Minnesota River Watershed District, Permit ID: C000_____

General Contractor: _____

The Contractor is REQUIRED to maintain this record throughout the project.

Inspectors should enter their initials, type, date, and time of the inspection in the blanks provided. After inspecting each shaded area, inspectors should check each box, and make any necessary comments regarding their findings in the blanks provided below and on the back of this sheet.

Refer to the MPCA's Compliance Guide for Erosion and Sediment Control during the inspection.

| Name of Inspector | Type of Inspection | | Date and Time of Inspection | | | | Weather | | Areas to be Inspected | | | |
|-------------------|--------------------|--------------------------|-----------------------------|-----|------|--------------|----------------------------------|--------------------------|---------------------------------------|--------------------------------|--|-------------------------|
| | Routine Weekly | 24 Hr after a rain event | Month | Day | Year | Time (AM/PM) | Temperature (degrees Fahrenheit) | Rainfall Amount (inches) | All erosion and sediment control BMPs | Temporary Sedimentation Basins | Drainage ditches and other waters of the State | Construction Site Exits |
| | | | | | | | | | | | | |
| Comments: | | | | | | | | | | | | |
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| Comments: | | | | | | | | | | | | |

(A digital version of this form is available by request to the Engineer)

SECTION 01 71 13 – MOBILIZATION

PART 1 - GENERAL

1.1 SUMMARY

- A. This section covers the mobilization of all labor, materials, tools, equipment and performances of all work and services necessary or incidental to construct the project, including but not limited to, the demobilization associated with closing the project, removing all equipment, removing excess materials, and general clean-up.

1.2 METHOD OF MEASUREMENT AND PAYMENT

- A. Mobilization shall be measured by the Lump Sum and paid in accordance with the following schedule.
 - 1. First payment at 50 percent, then based on percent completed
 - (a) 25 percent of contract earned up to 70 percent.
 - (b) 50 percent of contract earned up to 90 percent.
 - (c) 100 percent of contract earned up to 100 percent.

1.3 SPECIFICATION REFERENCES

- A. MnDOT 2021 shall apply to this Section.
- B. Unless noted otherwise, the provisions in this section are in addition to the referenced specification.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

*****END OF SECTION*****

SECTION 01 71 23 - FIELD ENGINEERING

PART 1 - GENERAL

1.1 SUMMARY

A. This section covers staking and record documents, as specified herein, and/or as specified by the Engineer.

1.2 METHOD OF MEASUREMENT AND PAYMENT

A. No direct payment is made for fulfilling the requirements of this section.

1.3 SPECIFICATION REFERENCE

A. The following referenced Specifications will apply to this Section:

1. CEAM 2600.
2. CEAM 2621.

B. Unless noted otherwise, the provisions in this section are in addition to the referenced specification.

1.4 SUBMITTALS

A. Record Documentation, if required in Section 3.2 "Record Documentation" as shown below in this Section.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.1 STAKING

A. Unless otherwise specified in the specific sections, Owner shall provide engineering surveys to establish reference points for construction as follows:

1. Storm Sewer: Staking will be furnished and set by the Engineer at 50.0-foot spacing (usually offset for construction) for the control of the underground construction herein described. Cuts to the proposed pipeline grade will be furnished by the Engineer. Manholes and catch basins will be staked with an offset and a witness with a cut to the lowest structure invert.
2. Street Grading and Top of Curb:
 - (a) A control line (usually offset from the curb line) with cuts and fills to proposed grade at 50.0-foot spacing on tangents, and 25.0-foot spacing on horizontal or vertical curves, will be furnished and set on both sides for control of the construction herein described.
 - (b) Unless otherwise stated in the applicable section of the Specifications or waived by the Engineer, the Contractor shall provide Blue Tops prior to final paving for subgrade and aggregate base construction.
3. The Engineer will provide horizontal and vertical control points on the project's datum.
4. The Engineer will provide stakes indicating the project stationing.
5. Contractor is responsible to have all areas where stakes need to be set to be clear of debris. The contractor needs to also provide a clear line of sight for staking.
6. The Contractor shall submit staking requests a minimum two (2) working days, excluding Saturdays, Sundays, and legal holidays, prior to the date requested stakes are needed on the project. Staking requests submitted after 2pm will be recorded as being received the next business day.
7. The stakes are an integral part of the project and the Contractor shall protect and preserve all such stakes and marks, and will be charged with the expense of resetting all such stakes and marks destroyed or disturbed due to the Contractor's carelessness or negligence. Stakes that are destroyed

due to vandalism, erosion or other incidents will be re-staked by the Engineer and will not be at the Contractor's expense.

8. In the event of apparent or questionable errors or inconsistencies in such stakes set for control of line and/or grade, the Contractor shall promptly notify the Engineer of such error or inconsistency and shall not proceed with the work until such stake, grade, or mark has been verified or corrected by the Engineer.
 9. The Engineer will mark the existing boundary monuments prior to construction. The Contractor is responsible for protecting the monuments during construction. If monuments are removed the Engineer will reset them post construction at the Contractor's expense.
 10. All other line and grade staking will be the responsibility of the Contractor. The Contractor shall furnish sufficient equipment and personnel for determination of plan grades, cross sections, course thicknesses, etc. The survey cost of establishing stakes requested by the Contractor for the convenience of the Contractor, beyond those cited as basic project control, will be charged to the Contractor or withheld from the amounts due to the Contractor.
- B. Unless otherwise stated in the applicable section of the Specifications or waived by the Engineer, the Contractor shall provide Blue Tops prior to final paving for subgrade and aggregate base construction.

******END OF SECTION******

SECTION 01 77 00 - CLOSEOUT PROCEDURES

PART 1 - GENERAL

1.1 FINAL INSPECTION

- A. After the cleaning up of the work, premises, and all other areas and structures connected with the performance of the contract, the work as a whole, will be examined by the Engineer and Owner; and, any workmanship or materials found which do not meet the specified requirements will be identified and included on a punch list given to the Contractor.
- B. The Contractor shall, at its own expense, promptly remove, replace, repair, or otherwise correct the deficiencies with good and satisfactory workmanship and material to the satisfaction of the Owner and Engineer.
- C. In the event that the Contractor does not satisfactorily remove, replace, repair, or otherwise correct the deficiencies within thirty calendar days after receipt of the punch list, the Owner reserves the right to employ the services of other contractors and/or service organizations to conduct the necessary work and deduct any and all associated costs from final payment to the Contractor. The entry of such other agents on the project to perform this work will not relieve the Contractor from any of its warranty, maintenance or start-up obligations.

1.2 PROJECT ACCEPTANCE

- A. The project will be accepted after the final examination has been conducted and all settlement, defects, damages, etc., discovered during the previous examination have been remedied.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

**** END OF SECTION ****

TECHNICAL SPECIFICATIONS

for

Vernon Avenue Improvements

OT1.129866

Lower Minnesota River Watershed District

Savage, MN

SECTION 02 41 13 - SELECTIVE SITE DEMOLITION

PART 1 - GENERAL

1.1 SUMMARY

- A. This section covers the furnishing of all labor, materials, tools, equipment, and performances of all work and services necessary or incidental to the removal of pavement and miscellaneous structures as indicated on the drawings or as specified herein.

1.2 METHOD OF MEASUREMENT AND PAYMENT

- A. Measurement and compensation for the following items will be paid according to the referenced specification or as modified below:
1. The unit price bid for removing pavement and miscellaneous structures will include all costs of labor, materials, equipment, and ultimate disposal required to complete the work, as specified.
- B. The furnishing and installing of specific items and/or the performance of work under certain circumstances will not be individually paid in the absence of a specific bid item for the work. The costs will be included in the unit price bid for the associated removal and excavation items. Such items of work include but are not limited to:
1. Saw cutting - bituminous and/or concrete, driveways, sidewalks, pavements, curb & gutter, and other impervious surfaces.
 2. Removing storing and reinstalling mailboxes, street/traffic signs, or similar structures which must be moved to construct the project.
 3. Off-site disposal of excess excavated material and debris.
 4. Removal and off-site disposal of bituminous or concrete, unless designated for salvaging.
 - (a) The bid item for Remove Bituminous Pavement covers removal of all existing bituminous pavement and existing deteriorated bituminous pavement/gravel surface, as indicated on the plans.
 5. Removing, salvaging, and storing, or disposing of manhole and catch basin castings.
 6. Loading, hauling, stockpiling, and placing as directed (i.e., leveling) designated salvage items to a location directed by the Owner.
 7. Fees and permits for the disposal of materials.
 8. Removal and disposal of existing sanitary sewer pipe, storm sewer pipe, watermain, and service pipes.
 9. Bulkheading the ends of existing pipes designated by the Engineer to be abandoned in place.
 10. Protection from damage of structures or other surface improvements that are not to be removed, and subsequent repair and/or replacement if damaged by Contractor operations.
- C. Re-sawing bituminous and/or concrete edges as needed to provide straight and vertical edges just prior to constructing new pavement.

1.3 SPECIFICATION REFERENCES

- A. The following referenced Specifications will apply to this Section:
1. MnDOT 2104.
- B. Unless noted otherwise, the provisions in this section are in addition to the referenced specification.

1.4 SUBMITTALS

- A. No submittals for this section.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. No exception to this Section is made.

PART 3 - EXECUTION

3.1 CONSTRUCTION REQUIREMENTS

- A. Remove existing bituminous, curb and gutter, walks, drives, steps, and other specified items where shown on the plans and/or required for the construction of the project.
- B. Saw cut bituminous and concrete surfaces before excavation, to produce a clean-cut breakage joint.
- C. Dispose of all concrete and bituminous removal items, rubbish, and debris outside of the construction zone. It will be the Contractor's responsibility to secure all required permits and pay all fees associated with the disposal of the material and secure the disposal site.
- D. Remove existing mailboxes, street/traffic signs, and similar structures that must be removed to construct the project. Restore these facilities to the original location or a location designated by the Owner when work has progressed past the location of the structure.
- E. The Contractor shall take full responsibility to protect structures or other surface improvements from damage that are not to be removed. If damage to these facilities occurs due to the construction of the project, the Contractor shall replace or repair them.
- F. Saw cut bituminous and concrete surfaces before excavation and just prior to final construction as needed to produce a clean-cut breakage joint.

******END OF SECTION******

SECTION 31 11 00 - CLEARING AND GRUBBING

PART 1 - GENERAL

1.1 SUMMARY

- A. This section covers the furnishing of all labor, materials, tools, equipment, and performances of all work and services necessary or incidental to clearing and grubbing trees, stumps, and brush as indicated on the drawings or as specified herein.

1.2 METHOD OF MEASUREMENT AND PAYMENT

- A. Measurement and compensation for the following items will be paid according to the referenced specification or as modified below:
 - 1. No exception to the referenced specification is made.
- B. The furnishing and installing of specific items and/or the performance of work under certain circumstances will not be individually paid in the absence of a specific bid item for the work. The costs will be included in the unit price bid for clearing and grubbing. Such items of work include but are not limited to:
 - 1. Permits and fees for the disposal of materials.
 - 2. Protecting existing improvements from damage.

1.3 SPECIFICATION REFERENCES

- A. MnDOT 2101 will apply to this Section.
- B. Unless noted otherwise, the provisions in this section are in addition to the referenced specification.

1.4 SUBMITTALS

- A. No submittals for this section.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. No exception to this section is made.

PART 3 - EXECUTION

3.1 CONSTRUCTION REQUIREMENTS

- A. Before tree clearing operations, the Contractor shall inspect the tree to be removed for the presence of eagles nests.
 - 1. If absent, tree trimming will be completed without time restrictions.
 - 2. If present, the Contractor shall document with photos to the best of their ability and contact the Engineer before initiating tree clearing. Tree removal may not proceed until authorized in writing by the Engineer.
- B. Tree clearing seasonal restrictions do not apply to grubbing.
- C. Before tree trimming to remove overhanging branches, the Contractor shall inspect the branches to be trimmed for occupied bird nests and/or hollows that may be used by birds or bats.
 - 1. If absent, tree trimming will be completed without time restrictions.

2. If present, the Contractor shall document with photos to the best of their ability and contact the Engineer before initiating tree trimming. Tree trimming may not proceed until authorized in writing by the Engineer.
- D. All trees, stumps, brush, seed, grass, roots, or other undesirable material within the construction limits will be disposed of by the Contractor.
- E. Disposal methods will be approved by the Engineer and shall meet all Local, State, and Federal regulations.
- F. Burning or burial will not be allowed within city limits.

******END OF SECTION******

31 20 00 EXCAVATION AND EMBANKMENT

PART 1 - GENERAL

1.1 SUMMARY

- A. This section covers the furnishing of all labor, materials, tools, equipment and performance of all work and services necessary or incidental to the excavation and embankment for roadways and pavements as indicated on the drawings or as specified herein.

1.2 METHOD OF MEASUREMENT AND PAYMENT

- A. Measurement and compensation for the following items shall be paid according to the referenced specification or as modified below:
1. Common Excavation:
 - (a) Measurement and payment for Excavation - Common shall be based upon the CUBIC YARD, PLAN QUANTITY - CY(P).
 - (1) Payment for Plan Quantity (P) Items: Items designated as Plan Quantity (P) shall be measured and paid for based on the quantity listed in the plans and no field measurement shall be made. The Engineer will only adjust the quantities on Plan Quantity (P) designated Contract items when the Engineer authorizes changes to the dimensions of that work (in which case only the affected portion will be re-determined) or when the Engineer determines that the quantity designated as a Plan Quantity (P) is incorrect.
 - (b) Common excavation is computed to the face of any retaining walls. Excavation required for construction of the wall shall be incidental to the unit price bid for retaining wall.
 2. Subgrade Excavation:
 - (a) All excavation directed by the Engineer below the common excavation zone or limits indicated in the typical sections or cross sections in the plans shall be considered Subgrade Excavation, except where conducted for utility construction. This is considered the existing soils beneath the select granular embankment section.
 - (b) Measurement and payment for Excavation - Subgrade will be by the CUBIC YARD, EXCAVATED VOLUME - CY (EV) based on the dimensions of the excavated area.
 - (c) The quantities for Subgrade Excavation is strictly an estimate and may be increased or decreased by any amount with no adjustment in unit price according to the conditions revealed.
 3. Backfill for Subgrade Excavations:
 - (a) No direct compensation will be made for backfilling subcut areas with suitable material from the excavation.
 - (b) Measurement and payment for Stabilizing Aggregate will be by the CUBIC YARD, COMPACTED VOLUME – CY (CV), and will be compensation for the installation of stabilizing aggregate used to backfill subgrade excavations, as directed by the Engineer.
 - (c) The quantities for materials used to backfill subgrade excavations are strictly estimates and may be increased or decreased by any amount with no adjustment in unit price according to the conditions revealed. The Engineer in the field will determine the material to be used as backfill for subgrade excavations.
 4. Minor Grading:
 - (a) Grading up to each storm sewer culvert apron and around the installed riprap to provide proper drainage into and away from each culvert apron. The work includes the clearing or accumulated

debris and sediment to allow for the completion of the minor grading. Grading shall be completed to generally match the existing drainage ditch and provide for proper drainage.

- (b) Measurement and payment for Minor Grading will be by the LINEAL FOOT – LF along the centerline of the drainage ditch from the culvert apron invert to the proposed grading limits, and will be compensation for the clearing of accumulated debris/sediment and re-grading to provide proper drainage, as directed by the Engineer.
- (c) Minor grading shall be completed with the use of a skid steer, or alternative method/equipment approved by the Engineer.

5. Topsoil Borrow:

- (a) No direct compensation will be made for salvaging, stockpiling and replacing topsoil salvaged from within the construction limits.
- (b) Measurement and payment for furnishing and installing topsoil borrow shall be based upon the CUBIC YARD, LOOSE VOLUME - CY (LV).
- (c) The quantities for topsoil borrow are strictly estimates and may be increased or decreased by any amount with no adjustment in unit price according to the extent of existing topsoil salvaged and other conditions revealed.

B. The furnishing and installing of specific items and/or the performance of work under certain circumstances shall not be individually paid. The costs shall be included in the unit price bid for the associated excavation items. Such items of work include but are not limited to:

1. Disposal of bituminous/aggregate reclamation material that is determined by the Engineer to be unsuitable for re-use.
2. Salvaging, separating, separately stockpiling and re-spreading topsoil material in turf areas to the depths specified or indicated on the plans.
3. Salvaging and separately stockpiling suitable aggregate base material, as determined by the Engineer.
4. Separating, salvaging, stockpiling and installing subgrade excavation backfill, as determined by the Engineer.
5. Earthwork balancing including adjustments for shrinkage loss, and excess materials resulting from the additional volume created from pipe bedding, utility pipe, and/or underground structures shall be included in the unit price bid for common excavation.
6. Protecting existing improvements and previously accepted in-process improvements from damage.
7. Protecting infiltration areas.
8. The avoidance of wetlands.
9. Subcutting the existing topsoil prior to placing embankment in all roadway, patio and trail locations.
10. Subgrade excavation, furnishing stabilizing aggregate, geotextile fabric installation, compaction, regrading and/or other efforts necessary to repair the subgrade for failing to protect the integrity of the subgrade after it has been accepted (test rolled).
11. Removal and disposal of existing mulch, shrubs, plantings, stones/boulders, landscape rock, plastic landscape edging, paver/block landscape edging, and other minor landscape items designated for removal.

1.3 SPECIFICATION REFERENCES

- A. MnDOT 2105 shall apply to excavation and embankment, except as modified herein.
- B. MnDOT 2106 shall apply to excavation and embankment, except as modified herein.

- C. MnDOT 2574 shall apply to excavation and embankment, except as modified herein.
- D. Unless noted otherwise, the provisions in this section are in addition to the referenced specification.

1.4 SUBMITTALS

- A. Gradation testing shall be taken from material in stock at locations approved by the Engineer. All sampling methods shall be approved by the Engineer.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. All excess excavated material shall become the property of the Contractor and shall be removed from the site and disposed of at a site secured by the Contractor.
- B. Frozen material shall be considered unsuitable material unless otherwise authorized in writing by the Engineer.
- C. Excavated material unsuitable for embankment and backfill construction shall become the property of the Contractor and shall be removed from the site and disposed of at a site secured by the Contractor.
- D. Stabilizing aggregates for use in backfilling subgrade excavations shall be material generally produced and referred to as "3-inch dust free aggregate" or other coarse aggregate found to be in general compliance by the Engineer.

PART 3 - EXECUTION

3.1 CONSTRUCTION REQUIREMENTS

- A. At the end of each day the Contractor shall eliminate surface indentations, including those caused by sheeps foot rollers, tractor tires and tracked equipment, and roll the surface with a steel wheel or rubber tired roller except in those areas designated to be protected from compaction.
- B. Subgrade excavation shall be performed, as directed by the Engineer, for the removal of any unstable soils that may be encountered. Such excavation shall be backfilled with suitable excess common excavation material or stabilizing aggregate as directed by the Engineer. If the Contractor proceeds without approval from the Engineer or Owner, all work and material to restore the roadbed to the proper grade shall be at the Contractor's expense.
- C. The Contractor shall salvage and stockpile all topsoil removed during the course of the construction. This topsoil shall be used where required for turf establishment as directed by the Engineer.
- D. Sufficient excavated material shall be utilized by the Contractor to replace loss volume due to soil shrinkage from trench excavation that may occur through the course of construction. The Contractor shall make his own determination of the amount of shrinkage that will occur.
- E. All embankment shall be compacted using the Ordinary Compaction method.

3.2 SOURCE QUALITY CONTROL

- A. The Owner may arrange for having the following testing performed:
 - 1. One gradation test per each 500 tons or 275 cubic yards of select granular embankment.
 - 2. One gradation test for stabilizing aggregate.
- B. Samples for testing shall be taken from material in stock at locations approved by the Engineer. All sampling methods shall conform to MnDOT standards.

****END OF SECTION****

SECTION 31 23 13 - SUBGRADE PREPARATION

PART 1 - GENERAL

1.1 SUMMARY

- A. This section covers the furnishing of all labor, materials, tools, equipment, and performance of all work and services necessary or incidental to the subgrade preparation as indicated on the drawings or as specified herein.

1.2 METHOD OF MEASUREMENT AND PAYMENT

- A. Measurement and compensation for the following items will be paid according to the referenced specification or as modified below:
 - 1. No direct payment will be made for subgrade preparation. Costs will be included in the unit prices bid for the various excavation items.
- B. The furnishing and installing of specific items and/or the performance of work under certain circumstances will not be individually paid in the absence of a specific bid item for the work. The costs will be included in the unit price bid for the various excavation items. Such items of work include but are not limited to:
 - 1. Drying and adding water to the subgrade.
 - 2. Subgrade excavation, furnishing stabilizing aggregate, geotextile fabric installation, compaction, regrading, and/or other efforts necessary to repair the subgrade after satisfying the rolling test and failing to protect the integrity of the subgrade.
 - 3. Test rolling the compacted subgrade.

1.3 SPECIFICATION REFERENCES

- A. MnDOT 2112 will apply to this Section.
- B. Unless noted otherwise, the provisions in this section are in addition to the referenced specification.

1.4 SUBMITTALS

- A. No submittals for this section.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. No exception to the referenced specification is made.

PART 3 - EXECUTION

3.1 CONSTRUCTION REQUIREMENTS

- A. At the end of each day, and before the placement of aggregate base, the Contractor shall eliminate surface indentations, including those caused by sheeps foot rollers and tractor cletes, and roll the surface with a steel wheel or rubber-tired roller.
- B. The Contractor shall disc, scarify, shape and compact the street subgrade or existing base, adding water or drying as may be necessary to give uniform and desired density.
- C. If the subgrade is unstable and the instability is due to excessive moisture, the subgrade will be scarified and dried over a reasonable period. When the material has reached acceptable moisture limits, the material will be returned to the roadbed and compacted into place to the proper elevation. The roadbed will once again be test rolled. If the material continues to be unstable, the Engineer may authorize the removal of the undesirable material as subgrade excavation.

- D. Once the subgrade has been test rolled and accepted by the Engineer, no traffic or construction equipment will be permitted to operate directly on the subgrade without the prior approval of the Engineer. All equipment will be restricted to operating only in areas where the aggregate base has been installed to its full design depth. If inclement weather occurs after a test roll, and before placement of the aggregate base or first course of bituminous, the test roll will be voided and a new test roll will be performed.
- E. The subgrade will be compacted in accordance with the Quality Compaction Method.

3.2

FIELD QUALITY CONTROL

- A. "Blue Top" stakes will be provided by the Contractor at 50 foot intervals to confirm that the subgrade is constructed to the required grades and elevations. Methods other than "Blue Top" staking may be allowed if approved by the Engineer.
- B. The compacted subgrade will be test rolled using a fully loaded aggregate truck (tandem) in a pattern approved by the Engineer. The subgrade stability will be considered adequate when the surface shows less than 1.0 inch of yielding or rutting after one pass, or as otherwise approved by the Engineer.

******END OF SECTION******

SECTION 31 23 19 - DEWATERING

PART 1 - GENERAL

1.1 SUMMARY

- A. This section covers the furnishing of all labor, materials, tools, equipment, and performances of all work and services necessary or incidental to the dewatering of trenches as necessary to construct the elements shown on the drawings or as specified herein, including but not limited to culvert removal, riprap removal, culvert installation, minor ditch grading, and riprap installation.
- B. This item will be considered exempt from the requirements of Supplementary Condition 13.03.

1.2 METHOD OF MEASUREMENT AND PAYMENT

- A. Payment will be at the Lump Sum Contract price bid. Payment will be compensated in full for all costs relative thereto, including, but not limited to permit approval, permit fees, investigation, design, installation, operation, maintenance repair, replacement, piping, monitoring, temporary bulkheads, temporary cofferdams, temporary sheet pile installation, temporary piping, temporary pumping, settling basins and other permanent and temporary construction features.
- B. The furnishing and installing of specific items and/or the performance of work under certain circumstances will not be individually paid in the absence of a specific bid item for the work. The costs will be included in the unit price bid for the dewatering items, as indicated. Such items of work include but are not limited to:
 - 1. Interference of other underground structures and utilities.
 - 2. Protection of existing improvements from damage.
 - 3. Removal of temporary cofferdams, etc.

1.3 SPECIFICATION REFERENCES

- A. MnDOT 2106 will apply to this Section.
- B. MnDOT 2451 will apply to this Section.
- C. Unless noted otherwise, the provisions in this section are in addition to the referenced specification.

1.4 SUBMITTALS

- A. Dewatering Plan.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. No exception to this section is made.

PART 3 - EXECUTION

3.1 CONSTRUCTION REQUIREMENTS

- A. The Contractor shall furnish and install all necessary discharge piping and obtain all permits, easements, rights-of-way, etc. to convey and discharge the water at a sufficient distance from the project area to eliminate recharge of the groundwater at the project site.
- B. Water from dewatering operations will not be discharged where it will pond or cause damage to cropland or personal property due to the presence of standing or flowing water.
- C. Unless otherwise provided in the contract documents; the Contractor shall be responsible for obtaining all necessary permits required for dewatering prior to the beginning of dewatering. The Contractor shall

provide a plan for the discharge showing the discharge location, energy dissipation, and water quality treatment to the Engineer for approval before beginning discharge. The discharge rate, location, and water quality will meet all local, State, and Federal requirements.

- D. Existing and/or proposed sanitary system(s) shall not be used as an outlet for the dewatering operations.
- E. Method of dewatering may be chosen by the Contractor; however, no silt or dirty water can be pumped to adjacent ditches, drainageways, ponds, lakes, or storm structures. The chosen method shall be described in a dewatering plan submitted to and reviewed by the Owner prior to starting dewatering activities.

******END OF SECTION******

SECTION 31 37 00 - RIPRAP

PART 1 - GENERAL

1.1 SUMMARY

- A. This section covers the furnishing of all labor, materials, tools, equipment, and performances of all work and services necessary or incidental to construct the riprap and geotextile fabric as indicated on the drawings or as specified herein.

1.2 METHODS OF MEASUREMENT AND PAYMENT

- A. Measurement and compensation for the following items will be paid according to the referenced specification or as modified below:
 - 1. Payment for riprap will be by the Ton based on actual weigh tickets. The amount bid will be compensation in full for all costs of excavating, removing, and disposing of, if necessary, all materials encountered in the course of riprap placement.
- B. The furnishing and installing of specific items and/or the performance of work under certain circumstances will not be individually paid in the absence of a specific bid item for the work. The costs will be included in the unit price bid for the associated rip-rap items. Such items of work include but are not limited to:
 - 1. Granular filter material and/or geotextile fabric.
 - 2. Excavation is required to place rip-rap.

1.3 SPECIFICATION REFERENCES

- A. The following referenced Specifications will apply to this Section:
 - 1. MnDOT 2511.
 - 2. MnDOT 3601.
 - 3. MnDOT 3733.
- B. Unless noted otherwise, the provisions in this section are in addition to the referenced specification.

1.4 SUBMITTALS

- A. No submittals for this section.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. The material to be used will be the class riprap and fine filter aggregate shown on the plans as specified in MnDOT 3601.
- B. The geotextile fabric shall meet the requirements of MnDOT 3733, Type 4, unless otherwise shown on the plans.
- C. The Contractor may choose the type of filter material, except as restricted for geotextile filters, unless the type is specified on the plans.

PART 3 - EXECUTION

3.1 CONSTRUCTION REQUIREMENTS

- A. No exception to the referenced specification is made.

****END OF SECTION****

SECTION 32 11 23 - AGGREGATE BASE COURSES

PART 1 - GENERAL

1.1 SUMMARY

- A. This section covers the furnishing of all labor, materials, tools, equipment and performances of all work and services necessary or incidental to construct the aggregate base course as indicated on the drawings or as specified herein.

1.2 METHODS OF MEASUREMENT AND PAYMENT

- A. Measurement and compensation for the following items shall be paid according to the referenced specification or as modified below:
 - 1. No exception to the referenced specification is made.
- B. The furnishing and installing of specific items and/or the performance of work under certain circumstances shall not be individually paid in the absence of a specific bid item for the work. The costs shall be included in the unit price bid for the associated aggregate items. Such items of work include but are not limited to:
 - 1. Protecting existing improvements and previously accepted in-process improvements from damage.
 - 2. Subgrade excavation, furnishing stabilizing aggregate, geotextile fabric installation, compaction, regrading and/or other efforts necessary to repair the subgrade after satisfying the rolling test and failing to protect the integrity of the subgrade.
 - 3. The cost of all labor, equipment and materials necessary for meeting the testing requirements of field quality control, if required, include in price bid for Aggregate Base.
 - 4. Furnishing and installing blue tops for gravel surface.
 - 5. Test rolling of the compacted aggregate base using a fully loaded aggregate truck (tandem).

1.3 SPECIFICATION REFERENCES

- A. MnDOT 2211 shall apply to the construction of aggregate base, except as modified herein.
- B. Unless noted otherwise, the provisions in this section are in addition to the referenced specification.

1.4 SUBMITTALS

- A. Provide the following test results for each source of aggregate:
 - 1. Two gradation tests
 - 2. One percent crushing test (only if requested by Engineer).
 - 3. One aggregate quality test (only if requested by Engineer).

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Aggregate base shall be 100 percent crushed quarry rock (limestone) Class 5, as specified in MnDOT 3138.2B.
 - 1. When the project calls for 100 percent crushed aggregate base, the material to be used shall conform to the Specifications for Aggregate Base Class 5, modified so that the material consists of 100 percent crushed rock. The gradation shall also be modified so that the percent passing the No. 200 sieve shall be 5 to 10 percent.

PART 3 - EXECUTION

3.1 CONSTRUCTION REQUIREMENTS

- A. At the end of each day the Contractor shall eliminate surface indentations, including those caused by sheeps foot rollers and tractor cletes, and roll the surface with a steel wheel or rubber-tired roller.
- B. The depth and class of aggregate base to be constructed shall be as shown on the plans. Aggregate base construction shall take place only after the street subgrade condition and grade has been examined by the Engineer.
- C. Pneumatic rollers are required for compaction on all aggregate base courses with recycled bituminous unless otherwise approved by the Engineer.
- D. Aggregate base shall be compacted to the requirements specified using the 2211.3D.2.a "Specified Density Method" (100% Standard Proctor Density) or 2211.3D.2.c "Penetration Index Method" (Table 2211.3-3) as directed by the Engineer.

3.2 SOURCE QUALITY CONTROL

- A. The Owner may arrange for having the following testing performed:
 - 1. One gradation test for each 500 tons or 275 cubic yards (CV) of each class of aggregate base.
 - 2. One percent crushing test.
 - 3. One aggregate quality test.
- B. Samples for testing shall be taken from material in stock at locations approved by the Engineer. All sampling methods shall be approved by the Engineer.
- C. Should any of the specified tests fail, the Contractor may arrange and pay for additional tests as may be necessary to satisfy the Engineer that the requirements have been met.

3.3 FIELD QUALITY CONTROL

- A. "Blue top" stakes shall be provided by the Contractor at 50.0-foot intervals to confirm that the base is constructed to the required grades and elevations. Methods other than "blue top" staking may be allowed, if approved by the Engineer.
- B. The Owner may arrange for having the following testing performed:
 - 1. One density test per 2000 SY of each class of aggregate base, minimum of 3 tests per project.
 - 2. One moisture test per project (not required for reclaimed aggregate base material).
- C. Any required Contractor testing shall be performed by an independent testing laboratory approved by the Engineer.
- D. The Contractor shall cooperate fully with the individuals performing the tests.
- E. Samples for testing shall be taken from material in place, in the roadway at locations approved by the Engineer. All sampling methods shall be approved by the Engineer.
- F. Should any of the specified tests fail, the Contractor may arrange and pay for additional tests as may be necessary to satisfy the Engineer that the requirements have been met.

******END OF SECTION******

SECTION 32 12 00 - FLEXIBLE PAVING

PART 1 - GENERAL

1.1 SUMMARY

- A. This section covers the furnishing of all labor, materials, tools, equipment and performances of all work and services necessary or incidental to the construction of plant-mixed bituminous surfacing utilizing the MnDOT Gyratory Design Specification (2360) as indicated on the plans or as specified herein.
- B. This is a Certified Plant Project. The supplier shall have sufficient testing facilities and qualified personnel including Certified Technicians. All required plant and field tests shall be performed in a timely manner and with a good quality control program.

1.2 METHOD OF MEASUREMENT AND PAYMENT

- A. Measurement and compensation for the following items shall be paid according to the referenced specification or as modified below:
 - 1. Payment for the accepted quantity of asphalt emulsion and cutback shall be at the Contract price per gallon for undiluted asphalt emulsion and neat cutback. Should the Contract fail to include a Contract Item covering payment for the bituminous material used for tack coat, all costs of furnishing and applying bituminous tack coat material will be included in the compensation provided for the bituminous mixture, with no measurement made of the bituminous material used and with no direct compensation being made therefore.
 - 2. Payment shall be at the unit price bid per TON of bituminous surfacing for the respective bituminous courses. The amount bid shall include all material and work required to mix and place the bituminous course specified.
 - 3. The Contractor shall allow one thousand dollars (\$1,000) in the bid to cover the expense of taking ten (10) random, 3.0-inch diameter core samples and patching the bore holes. Should any or all of the core samples be deleted, the proportionate core expense shall be deducted from the final project cost. Additional core samples required by the Engineer shall be compensated at thirty dollars (\$30) per core.
- B. No payment adjustment shall be made for density.
- C. This project is not subject to the provisions of MnDOT 2399.
- D. The furnishing and installing of specific items and/or the performance of work under certain circumstances shall not be individually paid in the absence of a specific bid item for the work. The costs shall be included in the unit price bid for the associated bituminous paving items. Such items of work include but are not limited to:
 - 1. Equipment and materials necessary for meeting the testing requirements of Source Quality Control for the bituminous tack coat, if required, include in price bid for bituminous tack coat.
 - 2. The cost of all labor, equipment and materials necessary to comply with plant and field testing requirements of MnDOT 02360, include in price bid for Plant-Mixed Bituminous Surfacing.
 - 3. The cost of all labor, equipment and materials necessary for constructing clean, vertical, solid edge at the adjacent asphalt surface for both non-wear and wear courses, include in the price bid for Plant-Mixed Bituminous surfacing.
 - 4. Sawcutting the bituminous edges and removing of damaged bituminous just prior to the construction of the next lift of bituminous course.

1.3 SPECIFICATION REFERENCE

- A. MnDOT 2360 shall apply, except as modified herein.

- B. MnDOT 2357 shall apply, except as modified herein.
- C. MnDOT 3139 shall apply, except as modified herein.
- D. Unless noted otherwise, the provisions in this Section are in addition to the referenced specification.

1.4 SUBMITTALS

- A. Bituminous Mix Design (wear and non-wear).

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Bituminous Tack Coat:

1. The bituminous material for tack coat will be limited to one of the following kinds of emulsified asphalt. However, the Engineer may authorize the use of medium cure cutback asphalt (MC-250) during the early and late construction season when it is anticipated the air temperature may drop below 32 degrees Fahrenheit. Cutback asphalt shall be used only when approved by the Engineer.

(a) Emulsified Asphalt

- (1) Anionic SS-1, SS-1h
- (2) Cationic CSS-1, CSS-1h

(b) Cutback Asphalt:

- (1) Medium Cure Liquid Asphalt MC-250

2. Only Certified Sources are allowed for use. MnDOT’s Certified Source List is located at the following link: <http://www.dot.state.mn.us/products/index.html>.

- B. Bituminous material and aggregate shall be as shown on the typical sections in the plans.

PART 3 - EXECUTION

3.1 CONSTRUCTION REQUIREMENTS

- A. Bituminous Tack Coat

1. The tack coat shall not be applied when the road surface or weather conditions are unsuitable as determined by the Engineer.
2. At the time of applying bituminous tack coat material, the road surface shall be dry and clean and all necessary repairs or reconditioning work shall have been completed as provided for in the Contract and approved by the Engineer.
3. Unless otherwise indicated in the Plans or provisions, the bituminous tack coat material shall be applied within the application rates shown in the table below as based on pavement type or condition and type of bituminous material. The Engineer shall approve the time and rate of application. Only a MnDOT certified asphalt emulsion supplier is allowed to dilute the emulsion. When diluted, the supplier shall provide asphalt emulsion diluted 1-part emulsion to 1-part water. Dilution of asphalt emulsion in the field is not allowed. The Engineer may waive the tack coat requirement when multiple lifts are paved on the same day.

| Pavement Type or Condition | Application Rate - gallons/sy | | |
|----------------------------|---|--|-----------------------------------|
| | Undiluted Emulsion SS-1, SS-1H, CSS-1, CSS-1H | Diluted Emulsion (1 part Emulsion to 1 part water) ¹ SS-1, SS-1H, CSS-1, CSS-1H | MC Cutback ² MC-250 |
| | | | |

| | | | |
|--|-------------|-------------|-------------|
| New HMA | 0.03 – 0.05 | 0.06 – 0.10 | 0.03 – 0.05 |
| Aged HMA ³ or Un-milled PCC | 0.05 – 0.08 | 0.10 – 0.15 | 0.05 – 0.08 |
| Milled HMA or Milled PCC | 0.07 – 0.10 | 0.14 – 0.20 | 0.07 – 0.10 |

¹As provided by the asphalt emulsion supplier

²When approved by the Engineer

³Older than 1 year

4. The temperature of the bituminous material at the time of application shall be approved by the Engineer, within the limits specified following:
 - (a) SS-1, SS-1H, CSS-1, CSS-1H70 to 160 Degrees Fahrenheit
 - (b) MC-250165 to 220 Degrees Fahrenheit
- B. The Contractor is required to use the self-propelled pneumatic tire roller as an intermediate roller on the wearing courses.
- C. Cut the adjacent asphalt surface prior to construction of the bituminous surface course to obtain a clean, vertical, solid edge.
- D. Compaction of all bituminous mixtures shall be by the Maximum Density Method.
 1. Longitudinal Joint Cores:
 - (a) The first paragraph of 2360.3.D.1 of the referenced MnDOT 2360 (Plant Mixed Asphalt Pavement) Specification is hereby deleted and replaced with the following:

D.1 Maximum Density

Compact the pavement to at least the minimum required maximum density values in accordance with table 2360 19, “required minimum lot density (mat)”.
 - (b) Table 2360-20 Longitudinal Joint Density Requirement of the referenced MnDOT 2360 (Plant Mixed Asphalt Pavement) Specification is hereby deleted.
 - (c) 2360.3.D.1.h Mat Density Cores of the referenced MnDOT 2360 (Plant Mixed Asphalt Pavement) Specification is hereby deleted and replaced with the following:

D.1.h Mat Density Cores

Obtain four cores in each lot. Take two cores from random locations as directed by the Engineer. Take the third and fourth cores, the companion cores, within 1.0-foot longitudinally from the first two cores. Submit the companion cores to the Engineer immediately after coring and sawing. If the random core location falls on an unsupported joint, at the time of compaction, (the edge of the mat being placed does not butt up against another mat, pavement surface, etc.) cut the core with the outer edge of the core barrel 1.0-foot away (laterally) from the edge of the top of the mat (joint). If the random core location falls on a confined joint (edge of the mat being placed butts up against another mat, pavement surface, curb and gutter, or fixed face), cut with the outer edge of the core barrel 6.0-inches ± 0.5-inch from the edge of the top of the mat (ex. center of 4.0-inch core barrel 8.0-inches ± 0.5-inches] from the edge of the top of the mat). Cores will not be taken within 1.0-foot of any unsupported edge. The Contractor is responsible for maintaining traffic, coring, patching the core holes, and sawing the cores to the paved lift thickness before density testing.

The Engineer may require additional density lots to isolate areas affected by equipment malfunction, heavy rain, or other factors affecting normal compaction operations.
 - (d) 2360.3.D.1.j Companion Core Testing of the referenced MnDOT 2360 (Plant Mixed Asphalt Pavement) Specification is hereby deleted and replaced with the following:

- (1) The Engineer will select at least one of the two companion cores per lot to test for verification
- (e) 2360.3.D.1.n Longitudinal Joint Density of the referenced MnDOT 2360 (Plant Mixed Asphalt Pavement) Specification is hereby deleted.
- (f) 2360.3.D.1.p Shoulders of the referenced MnDOT 2360 (Plant Mixed Asphalt Pavement) Specification is hereby deleted.
- (g) Table 2360-24 Payment Schedule for Longitudinal Joint Density (SP Wear and SP Shoulders, 4 percent Void) of the referenced MnDOT 2360 (Plant Mixed Asphalt Pavement) Specification is hereby deleted.
- (h) Table 2360-25 Payment Schedule for Longitudinal Joint Density (SP Non-wear and SP Shoulders, 3 percent Void) of the referenced MnDOT 2360 (Plant Mixed Asphalt Pavement) Specification is hereby deleted.
- (i) 2360.3.D.1.r Pay Factor Determination of the referenced MnDOT 2360 (Plant Mixed Asphalt Pavement) Specification is hereby deleted.

3.2 SOURCE QUALITY CONTROL

- A. The bituminous mix shall be designed using Contractor Trial Mix Designs. A current MnDOT mix design may be accepted provided it represents the aggregate source and bituminous plant being used for the project, and is approved by the Engineer. No bituminous mixture shall be placed without an approved mix design.
- B. Testing of the material bituminous tack coat may be required, if determined by the Engineer, that the material appears suspect.
- C. The Contractor shall cooperate fully with the individuals performing the tests.

3.3 FIELD QUALITY CONTROL

- A. If required by the Engineer, cores for mat density and for lift thickness verification shall be taken, except that for daily production less than 300 tons, the Engineer may require that two cores are taken (one for Contractor testing and one companion core). Sample locations shall be designated by the Engineer and made with a drilling device that produces clean sharp, vertical edges.
- B. Lift Thickness Tolerances:
 - 1. If any cores indicate lift thicknesses outside of the specified tolerances, the Contractor may, at its own cost and expense, take additional core samples to further define the extent of the deficiency.
 - 2. The Engineer shall calculate deficient pavement areas using the locations and thickness results of all core samples and prorating the thickness profile.
 - 3. At the discretion of the Engineer as an alternative to removal and replacement, the Engineer may allow a \$1.00 deduction per square yard will be made for each 1/8-inch deficiency of thickness beyond the specified tolerances.
 - 4. Reduction in payment for bituminous courses constructed to more than the maximum permissible thickness, except that the thickness tolerances specified herein apply.
- C. Testing:
 - 1. For projects with 2000 tons or less of a particular mix type, delete Tables 2360-10 and 2360-11 of the referenced MnDOT 2360 and substitute the following:

| Production Test | Sampling and Testing Rates (each mix type) | Test Reference (Laboratory Manual unless otherwise indicated) | Spec Section |
|------------------------|---|--|---------------------|
| Bulk Specific Gravity | | 1806 | 2360.2.G.7.b |

| Production Test | Sampling and Testing Rates (each mix type) | Test Reference (Laboratory Manual unless otherwise indicated) | Spec Section |
|---|---|---|--------------------------------|
| Maximum Specific Gravity | Divide the planned production by 500. Round up to the next whole number | 1807 | 2360.2.G.7.c |
| Air Voids (calculated) | | 1808 | 2360.2.G.7.d |
| Asphalt Content | | 1853 | 2360.2.G.7.a |
| Add AC/Total AC Ratio (calculated) | | 1853 | 2360.2.G.7.a |
| Adj. AFT (Calculated) | | 1854 | 2360.2.E.7.e |
| Gradation | 1 gradation per 500 tons or portion thereof (at least one per day) | 1203 | 2360.2.G.7.f |
| Coarse Aggregate Angularity | 1 test per 500 tons or portion thereof. If CAA >8 percent of requirement, 1 sample per day but test 1 per week. | 1214 | 2360.2.G.7.g |
| Fine Aggregate Angularity (FAA) | 1 test per 500 tons or portion thereof. If FAA >5 percent of requirement, 1 sample per day but test 1 per week. | 1213 | 2360.2.G.7.h |
| Fines to Effective Asphalt Ratio (calculated) | Divide the planned production by 500. Round up to the next whole number | 1203 & 1853 | 2360.2.G.7.f & 2360.2.G.7.a |
| TSR | As directed by the Engineer | 1213 | 2360.G.7.i |
| Aggregate Specific Gravity | As directed by the Engineer | 1204, 1205, and 181 | 2360.G.7.j |
| Mixture Moisture Content | Daily unless otherwise required by the Engineer | 1805 | 2360.G.7.k |
| Asphalt Binder | As directed by the Engineer] | MnDOT Bituminous Manual 5-693.920 | 2360.G.7.l |

2. Contractor shall send a copy of the testing results to the Engineer.
3. Should any of the specified tests fail, the Contractor shall notify the Engineer immediately and shall arrange and pay for additional test as may be necessary to satisfy the Engineer that the requirements have been met.

******END OF SECTION******

SECTION 32 15 00 - AGGREGATE SURFACING

PART 1 - GENERAL

1.1 SUMMARY

- A. This section covers the furnishing of all labor, materials, tools, equipment and performances of all work and services necessary or incidental to construct the aggregate surfacing / shouldering as indicated on the drawings or as specified herein.

1.2 METHODS OF MEASUREMENT AND PAYMENT

- A. Measurement and compensation for the following items shall be paid according to the referenced specification or as modified below:
 - 1. No exception to the referenced specification is made.
- B. The furnishing and installing of specific items and/or the performance of work under certain circumstances shall not be individually paid in the absence of a specific bid item for the work. The costs shall be included in the unit price bid for the associated aggregate surfacing items. Such items of work include but are not limited to:
 - 1. Protecting existing improvements and previously accepted in-process improvements from damage.
 - 2. Subgrade excavation, furnishing stabilizing aggregate, geotextile fabric installation, compaction, regrading and/or other efforts necessary to repair the subgrade after satisfying the rolling test and failing to protect the integrity of the subgrade.
 - 3. The cost of all labor, equipment and materials necessary for meeting the testing requirements of field quality control, if required.
 - 4. Furnishing and installing blue tops for aggregate surfacing.
 - 5. Test rolling of the compacted aggregate surface using a fully loaded tandem axle truck.

1.3 SPECIFICATION REFERENCES

- A. MnDOT 2118 shall apply to the construction of aggregate surfacing, except as modified herein.
- B. MnDOT 2221 shall apply to the construction of aggregate shouldering, except as modified herein.
- C. Unless noted otherwise, the provisions in this section are in addition to the referenced specification.

1.4 SUBMITTALS

- A. Provide the following test results for each source of aggregate:
 - 1. Two gradation tests (only if requested by Engineer).

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Materials included here consist of new aggregate surfacing, Class 2. If additional rock is used to provide a coarser Class 2 gradation, the added materials must pass the Los Angeles Rattler (L.A.R.) test.

PART 3 - EXECUTION

3.1 CONSTRUCTION REQUIREMENTS

- A. At the end of each day the Contractor shall eliminate surface indentations, including those caused by sheeps foot rollers, tractor tires and tracked equipment, and roll the surface with a steel wheel or rubber tired roller.

- B. The depth and class of aggregate surfacing to be constructed shall be as shown on the plans. Aggregate surfacing construction shall take place only after the subgrade or aggregate base condition and grade has been examined by the Engineer.
- C. Existing aggregate surfacing shall be salvaged prior to commencing trenching activities, and shall be restored after underground construction is completed.
- D. Compaction of the aggregate surfacing courses shall be by the Quality Compaction Method.
- E. The compacted aggregate shall be test rolled using a fully loaded tandem axel truck in a pattern approved by the Engineer. The stability of the compacted aggregate shall be considered adequate when the surface shows less than 1.0-inch of yielding or rutting after one pass, or as otherwise approved by the Engineer. Test rolling shall be incidental.

3.2 SOURCE QUALITY CONTROL

- A. The Contractor shall perform and pay for Contractor Quality Control Testing in accordance with the MnDOT Schedule of Materials Control.
- B. Samples for testing shall be taken from material in stock at locations approved by the Engineer. All sampling methods shall be approved by the Engineer.
- C. The Contractor shall cooperate fully with the individuals performing the tests.
- D. The OWNER will arrange for and pay for Quality Assurance (QA) testing. Should any of the specified (QA) tests fail, the Contractor shall pay for additional tests as may be necessary to satisfy the Engineer that the requirements have been met. If the material is determined to be out of compliance with the MnDOT 2211, price reductions or material rejections will be implemented per MnDOT 2211.

*******END OF SECTION*******

SECTION 32 91 19.13 - TOPSOIL PLACEMENT AND GRADING

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. All labor, materials, equipment, and supervision required to furnish and install amended soil and topsoil to finished grade, as shown on the Plan Sheets.

1.2 MEASUREMENT AND PAYMENT

A. Measurement and compensation for the following items shall be paid according to the referenced specification or as modified below:

1. Payment for amended soil and topsoil shall be by the CUBIC YARD based on plan quantity for each type of topsoil specified. The amount bid shall be compensation in full for all costs of area preparation, transportation, placement, and final grading as shown on the plan sheets.

1.3 SPECIFICATION REFERENCE

A. MnDOT 3877 Topsoil Materials

B. Unless noted otherwise, the provisions in this section are in addition to the referenced specification.

1.4 SUBMITTALS

A. No submittals for this section.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Unless otherwise specified on the plans, topsoil types shall be provided as follows:

1. Common Topsoil Borrow shall be used for areas to be seeded or sodded.

PART 3 - EXECUTION

3.1 SHRUB, TREE, AND PERENNIAL PLANT BED PREPARATION

- A. Loosen surface of subgrade to minimum 2.0-inch depth to insure a positive bond between subgrade and topsoil.
- B. Do not place finish topsoil until after clean-up and removal of construction debris, trash, surplus materials, and equipment from project site.
- C. In perennial and shrub planting beds, place and spread topsoil to a uniform settled depth that is approximately 66.67 percent of the overall settled depth.
- D. Where topsoil is spread, use a cultipacker, pulverizer, or similar tool to pulverize the soil and eliminate all lumps. Do not compact topsoil.
- E. Provide settled depth of amended soil in all shrub and perennial plant beds as shown in the drawings. Provide backfill for tree root balls as shown on the plans.
- F. Finish grade plant bed areas as shown on the Drawings.

3.2 TOPSOIL PLACEMENT AND FINISH GRADING FOR SOD

- A. Topsoil should be placed to a 6.0-inch finished depth in all areas to be sodded.
- B. Prepare soil for planting so that only light raking, or scarifying will be required.

- C. Round finished surfaces at abrupt changes in slope.
- D. Should spot elevations for finished grades conflict with finished contours, the spot elevations shall govern.
- E. Finished grades shall be to top of sod.
- F. Finished grades to uniform levels or slopes between points where levels are given or between such points and existing grades.
- G. Positively drain all sod and planting areas to designated surface water collection points, streets, and/or waterways.
- H. Protect paving, sidewalks, utilities, and plants during finish grading; repair or replace any items damaged by construction operations at no cost to Owner. Equipment that may leave black tire marks should not be driven on sidewalk or paver areas, or marks must be removed, without damage to walks or pavers, prior to project acceptance.
- I. After placement, maintain surfaces to indicated finished grades; deposit additional topsoil or amended soil to repair settlement or erosion up to the date of final acceptance. Scarify surfaces upon which additional topsoil is to be deposited.

3.3 BORROW TOPSOIL IN ABOVE-GRADE PLANTERS

- A. Place according to manufacturer's recommendations.

3.4 MAINTENANCE

- A. Protection of graded areas:

- 1. Protect newly graded areas from traffic and erosion.
- 2. Keep free of trash and debris.
- 3. Repair and re-establish grades in settled, eroded, and rutted areas to specified tolerances.
- 4. Keep public streets clean from soil, soil tracking, and debris at all times.

- B. Reconditioning Compacted Areas: Where completed graded areas are disturbed by subsequent construction operations, erosion or adverse weather, scarify surface, re-shape, and compact to required density prior to further construction at no cost to the Owner.

- C. Settling: Where settling is measurable or observable during general project warranty period, add topsoil or amended soil, compact, and replace surface treatment. Restore appearance, quality, and condition of surface or finish to match adjacent work and eliminate evidence of restoration at no cost to the Owner.

3.5 DISPOSAL OF EXCESS AND WASTE MATERIALS

- A. Remove waste materials, including unacceptable excavated material, trash, and debris from the job site.

3.6 PROTECTION OF SIDEWALK

- A. Equipment that may leave black tire marks shall not be driven on sidewalk or special paver areas, or marks must be removed without damage to walks prior to acceptance.

****END OF SECTION****

SECTION 32 92 00 – TURF AND GRASSES

PART 1 - GENERAL

1.1 SUMMARY

- A. This section covers the furnishing of all labor, materials, tools, equipment and performances of all work and services necessary or incidental to turf restoration as indicated on the drawings or as specified herein.
- B. A variety of different seeding mixtures may be utilized on this project. The Contractor shall refer to the plan for the locations of the different turf establishment areas.
- C. Temporary seeding may be necessary during construction in erosion sensitive areas. The Contractor shall do temporary seeding work as specified herein or as directed by the Engineer.

1.2 METHOD OF MEASUREMENT AND PAYMENT

- A. Measurement and compensation for the following items shall be paid according to the referenced specification or as modified below:
 1. All measurements for payments for turf establishment items shall be based on the Unit Price bid per item.
 2. Payment for Rolled Erosion Prevention Category 20 w/ Seed Mixture shall be by the SQUARD YARD (SY) and shall be compensation in full for the installation of seed, fertilizer, and blanket, as specified.
- B. The furnishing and installing specific items and/or the performance of work under certain circumstances shall not be individually paid in the absence of a specific bid item for the work. The costs shall be included in the unit price bid for the associated seeding and sodding items. Such items of work include but are not limited to:
 1. Application of starter fertilizer on all areas to be sodded or seeded shall be included in the price bid for the associated bid item.
 2. Subgrade preparation and topsoil placement as required on all areas shown on the plans.
 3. Maintenance of newly sodded and seeded areas, as specified, include in the unit price for the associated items.
 4. Stapling of sod on sloped areas, include in the unit price bid for sodding.

1.3 SPECIFICATION REFERENCES

- A. The following referenced Specifications will apply to this Section:
 1. MnDOT 2574.
 2. MnDOT 2575.
 3. MnDOT 3876.
 4. MnDOT 3877.
 5. MnDOT 3878.
 6. MnDOT 3881.
 7. MnDOT 3882.
 8. MnDOT 3884.
 9. MnDOT 3885.
- B. Unless noted otherwise, the provisions in this section are in addition to the referenced specification.

1.4 SUBMITTALS

- A. Seeding - Certificates of Compliance for seed mixture.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Seeding

1. The seed mixtures to be used are shown on the plans.
2. Unless otherwise specified on the plans, all application rates for MnDOT mixes, except temporary seed, are 150 percent the specified rate.
3. Type 1 mulch shall consist of clean straw with no pasture hay.
4. Seed must be obtained from as close to the project site as reasonably possible with an emphasis on obtaining seed from the local ecotype region.
5. Source identified (Yellow tag) seed through the Minnesota Crop Improvement Association (MCIA) unless otherwise approved by the Engineer.
6. All seed shall be supplied as pure-live seed (PLS).
7. All seed and seed mixes shall conform to State seed requirements for noxious weed content.
8. All seed and seed mixes shall conform to State labeling requirements. For all species in the mix, the label and or invoice shall include the county of origin, and if from Canada, the province.

B. Sodding Items

1. Unless otherwise indicated on the plans, sod shall be Lawn Sod as defined in the referenced specification except when located within MnDOT right-of-way where Salt Tolerant Sod shall be utilized.

C. Imported Topsoil

1. Unless otherwise indicated on the plans, imported topsoil borrow for general use as a turf growing medium shall comply with MnDOT 3877.2.A.
2. Unless otherwise indicated on the plans, imported topsoil borrow for use as a plant growing medium in designated areas such as landscape beds shall meet the requirements of MnDOT 3877.2.B.

D. Fertilizer

1. Fertilizer shall be per MnDOT specification.
2. Fertilizer shall be applied at a rate indicated in the MnDOT specification.

E. Hydraulic Matrix

1. Hydraulic Matrix shall be MnDOT Type Bonded Fiber Matrix
2. Hydraulic Matrix shall be applied at a rate of 3500 lbs/acre (dry weight)

PART 3 - EXECUTION

3.1 CONSTRUCTION REQUIREMENTS

A. GENERAL

1. The subgrade shall be shaped to the approximate contour of the finished surface. All construction debris shall be removed from the area prior to the placement of the topsoil. The subgrade shall be loosened with a disc or harrow to a depth of 6.0-inches prior to application of the topsoil.

2. The topsoil shall be shaped to the approximate contour of the finished surface, with a minimum depth of 4.0-inches, unless otherwise shown on the plan. All construction debris, rocks and trash shall be removed from the area prior to seeding or sodding. The topsoil shall be loosened with a disc or harrow to its full depth prior to seeding or sodding.
3. The Contractor shall be responsible for providing water and maintenance for a period of 30 calendar days, or until final acceptance by the Owner, to firmly establish the seed or sod. The term maintenance includes mowing, weed control and watering, as necessary. Failure to perform this work within 24-hours of notification of non-compliance may result in the Owner or Engineer arranging for completion of the work by others. A contract deduction will be made equal to the total of all costs to perform such work so arranged, including but not limited to, labor, materials, equipment and administrative costs.
4. Where dormant seeding or sodding is authorized, the maintenance period will be extended to include the first 30 calendar days after the beginning of the growing season. The beginning of growing season will be defined as bud burst.

B. SEEDING REQUIREMENTS

1. Turf establishment by seeding shall be done utilizing the various combinations of seed mixtures (including aquatic plants), fertilizing and mulching at disturbed areas as shown on the plans.
2. Areas prepared for seeding shall be free of rocks, debris and clumps of soil. The areas shall be graded uniformly, and vegetated areas shall be raked free of chunks exceeding ½-inch diameter.
3. Seed shall be applied with a drill seeder, unless otherwise approved by the Owner.
4. The Contractor shall furnish weight tickets documenting pounds of hydraulic soil stabilizer placed, pounds of fertilizer placed, and pounds of seed placed. The seed tickets shall show individual plant species along with the percent purity and percent germination. The fertilizer tickets shall show mix proportions. The Contractor shall also furnish its QA/QC data to the Engineer.
5. Dormant seeding and snow seeding may be utilized in accordance with the referenced specification and technical memorandum, provided the final acceptance standards are met.
6. Final acceptance of seeding will be based on an established growth of 6.0-inches with a uniform density to cover 70 percent of the designated area, free of weeds and bare spots. Any re-seeding necessary shall be performed at the Contractor's expense.

C. SODDING REQUIREMENTS

1. Sod shall be placed by the Contractor in the locations shown on the plans as directed by the Engineer.
2. When placing sod in irregularly shaped locations, the Contractor shall produce sharp, straight joints between sod rolls.
3. Sod shall be placed to create a firm, smooth, uniform surface without ruts, knobs or wrinkles.
4. Sod placed on slopes greater than 1:4 (v:h), in ditch bottoms, and around storm sewer inlets or outlets shall be anchored with staples. Staples shall be U shaped 0.12-inch diameter or heavier steel wire having a span width of 1.0-inch and a length of 8.0-inches from top to bottom, after bending.
5. All re-work necessary to repair imperfections in sod placement shall be made at the Contractor's expense.

******END OF SECTION******

SECTION 33 05 06 - TRENCHING AND BACKFILLING

PART 1 - GENERAL

1.1 SUMMARY

- A. This section covers the furnishing of all labor, materials, tools, equipment, and performances of all work and services necessary or incidental to the maintenance of utility service, trench excavation, bedding, and backfill necessary for the construction of underground utilities and structures, as indicated on the drawings or as specified herein.

1.2 DEFINITIONS

- A. Excess Material - Material that is not needed to complete the earthwork balance.
- B. Suitable Material - Sand, silty sand, or low plasticity clay soils with no organic content. The Engineer shall make the final determination as to what material will be considered suitable.
- C. Unsuitable Material - Soil with organic content including topsoil, swamp deposits, peat, muck, or other material deemed by the Engineer to be unsuitable for fill or embankment construction.
- D. Flexible Pipe Materials – For this specification section, flexible pipe materials will include the following:
 - 1. Polyvinyl chloride (PVC) pipe – solid wall and profile wall pipe.
 - 2. Polypropylene profile wall pipe.
 - 3. High-density polyethylene pipe – solid wall and profile wall pipe.
 - 4. Corrugated steel or aluminum pipe.
 - 5. Centrifugally cast glass-fiber-reinforced, polymer mortar (CCFRPM) pipe.
- E. Rigid Pipe Materials – For this specification section, rigid pipe materials will include the following:
 - 1. Reinforced concrete pipe.
 - 2. Reinforced concrete box culverts.
 - 3. Ductile iron pipe.

1.3 METHOD OF MEASUREMENT AND PAYMENT

- A. Measurement and compensation for the following items will be paid according to the referenced specification or as modified below:
 - 1. Items specifically identified in the Schedule of Unit Prices will be compensated following the description of measurement and payment contained in the section applicable to the individual item. No direct compensation will be granted for compliance with the provisions contained herein.
- B. The furnishing and installing of specific items and/or the performance of work under certain circumstances will not be individually paid in the absence of a specific bid item for the work. The costs will be included in the unit price bid for the individual pipeline items associated with the stated specific item or work effort. Such items of work include but are not limited to:
 - 1. Interference with other above and underground structures and utilities.
 - 2. The removal and restoration, or protection of existing structures and utilities that are shown on the plans and for which there is no bid item for removing and restoring or working around the utility.
 - 3. Unless separately itemized in the Schedule of Unit Prices, any dewatering is necessary for construction.
 - 4. Foundation materials placed instead of performing necessary dewatering.

5. Bulkheading of existing pipes to be abandoned in place.
6. Granular foundation, granular bedding, and granular encasement materials.
7. Granular foundation materials used instead of bedding materials in the specified bedding zone, where specified.
8. Granular foundation materials used in unstable trench conditions.
9. The removal and disposal of native materials that are unsuitable for bedding and/or backfill.
10. Providing and maintaining utility service.
11. The replacement of all material displaced due to shrinkage or loss during the excavation and backfilling operations.
12. The removal of excess materials above the original topography resulting from the additional volume created from pipe bedding, utility pipe, and/or underground structures.
13. Delays due to other utility conflicts that result during construction.
14. Protecting existing improvements and previously accepted elements of this construction from damage.
15. Protecting the inverts of other utility pipes from the accumulation of debris and soil, the removal of blockages that threaten to damage property, and/or the cleaning of both the newly constructed lines and the existing lines of all debris and soil that accumulated during the construction.
16. If a separate bid item for bypass pumping is NOT included in the Schedule of Unit Prices, providing temporary bypass pumping/control of stormwater flows around the construction zone, will be included in the price bid for the associated items being installed.
17. The use of special construction techniques such as trench boxes, sheeting, shoring, etc., will be included in the price bid for the associated items being installed.
18. Compaction testing and compaction, if required, will be included in the price bid for the associated items being installed.

1.4 SPECIFICATION REFERENCES

- A. CEAM 2600 will apply, except as modified herein.
- B. MnDOT 2451 will apply, except as modified herein.
- C. Unless noted otherwise, the provisions in this section are in addition to the referenced specification.

1.5 SUBMITTALS

- A. Gradation Test Results for any granular borrow materials.
- B. Two separate tests, as required in Source Quality Control provisions of individual sections contained herein, from material stockpiles of aggregates to be used on this project. These tests may be run by the Contractor or its supplier during aggregate production.

PART 2 - PRODUCTS

2.1 GRANULAR MATERIALS

- A. Granular Bedding and Granular Encasement – No exception to the referenced specification is made.
- B. Granular Backfill - No exception to the referenced specification is made.

PART 3 - EXECUTION

3.1 EXCAVATION AND PREPARATION OF TRENCH

A. Interference and Protection of Underground Structures

1. If an existing utility is shown on the plans and there is no bid item for removing and restoring, or working around the utility, the Contractor shall be required to remove and restore, or protect the utility.
2. The inverts of existing sewers (storm & sanitary), culverts, subdrains, etc. will be protected during construction. The Contractor is responsible to inspect and clean, if necessary, all lines which have become compromised by the construction operations.

B. Excavation Limits and Requirements

1. The trench for all flexible pipe will be undercut 6.0-inches below the pipe barrel to permit the installation of granular bedding or foundation material.
2. The trench for all rigid pipe will be undercut 3.0-inches below the pipe barrel, or as shown in the bedding detail, to permit the installation of granular bedding or foundation material.
3. The Contractor shall install and operate a dewatering system to maintain all trenches free of water wherever necessary. The Contractor shall make their subsurface investigations and determine what dewatering methods to utilize to prevent such damage.
4. The Contractor shall be responsible for any damage to adjacent structures or buildings caused by the dewatering operations.
5. Use of granular foundation material in place of performing dewatering is permitted.
6. All excess excavated material will become the property of the Contractor and will be removed from the site and disposed of at a location secured by the Contractor.

3.2 INSTALLATION OF PIPE AND FITTINGS

- A. The Contractor shall keep accurate records as to the location of the service connections, field tile, utility crossings, etc. either constructed or encountered during the construction. Measurements to service lines will be taken from the two nearest permanent structures (i.e., hydrants, valves, manholes, buildings). Final payment for the project will not be made until the information is in the possession of the Owner.
- B. When connection to an existing conduit is required at an existing or proposed manhole, the Contractor shall expose and verify the elevation of the existing conduit before laying any pipe toward, or away from, the connection point. If the elevation of the existing conduit does not match the elevation shown on the plans, the Contractor shall notify the Engineer, at which time the Engineer may adjust the proposed grades.
- C. Sewer Pipe at Structures
1. The pipe end(s) will be extended inside the structure a maximum of 3.0-inches unless approved otherwise by the Engineer or shown on the plans.
- D. Connection and Assembly of Joints
1. For sanitary sewer, watermain, forcemains, and culverts, all joints will be water-tight.
 2. For storm sewers and subdrains, all joints will not permit the intrusion of soil or backfill materials.
 - (a) If a reinforced concrete pipe is used, the Contractor may at its discretion choose to wrap each joint with a geotextile filter fabric, as specified, rather than place mastic in the joint.
- E. Bulkheading Open Pipe Ends
1. The Contractor shall furnish, install and maintain a temporary, water-tight plug adequately blocked in place to prevent flooding of the existing downstream sewer system. The plug will be placed at the beginning of the project or the end of each working day at the end of the day's operation.

2. When flows are diverted from an existing sewer or tile to be abandoned in place, the Contractor will construct a water-tight plug on the open end of the abandoned pipe.
3. Permanent watertight plugs will be constructed with concrete grout with a thickness of not less than 1 pipe diameter.

3.3 BEDDING AND BACKFILLING OPERATIONS

- A. Backfill material around all manholes, catch basins, valve boxes, curb boxes, and hydrants will be compacted with hand machines. The maximum lift thickness will be 6.0-inches.
- B. Flexible Pipe Materials
 1. Unless otherwise shown on the plans, the pipe will be bedded and backfilled with granular material compacted to 95 percent Standard Proctor Density or as recommended by the pipe manufacturer, whichever is denser, from 6.0-inches below the bottom of the pipe to 12.0-inches above the top of the pipe the full width of the trench. The Contractor shall bed and backfill the pipe as shown on the plan details.
 2. Where the trench foundation is unstable and not suitable for bedding, the trench will be undercut until acceptable conditions are found. The Contractor shall then install compacted foundation material to meet the line and grade specified on the plan.
 3. Unless otherwise shown on the plans, select native material will be used as a trench backfill above the granular bedding up to the bottom of the subgrade except in those conditions where the top of the pipe is less than 12.0-inches from the bottom of the subgrade in which case granular material compacted to 100 percent Standard Proctor Density will be used as trench backfill the full width of the trench to the bottom of the subgrade excavation zone.
- C. Rigid Pipe Materials
 1. Unless otherwise shown on the plans, in ordinary or stable trench conditions, the bottom of the trench will be first excavated to a depth of approximately 15 percent of the outside pipe diameter below the established grade for the bottom of the pipe. Then the bottom of the trench will be further excavated to allow for the placement of 6.0-inches of granular bedding for a width of at least 60 percent of the outside diameter of the pipe. A pipe will be placed on the bottom of the pre-shaped excavated trench. The bottom of the excavated trench will be shaped to fit the circumference of the pipe up to 0.15 of the outside diameter of the pipe. The Contractor shall encase the pipe from the 0.15 outside diameter to the 0.60 diameter height of the pipe with granular material compacted to 95 percent Standard Proctor Density or as recommended by the pipe manufacturer, whichever is denser.
 2. Where the trench foundation is unstable and not suitable for bedding, the trench will be undercut until acceptable conditions are found. The Contractor shall then install compacted foundation material to meet the line and grade specified on the plan.
 3. Unless otherwise shown on the plans, select native material may be used as trench backfill above the granular bedding up to the bottom of the subgrade except in those conditions where the top of the pipe is less than 12.0-inches from the bottom of the subgrade in which case granular material compacted to 100 percent Standard proctor Density will be used as trench backfill the full width of the trench to the bottom of the subgrade excavation zone.
- D. Structures
 1. All manholes, catch basins, valve boxes, water vaults, headwalls, and miscellaneous structures will be backfilled with granular backfill material and will be compacted with a hand-operated motorized compactor.
- E. All trench backfill will be compacted in accordance with the Quality Compaction Method.

3.4 SOURCE QUALITY CONTROL

- A. The Contractor shall arrange for having the following testing performed:
 - 1. One gradation test per every 500 tons or 275 cu yd (CV) of granular materials.

3.5 FIELD QUALITY CONTROL

- A. No exception to the referenced Specification is made.

*****END OF SECTION*****

SECTION 33 42 00 - STORMWATER CONVEYANCE

PART 1 - GENERAL

1.1 SUMMARY

- A. This section covers the furnishing of all labor, materials, tools, equipment and performances of all work and services necessary or incidental to storm sewer construction as indicated on the drawings or as specified herein.

1.2 METHOD OF MEASUREMENT AND PAYMENT

- A. Measurement and compensation for the following items shall be paid according to the referenced specification or as modified below:
1. Manholes
 - (a) Payment for all manholes shall be at the unit price bid per LINEAR FOOT of structure as measured from the invert of the outlet pipe to the top of the manhole casting. The amount bid includes all work and material required to complete the structure. Casting assemblies shall be paid separately for each assembly furnished and installed.
 2. Catch Basins
 - (a) Payment for all catch basins shall be at the unit price bid per LINEAR FOOT of structure as measured from the invert of the outlet pipe to the flow line of the catch basin casting. The amount bid includes all work and material required to complete the structure. Casting assemblies shall be paid separately for each assembly furnished and installed.
 3. Casting Assemblies
 - (a) Casting assemblies shall be measured per EACH, complete in place and paid at the unit price bid.
 - (b) Chimney Seal
 - (c) Chimney seals shall be measured per EACH structure, furnished and installed, for the type and style indicated and paid at the unit price bid. The amount bid includes all work and materials required to place the chimney seal from the top of the precast concrete structure to the middle of the casting.
 4. Sewer Pipe
 - (a) No exception to the referenced specification is made.
 5. Aprons
 - (a) No exception to the referenced specification is made.
 6. Connect to Existing Storm Manhole
 - (a) Payment for connecting a new storm sewer to an existing storm manhole shall be measured and paid per EACH, as specified in the Schedule of Unit Prices, complete and in place, at the appropriate unit price bid. The amount bid shall include removing the existing storm sewer pipe, enlarging the hole, removing the bench and reshaping the invert, if necessary to fit the proposed storm sewer pipe.
 7. Raise / Lower Existing Manhole
 - (a) Payment for raising or lowering an existing manhole shall be measured and paid per lineal foot based on the vertical difference between the existing and final rim elevations. The payment shall include all cost of labor, materials and equipment required to complete the work.

- B. The furnishing and installing of specific items and/or the performance of work under certain circumstances shall not be individually paid in the absence of a specific bid item for the work. The costs shall be included in the unit price bid for the storm sewer items, as indicated. Such items of work include but are not limited to:
1. Locating and connecting to an existing storm sewer, include in the price bid for storm sewer.
 2. The costs of furnishing bends, adapters, cutting and removing the existing storm sewer pipe, include in the price bid for storm sewer.
 3. Locating and connecting to an existing storm sewer service laterals, include in the price bid for service connections.
 4. Use of geotextile fabric to wrap pipe joints in lieu of using mastic, include in the price bid for storm sewer.
 5. Maintenance of an appropriate storm water outlet during construction, include in the price bid for storm sewer.
 6. The cost of all labor, equipment and materials necessary for testing of storm sewer, if required, included in the price bid for storm sewer.
 7. If a separate bid item for bypass pumping is NOT included in the Schedule of Unit Prices, providing temporary bypass pumping / control of storm water flows around the construction zone, include in the price bid for the associated sewer items.
 8. If the sewer is to be installed inside a casing pipe, furnishing and placing the carrier pipe, carrier pipe support materials, sand fill and grout seals, include in the unit price bid for sewer.
 9. Furnishing and installing underground utility location system, include in the price bid for sewer

1.3 SPECIFICATION REFERENCES

- A. The following Sections of this Project Manual as listed:
1. Section 33 05 06 "Trenching and Backfilling".
- B. ASTM D543 shall apply, except as modified herein.
- C. ASTM D1248 shall apply, except as modified herein.
- D. ASTM D1784 shall apply, except as modified herein.
- E. ASTM D3034 shall apply, except as modified herein.
- F. ASTM D3213 shall apply, except as modified herein.
- G. ASTM D3261 shall apply, except as modified herein.
- H. ASTM D3350 shall apply, except as modified herein.
- I. ASTM F679 shall apply, except as modified herein.
- J. ASTM F949 shall apply, except as modified herein.
- K. AWWA C900 shall apply, except as modified herein.
- L. AWWA C906 shall apply, except as modified herein.
- M. CEAM 2621 shall apply, except as modified herein.
- N. MnDOT 2503 shall apply, except as modified herein.
- O. MnDOT 2506 shall apply, except as modified herein.
- P. MnDOT 3236 shall apply, except as modified herein.

- Q. MnDOT 3245 shall apply, except as modified herein.
- R. MnDOT 3733 shall apply, except as modified herein.
- S. MnDOT Standard Plates Manual with latest revisions.
- T. State of Minnesota Plumbing Code shall apply to all underground pipe sewers installed through areas to be occupied by buildings. Unless noted otherwise, the provisions in this section are in addition to the referenced specification.

1.4 SUBMITTALS

- A. Storm Sewer
 - 1. Manhole and catch basin structure - shop drawings.
 - 2. Manhole and catch basin casting - shop drawings.
 - 3. Piping and fittings - Certificates of Compliance.

PART 2 - PRODUCTS

2.1 OPEN CUT SEWER PIPE AND FITTINGS

- A. All storm sewer pipe shall be reinforced concrete pipe, unless otherwise shown on the plans.
- B. Reinforced Concrete Pipe (MnDOT 3236)
 - 1. Reinforced Concrete Pipe (RCP), fittings and specials shall conform with the requirements of MnDOT 3236 (Reinforced Concrete Pipe) for the type, size and strength class specified. The joints for RCP shall be rubber gasketed conforming to MnDOT Standard Plate 3006. Reinforced concrete pipe shall conform to the following strength class, unless otherwise shown on the plans or these specifications.
 - (a) 12-inch – Class IV
 - (b) 15-inch through 30-inch - Class III
- C. Solid Wall Polyvinyl Chloride (PVC) Pipe (MnDOT 3245) (Thermoplastic, TP)
 - 1. 4-inch through 15-inch Diameters: Smooth-walled polyvinyl chloride pipe and fittings shall conform with the requirements of ASTM D-3034 for the Standard Dimension Ratio (SDR) of 35.
 - 2. Over 15-inch Diameters: Smooth-walled polyvinyl chloride pipe and fittings shall conform with the requirements of ASTM F679 with a minimum wall thickness for a minimum pipe stiffness of 46.
 - 3. The connection shall be push-on with elastomeric gasketed joints, which are bonded to the inner walls of the gasket recess of the bell socket.
 - 4. The pipe grade used shall be resistant to aggressive soil and corrosive substances in accordance with the requirements of ASTM D543.
- D. Profile Wall Polyvinyl Chloride (PVC) Pipe
 - 1. Large diameter (21-inches through 48-inches) closed profile polyvinyl chloride pipe and fittings shall conform with the requirements of ASTM F794. Pipe and fittings shall be made from polyvinyl chloride compounds which comply with the requirements for a minimum cell classification of 12364A as defined by ASTM D1784.
 - 2. All joints shall be of the bell and spigot type with elastomeric seals and conform to the requirements of ASTM D3212. Gaskets shall be factory installed and chemically bonded to the bell end of the pipe
 - 3. Alternate PVC pipe conforming to Contech A-2000 (ASTM F949) will be accepted.
- E. Corrugated Polyethylene (CP) Pipe and Fittings (MnDOT 3247)

1. Smooth interior and corrugated exterior polyethylene pipe and fittings (diameters through 36-inches) shall conform to the requirements of AASHTO M294 or ASTM F2648 and MnDOT 3247. All joints shall be installed using an approved watertight sleeve with gaskets meeting the requirements of ASTM F477.

F. Flexible Pipe Jointing

1. Pipe and fitting joints for solid wall and profile wall polyvinyl chloride (PVC) pipe shall be in accordance with ASTM 3212. This includes the flexible elastomeric seals being rated at sustaining an internal pressure of 10.8 psi for 10 minutes.
2. Pipe and fitting joints for corrugated polyethylene pipe shall be in accordance with ASTM D3261-90.

G. Corrugated Aluminized Steel (CAS) Pipe, Type 2 - Smooth Interior Corrugated Exterior Pipe and Fittings (MnDOT 3222)

1. 72-inch diameter (between outlet control structure and existing 72-inch C.M.P): Pipe shall be formed from Aluminized Steel Type 2 coil (12 ga.) and conform to the current AASHTO M-274 and ASTM A819 material specification. Pipe shall be manufactured to conform to the current ASTM A760 Type 1R. Each pipe shall be fabricated with a minimum of two (2) annular corrugations to join the pipe with band connectors. Pipe shall be joined together with hugger band connectors made from the same material as the pipe. All joints shall be constructed with the hugger band drawn together by two (2) diameter bolts through the use of a bar and strap connector, or an angle type connector. All joints shall have two O-ring gaskets that conform to the requirements of ASTM C361 (Section 5.9).

H. Corrugated Steel (CS) Pipe (MnDOT 3226)

1. No exception to the referenced specification is made.

2.2 MANHOLES & CATCH BASINS

A. Precast Concrete Manholes and Catch Basin Section

1. Storm sewer manholes shall conform to the MnDOT Standard for the design type shown on the plans.
2. Reinforced polypropylene plastic steps shall be furnished for all storm sewer manholes 8.0-feet or more in depth.

B. Castings

1. All casting assemblies shall meet the certification requirements of the Minnesota Department of Transportation and be manufactured by a MnDOT approved source.
2. The Type of curb and gutter catch basin casting assembly to be used shall be Neenah R-3067-V (Vane Grate).
3. The type of non-street / rear yard inlet casting assembly to be used shall be Neenah R-4342 stool grate.

C. Adjusting Rings

1. Ladtech H.D.P.E. adjusting rings are approved as an alternate to concrete adjusting rings.

D. Chimney Seal

1. Chimney seals accepted for use, when shown in the plans, shall be one of the following listed as standard of quality:
 - (a) Infi-Shield (exterior only)
 - (b) Cretex (exterior or interior)

2.3 GEOTEXTILE FABRIC

- A. MnDOT 3733, Type I, non-woven for use in wrapping joints in storm sewer.

SECTION 33 42 13 - STORMWATER CULVERTS

PART 1 - GENERAL

1.1 SUMMARY

- A. This section covers the furnishing of all labor, materials, tools, equipment and performances of all work and services necessary to construct pipe culverts as indicated on the drawings or as specified herein.

1.2 METHOD OF MEASUREMENT AND PAYMENT

- A. Measurement and compensation for the following items shall be paid according to the referenced specification or as modified below:
 - 1. No exception to the referenced specification is made.
- B. The furnishing and installing of specific items and/or the performance of work under certain circumstances shall not be individually paid in the absence of a specific bid item for the work. The costs shall be included in the unit price bid for the associated pipe culvert items, as indicated. Such items of work include but are not limited to:
 - 1. The placement of clay borrow as an anti-seepage collar, include in the price bid for pipe culvert.
 - 2. Connection to an existing pipe culvert, storm sewer pipe or subdrain, include in the price bid for pipe culvert.
 - 3. Use of geotextile fabric to wrap pipe joints in lieu of using mastic, include in the price bid for storm sewer.
 - 4. Maintenance of an appropriate storm water outlet during construction, include in the price bid for pipe culvert.
 - 5. If the culvert is to be installed inside a casing pipe, furnishing and placing the carrier pipe, carrier pipe support materials, sand fill and grout seals, include in the unit price bid for culvert.
 - 6. The furnishing and installation of a trash guard shall be included in the price bid for RC Pipe Apron, as indicated in the details.
 - 7. The furnishing and installation of tie bolt fasteners to tie all pipe joints along the entire storm sewer culvert shall be included in the price bid for RC Pipe Sewer, as indicated in the details.

1.3 SPECIFICATION REFERENCES

- A. Reference Section 33 05 06 "Trenching and Backfilling" of this Project Manual, except as modified herein.
- B. MnDOT 2501 shall apply to the construction of pipe culvert and appurtenance items, except as modified herein.
- C. Unless noted otherwise, the provisions in this section are in addition to the referenced specification.

1.4 SUBMITTALS

- A. No submittals for this section.

PART 2 - PRODUCTS

2.1 CULVERT PIPE AND FITTINGS

- A. Reinforced Concrete Pipe (MnDOT 3236)
 - 1. No exception to the referenced specification is made.

PART 3 - EXECUTION

3.1 CONSTRUCTION REQUIREMENTS

- A. The Contractor shall install a clay (or an approved impermeable equal) collar around all culverts at a point approximately 4.0-feet from each apron. The collar shall fill the breadth and height of the trench for a minimum length of 3.0- feet.

3.2 FIELD QUALITY CONTROL

- A. Deflection test - No exception to the referenced specification is made.
- B. Televising - No exception to the referenced specification is made.

******END OF SECTION******

SECTION 34 41 05 - TRAFFIC SIGNS AND DEVICES

PART 1 - GENERAL

1.1 SUMMARY

- A. This section covers the furnishing of all labor, materials, tools equipment and performances of all work and services necessary or incidental to project signing as indicated on the drawings or as specified herein.

1.2 METHOD OF MEASUREMENT AND PAYMENT

- A. Measurement and compensation for the following items shall be paid according to the referenced specification or as modified below:
 - 1. Traffic Signs shall be paid at the unit price bid for related items and includes the cost of providing and installing the sign, sign posts, stringers, brackets, attachment angles or strap mounting hardware, and all other materials and labor required for sign installation per the plan details.
- B. The furnishing and installing specific items and/or the performance of work under certain circumstances shall not be individually paid in the absence of a specific bid item for the work. The costs shall be included in the unit price bid for the associated project signing item. Such items of work include but are not limited to:
 - 1. No exception to the referenced specification is made.

1.3 SPECIFICATION REFERENCES

- A. MnDOT 2564 - Traffic Signs and Devices.
- B. MnDOT 3401 -Flanged Channel Sign Posts.
- C. Current "Minnesota Manual for Uniform Traffic Control Devices" - <http://www.dot.state.mn.us/trafficeng/publ/mutcd/index.html>
- D. Unless noted otherwise, the provisions in this section are in addition to the referenced specification.

1.4 SUBMITTALS

- A. No submittals for this section.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

*******END OF SECTION*******

APPENDIX A

GEOTECHNICAL EVALUATION REPORT

Geotechnical Evaluation Report

Vernon Avenue Improvements
TH 13 to the Minnesota River
Savage, Minnesota

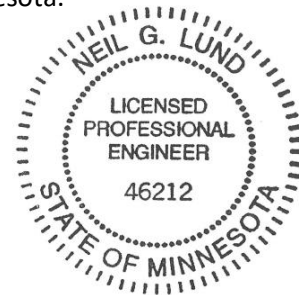
Prepared for

Lower Minnesota River Watershed District

Professional Certification:

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

Neil G. Lund, PE
Technical Manager, Senior Engineer
License Number: 46212
August 2, 2023



August 2, 2023

Project B2302291

Ms. Linda Loomis
District Administrator
Lower Minnesota River Watershed District
112 E. 5th Street, #102
Chaska, MN 55318

Re: Geotechnical Evaluation
Vernon Avenue Improvements
TH 13 to the Minnesota River
Savage, Minnesota

Dear Ms. Loomis:

We are pleased to present this Geotechnical Evaluation Report for the proposed improvements to Vernon Avenue between Th 13 and the Minnesota River in Savage, Minnesota.

Thank you for making Braun Intertec your geotechnical consultant for this project. If you have questions about this report, or if there are other services that we can provide in support of our work to date, please contact Neil Lund at 952.995.2284 or (nlund@braunintertec.com).

Sincerely,

BRAUN INTERTEC CORPORATION



Neil G. Lund, PE
Technical Manager, Senior Engineer



Brian J. Schreurs, PE
Account Manager, Senior Engineer

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Appendix

Soil Boring Location Sketch

Log of Boring Sheets C-1, R-1 to R-4

Descriptive Terminology of Soil

A. Introduction

A.1. Project Description

This Geotechnical Evaluation Report addresses the proposed reconstruction of Vernon Avenue between TH 13 and the Minnesota River in the City of Savage, approximately 0.7 miles in length. This segment of Vernon Avenue provides access to the Cargill East River Dredge Site, and the Lower Minnesota River Watershed District (LMRWD) is seeking to reconstruct the pavement to support these dredging activities. This will include replacement of a centerline culvert below the access road to the dredging site. We provide a summary of project details below in Table 1.

Table 1. Project Description

| Project Component | Description | Source |
|---------------------------------|---|--|
| Pavement rehabilitation methods | Reconstruction | Bolton & Menk, Inc. |
| New pavement type(s) | Bituminous | Bolton & Menk, Inc. |
| Pavement loads | 200,000 Bituminous ESALs* | Assumed; infrequent or intermittent loaded truck traffic for dredging activities |
| Grade changes | Limited (< 2 feet) | Assumed |
| Existing culvert to be replaced | 48-inch RCP with flared aprons and trash guards Invert depth unknown | Bolton & Menk, Inc. |

*Equivalent 18,000-lb single axle loads based on 20-year design. See attachment to this report for calculation.

We have described our understanding of the proposed construction and site to the extent others reported it to us. Depending on the extent of available information, we may have made assumptions based on our experience with similar projects. If we have not correctly recorded or interpreted the project details, the project team should notify us. New or changed information could require additional evaluation, analyses and/or recommendations.

A.2. Site Conditions

Vernon Avenue has a flat, single-lane rural roadway profile within the project corridor, with limited ditches. Given the location within the Minnesota River Valley, the road is subject to regular seasonal flooding.

Pavement history or construction plans were not available for our review. Based on historical aerial photographs, it appears the dredge site was first constructed around 2008.

A.3. Purpose

The purpose of our geotechnical evaluation was to characterize subsurface geologic conditions at selected exploration locations, evaluate their impact, and provide geotechnical recommendations for the design and construction of the Vernon Avenue Improvements project.

A.4. Background Information and Reference Documents

We reviewed the following information:

- Communications with LMRWD and Bolton & Menk, Inc. regarding the proposed project.
- *Report of Pavement Evaluation Services* prepared by American Engineering Testing, Inc. (AET) dated June 25, 2015.
- Aerial imagery of the site available on Google Earth.
- Geologic map *C-17 Geologic Atlas of Scott County, Minnesota* prepared by the Minnesota Geological Survey and dated 2006.

A.5. Scope of Services

We performed our scope of services for the project in accordance with our proposal QTB173917 to Ms. Linda Loomis of the Lower Minnesota River Watershed District (LMRWD), which we prepared at the request of Mr. Brad Fisher of Bolton & Menk, Inc. The following list describes the geotechnical tasks completed in accordance with our authorized scope of services.

- Reviewing the background information and reference documents previously cited.

- Staking and clearing the exploration location of underground utilities. We selected and staked the new exploration locations. We acquired the surface elevations and locations with GPS technology using the State of Minnesota's permanent GPS base station network. The Soil Boring Location Sketch included in the Appendix shows the approximate locations of the borings.
- Obtaining a right-of-way permit from the City of Savage.
- Performing four standard penetration test (SPT) borings to a depth of 6 feet for the roadway, with sampling on a continuous basis.
- Performing one SPT boring for the culvert to a depth of 14 1/2 feet, with sampling at 2 1/2-foot intervals.
- Preparing this report containing a boring location sketch, logs of soil borings, a summary of the soils encountered, results of laboratory tests, and recommendations subgrade preparation, pavement design and culvert replacement.

Our scope of services did not include environmental services or testing, and we did not train the personnel performing this evaluation to provide environmental services or testing. We can provide these services or testing if requested.

B. Results

B.1. Geologic Overview

Based on the review of geologic map C-17 Geologic Atlas of Scott County, the project site is underlain by Minnesota River alluvium with deposits of low-lying windblown sand near the riverbanks.

We based the geologic origins used in this report on the soil types and laboratory testing, and available common knowledge of the geological history of the site. Because of the complex depositional history, geologic origins can be difficult to ascertain. We did not perform a detailed investigation of the geologic history for the site.

B.2. Previous Geotechnical Information

The AET report included several evaluation services including soil borings to 3 1/2 feet deep, pavement cores, falling weight deflectometer (FWD) testing, ground penetrating radar (GPR) testing, and digital pavement surface condition rating.

The report indicated Vernon Avenue had significant distresses at the surface, with cores, GPR and borings showing about 2 1/2 inches of damaged bituminous pavement material overlying around 6 to 8 inches of mixed aggregate base material. The report classified the underlying soils as clayey fill, buried topsoil and clayey and sandy alluvium, with FWD testing indicating a rather weak subgrade R-value of 5.6.

Based on the results of the evaluation, the report recommended reclaiming 4 inches of roadway and placing 3 inches of Class 1 aggregate surfacing to support hauling operations proposed for that time.

B.3. Boring Results

Table 2 provides a summary of the soil boring results in the general order we encountered the strata. Please refer to the Log of Boring sheets in the Appendix for additional details. The Descriptive Terminology of Soil sheet in the Appendix includes definitions of abbreviations used in Table 2. For simplicity in this report, we define fill to mean existing, uncontrolled, or undocumented fill.

Table 3. Subsurface Profile Summary*

| Strata | Soil Type - ASTM Classification | Range of Penetration Resistances | Commentary and Details |
|------------------|---------------------------------|-------------------------------------|--|
| Pavement section | --- | --- | <ul style="list-style-type: none"> Appeared as multi-layered aggregate; the top material consisted of highly deteriorated bituminous pavement mixed with floodplain sediment, which was then underlain by an apparent aggregate base Surface materials ranged from 2 to 6 inches thick, with the underlying aggregate ranging between 6 and 12 inches and generally about 8 inches thick |
| Fill | SP-SM, SM | About 20 to 32 blows per foot (BPF) | <ul style="list-style-type: none"> Present in Borings C-1, R-1 and R-3 Primarily fine to medium-grained and moist. Some penetration test results influenced by frost. |
| Swamp deposit | OL | 4 BPF | <ul style="list-style-type: none"> Organic clay mixed with peat from 2 to 4 feet in Boring R-1 |
| Alluvium | GP, SP, SM, SC, CL, ML | 3 to 22 BPF | <ul style="list-style-type: none"> Loose sandy soils or soft to medium clays and silts Extended to boring termination depth at each location |

B.4. Laboratory Test Results

We performed moisture content (MC) tests (ASTM D2216), wash loss (P200) tests (ASTM D1140), and organic content (OC) (ASTM D2974) on selected samples to verify field classification and to evaluate the reusability of the material. The Log of Boring Sheets attached in the Appendix show the results of moisture content and wash loss testing we performed next to the tested sample depth.

B.5. Groundwater

We did not observe groundwater while performing our borings. Groundwater may take days or longer to reach equilibrium in the boreholes and we immediately backfilled the boreholes in accordance with our scope of work. If the project team identifies a need for more accurate determination of groundwater depth, we can install piezometers. We expect groundwater will fluctuate with nearby Minnesota River levels and project planning should anticipate seasonal and annual fluctuations of groundwater.

C. Recommendations

C.1. Design and Construction Discussion

C.1.a. Pavement Reconstruction

We understand LMRWD is proposing to reconstruct Vernon Avenue to support future hauling operations. The proposed reconstruction will include a new bituminous surface.

Given the nature of the pavement materials we encountered, which often appeared to be inconsistent in quality and thickness and mixed with floodplain soils and other materials, we do not recommend reusing any reclaimed pavements as aggregate base. Instead, these materials should be removed and replaced with a quality imported aggregate capable of supporting new pavements and the associated haul route loading.

The pavement subgrades are likely to consist of soft or sensitive materials that will be prone to strength loss during construction. In particular, we noted organic clay just below the surface at Boring R-1, shallow sandy silt in Boring R-4, and alluvial clays in other locations. These materials will provide poor support to reconstructed pavements and portions of these soils should be removed and replaced with imported granular subbase to improve uniformity of the pavement section, aid in constructability, and reduce the potential for pavement damage from frost heave and saturated subgrade conditions.

Section C.2 includes our detailed recommendations for pavement reconstruction.

C.1.b. Culvert Replacement

We assume the culvert will be ground supported and will be replaced by open-cut methods.

Boring C-1 generally encountered alluvial soils including silty sand and clayey sand; at depth, these soils were considered to be soft to medium in consistency. These soils can generally be reused to support the replacement culvert, though there is a somewhat high risk of these soils being wet upon exposure and becoming unstable, which will require further subcutting and/or soil conditioning. Additionally, groundwater control during construction will need to be considered.

Our recommendations for culvert construction are provided in Section C.3.

C.2. Pavements

C.2.a. Pavement Reclamation and Subgrade Preparation

We recommend the following steps for pavement reclamation and subgrade preparation for Vernon Avenue, understanding the new pavements will generally match existing grades.

- Remove the pavement by reclamation or excavation. We do not recommend using reclaimed pavement materials as aggregate base in the new pavements.
- Cut the roadway section to grade and have a geotechnical representative observe the excavated subgrade or top of reclaim material to evaluate if additional improvements are necessary.
- Scarify, moisture condition, and surface compact the subgrade to at least 100 percent of Standard Proctor density.
- Also, where necessary: place pavement engineered fill to grade where required and compact in accordance with Section C.2.c to bottom of the pavement section.
- Test roll the pavement subgrades and aggregate base layers as described in Section C.2.b.

C.2.b. Pavement Subgrade Test Roll

After preparing the subgrade as described above and prior to the placement of the sand subbase or additional aggregate base, we recommend test rolling the subgrade soils with a fully loaded tandem-axle truck. We also recommend having a geotechnical representative observe the test roll. Areas that fail the test roll indicate soft or weak soils that will require additional correction work to support pavements.

We recommend test rolling in accordance with MnDOT Specification 2111. Where necessary to correct subgrades that fail the test roll, options include moisture conditioning and recompaction, subcutting and replacement with soil or crushed aggregate, chemical stabilization and/or geotextiles.

C.2.c. Engineered Fill Materials and Compaction

The on-site soils with an organic content less than 5 percent and free of debris are suitable for reuse as backfill. The fine-grained soils will be more difficult to compact if wet, allowed to become wet, or if spread and compacted over wet surfaces. Soils comprised substantially of silt (ML), such as those in Boring R-4, will usually not be suitable for reuse and should be replaced.

If imported material is to be used, Table 4 contains our recommendations for engineered fill.

Table 4. Recommended Fill and Compaction Specifications*

| Material | Material Specification | Compaction Specification |
|--|---|---------------------------------|
| Subgrade fill | Select grading material (MnDOT 2106.2.B.1) | MnDOT 2106.3.G.1 |
| Below landscaped surfaces, where subsidence is not a concern | Non-structural embankment (MnDOT 2106.2.B.8) | MnDOT 2106.3.G.2 |

*More select soils may be needed to accommodate work occurring in periods of wet or freezing weather.

We recommend spreading engineered fill in loose lifts of approximately 12 inches thick. We recommend moisture conditioning and compacting engineered fill in accordance with the MnDOT specifications listed in the table above. The project documents should not allow the contractor to use frozen material as engineered fill or to place engineered fill on frozen material.

We recommend performing moisture content and density tests in engineered fill to evaluate if the contractors are effectively moisture conditioning and compacting the soil and meeting project requirements.

C.2.d. Pavement Design Sections

Our scope of services for this project did not include laboratory tests on subgrade soils to determine an R-value for pavement design. The previous report cited an R-value of 5.6 based on FWD testing. This R-value represents in-situ subgrade stiffness; assuming poorer subgrade soils will be subcut and the soils generally will be recompacted, we recommend a design R-value of 10.

Based upon the estimated traffic loads and above R-value, we recommend a new pavement section per the following table.

Table 5. Recommended Bituminous Pavement Thickness Design

| Layer | Thickness (in) | Material (Specification) |
|------------------------|----------------|---|
| Bituminous wear course | 4 | SPWEA340C (MnDOT 2360) |
| Aggregate base | 8 | Class 5 (MnDOT 3138) |
| Granular subbase | 12 | Select granular material (MnDOT 3149.2.B.2) |

The above pavement design is based upon a 20-year performance life. This is the amount of time before major rehabilitation is anticipated. This performance life assumes maintenance such as seal coating and crack sealing is routinely performed. The actual pavement life will vary depending on variations in weather, traffic conditions, and maintenance.

Many conditions affect the overall performance of the pavements. Some of these conditions include the environment, loading conditions, and the level of ongoing maintenance. With regard to bituminous pavements, in particular, it is common to have thermal cracking develop within the first few years of placement and continue throughout the life of the pavement. We recommend developing a regular maintenance plan for filling cracks in pavements to lessen the potential impacts for cold weather distress due to frost heave or warm weather distress due to wetting and softening of the subgrade.

C.2.e. Pavement Materials Placement

We recommend placing the bituminous wear course to meet the requirements of MnDOT Specification 2360. We recommend compacting the aggregate base to meet the requirements of MnDOT Specification 2211.3.D.2.c (Penetration Index Method for the dynamic cone penetrometer [DCP]).

C.3. Culvert Replacement

C.3.a. Excavated Slopes

Based on the borings, we anticipate on-site soils in excavations will consist of soils meeting OSHA (Occupational Safety and Health Administration) Type C requirements. OSHA guidelines indicate unsupported excavations in Type C soils should have a gradient no steeper than 1:1.5 V:H

(vertical :horizontal). Slopes constructed in this manner may still exhibit surface sloughing. In organic soils or excavations below the groundwater table, excavation sides slopes may need to lie back at even flatter inclinations for stability. OSHA requires an engineer to evaluate slopes or excavations over 20 feet in depth.

An OSHA-approved qualified person should review the soil classification in the field. Excavations must comply with the requirements of OSHA 29 CFR, Part 1926, Subpart P, "Excavations and Trenches." This document states excavation safety is the responsibility of the contractor. The project specifications should reference these OSHA requirements.

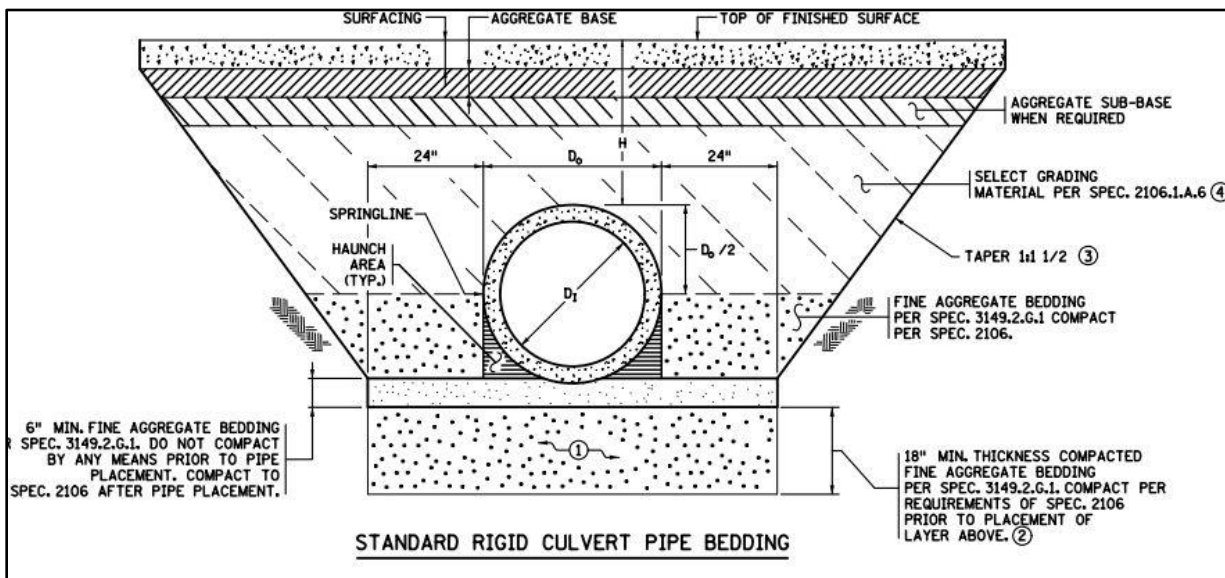
C.3.b. Groundwater Control

Prior to excavation and installation of the new culverts, we recommend temporarily diverting waters away from the construction area. Temporary groundwater removal may be required to facilitate the construction of the culvert and perform any necessary soil corrections below the structures. We anticipate local dewatering can be achieved with sump pumps.

C.3.c. Culvert Bedding and Subgrade Treatments

Our recommendation for culvert bedding, taken from MnDOT standard plans, is shown in Figure 1

Figure 1. Standard Culvert Bedding for Rigid Pipe (without treatment)



¹Figure taken from MnDOT's Standard Plan 5-297-441.

C.3.d. Additional Foundation Support and Bedding/Treatment Recommendations

We recommend stripping vegetation, topsoil, debris, soft, loose, or poor soils encountered to the bottom of the bedding material elevation in accordance with MnDOT Specifications 2106 and 2451. We define poor soils as organic, soft or loose soils judged unsuitable for support of the culvert structures.

A geotechnical engineer should evaluate the site to judge if further excavation is warranted. Poor soils will typically require removal to a depth of at least 2 feet and replacement with additional bedding material.

C.3.e. Subgrade Fill Materials and Compaction

We recommend culvert backfill per the details shown above in Figure 1. If working in wet conditions, the fine aggregate bedding material can be replaced with coarse aggregate bedding to aid in compaction.

We recommend performing density tests in engineered fill to evaluate if the contractors are effectively compacting the soil and meeting project requirements. We recommend spreading engineered fill in loose lifts of approximately 12 inches thick or less. The project documents should not allow the contractor to use frozen material as engineered fill or to place engineered fill on frozen material. Frost should not penetrate under foundations during construction.

We recommend compacting backfill and fill per the MnDOT Standard Specification and the criteria presented in the table below.

C.3.f. Permanent Side Slopes

Our scope of services did not include global stability of the permanent side slopes. We recommend constructing these slopes at a 1:3 V:H inclination or flatter. Steeper slopes should be reviewed and may require additional analyses.

D. Procedures

D.1. Penetration Test Borings

We drilled the penetration test borings with a Geoprobe rig equipped with hollow-stem auger. We performed the borings in general accordance with ASTM D6151 taking penetration test samples at 2 1/2- or 5-foot intervals in general accordance with ASTM D1586. We collected thin-walled tube samples in general accordance with ASTM D1587 at selected depths. The boring logs show the actual sample intervals and corresponding depths.

D.2. Log of Boring Sheets

The Appendix includes Log of Boring sheets for our penetration test borings. The logs identify and describe the penetrated geologic materials and present the results of penetration resistance tests performed. The logs also present the results of laboratory tests performed on penetration test samples, and groundwater measurements.

We inferred strata boundaries from changes in the penetration test samples and the auger cuttings. The strata boundary depths are only approximate. The boundary depths likely vary away from the boring locations, and the boundaries themselves may occur as gradual rather than abrupt transitions.

D.3. Material Classification and Testing

D.3.a. Visual and Manual Classification

We visually and manually classified the geologic materials encountered based on ASTM D2488. When we performed laboratory classification tests, we used the results to classify the geologic materials in accordance with ASTM D2487. The Appendix includes a chart explaining the classification system we used.

D.3.b. Laboratory Testing

The exploration logs in the Appendix note the results of the laboratory tests performed on geologic material samples. We performed the tests in general accordance with ASTM or AASHTO procedures.

D.4. Groundwater Measurements

The drillers checked for groundwater while advancing the penetration test borings, and again after auger withdrawal. We then filled the boreholes or allowed them to remain open for an extended period of observation, as noted on the boring logs.

E. Qualifications

E.1. Variations in Subsurface Conditions

E.1.a. Material Strata

We developed our evaluation, analyses, and recommendations from a limited amount of site and subsurface information. It is not standard engineering practice to retrieve material samples from exploration locations continuously with depth. Therefore, we must infer strata boundaries and thicknesses to some extent. Strata boundaries may also be gradual transitions, and project planning should expect the strata to vary in depth, elevation, and thickness away from the exploration locations.

Variations in subsurface conditions present between exploration locations may not be revealed until performing additional exploration work or starting construction. If future activity for this project reveals any such variations, you should notify us so that we may reevaluate our recommendations. Such variations could increase construction costs, and we recommend including a contingency to accommodate them.

E.1.b. Groundwater Levels

We made groundwater measurements under the conditions reported herein and shown on the exploration logs and interpreted in the text of this report. Note that the observation periods were relatively short, and project planning can expect groundwater levels to fluctuate in response to rainfall, flooding, irrigation, seasonal freezing and thawing, surface drainage modifications, and other seasonal and annual factors.

E.2. Continuity of Professional Responsibility

E.2.a. Plan Review

We based this report on a limited amount of information, and we made a number of assumptions to help us develop our recommendations. We should be retained to review the geotechnical aspects of the designs and specifications. This review will allow us to evaluate whether we anticipated the design correctly, if any design changes affect the validity of our recommendations, and if the design and specifications correctly interpret and implement our recommendations.

E.2.b. Construction Observations and Testing

We recommend retaining us to perform the required observations and testing during construction as part of the ongoing geotechnical evaluation. This will allow us to correlate the subsurface conditions exposed during construction with those encountered by the borings and provide professional continuity from the design phase to the construction phase. If we do not perform observations and testing during construction, it becomes the responsibility of others to validate the assumption made during the preparation of this report and to accept the construction-related geotechnical engineer-of-record responsibilities.

E.3. Use of Report

This report is for the exclusive use of the addressed parties. Without written approval, we assume no responsibility to other parties regarding this report. Our evaluation, analyses, and recommendations may not be appropriate for other parties or projects.

E.4. Standard of Care

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

Appendix



Drawing Information

| | |
|----------------|----------|
| Project No: | B2302291 |
| Drawing No: | B2302291 |
| Drawn By: | JAG |
| Date Drawn: | 3/22/23 |
| Checked By: | NGL |
| Last Modified: | 5/2/23 |



Project Information

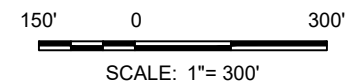
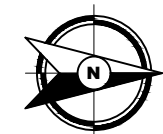
Vernon Avenue
Improvements
and Access Road
Culvert Project

Vernon Avenue, TH 13
to the Minnesota River

Savage, Minnesota

Soil Boring
Location Sketch

-  DENOTES APPROXIMATE LOCATION OF ROADWAY SPT SOIL BORING
-  DENOTES APPROXIMATE LOCATION OF CULVERT SPT SOIL BORING



See Descriptive Terminology sheet for explanation of abbreviations

| | | | | | |
|--|-----------|--------------------|------------------------|---|------------------------|
| Project Number B2302291 | | | | BORING: C-1 | |
| Geotechnical Evaluation | | | | LOCATION: See attached sketch | |
| Vernon Ave Improvements and Access Road Culvert | | | | DATUM: NAD 1983 HARN Adj MN Scott (US Feet) | |
| Vernon Ave TH 13 to Minnesota River | | | | NORTHING: 215572 | EASTING: 491414 |
| DRILLER: M. Barber | | LOGGED BY: N. Lund | | START DATE: 03/29/23 | END DATE: 03/29/23 |
| SURFACE ELEVATION: 706.8 ft | RIG: GP-1 | METHOD: 3 1/4" HSA | SURFACING: Gravel Road | | WEATHER: Partly Cloudy |

| Elev./Depth ft | Water Level | Description of Materials (Soil-ASTM D2488 or 2487; Rock-USACE EM 1110-1-2908) | Sample | Blows (N-Value) Recovery | q _p tsf | MC % | Tests or Remarks |
|----------------|-------------|--|--------|--------------------------|--------------------|------|------------------------------------|
| 706.5 0.3 | | GRAVEL, 4 inches aggregate surface | | | | | |
| 705.5 1.3 | | APPARENT AGGREGATE BASE, 12 inches aggregate base | | | | | |
| 702.8 4.0 | | FILL: SILTY SAND (SM), fine-grained, brown, frozen (moist when thawed) | 5 | 16-14-14 (28) 12" | | 11 | P200=14% |
| | | SILTY SAND (SM), fine-grained, brown, moist, medium dense (ALLUVIUM) | | 10-9-8 (17) 12" | | | |
| 695.8 11.0 | | | 10 | 9-7-6 (13) 10" | | | |
| | | CLAYEY SAND (SC), with Sand, gray, moist, soft to medium (ALLUVIUM) | | 2-2-1 (3) 16" | | | |
| 692.3 14.5 | | | | 2-3-3-3 (6) 12" | | 24 | P200=46% |
| | | END OF BORING | 15 | | | | Water not observed while drilling. |
| | | Boring then backfilled with auger cuttings | | | | | |
| | | | 20 | | | | |
| | | | 25 | | | | |
| | | | 30 | | | | |

See Descriptive Terminology sheet for explanation of abbreviations

| | | | | | |
|--|-----------|--------------------|------------------------|---|------------------------|
| Project Number B2302291 | | | | BORING: R-2 | |
| Geotechnical Evaluation | | | | LOCATION: See attached sketch | |
| Vernon Ave Improvements and Access Road Culvert | | | | DATUM: NAD 1983 HARN Adj MN Scott (US Feet) | |
| Vernon Ave TH 13 to Minnesota River | | | | NORTHING: 213433 | EASTING: 491393 |
| DRILLER: M. Barber | | LOGGED BY: N. Lund | | START DATE: 03/29/23 | END DATE: 03/29/23 |
| SURFACE ELEVATION: 710.3 ft | RIG: GP-1 | METHOD: 3 1/4" HSA | SURFACING: Gravel Road | | WEATHER: Partly Cloudy |

| Elev./ Depth ft | Water Level | Description of Materials (Soil-ASTM D2488 or 2487; Rock-USACE EM 1110-1-2908) | Sample | Blows (N-Value) Recovery | q _p tsf | MC % | Tests or Remarks |
|-----------------|-------------|--|--------|--------------------------|--------------------|------|---|
| 710.0 | | GRAVEL, 4 inches aggregate surface | | 16-6-5-4 | | | OC=3% Water not observed while drilling. |
| 0.3 | | APPARENT AGGREGATE BASE, 8 inches | | (11) | | | |
| 709.3 | | apparent aggregate base | | 16" | | | |
| 1.0 | | POORLY GRADED SAND (SP), fine-grained, | | 2-2-2-4 | | | |
| 708.3 | | dark brown, moist, loose (ALLUVIUM) | | (4) | | | |
| 2.0 | | LEAN CLAY (CL), with Sand, brown and gray, | | 12" | | | |
| 706.3 | | moist, medium (ALLUVIUM) | | 3-4-3-4 | | | |
| 4.0 | | LEAN CLAY (CL), with Sand, slightly organic, | 5 | (7) | | 17 | |
| 704.3 | | black, moist, medium (ALLUVIUM) | | 12" | | | |
| 6.0 | | END OF BORING | | | | | |
| | | Boring then backfilled with auger cuttings | | | | | |
| | | | 10 | | | | |
| | | | 15 | | | | |
| | | | 20 | | | | |
| | | | 25 | | | | |
| | | | 30 | | | | |

| Criteria for Assigning Group Symbols and Group Names Using Laboratory Tests ^A | | | | Soil Classification | | |
|--|---|---|--|----------------------------|-----------------------------------|------------------------------|
| | | | | Group Symbol | Group Name ^B | |
| Coarse-grained Soils (more than 50% retained on No. 200 sieve) | Gravels (More than 50% of coarse fraction retained on No. 4 sieve) | Clean Gravels (Less than 5% fines ^C) | $C_u \geq 4$ and $1 \leq C_c \leq 3^D$ | GW | Well-graded gravel ^E | |
| | | | $C_u < 4$ and/or ($C_c < 1$ or $C_c > 3$) ^D | GP | Poorly graded gravel ^E | |
| | | Gravels with Fines (More than 12% fines ^C) | | Fines classify as ML or MH | GM | Silty gravel ^{EFG} |
| | | | | Fines Classify as CL or CH | GC | Clayey gravel ^{EFG} |
| | Sands (50% or more coarse fraction passes No. 4 sieve) | Clean Sands (Less than 5% fines ^H) | $C_u \geq 6$ and $1 \leq C_c \leq 3^D$ | SW | Well-graded sand ^I | |
| | | | $C_u < 6$ and/or ($C_c < 1$ or $C_c > 3$) ^D | SP | Poorly graded sand ^I | |
| | | Sands with Fines (More than 12% fines ^H) | | Fines classify as ML or MH | SM | Silty sand ^{FGI} |
| | | | | Fines classify as CL or CH | SC | Clayey sand ^{FGI} |
| Fine-grained Soils (50% or more passes the No. 200 sieve) | Silts and Clays (Liquid limit less than 50) | Inorganic | PI > 7 and plots on or above "A" line ^J | CL | Lean clay ^{KLM} | |
| | | | PI < 4 or plots below "A" line ^J | ML | Silt ^{KLM} | |
| | | Organic | Liquid Limit – oven dried | OH | Organic clay ^{KLMN} | |
| | | | Liquid Limit – not dried < 0.75 | | | OL |
| | Silts and Clays (Liquid limit 50 or more) | Inorganic | PI plots on or above "A" line | CH | Fat clay ^{KLM} | |
| | | | PI plots below "A" line | MH | Elastic silt ^{KLM} | |
| | | Organic | Liquid Limit – oven dried | OH | Organic clay ^{KLMN} | |
| | | | Liquid Limit – not dried < 0.75 | | | OL |
| Highly Organic Soils | Primarily organic matter, dark in color, and organic odor | | | PT | Peat | |

Particle Size Identification

- Boulders..... over 12"
- Cobbles..... 3" to 12"
- Gravel
 - Coarse..... 3/4" to 3" (19.00 mm to 75.00 mm)
 - Fine..... No. 4 to 3/4" (4.75 mm to 19.00 mm)
- Sand
 - Coarse..... No. 10 to No. 4 (2.00 mm to 4.75 mm)
 - Medium..... No. 40 to No. 10 (0.425 mm to 2.00 mm)
 - Fine..... No. 200 to No. 40 (0.075 mm to 0.425 mm)
- Silt..... No. 200 (0.075 mm) to .005 mm
- Clay..... < .005 mm

Relative Proportions^{L-M}

- trace..... 0 to 5%
- little..... 6 to 14%
- with..... ≥ 15%

Inclusion Thicknesses

- lens..... 0 to 1/8"
- seam..... 1/8" to 1"
- layer..... over 1"

Apparent Relative Density of Cohesionless Soils

- Very loose 0 to 4 BPF
- Loose 5 to 10 BPF
- Medium dense..... 11 to 30 BPF
- Dense..... 31 to 50 BPF
- Very dense..... over 50 BPF

Consistency of Cohesive Soils **Blows Per Foot** **Approximate Unconfined Compressive Strength**

- Very soft..... 0 to 1 BPF..... < 0.25 tsf
- Soft..... 2 to 4 BPF..... 0.25 to 0.5 tsf
- Medium..... 5 to 8 BPF..... 0.5 to 1 tsf
- Stiff..... 9 to 15 BPF..... 1 to 2 tsf
- Very Stiff..... 16 to 30 BPF..... 2 to 4 tsf
- Hard..... over 30 BPF..... > 4 tsf

Moisture Content:

- Dry:** Absence of moisture, dusty, dry to the touch.
- Moist:** Damp but no visible water.
- Wet:** Visible free water, usually soil is below water table.

Drilling Notes:

Blows/N-value: Blows indicate the driving resistance recorded for each 6-inch interval. The reported N-value is the blows per foot recorded by summing the second and third interval in accordance with the Standard Penetration Test, ASTM D1586.

Partial Penetration: If the sampler could not be driven through a full 6-inch interval, the number of blows for that partial penetration is shown as #/x" (i.e. 50/2"). The N-value is reported as "REF" indicating refusal.

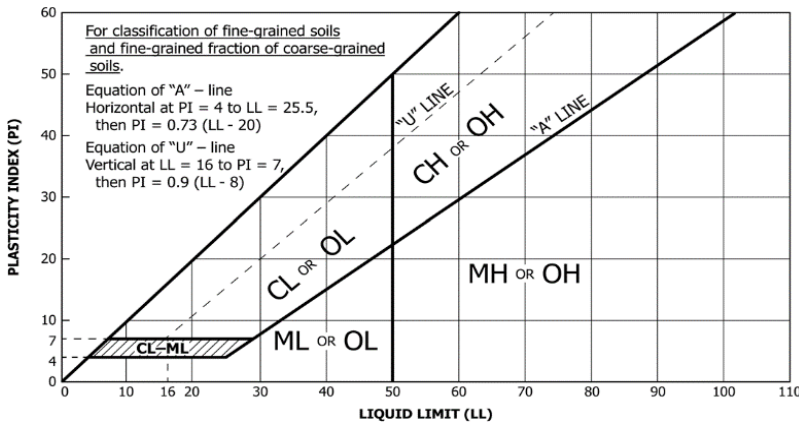
Recovery: Indicates the inches of sample recovered from the sampled interval. For a standard penetration test, full recovery is 18", and is 24" for a thinwall/shelby tube sample.

WOH: Indicates the sampler penetrated soil under weight of hammer and rods alone; driving not required.

WOR: Indicates the sampler penetrated soil under weight of rods alone; hammer weight and driving not required.

Water Level: Indicates the water level measured by the drillers either while drilling (◊), at the end of drilling (▼), or at some time after drilling (◊).

- A. Based on the material passing the 3-inch (75-mm) sieve.
- B. If field sample contained cobbles or boulders, or both, add "with cobbles or boulders, or both" to group name.
- C. Gravels with 5 to 12% fines require dual symbols:
 - GW-GM well-graded gravel with silt
 - GW-GC well-graded gravel with clay
 - GP-GM poorly graded gravel with silt
 - GP-GC poorly graded gravel with clay
- D. $C_u = D_{60} / D_{10}$ $C_c = (D_{30})^2 / (D_{10} \times D_{60})$
- E. If soil contains ≥ 15% sand, add "with sand" to group name.
- F. If fines classify as CL-ML, use dual symbol GC-GM or SC-SM.
- G. If fines are organic, add "with organic fines" to group name.
- H. Sands with 5 to 12% fines require dual symbols:
 - SW-SM well-graded sand with silt
 - SW-SC well-graded sand with clay
 - SP-SM poorly graded sand with silt
 - SP-SC poorly graded sand with clay
- I. If soil contains ≥ 15% gravel, add "with gravel" to group name.
- J. If Atterberg limits plot in hatched area, soil is CL-ML, silty clay.
- K. If soil contains 15 to < 30% plus No. 200, add "with sand" or "with gravel", whichever is predominant.
- L. If soil contains ≥ 30% plus No. 200, predominantly sand, add "sandy" to group name.
- M. If soil contains ≥ 30% plus No. 200 predominantly gravel, add "gravelly" to group name.
- N. PI ≥ 4 and plots on or above "A" line.
- O. PI < 4 or plots below "A" line.
- P. PI plots on or above "A" line.
- Q. PI plots below "A" line.



Laboratory Tests

- DD Dry density, pcf
- WD Wet density, pcf
- P200 % Passing #200 sieve
- MC Moisture content, %
- OC Organic content, %
- q_p Pocket penetrometer strength, tsf
- q_u Unconfined compression test, tsf
- LL Liquid limit
- PL Plastic limit
- PI Plasticity index

Sample Symbols

- Standard Penetration Test
- Modified California (MC)
- Auger
- Grab Sample
- Rock Core
- Thinwall (TW)/Shelby Tube (SH)
- Texas Cone Penetrometer
- Dynamic Cone Penetrometer

APPENDIX B

WORK IN UP RAILROAD ROW ASSOCIATED DOCUMENTS

Maintenance Consent Letter

Contractor Endorsement

General Terms and Conditions for Contractor Endorsement

Exhibit A - Insurance Provisions for Contractor Endorsement

Exhibit B – Minimum Safety Requirements for Contractor Endorsement

Permit Record Summary

REMS Project: 0793829
Agency Project: OT1.129866
Start Date: 11/10/2023
End Date: 11/10/2024



BUILDING AMERICA®

Maintenance Consent Letter

| DOT | MP | Subdivision |
|---------|--------|-------------|
| 854259H | 19.246 | Mankato Sub |

Linda Loomis
LOWER MINNESOTA RIVER WATERSHED DISTRICT
6677 Olson Memorial Highway
Golden Valley, MN 55427

It is the LOWER MINNESOTA RIVER WATERSHED DISTRICT’s (**Public Entity**) intention to repair subgrade, remove existing pavement, install asphalt pavement, replace existing pavement markings, and provide traffic control (**Work**) at the location(s) noted above. This letter serves as an acceptance by UNION PACIFIC RAILROAD COMPANY (**Railroad**) of the proposed Work to be performed.

If a contractor is to do any of the Work on Railroad’s property, then the Public Entity shall require its contractor to execute and return the attached Contractor Endorsement (**Endorsement**). Under no circumstances will Public Entity’s contractor be allowed on Railroad’s property without first executing the Endorsement.

This Consent Letter shall be valid for one year or until the Work is completed or this Consent Letter is revoked by the Railroad.

Prior to performing the Work, Contractor agrees to provide forty-five (45) days advance notice to the Railroad Representative identified below.

Leo Craig (817) 901-9560 – lcraig@olsson.com

Fiber Optics & Telecommunications (Call Before You Dig) – www.up.com/CBUD

DocuSigned by:

C56FA18B005E4A2...

11/30/2023

Melinda S DuBay
Manager I
Engineering-Public Projects

REMS Project: 0793829
Agency Project: OT1.129866
Consent Start Date: 11/10/2023

Contractor Endorsement

| DOT | MP | Subdivision |
|---------|--------|-------------|
| 854259H | 19.246 | Mankato Sub |

A. As a condition to entering upon Union Pacific Railroad Company (**Railroad**) property to repair subgrade, remove existing pavement, install asphalt pavement, replace existing pavement markings, and provide traffic control (**Work**) described in the Consent Letter, the contractor for LOWER MINNESOTA RIVER WATERSHED DISTRICT (**Public Entity**), by signing below, acknowledges and agrees to comply with and be bound by the Railroad Property Access Training (UP-PAT) and the General Terms and Provisions of the Endorsement that can be found at the links below.

Union Pacific Property Access Training (UP-PAT)

www.up.com/up-pat

Contractor Endorsement-General Terms and Provisions

www.up.com/ce-terms

Third-party Flagging Requirements

www.up.com/flagging

B. Upon request, all insurance documentation shall be provided to Railroad.

C. Fiber optics and telecommunication facilities can be present on Railroad property. Prior to performing work that has the potential to impact these facilities, the Agency or its contractor shall follow the procedures outlined on the Railroad webpage link below.

Fiber Optics & Telecommunications (Call Before You Dig) - www.up.com/CBUD

D. Prior to Performing the Work, Contractor agrees to provide forty-five (45) days advance notice to the Railroad Representative identified below.

Leo Craig (817) 901-9560 – lcraig@olsson.com

E. The terms of this Endorsement shall commence on the date of execution and continue for one (1) year or until such time as contractor has completed the Work. The Work may be terminated within 24 hours' notice by either party.

Signed Contractor Endorsement must be returned to the address below. No work may proceed until the terms of this endorsement have been met, and the executed endorsement and \$1,025 administrative fee is received.

Union Pacific Railroad Company
 ATTN: Engineering-Public Projects
 Maintenance Program
 1400 Douglas Street MS910
 Omaha, NE 68179

REMS Project: 0793829
Agency Project: OT1.129866
Consent Start Date: 11/10/2023

Payment of the \$1,025 administrative fee must be submitted using one of the methods identified on the Bill included with this endorsement. If paying by check, submit the Bill with the check and mail to the Bank of America address on the Bill. For ACH or wire transfer payments, refer to the instructions provided on the Bill.

Failure to include the Bill Number with the payment will result in delays.

| | | | |
|--|---------------------------------------|-------------------------------------|---|
| Company Name | | | |
| Contact Name | | | |
| Address | | | |
| City, ST Zip | | | |
| Phone | Email | | |
| Contact Signature | Date | | |
| Payment Method Select Payment Type | <input type="checkbox"/> Check | <input type="checkbox"/> ACH | <input type="checkbox"/> Wire Transfer |

Union Pacific Railroad Company

BUILDING AMERICA™

Bill Number 329665161
Contract Number 0793829
Audit Number 311466
Customer Number 57655
Folder Number
Bill Date 11/8/2023

LOWER MINNESOTA RIVER WATERSHED DISTRICT
6677 OLSON MEMORIAL HIGHWAY
GOLDEN VALLEY, MN 55427

For questions or comments please email REBILLING@up.com

Bill Description : Agency No: Vernon Ave (0T1.129866); DOT 854259H; Maintenance-Roadway. Effective date: 11/08/23

Location of Agreement: SAVAGE, MN

Primary Purpose of Agreement:

| Description | Period | | Amount |
|------------------------------|-----------|-----------|-------------------|
| | From | To | |
| Roadway-Contractor's ROE Fee | 11/8/2023 | 11/8/2023 | \$1,025.00 |
| Total Due: | | | \$1,025.00 |

.....
**To assure proper credit to your account,
 please remit payment using one of these methods:**

ACH/Wire Information:

Union Pacific Acct nbr: 3752021457 (Checking)

Wire XFER ABA Routing nbr: 026009593

ACH PYMT ABA Routing nbr: 111000012

SEND Checks to:

Union Pacific Railroad Company

12567 Collections Center Drive

Chicago, IL 60693

Remittance Information:

Bill Number 329665161

Audit Number 311466

Customer Number 57655

Folder Number

Payable Upon Receipt: \$1,025.00

Receiving Bank's Address

Bank of America

901 Main Street

Dallas, TX 75202

DUNS nbr: 00-699-1590

SWIFT Code: BOFAUS3N

Tax ID: 94-6001323

Network ID: 0136400825

CONTRACTOR ENDORSEMENT

GENERAL TERMS AND PROVISIONS

SECTION 1. DEFINITION OF CONTRACTOR.

For purposes of this agreement, all references in this agreement to Contractor shall include Contractor's contractors, subcontractors, officers, agents and employees, and others acting under its or their authority. For purposes of clarity, Contractor agrees that any CIC (defined below) hired by Contractor is a subcontractor of Contractor and therefore included in the defined term Contractor pursuant to the foregoing sentence.

SECTION 2. ALL EXPENSES TO BE BORNE BY CONTRACTOR; SUPERVISION.

A. Contractor shall bear any and all costs and expenses associated with any work performed by Contractor (including without limitation any CIC), or any costs or expenses incurred by Railroad relating to this agreement.

B. Contractor, at its own expense, shall adequately police and supervise all work to be performed by Contractor and shall ensure that such work is performed in a safe manner as set forth in SECTION 15. The responsibility of Contractor for safe conduct and adequate policing and supervision of Contractor's work shall not be lessened or otherwise affected by Railroad's approval of plans and specifications involving the work, or by Railroad's collaboration in performance of any work, or by the presence at the work site of a Railroad Representative, or by compliance by Contractor with any requests or recommendations made by Railroad Representative.

SECTION 3. TERM; TERMINATION.

A. These general terms and provisions shall remain in effect for the term as stated in the Contractor Endorsement. Contractor agrees to notify the Railroad Representative in writing when it has completed its work on Railroad's property.

B. This agreement may be terminated by either party on twenty four (24) hours written notice to the other party.

SECTION 4. INSURANCE.

A. Contractor will, upon request, provide Railroad with the (i) insurance binders, policies, certificates and endorsements set forth in **Exhibit A** of this agreement, and (ii) the insurance endorsements obtained by each subcontractor as required under SECTION 21 of this agreement.

B. Upon request, all insurance correspondence, binders, policies, certificates and endorsements shall be sent to:

Union Pacific Railroad Company
Attn: Public Projects Manager
1400 Douglas Street, STOP 1690
Omaha, NE 68179

SECTION 5. PRECONSTRUCTION MEETING.

If the work to be performed by the Contractor will involve the Railroad providing any flagging protection (or if a CIC is approved to provide flagging protection pursuant to the terms set forth herein) and/or there is separate work to be performed by the Railroad, the Contractor confirms that no work shall commence until the Railroad and Contractor

participate in a preconstruction meeting involving flagging procedures and coordination of work activities of the Contractor and the Railroad (and any CIC, as applicable.)

SECTION 6. DISMISSAL OF CONTRACTOR'S EMPLOYEE.

At the request of Railroad, Contractor shall remove from Railroad's property any employee of Contractor who fails to conform to the instructions of the Railroad Representative in connection with the work on Railroad's property, and any right of Contractor shall be suspended until such removal has occurred. Contractor shall indemnify Railroad against any claims arising from the removal of any such employee from Railroad's property.

SECTION 7. CROSSINGS; COMPLIANCE WITH MUTCD AND FRA GUIDELINES.

A. No additional vehicular crossings (including temporary haul roads) or pedestrian crossings over Railroad's trackage shall be installed or used by Contractor without the prior written permission of Railroad.

B. Any permanent or temporary changes, including temporary traffic control, to crossings must conform to the Manual of Uniform Traffic Control Devices (MUTCD) and any applicable Federal Railroad Administration rules, regulations and guidelines, and must be reviewed by the Railroad prior to any changes being implemented. In the event the Railroad is found to be out of compliance with federal safety regulations due to the Contractor's modifications, negligence, or any other reason arising from the Contractor's presence on the Railroad's property, the Contractor agrees to assume liability for any civil penalties imposed upon the Railroad for such noncompliance.

SECTION 8. EXPLOSIVES.

Explosives or other highly flammable substances shall not be stored or used on Railroad's property without the prior written approval of Railroad.

SECTION 9. NOTICE OF COMMENCEMENT OF WORK - RAILROAD FLAGGING - PRIVATE FLAGGING.

A. Contractor agrees to notify the Railroad Representative at least ten (10) working days in advance of Contractor commencing its work and at least thirty (30) working days in advance of proposed performance of any work by Contractor in which any person or equipment will be within twenty-five (25) feet of any track, or will be near enough to any track that any equipment extension (such as, but not limited to, a crane boom) will reach to within twenty-five (25) feet of any track.

B. No work of any kind shall be performed, and no person, equipment, machinery, tool(s), material(s), vehicle(s), or thing(s) shall be located, operated, placed, or stored within twenty-five (25) feet of any of Railroad's track(s) at any time, for any reason, unless and until a Railroad approved flagman is provided to watch for trains. Upon receipt of such thirty (30)-day notice, the Railroad Representative will determine and inform Contractor whether a flagman need be present and whether Contractor needs to implement any special protective or safety measures.

C. Contractor shall be permitted to hire a private contractor to perform flagging or other special protective or safety measures (such private contractor being commonly known in the railroad industry as a contractor-in-charge ("CIC")) in lieu of Railroad providing such services or in concert with Railroad providing such services, subject to prior written approval by Railroad, which approval shall be in Railroad's sole and absolute discretion. If Railroad agrees to permit Contractor to utilize a CIC pursuant to the preceding sentence, Contractor shall obtain Railroad's prior approval in writing for each of the following items, as determined in all respects in Railroad's sole and absolute discretion: (i) the identity of the third-party performing the role of CIC; (ii) the scope of the services to be performed for the project by the approved CIC; and (iii) any other terms and conditions governing such services to be provided by the CIC. If flagging or other special protective or safety measures are performed by an approved CIC, Contractor shall be solely responsible for (and shall timely pay such CIC for) its services. Railroad reserves the right to rescind any approval pursuant to this Subsection C., in whole or in part, at any time, as determined in Railroad's sole and absolute discretion.

D. If any flagging or other special protective or safety measures are performed by employees of Railroad and/or any contractor of Railroad, Railroad will bill Contractor for such expenses incurred by Railroad, unless Railroad and a federal, state or local governmental entity have agreed that Railroad is to bill such expenses to the federal, state or local

governmental entity. If Railroad will be sending the bills to Contractor, Contractor shall pay such bills within thirty (30) days of Contractor's receipt of billing.

E. If any flagging or other special protective or safety measures are performed by Railroad or a CIC, Contractor agrees that Contractor is not relieved of any of its responsibilities or liabilities set forth in this agreement.

F. The provisions set forth in this subsection are only applicable for Flagging Services performed by employees of Railroad: the rate of pay per hour for each flagman will be the prevailing hourly rate in effect for an eight-hour day for the class of flagmen used during regularly assigned hours and overtime in accordance with labor agreements and schedules in effect at the time the work is performed. In addition to the cost of such labor, a composite charge for vacation, holiday, health and welfare, supplemental sickness, Railroad Retirement and unemployment compensation, supplemental pension, Employees Liability and Property Damage and Administration will be included, computed on actual payroll. The composite charge will be the prevailing composite charge in effect at the time the work is performed. One and one-half times the current hourly rate is paid for overtime, Saturdays and Sundays, and two and one-half times current hourly rate for holidays. Wage rates are subject to change, at any time, by law or by agreement between Railroad and its employees, and may be retroactive as a result of negotiations or a ruling of an authorized governmental agency. Additional charges on labor are also subject to change. If the wage rate or additional charges are changed, Contractor (or the governmental entity, as applicable) shall pay on the basis of the new rates and charges. If flagging is performed by Railroad, reimbursement to Railroad will be required covering the full eight-hour day during which any flagman is furnished, unless the flagman can be assigned to other Railroad work during a portion of such day, in which event reimbursement will not be required for the portion of the day during which the flagman is engaged in other Railroad work. Reimbursement will also be required for any day not actually worked by the flagman following the flagman's assignment to work on the project for which Railroad is required to pay the flagman and which could not reasonably be avoided by Railroad by assignment of such flagman to other work, even though Contractor may not be working during such time. When it becomes necessary for Railroad to bulletin and assign an employee to a flagging position in compliance with union collective bargaining agreements, Contractor must provide Railroad a minimum of five (5) days notice prior to the cessation of the need for a flagman. If five (5) days notice of cessation is not given, Contractor will still be required to pay flagging charges for the five (5) day notice period required by union agreement to be given to the employee, even though flagging is not required for that period. An additional thirty (30) days notice must then be given to Railroad if flagging services are needed again after such five day cessation notice has been given to Railroad.

SECTION 10. LIMITATION AND SUBORDINATION OF RIGHTS GRANTED.

A. The foregoing grant of right is subject and subordinate to the prior and continuing right and obligation of the Railroad to use and maintain its entire property including the right and power of Railroad to construct, maintain, repair, renew, use, operate, change, modify or relocate railroad tracks, roadways, signal, communication, fiber optics, or other wirelines, pipelines and other facilities upon, along or across any or all parts of its property, all or any of which may be freely done at any time or times by Railroad without liability to Contractor or to any other party for compensation or damages.

B. The foregoing grant is also subject to all outstanding superior rights (whether recorded or unrecorded and including those in favor of licensees and lessees of Railroad's property, and others) and the right of Railroad to renew and extend the same, and is made without covenant of title or for quiet enjoyment.

SECTION 11. NO INTERFERENCE WITH OPERATIONS OF RAILROAD AND ITS TENANTS.

A. Contractor shall conduct its operations so as not to interfere with the continuous and uninterrupted use and operation of the railroad tracks and property of Railroad, including without limitation, the operations of Railroad's lessees, licensees or others, unless specifically authorized in advance by the Railroad Representative. Nothing shall be done or permitted to be done by Contractor at any time that would in any manner impair the safety of such operations. When not in use, Contractor's machinery and materials shall be kept at least fifty (50) feet from the centerline of Railroad's nearest track, and there shall be no vehicular crossings of Railroads tracks except at existing open public crossings.

B. Operations of Railroad and work performed by Railroad personnel and delays in the work to be performed by Contractor caused by such railroad operations and work are expected by Contractor, and Contractor agrees that Railroad shall have no liability to Contractor, or any other person or entity for any such delays. The Contractor shall

coordinate its activities with those of Railroad and third parties so as to avoid interference with railroad operations. The safe operation of Railroad train movements and other activities by Railroad takes precedence over any work to be performed by Contractor.

SECTION 12. LIENS.

Contractor shall pay in full all persons who perform labor or provide materials for the work to be performed by Contractor. Contractor shall not create, permit or suffer any mechanic's or materialmen's liens of any kind or nature to be created or enforced against any property of Railroad for any such work performed. Contractor shall indemnify and hold harmless Railroad from and against any and all liens, claims, demands, costs or expenses of whatsoever nature in any way connected with or growing out of such work done, labor performed, or materials furnished. If Contractor fails to promptly cause any lien to be released of record, Railroad may, at its election, discharge the lien or claim of lien at Contractor's expense.

SECTION 13. PROTECTION OF FIBER OPTIC CABLE SYSTEMS.

A. Fiber optic cable systems may be buried on Railroad's property. Protection of the fiber optic cable systems is of extreme importance since any break could disrupt service to users resulting in business interruption and loss of revenue and profits. Contractor shall telephone Railroad during normal business hours (7:00 a.m. to 9:00 p.m. Central Time, Monday through Friday, except holidays) at 1-800-336-9193 (also a 24-hour, 7-day number for emergency calls) to determine if fiber optic cable is buried anywhere on Railroad's property to be used by Contractor. If it is, Contractor will telephone the telecommunications company(ies) involved, make arrangements for a cable locator and, if applicable, for relocation or other protection of the fiber optic cable. Contractor shall not commence any work until all such protection or relocation (if applicable) has been accomplished.

B. IN ADDITION TO OTHER INDEMNITY PROVISIONS IN THIS AGREEMENT, CONTRACTOR SHALL INDEMNIFY, DEFEND AND HOLD RAILROAD HARMLESS FROM AND AGAINST ALL COSTS, LIABILITY AND EXPENSE WHATSOEVER (INCLUDING, WITHOUT LIMITATION, ATTORNEYS' FEES, COURT COSTS AND EXPENSES) ARISING OUT OF ANY ACT OR OMISSION OF CONTRACTOR, ITS AGENTS AND/OR EMPLOYEES, THAT CAUSES OR CONTRIBUTES TO (1) ANY DAMAGE TO OR DESTRUCTION OF ANY TELECOMMUNICATIONS SYSTEM ON RAILROAD'S PROPERTY, AND/OR (2) ANY INJURY TO OR DEATH OF ANY PERSON EMPLOYED BY OR ON BEHALF OF ANY TELECOMMUNICATIONS COMPANY, AND/OR ITS CONTRACTOR, AGENTS AND/OR EMPLOYEES, ON RAILROAD'S PROPERTY. CONTRACTOR SHALL NOT HAVE OR SEEK RECOURSE AGAINST RAILROAD FOR ANY CLAIM OR CAUSE OF ACTION FOR ALLEGED LOSS OF PROFITS OR REVENUE OR LOSS OF SERVICE OR OTHER CONSEQUENTIAL DAMAGE TO A TELECOMMUNICATION COMPANY USING RAILROAD'S PROPERTY OR A CUSTOMER OR USER OF SERVICES OF THE FIBER OPTIC CABLE ON RAILROAD'S PROPERTY.

SECTION 14. PERMITS - COMPLIANCE WITH LAWS.

In the prosecution of the work covered by this agreement, Contractor shall secure any and all necessary permits and shall comply with all applicable federal, state and local laws, regulations and enactments affecting the work including, without limitation, all applicable Federal Railroad Administration regulations.

SECTION 15. SAFETY.

A. Safety of personnel, property, rail operations and the public is of paramount importance in the prosecution of the work performed by Contractor. Contractor shall be responsible for initiating, maintaining and supervising all safety, operations and programs in connection with the work. Contractor shall at a minimum comply with Railroad's safety standards listed in **Exhibit B**, hereto attached, to ensure uniformity with the safety standards followed by Railroad's own forces. As a part of Contractor's safety responsibilities, Contractor shall notify Railroad if Contractor determines that any of Railroad's safety standards are contrary to good safety practices. Contractor shall furnish copies of **Exhibit B** to each of its employees before they enter the job site.

B. Without limitation of the provisions of paragraph A above, Contractor shall keep the job site free from safety and health hazards and ensure that its employees are competent and adequately trained in all safety and health aspects of the job.

C. Contractor shall have proper first aid supplies available on the job site so that prompt first aid services may be provided to any person injured on the job site. Contractor shall promptly notify Railroad of any U.S. Occupational Safety and Health Administration reportable injuries. Contractor shall have a nondelegable duty to control its employees while they are on the job site or any other property of Railroad, and to be certain they do not use, be under the influence of, or have in their possession any alcoholic beverage, drug or other substance that may inhibit the safe performance of any work.

D. If and when requested by Railroad, Contractor shall deliver to Railroad a copy of Contractor's safety plan for conducting the work (the "Safety Plan"). Railroad shall have the right, but not the obligation, to require Contractor to correct any deficiencies in the Safety Plan. The terms of this agreement shall control if there are any inconsistencies between this agreement and the Safety Plan.

SECTION 16. INDEMNITY.

A. TO THE EXTENT NOT PROHIBITED BY APPLICABLE STATUTE, CONTRACTOR SHALL INDEMNIFY, DEFEND AND HOLD HARMLESS RAILROAD, ITS AFFILIATES, AND ITS AND THEIR OFFICERS, AGENTS AND EMPLOYEES (INDIVIDUALLY AN "INDEMNIFIED PARTY" OR COLLECTIVELY "INDEMNIFIED PARTIES") FROM AND AGAINST ANY AND ALL LOSS, DAMAGE, INJURY, LIABILITY, CLAIM, DEMAND, COST OR EXPENSE (INCLUDING, WITHOUT LIMITATION, ATTORNEY'S, CONSULTANT'S AND EXPERT'S FEES, AND COURT COSTS), FINE OR PENALTY (COLLECTIVELY, "LOSS") INCURRED BY ANY PERSON (INCLUDING, WITHOUT LIMITATION, ANY INDEMNIFIED PARTY, CONTRACTOR, OR ANY EMPLOYEE OF CONTRACTOR OR OF ANY INDEMNIFIED PARTY) ARISING OUT OF OR IN ANY MANNER CONNECTED WITH (I) ANY WORK PERFORMED BY CONTRACTOR, OR (II) ANY ACT OR OMISSION OF CONTRACTOR, ITS OFFICERS, AGENTS OR EMPLOYEES, OR (III) ANY BREACH OF THIS AGREEMENT BY CONTRACTOR.

B. THE RIGHT TO INDEMNITY UNDER THIS SECTION SHALL ACCRUE UPON OCCURRENCE OF THE EVENT GIVING RISE TO THE LOSS, AND SHALL APPLY REGARDLESS OF ANY NEGLIGENCE OR STRICT LIABILITY OF ANY INDEMNIFIED PARTY, EXCEPT WHERE THE LOSS IS CAUSED BY THE SOLE ACTIVE NEGLIGENCE OF AN INDEMNIFIED PARTY AS ESTABLISHED BY THE FINAL JUDGMENT OF A COURT OF COMPETENT JURISDICTION. THE SOLE ACTIVE NEGLIGENCE OF ANY INDEMNIFIED PARTY SHALL NOT BAR THE RECOVERY OF ANY OTHER INDEMNIFIED PARTY.

C. CONTRACTOR EXPRESSLY AND SPECIFICALLY ASSUMES POTENTIAL LIABILITY UNDER THIS SECTION FOR CLAIMS OR ACTIONS BROUGHT BY CONTRACTOR'S OWN EMPLOYEES. CONTRACTOR WAIVES ANY IMMUNITY IT MAY HAVE UNDER WORKER'S COMPENSATION OR INDUSTRIAL INSURANCE ACTS TO INDEMNIFY THE INDEMNIFIED PARTIES UNDER THIS SECTION. CONTRACTOR ACKNOWLEDGES THAT THIS WAIVER WAS MUTUALLY NEGOTIATED BY THE PARTIES HERETO.

D. NO COURT OR JURY FINDINGS IN ANY EMPLOYEE'S SUIT PURSUANT TO ANY WORKER'S COMPENSATION ACT OR THE FEDERAL EMPLOYERS' LIABILITY ACT AGAINST A PARTY TO THIS AGREEMENT MAY BE RELIED UPON OR USED BY CONTRACTOR IN ANY ATTEMPT TO ASSERT LIABILITY AGAINST ANY INDEMNIFIED PARTY.

E. THE PROVISIONS OF THIS SECTION SHALL SURVIVE THE COMPLETION OF ANY WORK PERFORMED BY CONTRACTOR OR THE TERMINATION OR EXPIRATION OF THIS AGREEMENT. IN NO EVENT SHALL THIS SECTION OR ANY OTHER PROVISION OF THIS AGREEMENT BE DEEMED TO LIMIT ANY LIABILITY CONTRACTOR MAY HAVE TO ANY INDEMNIFIED PARTY BY STATUTE OR UNDER COMMON LAW.

SECTION 17. RESTORATION OF PROPERTY.

In the event Railroad authorizes Contractor to take down any fence of Railroad or in any manner move or disturb any of the other property of Railroad in connection with the work to be performed by Contractor, then in that event Contractor shall, as soon as possible and at Contractor's sole expense, restore such fence and other property to the same condition as the same were in before such fence was taken down or such other property was moved or disturbed. Contractor shall remove all of Contractor's tools, equipment, rubbish and other materials from Railroad's property promptly upon completion of the work, restoring Railroad's property to the same state and condition as when Contractor entered thereon.

SECTION 18. WAIVER OF DEFAULT.

Waiver by Railroad of any breach or default of any condition, covenant or agreement herein contained to be kept, observed and performed by Contractor shall in no way impair the right of Railroad to avail itself of any remedy for any subsequent breach or default.

SECTION 19. MODIFICATION - ENTIRE AGREEMENT.

No modification of this agreement shall be effective unless made in writing and signed by Contractor and Railroad. This agreement and the exhibits attached hereto and made a part hereof constitute the entire understanding between Contractor and Railroad and cancel and supersede any prior negotiations, understandings or agreements, whether written or oral, with respect to the work to be performed by Contractor.

SECTION 20. ASSIGNMENT.

Contractor shall not assign or subcontract this agreement, or any interest therein, without the written consent of the Railroad.

SECTION 21. SUBCONTRACTING.

Contractor shall be responsible for the acts and omissions of all subcontractors. Before Contractor commences any work, the Contractor shall, except to the extent prohibited by law; (1) require each of its subcontractors to include the Contractor as "Additional Insured" on the subcontractor's Commercial General Liability policy and Umbrella or Excess policies (if applicable) with respect to all liabilities arising out of the subcontractor's performance of work on behalf of the Contractor by endorsing these policies with ISO Additional Insured Endorsements CG 20 10, and CG 20 37 (or substitute forms providing equivalent coverage; (2) require each of its subcontractors to endorse their Commercial General Liability Policy with "Contractual Liability Railroads" ISO Form CG 24 17 10 01 (or a substitute form providing equivalent coverage) for the job site; and (3) require each of its subcontractors to endorse their Business Automobile Policy with "Coverage For Certain Operations In Connection With Railroads" ISO Form CA 20 70 10 01 (or a substitute form providing equivalent coverage) for the job site.

EXHIBIT A

TO GENERAL TERMS AND CONDITIONS OF THE CONTRACTOR'S ENDORSEMENT

INSURANCE PROVISIONS FOR CONTRACTOR ENDORSEMENT

Contractor shall, at its sole cost and expense, procure and maintain during the course of the project and until all project Work on Railroad's property has been completed and the Contractor has removed all equipment and materials from Railroad's property and has cleaned and restored Railroad's property to Railroad's satisfaction, the following insurance coverage:

- A. Commercial General Liability insurance.** Commercial general liability (CGL) with a limit of not less than \$5,000,000 each occurrence and an aggregate limit of not less than \$10,000,000. CGL insurance must be written on ISO occurrence form CG 00 01 12 04 (or a substitute form providing equivalent coverage).

The policy must also contain the following endorsement, which must be stated on the certificate of insurance:

- Contractual Liability Railroads ISO form CG 24 17 10 01 (or a substitute form providing equivalent coverage) showing "Union Pacific Railroad Company Property" as the Designated Job Site.
- Designated Construction Project(s) General Aggregate Limit ISO Form CG 25 03 03 97 (or a substitute form providing equivalent coverage) showing the project on the form schedule.

- B. Business Automobile Coverage insurance.** Business auto coverage written on ISO form CA 00 01 10 01 (or a substitute form providing equivalent liability coverage) with a combined single limit of not less \$5,000,000 for each accident and coverage must include liability arising out of any auto (including owned, hired and non-owned autos).

The policy must contain the following endorsements, which must be stated on the certificate of insurance:

- Coverage For Certain Operations In Connection With Railroads ISO form CA 20 70 10 01 (or a substitute form providing equivalent coverage) showing "Union Pacific Property" as the Designated Job Site.
- Motor Carrier Act Endorsement - Hazardous materials clean up (MCS-90) if required by law.

- C. Workers' Compensation and Employers' Liability insurance.** Coverage must include but not be limited to:
- Contractor's statutory liability under the workers' compensation laws of the state where the work is being performed.
 - Employers' Liability (Part B) with limits of at least \$500,000 each accident, \$500,000 disease policy limit \$500,000 each employee.

If Contractor is self-insured, upon request, evidence of state approval and excess workers compensation coverage must be provided. Coverage must include liability arising out of the U. S. Longshoremen's and Harbor Workers' Act, the Jones Act, and the Outer Continental Shelf Land Act, if applicable.

- D. Railroad Protective Liability insurance.** Contractor must maintain "Railroad Protective Liability" (RPL) insurance written on ISO occurrence form CG 00 35 12 04 (or a substitute form providing equivalent coverage) on behalf of Railroad as named insured, with a limit of not less than \$2,000,000 per occurrence and an aggregate of \$6,000,000. The definition of "JOB LOCATION" and "WORK" on the declaration page of the policy shall refer to this agreement and shall describe all WORK or OPERATIONS performed under this agreement. Contractor shall provide this agreement to Contractor's insurance agent(s) and/or broker(s) and Contractor shall instruct such agent(s) and/or broker(s) to procure the insurance coverage required by this agreement. UPON REQUEST, A BINDER STATING THE POLICY IS IN PLACE MUST BE SUBMITTED TO RAILROAD BEFORE THE WORK MAY COMMENCE AND UNTIL THE ORIGINAL POLICY IS FORWARDED TO UNION PACIFIC RAILROAD.

- E. **Umbrella or Excess** insurance. If Contractor utilizes umbrella or excess policies, these policies must "follow form" and afford no less coverage than the primary policy.
- F. **Pollution Liability** insurance. Pollution liability coverage must be included when the scope of the work as defined in the agreement includes installation, temporary storage, or disposal of any "hazardous" material that is injurious in or upon land, the atmosphere, or any watercourses; or may cause bodily injury at any time.

If required, coverage may be provided in separate policy form or by endorsement to Contractors CGL or RPL. Any form coverage must be equivalent to that provided in ISO form CG 24 15 "Limited Pollution Liability Extension Endorsement" or CG 28 31 "Pollution Exclusion Amendment" with limits of at least \$5,000,000 per occurrence and an aggregate limit of \$10,000,000.

If the scope of work as defined in this agreement includes the disposal of any hazardous or non-hazardous materials from the job site, upon request, Contractor must furnish to Railroad evidence of pollution legal liability insurance maintained by the disposal site operator for losses arising from the insured facility accepting the materials, with coverage in minimum amounts of \$1,000,000 per loss, and an annual aggregate of \$2,000,000.

Other Requirements

- G. All policy(ies) required above (except business automobile, worker's compensation and employers liability) must include Railroad as "Additional Insured" using ISO Additional Insured Endorsements CG 20 10, and CG 20 37 (or substitute forms providing equivalent coverage). The coverage provided to Railroad as additional insured shall not be limited by Contractor's liability under the indemnity provisions of this agreement. BOTH CONTRACTOR AND RAILROAD EXPECT THAT UNION PACIFIC RAILROAD COMPANY WILL BE PROVIDED WITH THE BROADEST POSSIBLE COVERAGE AVAILABLE BY OPERATION OF LAW UNDER ISO ADDITIONAL INSURED FORMS CG 20 10 AND CG 20 37.
- H. Punitive damages exclusion, if any, must be deleted (and the deletion indicated on the certificate of insurance), unless (a) insurance coverage may not lawfully be obtained for any punitive damages that may arise under this agreement, or (b) all punitive damages are prohibited by all states in which this agreement will be performed.
- I. Contractor waives all rights of recovery, and its insurers also waive all rights of subrogation of damages against Railroad and its agents, officers, directors and employees for damages covered by the workers compensation and employers liability or commercial umbrella or excess liability obtained by Contractor required in this agreement where prohibited by law. This waiver must be stated on the certificate of insurance.
- J. Upon request, Contractor shall furnish Railroad with a certificate(s) of insurance, executed by a duly authorized representative of each insurer, showing compliance with the insurance requirements in this agreement.
- K. All insurance policies must be written by a reputable insurance company acceptable to Railroad or with a current Best's Insurance Guide Rating of A- and Class VII or better, and authorized to do business in the state where the work is being performed.
- L. The fact that insurance is obtained by Contractor or by Railroad on behalf of Contractor will not be deemed to release or diminish the liability of Contractor, including, without limitation, liability under the indemnity provisions of this agreement. Damages recoverable by Railroad from Contractor or any third party will not be limited by the amount of the required insurance coverage.

EXHIBIT B

TO
GENERAL TERMS AND CONDITIONS
OF THE
CONTRACTOR'S ENDORSEMENT

MINIMUM SAFETY REQUIREMENTS

<https://www.up.com/suppliers/contractor-safety/index.htm>

Certificate Of Completion

Envelope Id: 55B47D1726934E018153526F35375B41 Status: Completed
Subject: 793829MCL 7850 854259H 2023-11-10 Agency Project: 0T1.129866
Source Envelope:
Document Pages: 4 Signatures: 1 Envelope Originator:
Certificate Pages: 5 Initials: 0 Leo Craig
AutoNav: Enabled 1400 Douglas St MS910
Enveloped Stamping: Enabled Omaha, NE 68179
Time Zone: (UTC-06:00) Central Time (US & Canada) leo.craig@upcontractor.up.com
IP Address: 70.122.242.56

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Status: Original Holder: Leo Craig Location: DocuSign
11/17/2023 4:14:46 PM leo.craig@upcontractor.up.com

Signer Events

Melinda DuBay
msdubay@up.com
Engineering-Industry & Public Projects-Manager I
Union Pacific Railroad
Security Level: Email, Account Authentication (None)

Signature

DocuSigned by:
[C56FA18B605E4A2...]
Signature Adoption: Uploaded Signature Image
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Signed: 11/30/2023 3:32:00 PM

Electronic Record and Signature Disclosure:
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In Person Signer Events

Signature

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Editor Delivery Events

Status

Timestamp

Agent Delivery Events

Status

Timestamp

Intermediary Delivery Events

Status

Timestamp

Certified Delivery Events

Status

Timestamp

Linda Loomis
admin@lowermnrivewd.org
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Electronic Record and Signature Disclosure:
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ID: d3710647-c523-45a3-9940-5c2010223984

Carbon Copy Events

Status

Timestamp

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dwoods@olsson.com
Security Level: Email, Account Authentication (None)

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lcraig@olsson.com
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Peyton Lee
plee2@olsson.com

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Electronic Record and Signature Disclosure:
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admin@lowermnrivewrd.org

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(None)

Electronic Record and Signature Disclosure:
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ID: d3710647-c523-45a3-9940-5c2010223984

Brad Fisher
bradley.fisher@bolton-menk.com

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| Witness Events | Signature | Timestamp |
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| Notary Events | Signature | Timestamp |
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| Envelope Summary Events | Status | Timestamps |
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| Envelope Updated | Security Checked | 11/17/2023 4:17:47 PM |
| Certified Delivered | Security Checked | 11/30/2023 4:10:33 PM |
| Signing Complete | Security Checked | 11/30/2023 3:32:00 PM |
| Completed | Security Checked | 11/30/2023 4:10:34 PM |

| Payment Events | Status | Timestamps |
|----------------|--------|------------|
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From time to time, Union Pacific Corporation (we, us or Company) may be required by law to provide to you certain written notices or disclosures. Described below are the terms and conditions for providing to you such notices and disclosures electronically through the DocuSign system. Please read the information below carefully and thoroughly, and if you can access this information electronically to your satisfaction and agree to this Electronic Record and Signature Disclosure (ERSD), please confirm your agreement by selecting the check-box next to 'I agree to use electronic records and signatures' before clicking 'CONTINUE' within the DocuSign system.

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If you decide to receive notices and disclosures from us electronically, you may at any time change your mind and tell us that thereafter you want to receive required notices and disclosures only in paper format. How you must inform us of your decision to receive future notices and disclosure in paper format and withdraw your consent to receive notices and disclosures electronically is described below.

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If you elect to receive required notices and disclosures only in paper format, it will slow the speed at which we can complete certain steps in transactions with you and delivering services to you because we will need first to send the required notices or disclosures to you in paper format, and then wait until we receive back from you your acknowledgment of your receipt of such paper notices or disclosures. Further, you will no longer be able to use the DocuSign system to receive required notices and consents electronically from us or to sign electronically documents from us.

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Unless you tell us otherwise in accordance with the procedures described herein, we will provide electronically to you through the DocuSign system all required notices, disclosures, authorizations, acknowledgements, and other documents that are required to be provided or made available to you during the course of our relationship with you. To reduce the chance of you inadvertently not receiving any notice or disclosure, we prefer to provide all of the required notices and disclosures to you by the same method and to the same address that you have given us. Thus, you can receive all the disclosures and notices electronically or in paper format through the paper mail delivery system. If you do not agree with this process, please let us know as described below. Please also see the paragraph immediately above that describes the consequences of your electing not to receive delivery of the notices and disclosures electronically from us.

How to contact Union Pacific Corporation:

You may contact us to let us know of your changes as to how we may contact you electronically, to request paper copies of certain information from us, and to withdraw your prior consent to receive notices and disclosures electronically as follows:

To contact us by phone call: (402) 544-3331

To contact us by email send messages to: acampbe@upcontractor.up.com

To advise Union Pacific Corporation of your new email address

To let us know of a change in your email address where we should send notices and disclosures electronically to you, you must send an email message to us at acampbe@upcontractor.up.com and in the body of such request you must state: your previous email address, your new email address. We do not require any other information from you to change your email address.

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To request delivery from us of paper copies of the notices and disclosures previously provided by us to you electronically, you must send us an email to acampbe@upcontractor.up.com and in the body of such request you must state your email address, full name, mailing address, and telephone number. We will bill you for any fees at that time, if any.

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To inform us that you no longer wish to receive future notices and disclosures in electronic format you may:

- i. decline to sign a document from within your signing session, and on the subsequent page, select the check-box indicating you wish to withdraw your consent, or you may;
- ii. send us an email to acampbe@upcontractor.up.com and in the body of such request you must state your email, full name, mailing address, and telephone number. We do not need any other information from you to withdraw consent.. The consequences of your withdrawing consent for online documents will be that transactions may take a longer time to process..

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The minimum system requirements for using the DocuSign system may change over time. The current system requirements are found here: <https://support.docusign.com/guides/signer-guide-signing-system-requirements>.

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To confirm to us that you can access this information electronically, which will be similar to other electronic notices and disclosures that we will provide to you, please confirm that you have read this ERSD, and (i) that you are able to print on paper or electronically save this ERSD for your future reference and access; or (ii) that you are able to email this ERSD to an email address where you will be able to print on paper or save it for your future reference and access. Further, if you consent to receiving notices and disclosures exclusively in electronic format as described herein, then select the check-box next to ‘I agree to use electronic records and signatures’ before clicking ‘CONTINUE’ within the DocuSign system.

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- You can access and read this Electronic Record and Signature Disclosure; and
- You can print on paper this Electronic Record and Signature Disclosure, or save or send this Electronic Record and Disclosure to a location where you can print it, for future reference and access; and
- Until or unless you notify Union Pacific Corporation as described above, you consent to receive exclusively through electronic means all notices, disclosures, authorizations, acknowledgements, and other documents that are required to be provided or made available to you by Union Pacific Corporation during the course of your relationship with Union Pacific Corporation.

LOWER MINNESOTA RIVER WATERSHED DISTRICT

CONSTRUCTION PLANS FOR

VERNON AVENUE IMPROVEMENTS

BITUMINOUS STREET IMPROVEMENTS, AGGREGATE BASE & BITUMINOUS PAVING, CULVERT CROSSING

FEBRUARY, 2024

RESOURCE LIST

LOWER MINNESOTA RIVER WATERSHED DISTRICT
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Hannah@youngceg.com

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Charles.Snyder@charter.com

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SAVAGE MN 55378

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CITY ENGINEER/UTILITIES DIRECTOR
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AT&T TRANSMISSION
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JS0613@att.com

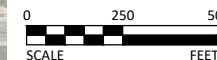
GAS
CENTERPOINT ENERGY
IBRAHIM SAREVA
Ibrahim.Sareva@CenterPointEnergy.com

NOTE: EXISTING UTILITY INFORMATION SHOWN ON THIS PLAN HAS BEEN PROVIDED BY THE UTILITY OWNER. THE CONTRACTOR SHALL FIELD VERIFY EXACT LOCATIONS PRIOR TO COMMENCING CONSTRUCTION AS REQUIRED BY STATE LAW. NOTIFY GOPHER STATE ONE CALL, 1-800-252-1166 OR 651-454-0002.

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



MAP OF THE CITY OF SAVAGE
DAKOTA COUNTY, MN



MAP LEGEND

PROJECT LIMITS

| SHEET NUMBER | SHEET TITLE |
|--|------------------------------------|
| GENERAL | |
| G0.01 - G0.02 | TITLE SHEET, LEGEND |
| G1.01 | STATEMENT OF ESTIMATED QUANTITIES |
| CIVIL | |
| C0.01 - C0.03 | EXISTING CONDITIONS, REMOVALS PLAN |
| C1.01 - C1.04 | TABLES, DETAILS & TYPICAL SECTIONS |
| C2.01 - C2.06 | EROSION CONTROL PLAN, SWPPP |
| C5.01 | STORM SEWER PLAN & PROFILE |
| C6.01 - C6.06 | STREET PLAN & PROFILE |
| C8.01 - C8.13 | CROSS SECTIONS |
| THIS PLAN SET CONTAINS <u>36</u> SHEETS. | |

PROJECT LOCATION

| | | |
|---|---|----------------------------|
| ⚬ BM=722.01 MnDOT Geodetic Mon. No 1901 H 1 | PROJECT DATUM: SCOTT COUNTY COORDINATE SYSTEM | RECORD DRAWING INFORMATION |
| | HORIZONTAL: NAD 83 (96 ADJ) | OBSERVER: |
| | VERTICAL: NAVD 88 | CONTRACTOR: |
| | | DATE: |

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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.

Bradley J Fisher
BRADLEY J FISHER
LIC. NO. 56595 DATE 02/21/2024



12224 NICOLLET AVENUE
BURNSVILLE, MINNESOTA 55337
Phone: (952) 890-0509
Email: Burnsville@bolton-menk.com
www.bolton-menk.com

| DESIGNED | NO. | ISSUED FOR | DATE |
|------------------|-----|------------|------|
| JLW | | | |
| DRAWN | | | |
| JLW | | | |
| CHECKED | | | |
| BJF | | | |
| CLIENT PROJ. NO. | | | |
| 0T1.129866 | | | |

LOWER MINNESOTA RIVER WATERSHED DISTRICT
VERNON AVENUE IMPROVEMENTS
TITLE SHEET

SHEET
G0.01

EXISTING TOPOGRAPHIC SYMBOLS

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

PROPOSED TOPOGRAPHIC SYMBOLS

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

SURVEY SYMBOLS

| | | | |
|--|--------------------|--|--------------------|
| | BENCHMARK LOCATION | | CAST IRON MONUMENT |
| | CONTROL POINT | | STONE MONUMENT |
| | MONUMENT FOUND | | |

EXISTING TOPOGRAPHIC LINES

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

SURVEY LINES

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

EXISTING UTILITY LINES

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

PROPOSED UTILITY LINES

| | |
|--|--------------------------------|
| | FORCEMAIN |
| | SANITARY SEWER |
| | SANITARY SERVICE |
| | STORM SEWER |
| | STORM SEWER DRAIN TILE |
| | WATERMAIN |
| | WATER SERVICE |
| | PIPE CASINGS |
| | TRENCHLESS PIPE (PLAN VIEW) |
| | TRENCHLESS PIPE (PROFILE VIEW) |

GRADING INFORMATION

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

HATCH PATTERNS

| | | | |
|--|------------|--|--------|
| | BITUMINOUS | | GRAVEL |
| | CONCRETE | | |

EXISTING PRIVATE UTILITY LINES

NOTE: EXISTING UTILITY INFORMATION SHOWN ON THIS PLAN HAS BEEN PROVIDED BY THE UTILITY OWNER. THE CONTRACTOR SHALL FIELD VERIFY EXACT LOCATIONS PRIOR TO COMMENCING CONSTRUCTION AS REQUIRED BY STATE LAW. NOTIFY GOPHER STATE ONE CALL, 1-800-252-1166 OR 651-454-0002.

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

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

UTILITIES IDENTIFIED WITH A QUALITY LEVEL :

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

UTILITY QUALITY LEVELS:

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

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

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

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

ABBREVIATIONS

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

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 BRADLEY J FISHER
 LIC. NO. 56595 DATE 02/21/2024



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| DRAWN | JLW | | |
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LOWER MINNESOTA RIVER WATERSHED DISTRICT

VERNON AVENUE IMPROVEMENTS

LEGEND

SHEET

G0.02

STATEMENT OF ESTIMATED QUANTITIES

| ITEM NO. | SPEC. REF | DESCRIPTION | NOTES | UNIT | TOTAL ESTIMATED QUANTITY |
|----------|-----------|--|----------|----------|--------------------------|
| 1 | 2021.501 | MOBILIZATION | | LUMP SUM | 1.0 |
| 2 | 2101.502 | CLEARING | | EACH | 48.0 |
| 3 | 2101.502 | GRUBBING | | EACH | 48.0 |
| 4 | 2104.502 | SALVAGE SIGN | | EACH | 1.0 |
| 5 | 2104.503 | SAWING BITUMINOUS PAVEMENT (FULL DEPTH) | | LIN FT | 26.0 |
| 6 | 2104.503 | REMOVE SEWER PIPE (STORM) | (1) | LIN FT | 96.0 |
| 7 | 2104.504 | REMOVE BITUMINOUS PAVEMENT | (P) (2) | SQ YD | 9320.0 |
| 8 | 2104.507 | REMOVE RIPRAP | (EV) | CU YD | 40.0 |
| 9 | 2106.507 | EXCAVATION - COMMON | (EV) (P) | CU YD | 6358.0 |
| 10 | 2106.507 | EXCAVATION - SUBGRADE | (EV) (3) | CU YD | 262.0 |
| 11 | 2106.507 | SELECT GRANULAR EMBANKMENT | (CV) (P) | CU YD | 3366.0 |
| 12 | 2106.507 | STABILIZING AGGREGATE | (CV) (3) | CU YD | 262.0 |
| 13 | 2106.601 | DEWATERING | (4) | LUMP SUM | 1.0 |
| 14 | 2106.603 | MINOR GRADING | (5) | LIN FT | 80.0 |
| 15 | 2118.507 | AGGREGATE SURFACING CLASS 2 | (CV) (P) | CU YD | 188.0 |
| 16 | 2123.510 | COMMON LABORERS | (3) | HOUR | 15.0 |
| 17 | 2123.510 | DOZER | (3) | HOUR | 5.0 |
| 18 | 2123.610 | CRAWLER MOUNTED BACKHOE | (3) | HOUR | 5.0 |
| 19 | 2211.507 | AGGREGATE BASE CLASS 5 | (CV) (P) | CU YD | 2244.0 |
| 20 | 2357.506 | BITUMINOUS MATERIAL FOR TACK COAT | | GAL | 550.0 |
| 21 | 2360.509 | TYPE SP 9.5 WEARING COURSE MIXTURE (3,C) | | TON | 1848.0 |
| 22 | 2501.502 | 48" RC PIPE APRON | (6) (7) | EACH | 2.0 |
| 23 | 2503.503 | 48" RC PIPE SEWER CLASS III | (7) | LIN FT | 84.0 |
| 24 | 2511.507 | RANDOM RIPRAP CLASS III | (8) | CU YD | 80.0 |
| 25 | 2563.601 | TRAFFIC CONTROL | | LUMP SUM | 1.0 |
| 26 | 2563.621 | TRAFFIC CONTROL SPECIAL (RR FLAGGING) | | DOL | 15000.0 |
| 27 | 2564.602 | INSTALL SIGN | (9) | EACH | 1.0 |
| 28 | 2572.602 | TREE PRUNING | (3) | HOUR | 12.0 |
| 29 | 2573.501 | STABILIZED CONSTRUCTION EXIT | | LUMP SUM | 1.0 |
| 30 | 2573.502 | STORM DRAIN INLET PROTECTION | | EACH | 3.0 |
| 31 | 2573.503 | FLOTATION SILT CURTAIN TYPE STILL WATER | | LIN FT | 40.0 |
| 32 | 2573.503 | SEDIMENT CONTROL LOG TYPE WOOD FIBER | | LIN FT | 14000.0 |
| 33 | 2574.507 | COMMON TOPSOIL BORROW | (LV) | CU YD | 1426.0 |
| 34 | 2575.504 | ROLLED EROSION PREVENTION CATEGORY 20 W/ SEED MIX (25-141) | (10) | SQ YD | 8295.0 |
| 35 | 2575.504 | ROLLED EROSION PREVENTION CATEGORY 20 W/ SEED MIX (34-181) | (10) | SQ YD | 257.0 |

NOTES:

- (1) INCLUDES REMOVAL OF PIPE APRONS AND ASSOCIATED APPURTENANCES.
 - (2) PAVEMENT DEPTHS ARE APPROXIMATE AND ARE REFERENCED IN THE GEOTECHNICAL REPORT. VARIANCE IN PAVEMENT THICKNESS WILL NOT BE COMPENSATED AND IS INCIDENTAL.
 - (3) TOKEN QUANTITY, TO BE USED AS DIRECTED BY THE ENGINEER.
 - (4) INCLUDES ALL WORK NECESSARY TO PROVIDE A STREAM/DITCH BYPASS AND DEWATERING, AS NECESSARY, TO ALLOW FOR CONSTRUCTION OF THE STORM CULVERT INSTALLATION.
 - (5) INCLUDES THE CLEARING OF ACCUMULATED DEBRIS AND RE-GRADING DITCHES TO PROVIDE PROPER DRAINAGE AS THEY APPROACH THE NEW CULVERT APRONS.
 - (6) INCLUDES FURNISHING & INSTALLATION OF TRASH GUARD, AS INDICATED IN THE DETAILS.
 - (7) INCLUDES FURNISHING & INSTALLATION OF PIPE TIES ON ALL PIPE JOINTS ALONG THE CULVERT AND INSTALLATION OF FINE AGGREGATE BEDDING, AS INDICATED IN THE DETAILS.
 - (8) INCLUDES THE FURNISHING AND INSTALLATION OF GEOTEXTILE FABRIC, AS SPECIFIED.
 - (9) NEW SIGN PANELS AND SALVAGED SIGNS TO BE REINSTALLED SHALL INCLUDE NEW SIGN POSTS, HARDWARE, AND INSTALLATION AS REQUIRED AND SHALL BE INCLUDED IN THE PRICE BID.
 - (10) INCLUDES THE FURNISHING AND INSTALLATION OF FERTILIZER AND SEED MIXTURE, AS SPECIFIED.
- (CV) COMPACTED VOLUME
 (EV) EXCAVATED VOLUME
 (LV) LOOSE VOLUME
 (P) PLAN QUANTITY

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Bradley J Fisher
 BRADLEY J FISHER
 LIC. NO. 56595 DATE 02/21/2024



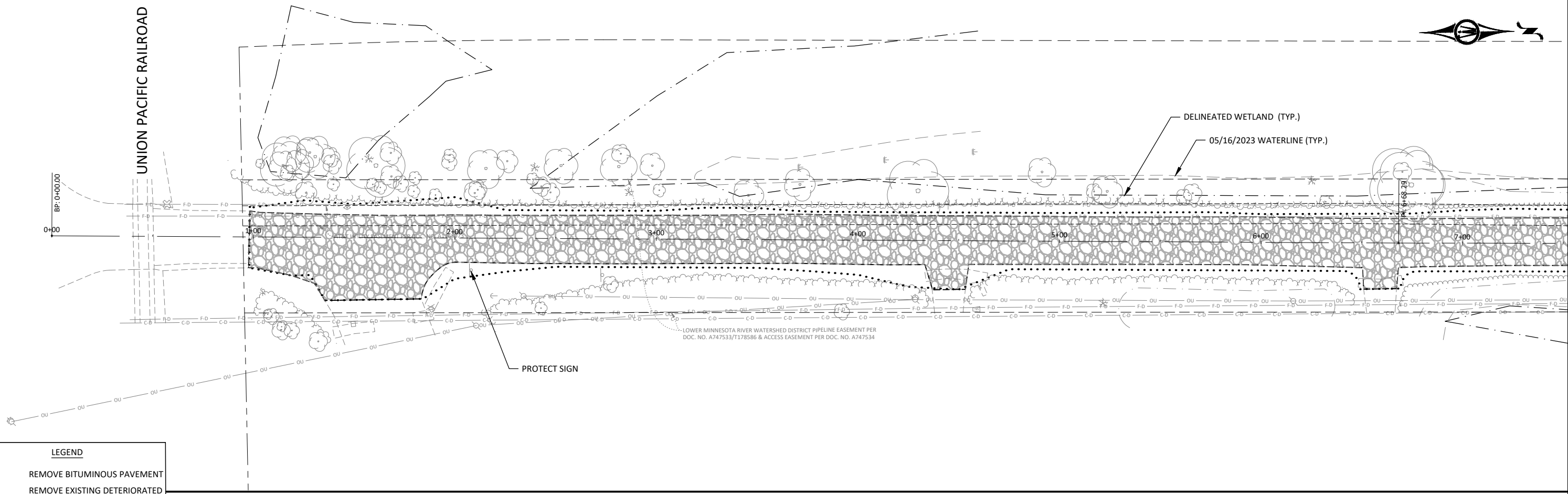
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LOWER MINNESOTA RIVER WATERSHED DISTRICT
 VERNON AVENUE IMPROVEMENTS
 STATEMENT OF ESTIMATED QUANTITIES

SHEET
G1.01

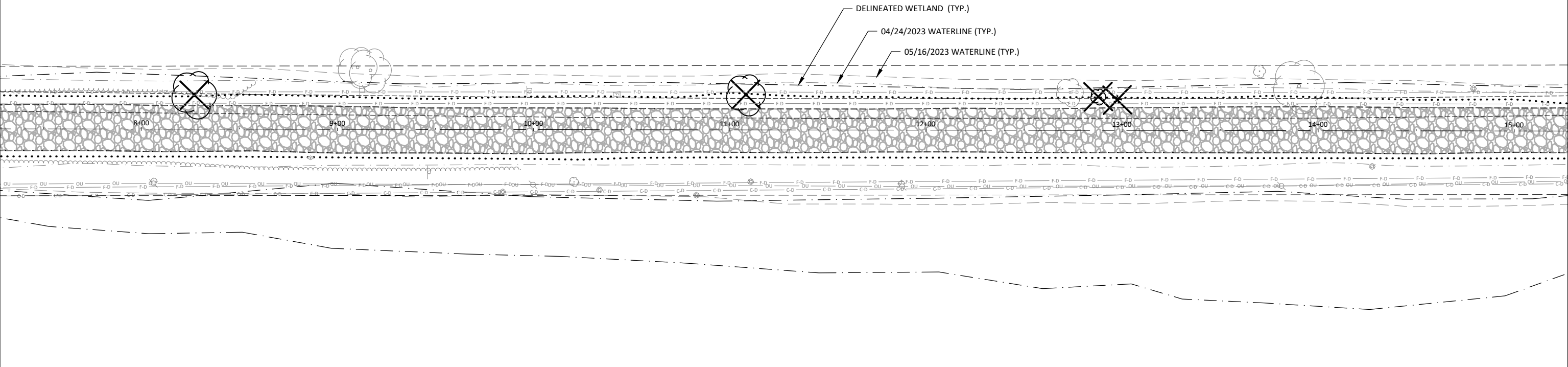
UNION PACIFIC RAILROAD



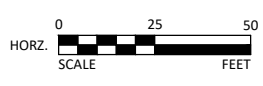
LOWER MINNESOTA RIVER WATERSHED DISTRICT PIPELINE EASEMENT PER DOC. NO. A747533/T178586 & ACCESS EASEMENT PER DOC. NO. A747534

LEGEND

- REMOVE BITUMINOUS PAVEMENT
- REMOVE EXISTING DETERIORATED BITUMINOUS PAVEMENT/ GRAVEL ROADWAY
- STORM SEWER PIPE REMOVAL
- CONSTRUCTION LIMITS
- TREE REMOVAL



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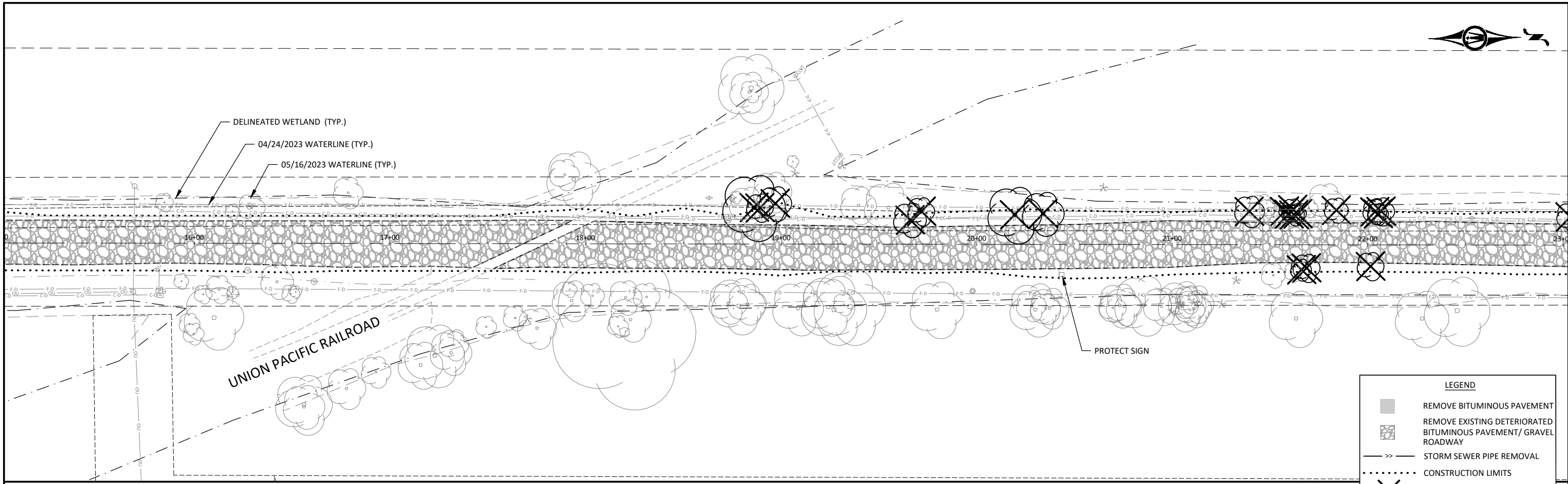


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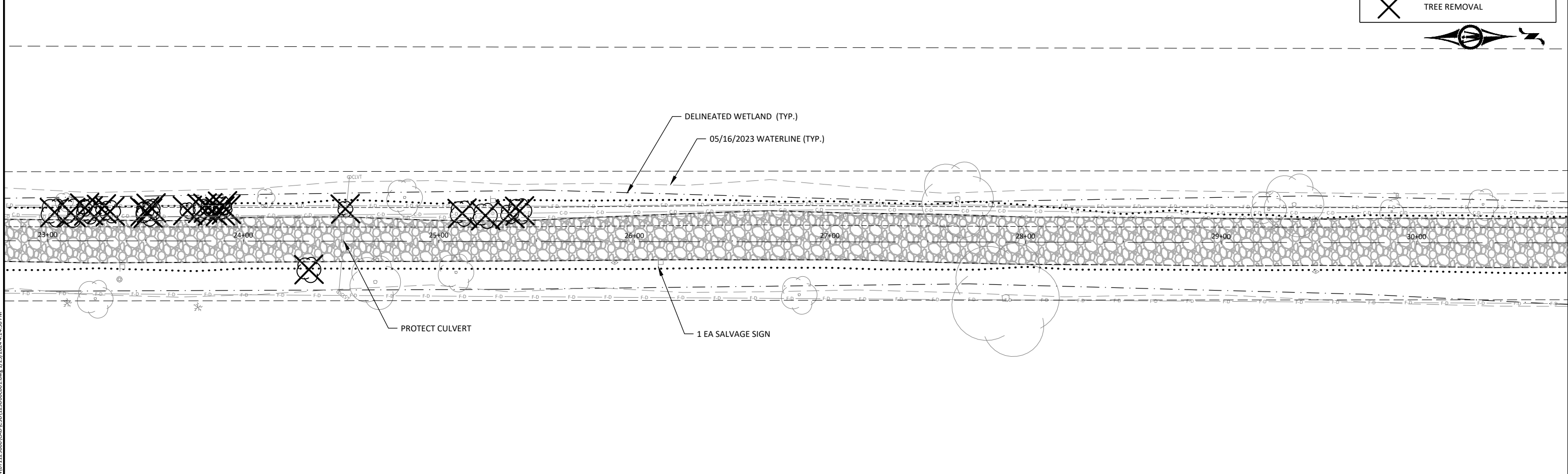
LOWER MINNESOTA RIVER WATERSHED DISTRICT
 VERNON AVENUE IMPROVEMENTS
 EXISTING CONDITIONS & REMOVAL PLAN

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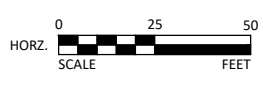


LEGEND

| | |
|--|--|
| | REMOVE BITUMINOUS PAVEMENT |
| | REMOVE EXISTING DETERIORATED BITUMINOUS PAVEMENT/ GRAVEL ROADWAY |
| | STORM SEWER PIPE REMOVAL |
| | CONSTRUCTION LIMITS |
| | TREE REMOVAL |



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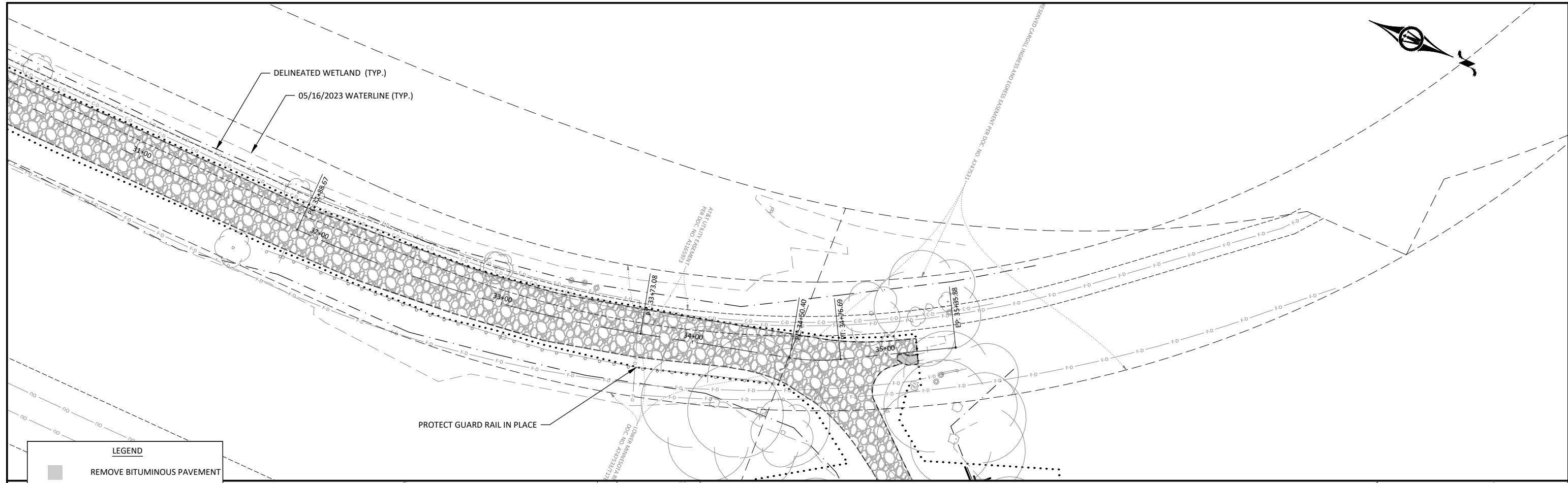
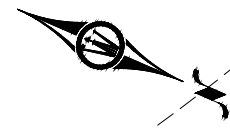


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LOWER MINNESOTA RIVER WATERSHED DISTRICT
 VERNON AVENUE IMPROVEMENTS
 EXISTING CONDITIONS & REMOVAL PLAN

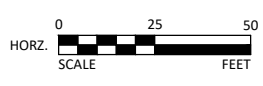
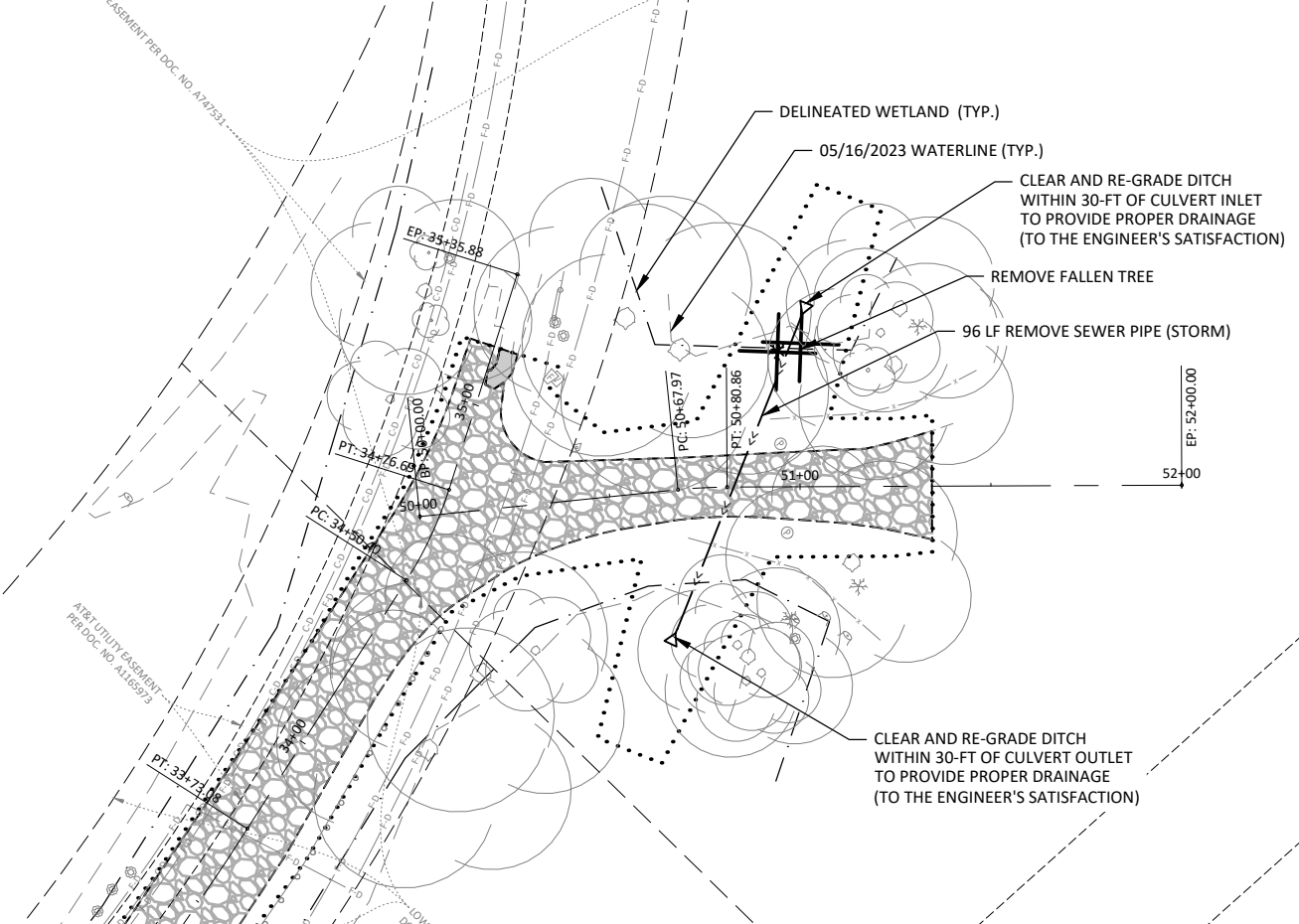
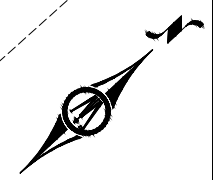
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LEGEND

- REMOVE BITUMINOUS PAVEMENT
- REMOVE EXISTING DETERIORATED BITUMINOUS PAVEMENT/ GRAVEL ROADWAY
- STORM SEWER PIPE REMOVAL
- CONSTRUCTION LIMITS
- TREE REMOVAL

LMRWD/US ARMY CORPS OF ENGINEERS DREDGE SITE



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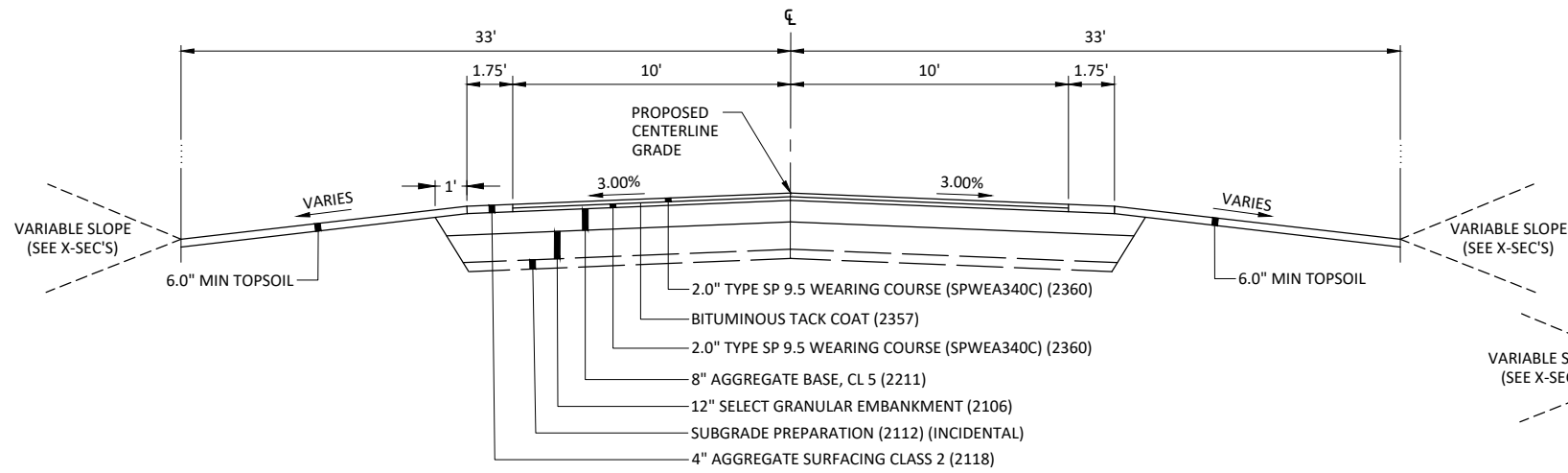
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LOWER MINNESOTA RIVER WATERSHED DISTRICT
 VERNON AVENUE IMPROVEMENTS
 EXISTING CONDITIONS & REMOVAL PLAN

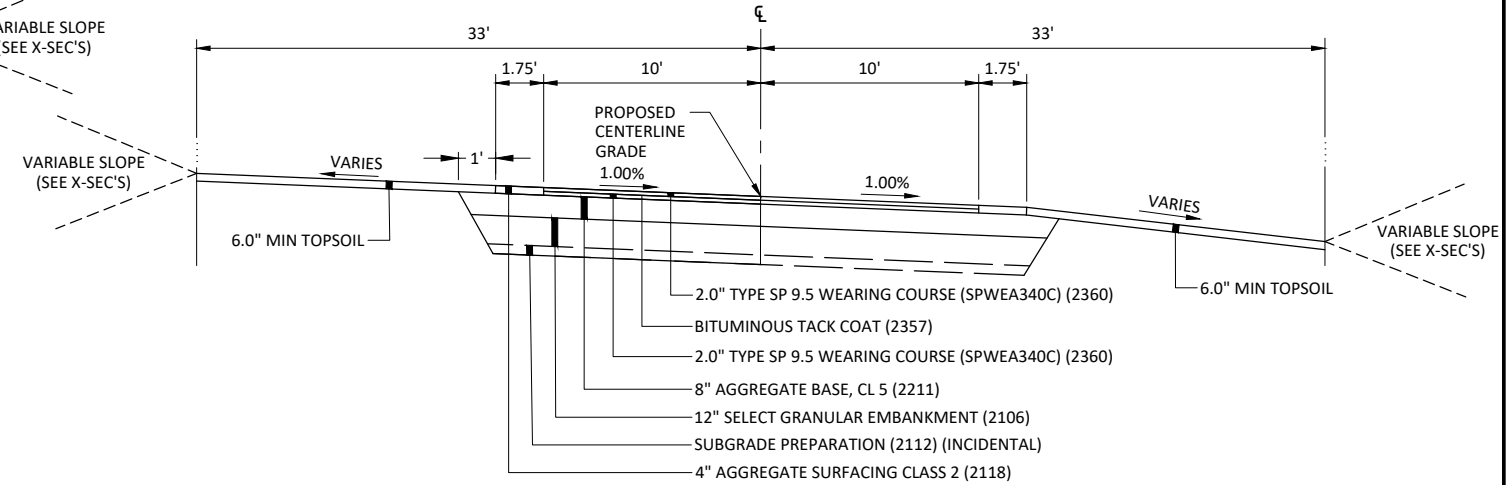
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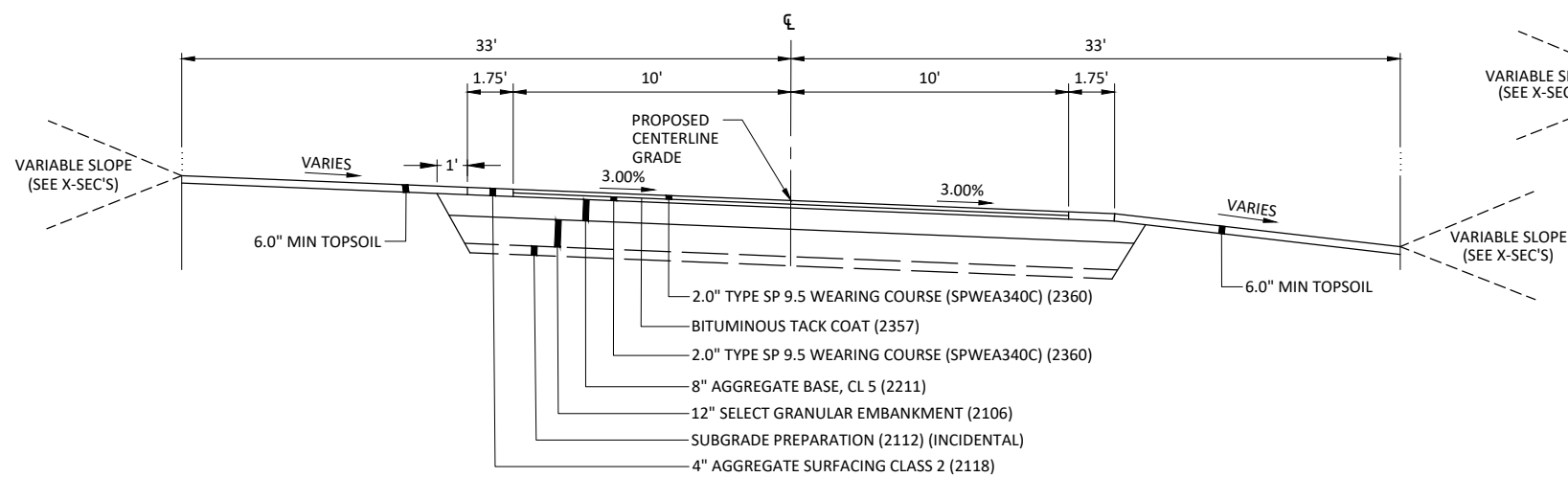
**VERNON AVENUE
TYPICAL SECTION**
0+97.80 - 17+50
19+25 - 35+16.05



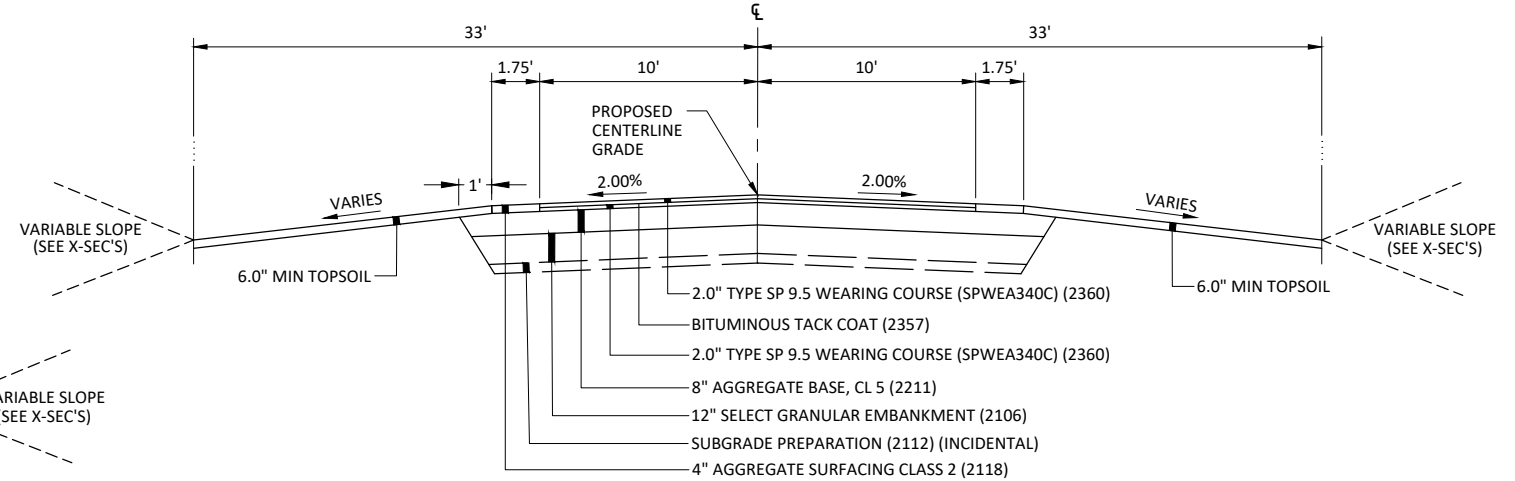
**DREDGE SITE ACCESS ROAD
TYPICAL SECTION**
50+12.23 - 50+50



**VERNON AVENUE
17+50 - 19+25
TYPICAL SECTION**



**DREDGE SITE ACCESS ROAD
TYPICAL SECTION**
50+50 - 51+34.56



- NOTES:
1. ANY VARIATIONS FROM THE TYPICAL SECTION DIMENSIONS ARE SHOWN ON THE PLAN DRAWINGS

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BRADLEY J FISHER
LIC. NO. 56595 DATE 02/21/2024

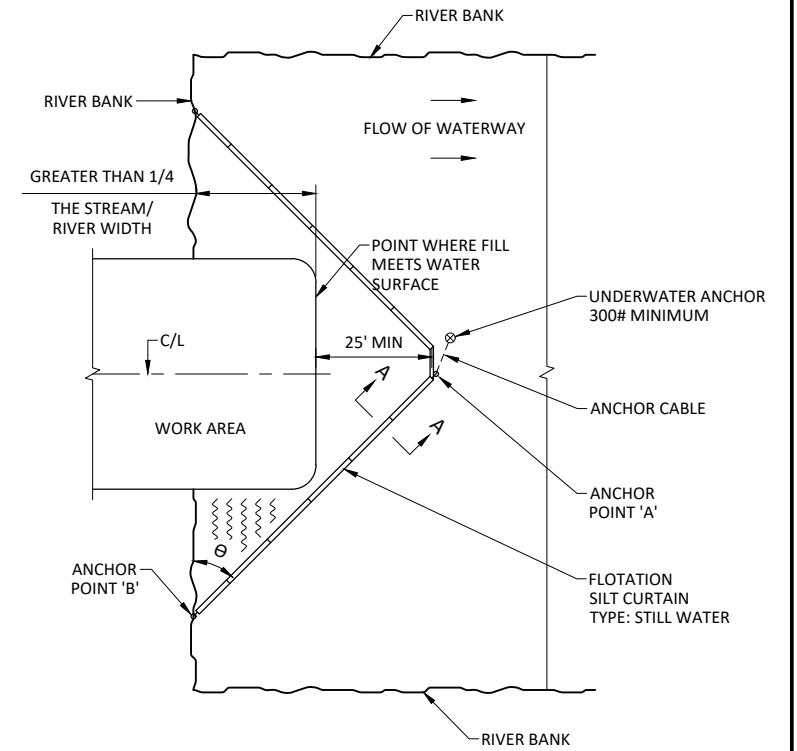
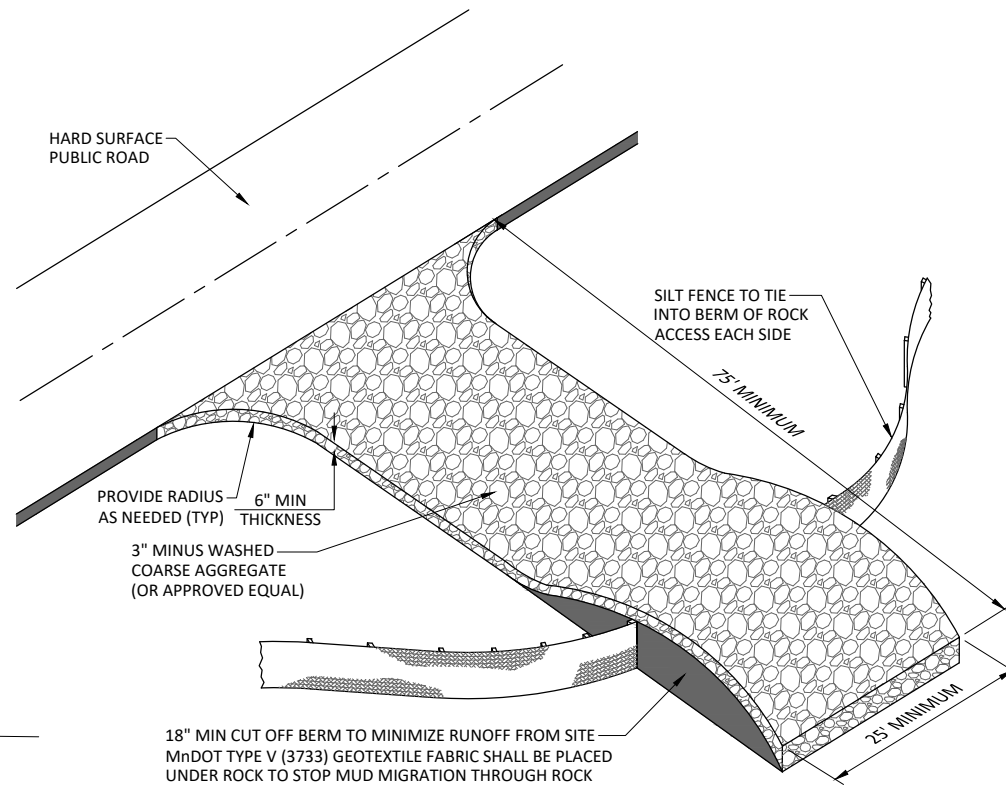
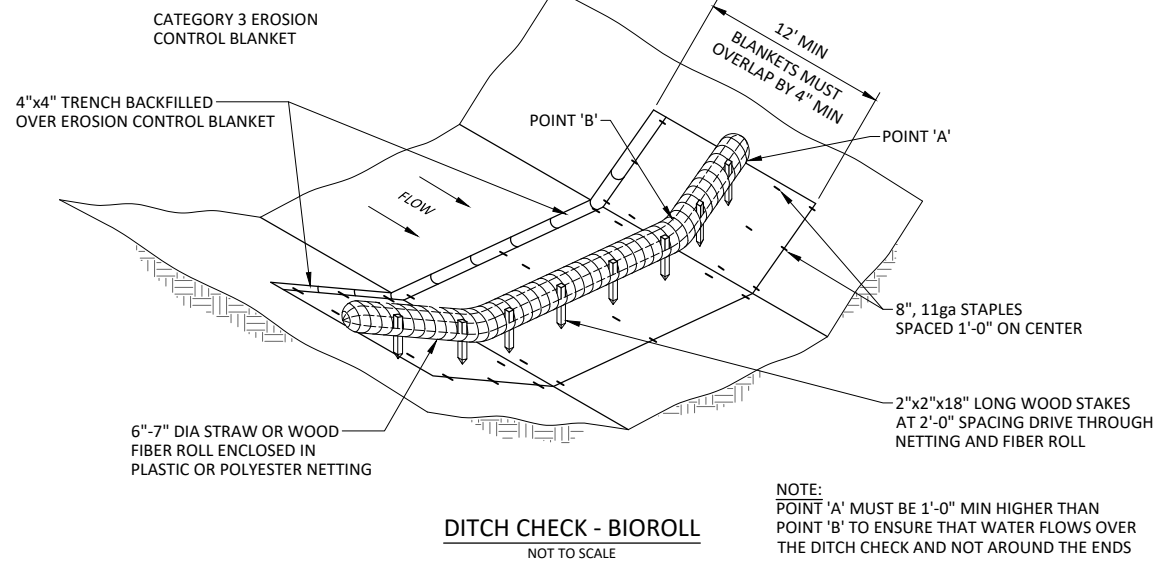


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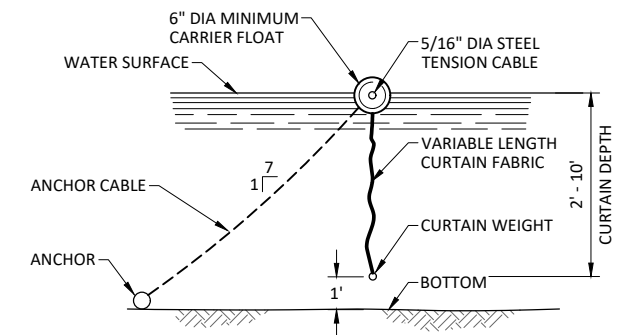
LOWER MINNESOTA RIVER WATERSHED DISTRICT
VERNON AVENUE IMPROVEMENTS
TYPICAL SECTION

SHEET
C1.01

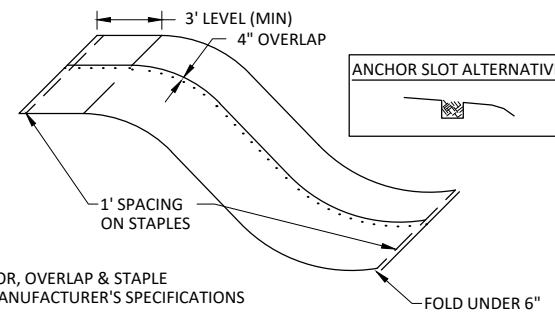
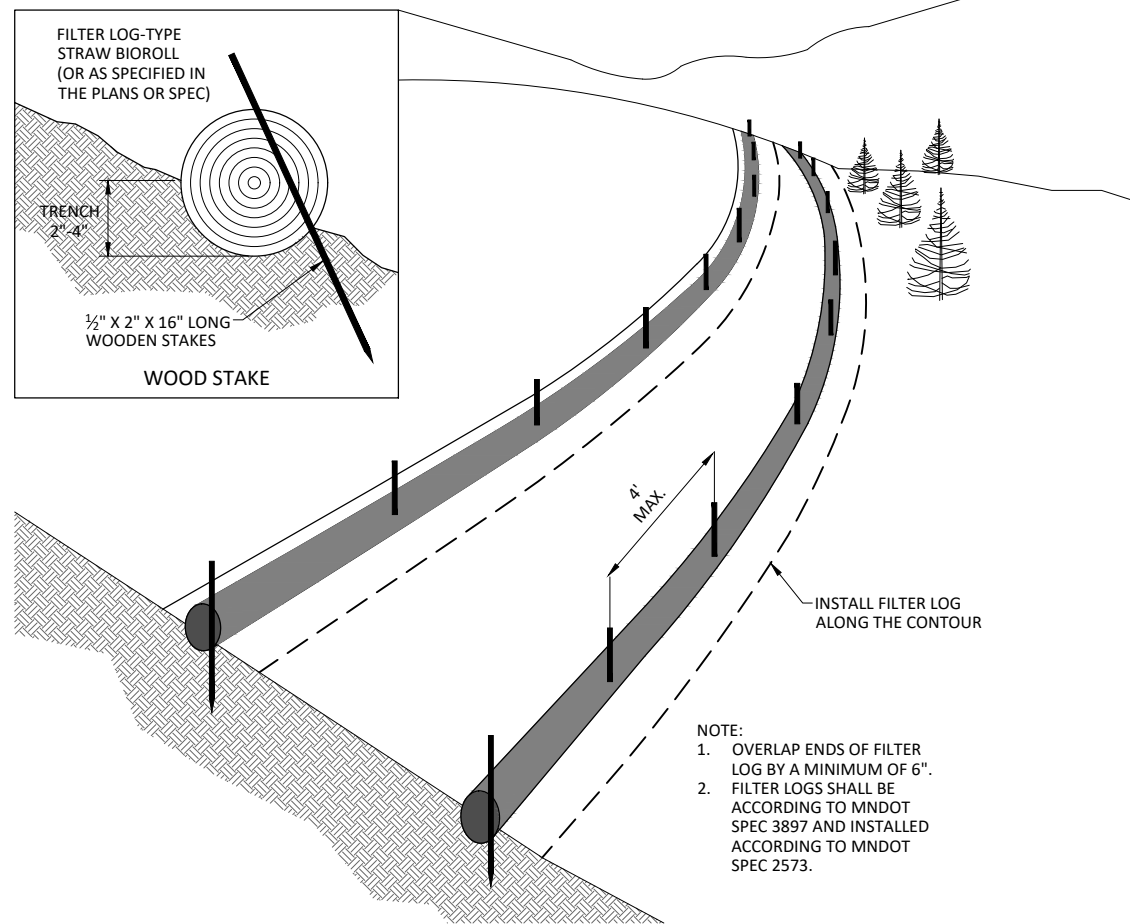


DESIGN GUIDELINES:
WHEN TEMPORARY FILL ENCLOSES MORE THAN 1/4 BUT LESS THAN 1/3 THE WIDTH OF THE STREAM

MAXIMUM WATER DEPTH: 11 FT
MINIMUM WATER DEPTH: 3 FT
MAXIMUM WATER VELOCITY: 5 FT/SEC



SILT FENCE - FLOTATION SILT CURTAIN
NOT TO SCALE



EROSION CONTROL BLANKET INSTALLATION
NOT TO SCALE

LAST REVISION:
04-2021

PLATE NO.
3-200



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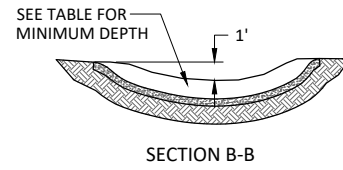
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LOWER MINNESOTA RIVER WATERSHED DISTRICT
VERNON AVENUE IMPROVEMENTS

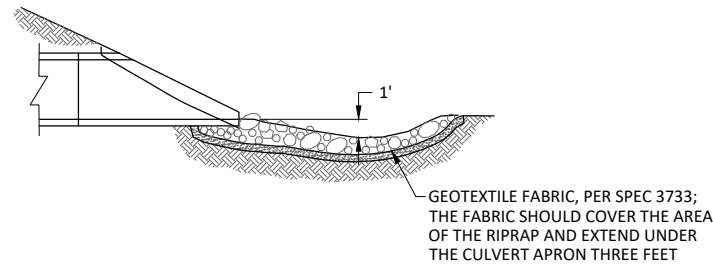
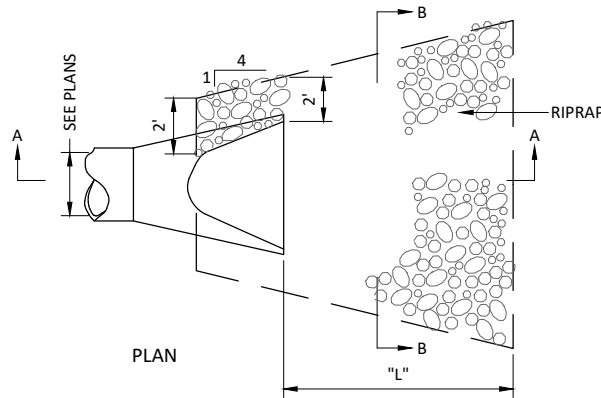
DETAILS

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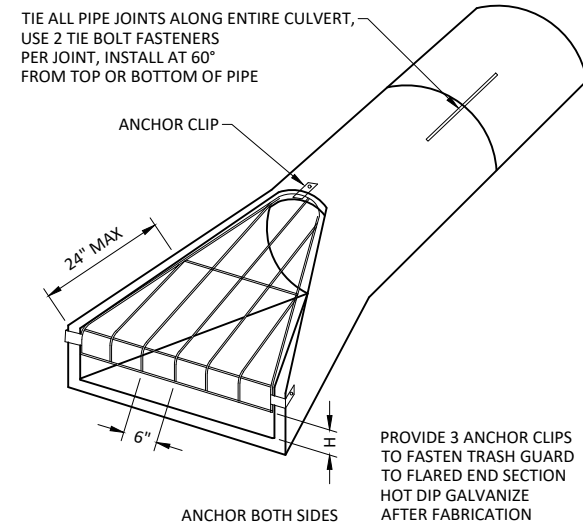
C1.02



| ROUND PIPE DIA (IN) | L (FT) | CLASS II | CLASS III | CLASS IV |
|---------------------|--------|----------|-----------|----------|
| | | d50=6" | d50=9" | d50=12" |
| 12 | 8 | 5 | 8 | 10 |
| 15 | 8 | 5 | 8 | 10 |
| 18 | 10 | 6 | 10 | 15 |
| 21 | 10 | 8 | 15 | 15 |
| 24 | 12 | 10 | 15 | 20 |
| 27 | 12 | 10 | 15 | 20 |
| 30 | 14 | 15 | 20 | 25 |
| 36 | 16 | 18 | 25 | 30 |
| 42 | 18 | 20 | 30 | 40 |
| 48 | 20 | 20 | 40 | 50 |



SECTION A-A
RIPRAP AT RCP CULVERT END
NOT TO SCALE



| TRASH GUARD SIZES | | | | |
|-------------------|---------|-----|-------|--|
| PIPE SIZE | BAR | "H" | BOLTS | |
| 12"-18" | 3/4"Ø | 4" | 5/8" | |
| 21"-42" | 1"Ø | 6" | 3/4" | |
| 42"-72" | 1 1/4"Ø | 12" | 1" | |

RC APRON TRASH RACK
(STEEL BARS)
NOT TO SCALE

ANTIVORTEX ROD, 5/8" MIN DIAMETER TACK WELD TO METAL PIPE

NOTES:

- FOR CSP, REMOVE TEMPORARY STANDPIPE AND INSTALL CULVERT APRON AFTER VEGETATION IS ESTABLISHED.
- FOR RCP, INSTALL CULVERT APRON AND SLIDE TEMPORARY STANDPIPE INTO RCP. AFTER VEGETATION IS ESTABLISHED, REMOVE TEMPORARY STANDPIPE.
- ALL GEOTEXTILE USED FOR INLET PROTECTION SHALL BE MONOFILAMENT IN BOTH DIRECTIONS.

ELEVATION OF CSP INSTALLATION

ELEVATION OF RCP INSTALLATION

FOR SEDIMENT CONTROL ON CULVERT INLET (TYPE D SPEC. 3891)
CULVERT SIZE: 12"-36"
d = DIAMETER OF STANDPIPE EQUAL TO DIAMETER OF PLAN CULVERT
L = LENGTH OF PERFORATED STANDPIPE (d+12")



INLET PROTECTION
CULVERT STANDPIPE
NOT TO SCALE

LAST REVISION:
04-2021
PLATE NO.
3-110

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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.
Bradley J Fisher
BRADLEY J FISHER
LIC. NO. 56595 DATE 02/21/2024



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LOWER MINNESOTA RIVER WATERSHED DISTRICT
VERNON AVENUE IMPROVEMENTS

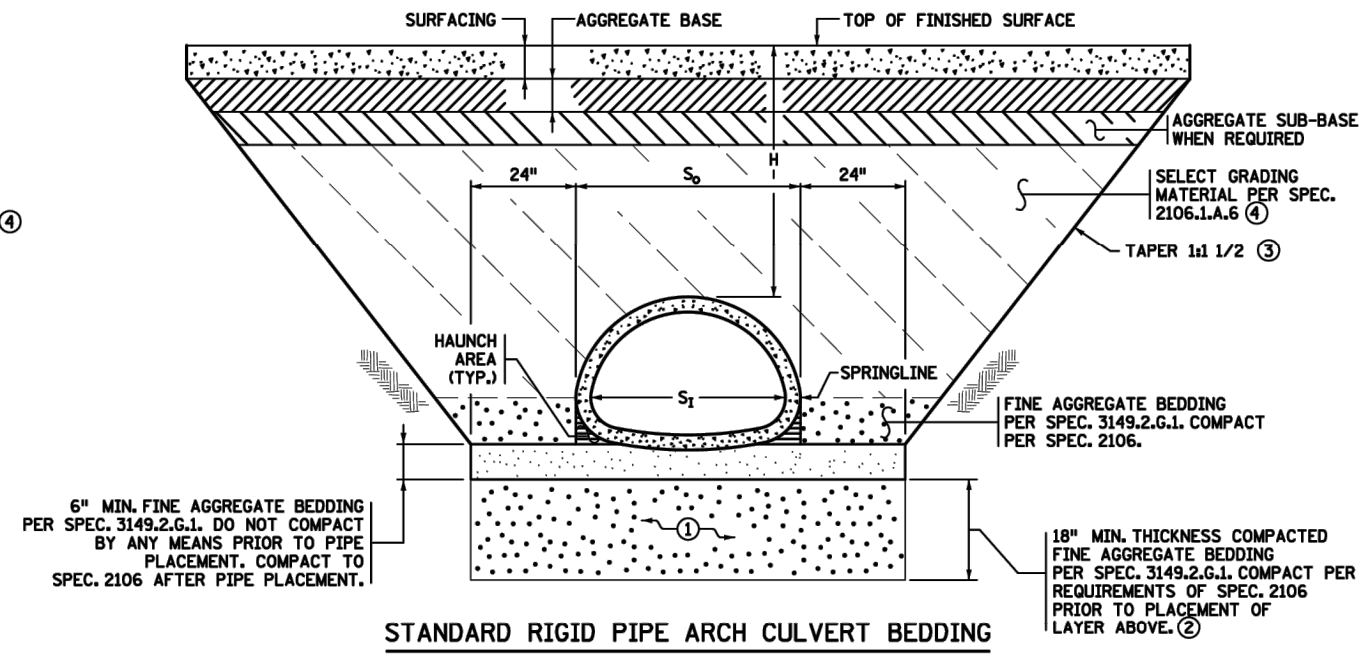
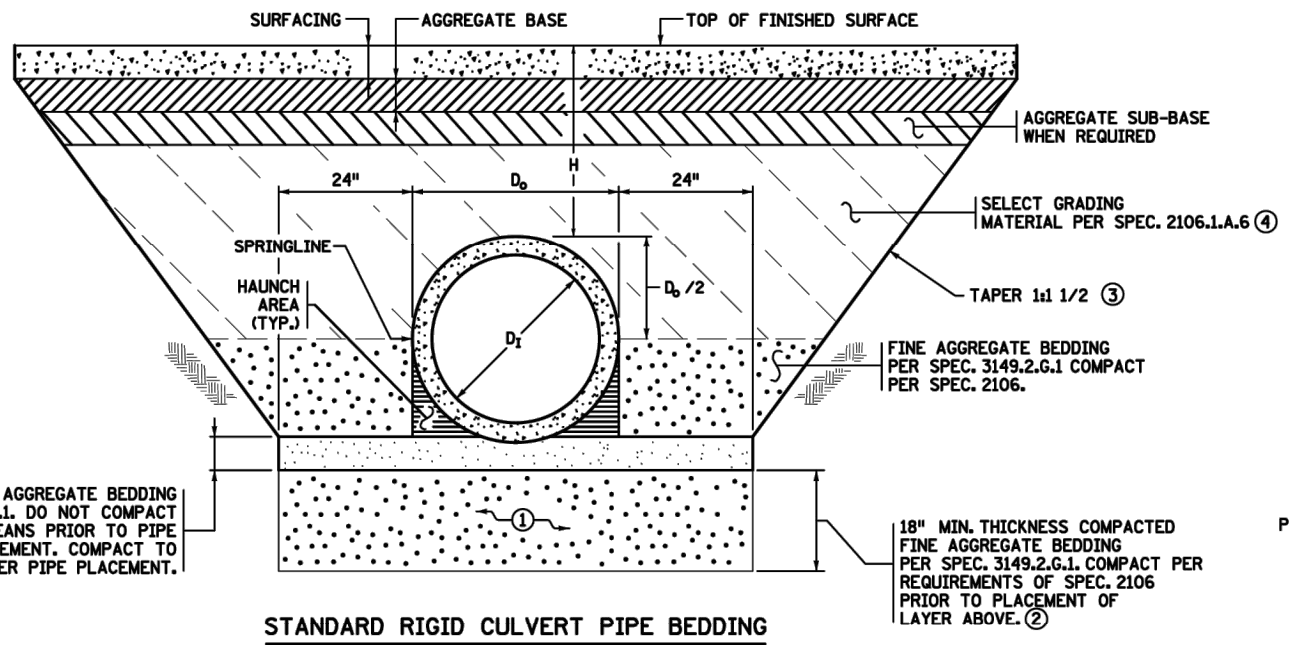
DETAILS

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C1.03

PLOTTED/REVISED:
29-JAN-2019

USER NAME: \$\$\$@USER\$NAME\$\$\$
PATH & FILENAME: OTS\DesignStandards\Development\StandardPlans\DEV400_Series.s441_spn.dgn



-LEGEND-
 D_1 = INSIDE DIAMETER OF ROUND PIPE (INCHES).
 D_0 = OUTSIDE DIAMETER OF ROUND PIPE (INCHES).
 S_1 = INSIDE SPAN OF PIPE-ARCH (INCHES).
 S_0 = OUTSIDE SPAN OF PIPE-ARCH (INCHES).
 H = FILL COVER HEIGHT OVER PIPE (FEET).
 = UNDISTURBED SOIL
 = COMPACTED BEDDING
 = LOOSE BEDDING, COMPACTED AFTER PIPE PLACEMENT

CONSTRUCTION SEQUENCE

1. PLACE AND COMPACT 18" OF FINE AGGREGATE BEDDING TO THE REQUIREMENTS OF SPEC. 2106.
2. LOOSELY PLACE 6" OF FINE AGGREGATE BEDDING MATERIAL (SPEC. 3149.2.G.1) TO GRADE. DO NOT COMPACT PRIOR TO PIPE PLACEMENT.
3. FOR PIPES WITH BELL, REMOVE MATERIAL IN BELL AREA PRIOR TO PLACEMENT.
4. FURNISH AND INSTALL PIPE TO GRADE.
5. AFTER PLACEMENT OF THE PIPE, PLACE ADDITIONAL BEDDING AND COMPACT THE FULL LENGTH ON BOTH SIDES OF THE PIPE UNDERNEATH THE HAUNCH AREA BY FIRST SHOVEL SLICING (MANUALLY SHOVEL THE BLADE END OF A SHOVEL AT AN ANGLE DOWN THE ENTIRE LENGTH OF THE PIPE IN THE HAUNCH AREA) THEN COMPACT THE HAUNCH AT AN ANGLE USING A POWERED MECHANICAL OR PNEUMATIC DEVICE (I.E. POLE TAMPER, JUMPING JACK, OR SIMILAR).
6. COMPACT THE REMAINING MATERIAL OUTSIDE THE HAUNCH AREA TO THE REQUIREMENTS OF SPEC. 2106 ENSURING THAT THE ENTIRE LENGTH OF PIPE IS SUPPORTED UNIFORMLY BY BEDDING.
7. PLACE AND COMPACT BACKFILL EVENLY AND SIMULTANEOUSLY IN 6" LIFTS ON EACH SIDE OF THE PIPE UP TO THE SPRINGLINE WHEN COMPACTED.
8. COMPLETE REMAINING BACKFILL.

NOTES

- STANDARD BEDDING FOR RIGID PIPE CULVERTS WITHOUT TREATMENTS.
- RIGID PIPE INCLUDES CONCRETE.
- ENTRANCE CULVERTS (FIELD AND DRIVEWAY CULVERTS) DO NOT NEED BEDDING UNLESS SPECIFIED IN THE PLANS OR SPECIAL PROVISIONS.
- UNLESS OTHERWISE NOTED IN THE PLAN, BEDDING QUANTITIES ARE COMPUTED FOR THE FULL LENGTH OF THE PIPE AND APRON, AND WILL NOT BE ADJUSTED FOR CHANGES TO MEET OSHA REQUIREMENTS.
- WHEN RIPRAP IS REQUIRED AT THE APRON END, SEE STANDARD PLATE OR PLAN FOR RIPRAP INSTALLATION AND QUANTITIES. FOR APRONS WITHOUT RIPRAP PLACE 6" MIN. FINE AGGREGATE BEDDING UNDER APRONS. USE A TRENCH WIDTH EQUAL TO THE PIPE TRENCH WIDTH.
- CONTRACT PAY ITEM FOR FINE AGGREGATE BEDDING INCLUDES THE COST OF EXCAVATION, PLACEMENT AND COMPACTION.
- EXCAVATION AND BACKFILL WITH SELECT GRADING MATERIAL ARE NOT TABULATED SEPARATELY BUT ARE INCLUDED IN THE CONTRACT UNIT PRICE OF THE RELEVANT CULVERT PAY ITEM.
- EXCAVATE & CONSTRUCT ALL TRENCHES AND SLOPES PER OSHA REQUIREMENTS.
- ALL SLOPES SHOWN AS (V) : (H).
- PIPE SIZE IS BASED ON THE NOMINAL INSIDE DIAMETER OR SPAN.
- PROTECT ALL PIPE DURING CONSTRUCTION PER SPEC. 2501.
- PLACE MULTIPLE PIPE CULVERTS WITH A CLEARANCE OF 24 INCHES OR GREATER BETWEEN STRINGS OF PIPE.
- ① IF APPROVED BY THE ENGINEER, IN WET CONDITIONS THE CONTRACTOR MAY SUBSTITUTE 18" OF COARSE FILTER AGGREGATE PER SPEC. 3149.2.H COMPACTED TO THE QUALITY COMPACTION REQUIREMENTS OF SPEC. 2106. WRAP WITH GEOTEXTILE FABRIC TYPE IV PER SPEC. 3733. SEAM ALL FABRIC SIDES AND ENDS PER SPEC. TABLE 3733-1 INCLUDING FOOTNOTE (e) OR OVERLAP A MINIMUM OF 3 FT., ALL AT NO ADDITIONAL COST.
- ② FOR INSTALLATIONS ON INTACT BEDROCK, OMIT THIS LAYER.
- ③ OVER-EXCAVATION BENEATH TAPERS IS NOT PERMITTED UNLESS REQUIRED BY OSHA. (TYP.)
- ④ MAXIMUM EMBANKMENT PARTICLE SIZE WITHIN 2 FT. OF RIGID PIPE IS 3".

REVISION:
APPROVED: JANUARY 18, 2019
Kevin Weston
STATE BRIDGE ENGINEER

| | | | | |
|--|-------------------------|----------------------------------|---|--|
| | STANDARD PLAN 5-297.441 | 1 OF 1 | STANDARD CULVERT BEDDING FOR RIGID PIPE (WITHOUT TREATMENTS) | |
| | | APPROVED: 01-18-2019 REVISED: | | |



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LOWER MINNESOTA RIVER WATERSHED DISTRICT
VERNON AVENUE IMPROVEMENTS
DETAILS

SHEET
C1.04

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

SWPPP AMENDMENTS AND SUBMITTALS

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

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

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

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

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

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

EROSION PREVENTION PRACTICES

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

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

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

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

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

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

SEDIMENT CONTROL PRACTICES

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

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

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

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

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

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

TEMPORARY SEDIMENTATION BASINS

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

DEWATERING

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

CONTRACTOR TO CONSTRUCT COFFERDAMS ON BOTH ENDS OF THE CULVERT, AS NECESSARY TO DEWATER THE CULVERT WORK AREA SUFFICIENTLY TO CONSTRUCT THE IMPROVEMENTS AS REQUIRED (OR APPROVED ALTERNATIVE METHOD). THE CONTRACTOR SHALL SUBMIT A PROPOSED DEWATERING PLAN, AND THE METHODS TO BE USED, TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO COMMENCING THE WORK. THE PROPOSED DEWATERING PLAN SHALL BE IN COMPLIANCE WITH SECTION 10 OF THE NPDES/SDS PERMIT MNR100001.

POLLUTION PREVENTION

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

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

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

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

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

If contaminated soils are discovered during grading operations, the contractor must immediately suspend work and notify the engineer and owner.

Spill Containment: Contractor/Erosion Control Supervisor must make a spill response plan before the application of any chemical that may be harmful to the environment. All spills must be reported immediately. Spill cleanup must be available on site. Material shall include, but not limited to brooms, mops, rags, gloves, absorbent material, plastic and metal containers. Spills that reach storm water conveyance systems connected to a water of the state must be immediately report to the MPCA State Duty Officer at 1-800-422-0798.

Contaminated Properties: The MPCA's "What's In My Neighborhood" database (<https://mpca.maps.arcgis.com/apps/webappviewer/index.html?id=9d45793c75644e05bac197525f633f87>) was reviewed on 7/21/2023. The results of this review showed no known contaminated properties or leak sources within the project limits. Past incidents have been reported within close proximity to the project site. Any discharges observed should be recorded, photographed and described as to the location of the discharge (i.e., color, odor, oil sheen, and other obvious indicators of pollutants).

If an illicit discharge is noticed the Minnesota Department of Public Safety Duty Officer at 1-800-422-0798 (toll free) or 651-649-5451 (Metro area) should be notified immediately if the source of the illicit discharge is a spill or leak as defined in Minn. Stat. 115.061.

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

Concrete Washout: Concrete washout operations must be contained in a leak proof containment facility or impermeable liner and must be performed in accordance with part 12.9 of the NPDES/SDS Program MNR 10001.

INSPECTION & MAINTENANCE

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

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

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

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

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

Inspections must include:

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

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

Permittees must repair, replace or supplement all nonfunctional BMPs with functional BMPs by the end of the next business day

after discovery, or as soon as field conditions allow.

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

PUBLIC WATER RESTRICTIONS:

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

FINAL STABILIZATION

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

1. Substantial Completion has been reached and no ground disturbing activities are anticipated.
2. Permanent cover has been installed with an established minimum uniform perennial vegetation density of 70 percent of its expected final growth. Vegetation is not required in areas where no vegetation is proposed by this project such as impervious surfaces or the base of a sand filter.
3. Accumulated sediment has been removed from all permanent stormwater treatment systems as necessary to ensure the system is operating as designed.
4. All sediment has been removed from conveyance systems
5. All temporary synthetic erosion prevention and sediment control BMPs have been removed. BMPs designated on the SWPPP to remain to decompose on-site may remain.
6. For residential construction only, permit coverage terminates on individual lots if the structures are finished and temporary erosion prevention and downgradient perimeter control is complete, the residence sells to the homeowner, and the permittee distributes the MPCA's "Homeowner Fact Sheet" to the homeowner.
7. For agricultural land only (e.g., pipelines across cropland), the disturbed land must be returned to its preconstruction agricultural use prior to submitting the NOT.
8. All previous soil surfaces that are compacted during construction must be decompacted through soil amendments and/or ripping to a depth of 18-inches.

SITE STABILIZATION COMPLETION:

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

SITE INSPECTION INTERVAL:

| | |
|--|-----------------|
| A trained person shall routinely inspect the entire construction site during active construction at an interval of no more than: | 7 calendar days |
|--|-----------------|

SPECIAL ENVIRONMENTAL CONSIDERATIONS AND PERMITS:

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

| TYPE OF PERMIT | PERMITTING AGENCY | PERMIT STATUS AND CONDITIONS |
|-------------------------------|-------------------|------------------------------|
| Construction Stormwater NPDES | MPCA | To be obtained |

SWPPP DESIGNER TRAINING DOCUMENTATION:

SWPPP DESIGNER TRAINING DOCUMENTATION:

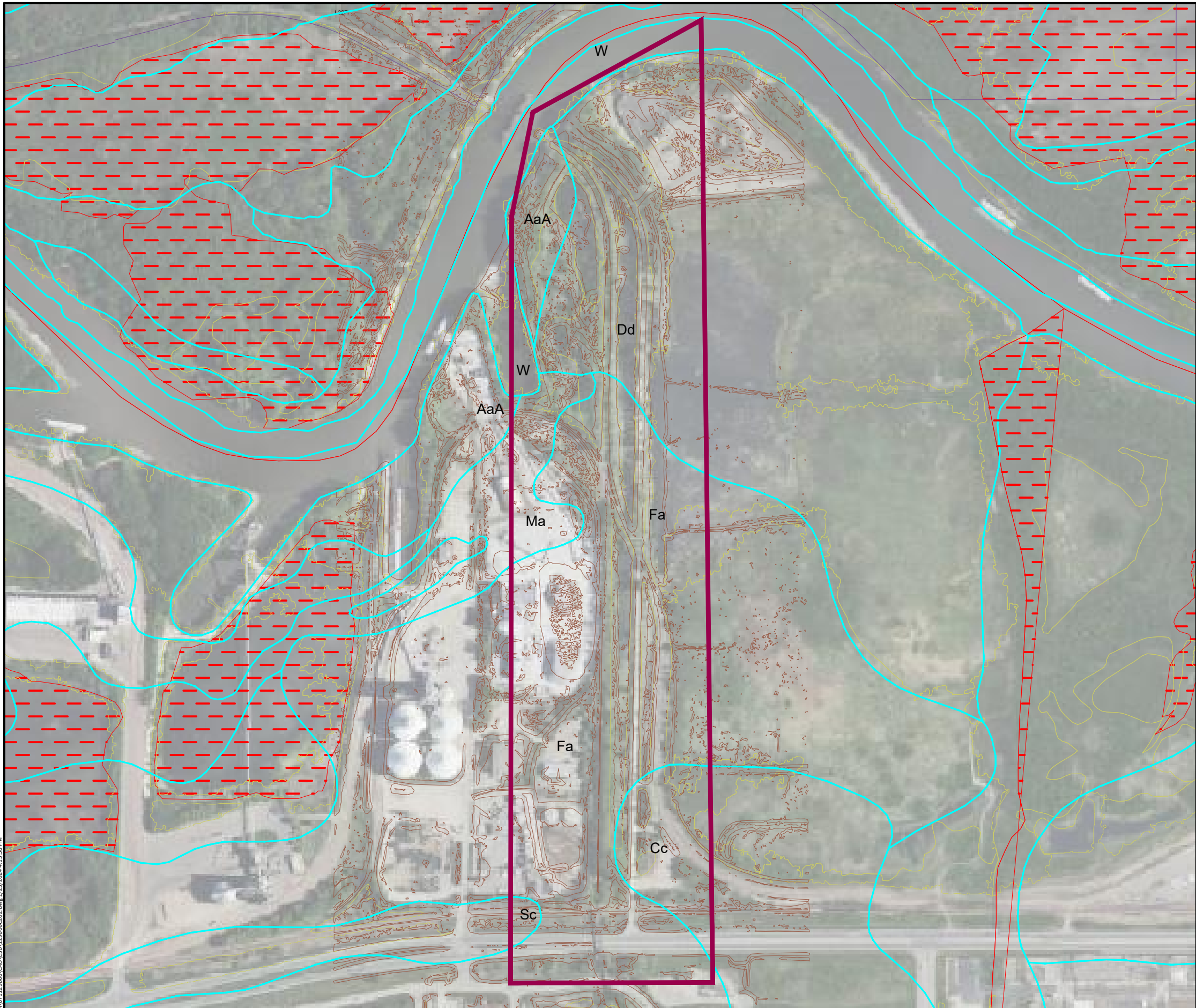
I certify that I have completed the Design of Construction SWPPP course. The certification expires 2026.

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SIGNER'S NAME
LIC. NO. 56595 DATE 02/21/2024



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| CLIENT PROJ. NO. | | | |
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LEGEND

- PROJECT BOUNDARY
- SOIL TYPE
- IMPAIRED, SPECIAL OR PROTECTED WATERS
- NATIONAL WETLANDS INVENTORY
- DWSMA, LOW VULNERABILITY
- STEEP SLOPES (>33.3%)
- RECEIVING WATERS



SOIL TYPE SUMMARY

| Map Unit Symbol | Soil Name | Hyd. Soil Group | Erodibility |
|-----------------|------------------------------------|-----------------|-------------|
| MUSYM | MUNAME | HYDGRP | MUHELCL |
| AaA | Alluvial land, 0-2% slopes | B | NHEL |
| Ab | Alluvial land, 0-6% slopes | A/D | NHEL |
| Cc | Comfrey silty clay loam | B/D | NHEL |
| Dd | Dorchester silty clay loam | C | NHEL |
| Fa | Faxon silty clay loam, 0-2% slopes | C/D | NHEL |
| Ma | Marsh | A/D | NHEL |
| Sc | Stony land | | NHEL |

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

LOCATION OF SWPPP REQUIREMENTS IN PROJECT PLAN

| DESCRIPTION | SHEET NO. |
|------------------------------------|---------------|
| SITE MAP | C2.01 |
| DIRECTION OF FLOW | C2.04 - C2.06 |
| FINAL STABILIZATION | C2.04 - C2.06 |
| SOILS | C2.03 |
| DRAINAGE STRUCTURES | C5.01 |
| DRAINAGE TABULATION | G1.01 |
| STORM SEWER PLAN & PROFILE SHEETS | C5.01 |
| EROSION & SEDIMENT CONTROL DETAILS | C1.02 - C1.03 |
| EROSION CONTROL TABULATION | C2.01 |
| TURF ESTABLISHMENT TABULATION | C2.01 |
| NARRATIVE & NOTES | C2.01 - C2.02 |

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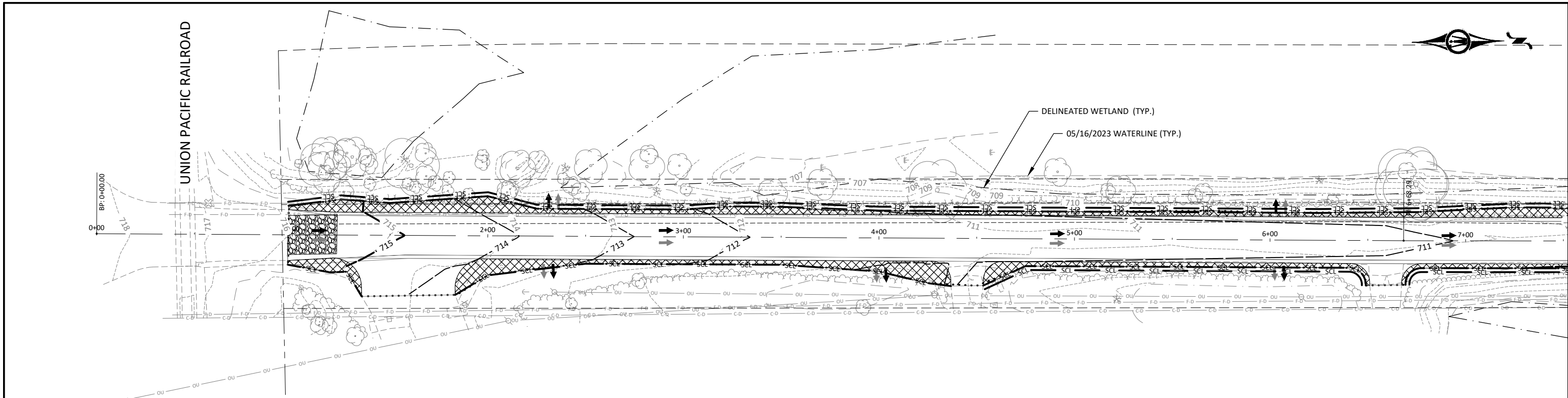


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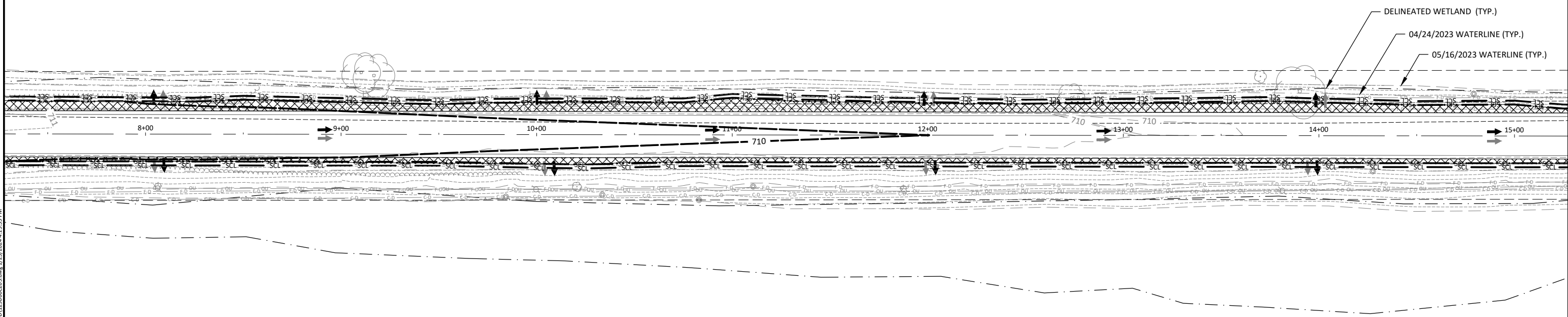
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LOWER MINNESOTA RIVER WATERSHED DISTRICT
 VERNON AVENUE IMPROVEMENTS
 STORMWATER POLLUTION PREVENTION PLAN
 SWPPP SOILS

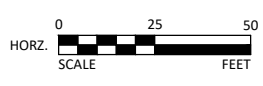
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C2.03



| EROSION CONTROL LEGEND | | | |
|------------------------|---------------------------------|--|----------------------------------|
| | CONSTRUCTION LIMITS | | STABILIZED CONSTRUCTION EXIT |
| → → | EXISTING/PROPOSED DRAINAGE FLOW | | SEED & BLANKET (SEED MIX 25-141) |
| | TURBIDITY BARRIER | | SEED & BLANKET (SEED MIX 34-181) |
| | SEDIMENT CONTROL LOG | | |
| | INLET PROTECTION | | |



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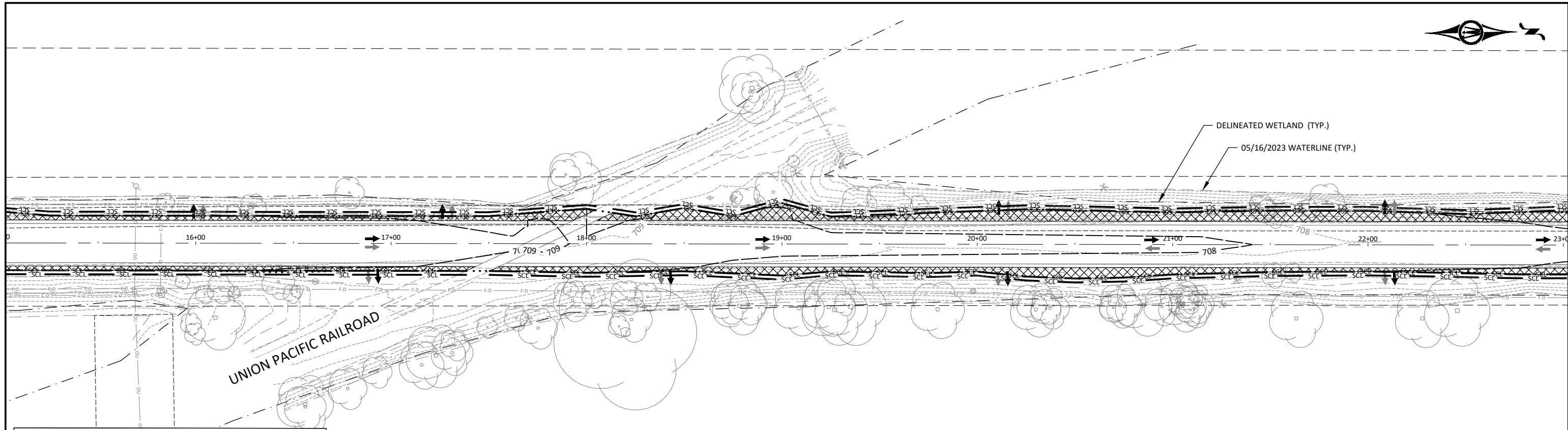


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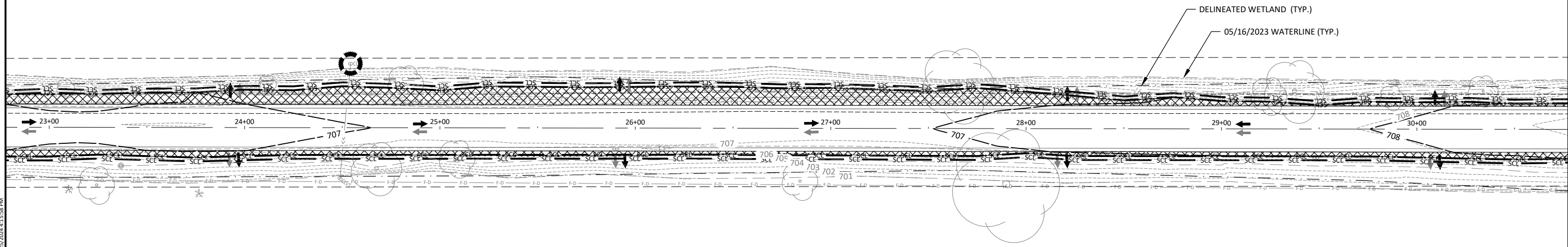
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LOWER MINNESOTA RIVER WATERSHED DISTRICT
 VERNON AVENUE IMPROVEMENTS
 EROSION CONTROL PLAN

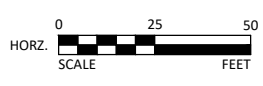
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| EROSION CONTROL LEGEND | | | |
|------------------------|---------------------------------|--|----------------------------------|
| | CONSTRUCTION LIMITS | | STABILIZED CONSTRUCTION EXIT |
| → → | EXISTING/PROPOSED DRAINAGE FLOW | | SEED & BLANKET (SEED MIX 25-141) |
| | TURBIDITY BARRIER | | SEED & BLANKET (SEED MIX 34-181) |
| — SCL — | SEDIMENT CONTROL LOG | | |
| | INLET PROTECTION | | |



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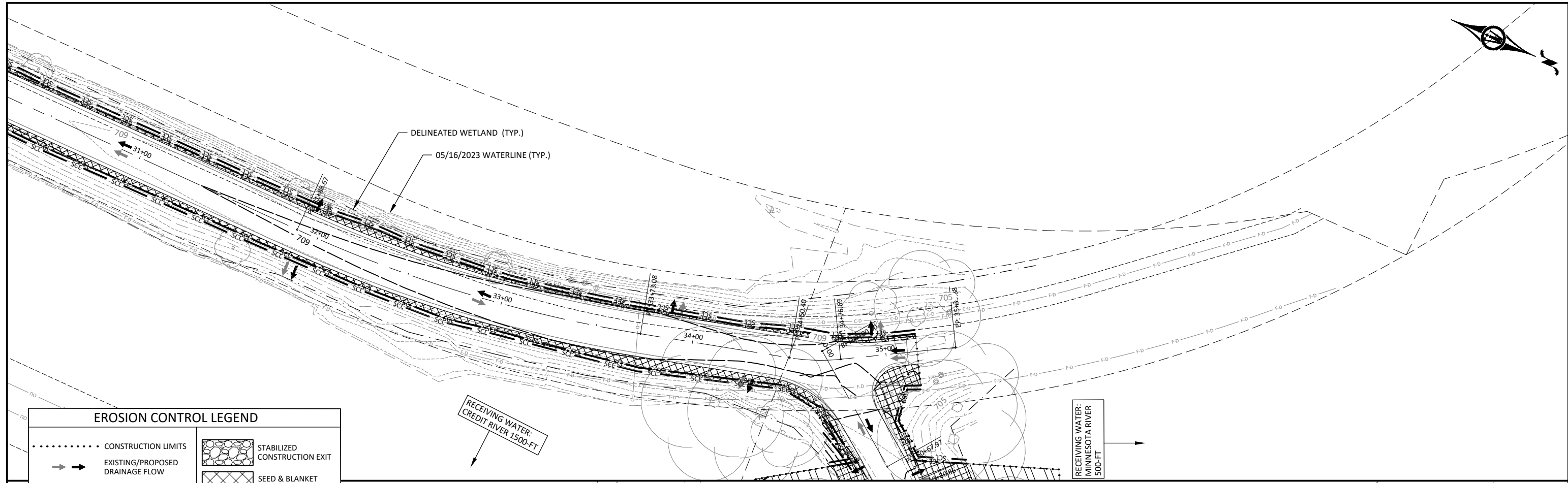
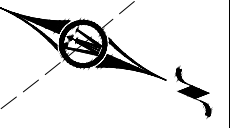


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LOWER MINNESOTA RIVER WATERSHED DISTRICT
 VERNON AVENUE IMPROVEMENTS
 EROSION CONTROL PLAN

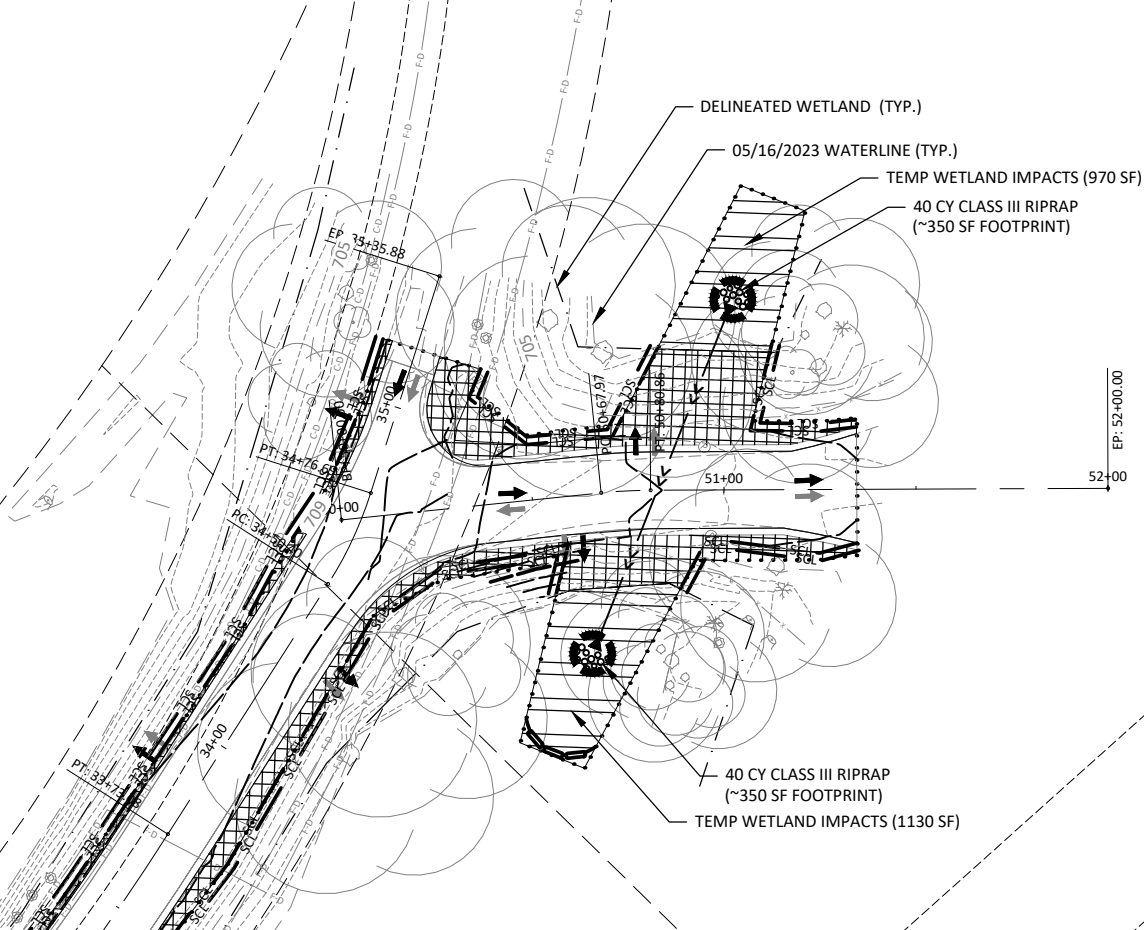
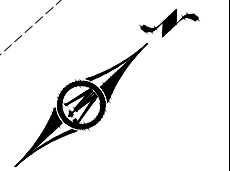
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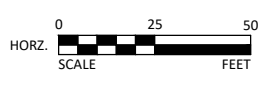
| EROSION CONTROL LEGEND | |
|------------------------|----------------------------------|
| | CONSTRUCTION LIMITS |
| → → | EXISTING/PROPOSED DRAINAGE FLOW |
| — — — | TURBIDITY BARRIER |
| — SCL — | SEDIMENT CONTROL LOG |
| ⊙ | INLET PROTECTION |
| | STABILIZED CONSTRUCTION EXIT |
| | SEED & BLANKET (SEED MIX 25-141) |
| | SEED & BLANKET (SEED MIX 34-181) |

RECEIVING WATER:
CREDIT RIVER 1500-FT

RECEIVING WATER:
MINNESOTA RIVER
500-FT



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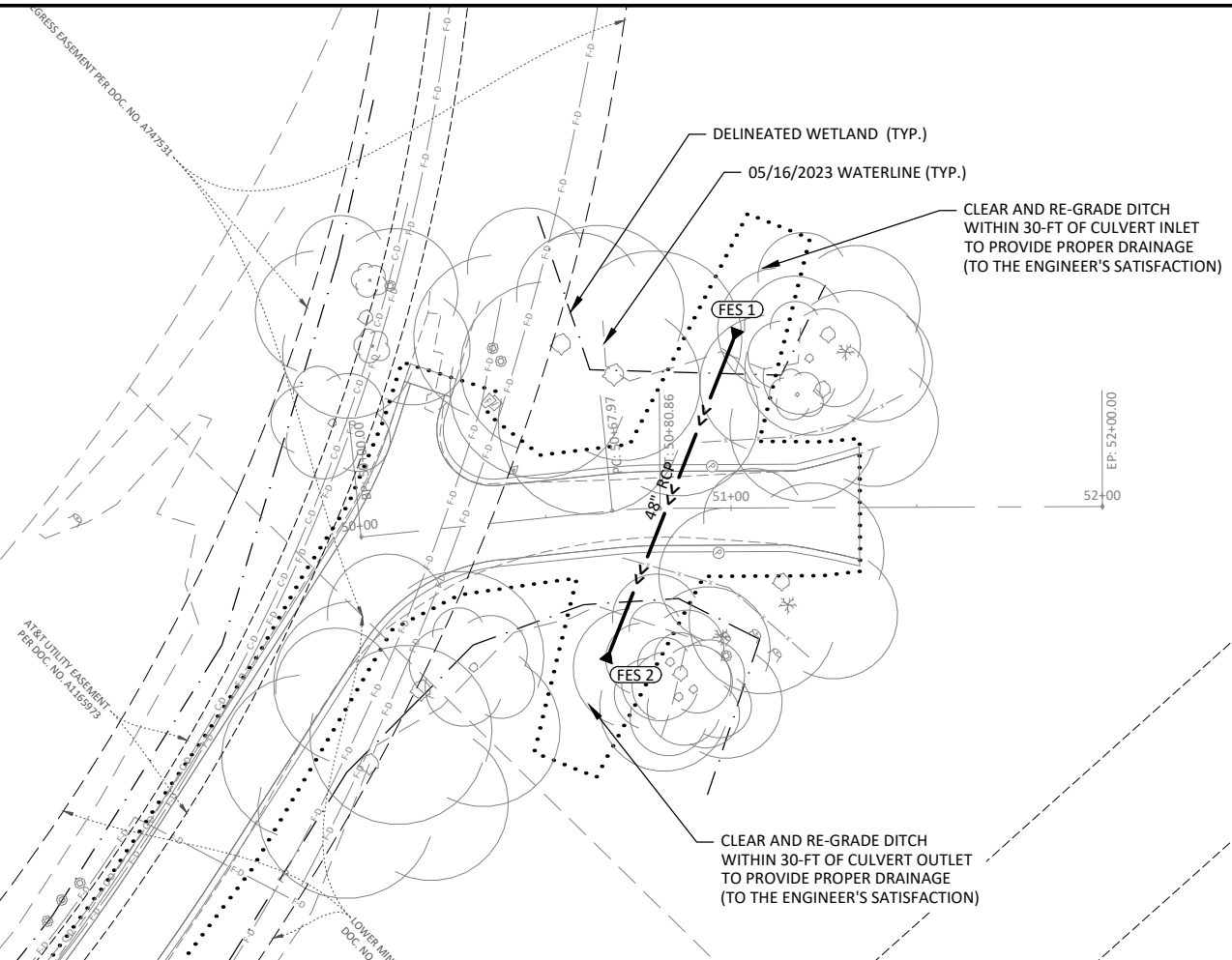
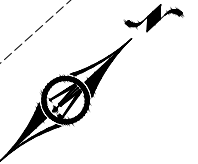


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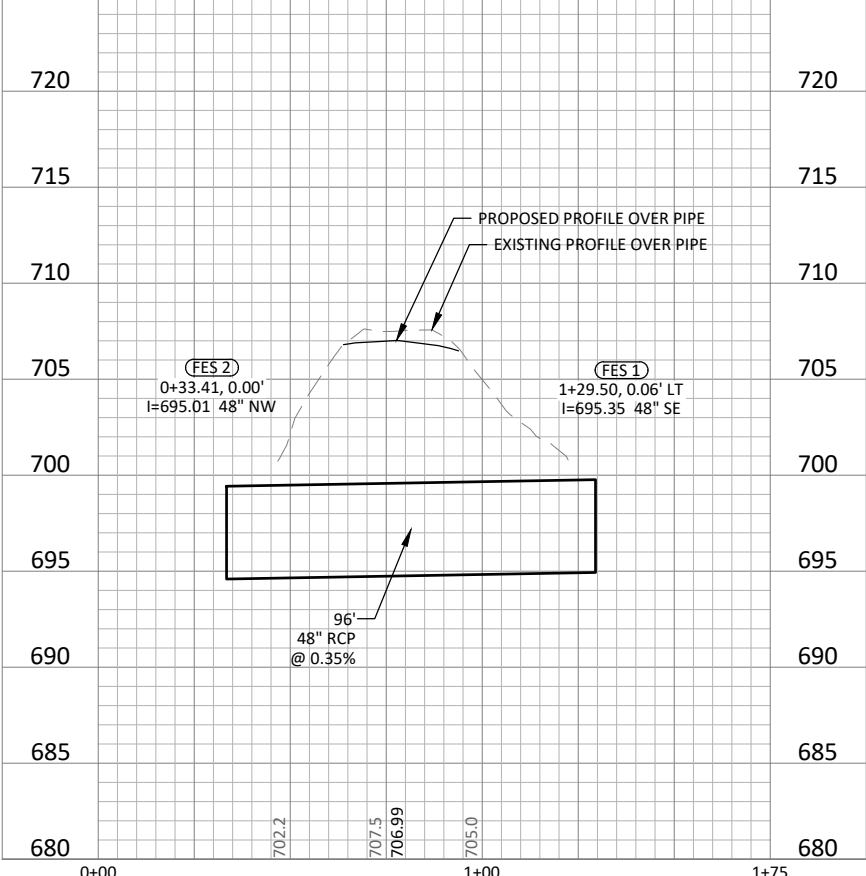
LOWER MINNESOTA RIVER WATERSHED DISTRICT
VERNON AVENUE IMPROVEMENTS
EROSION CONTROL PLAN

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C2.06

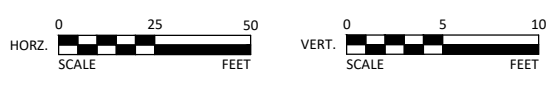


DEWATERING PLAN:

- CONTRACTOR TO CONSTRUCT COFFERDAMS ON BOTH ENDS OF THE CULVERT, AS NECESSARY TO DEWATER THE CULVERT WORK AREA SUFFICIENTLY TO CONSTRUCT THE IMPROVEMENTS AS REQUIRED (OR APPROVED ALTERNATIVE METHOD).
- THE CONTRACTOR SHALL SUBMIT A PROPOSED DEWATERING PLAN, AND THE METHODS TO BE USED, TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO COMMENCING THE WORK. THE PROPOSED DEWATERING PLAN SHALL BE IN COMPLIANCE WITH SECTION 10 OF THE NPDES/SDS PERMIT MNR100001.



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LOWER MINNESOTA RIVER WATERSHED DISTRICT
 VERNON AVENUE IMPROVEMENTS
 STORM SEWER PLAN AND PROFILE

SHEET
C5.01



MATCH EXISTING BITUMINOUS PAVEMENT

DELINEATED WETLAND (TYP.)

05/16/2023 WATERLINE (TYP.)

BP: 0+00.00

0+00

UNION PACIFIC RAILROAD

MATCH EXISTING

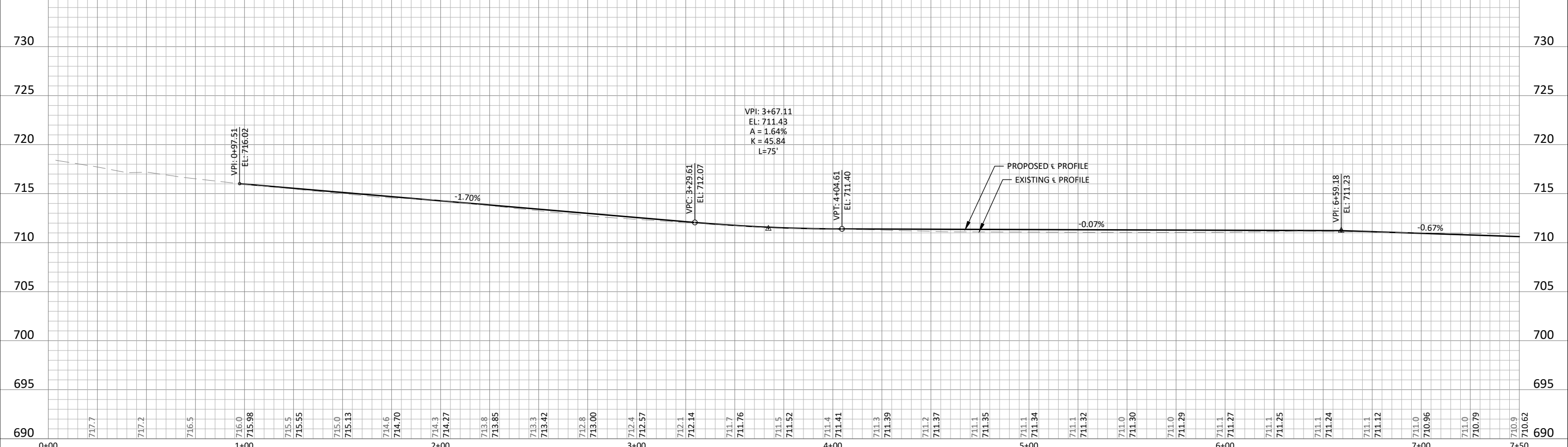
LOWER MINNESOTA RIVER WATERSHED DISTRICT PIPELINE EASEMENT PER DOC. NO. A747533/T178586 & ACCESS EASEMENT PER DOC. NO. A747534

MATCH EXISTING

MATCH EXISTING

LEGEND

- BITUMINOUS PAVEMENT
- AGGREGATE SURFACING
- CONSTRUCTION LIMITS



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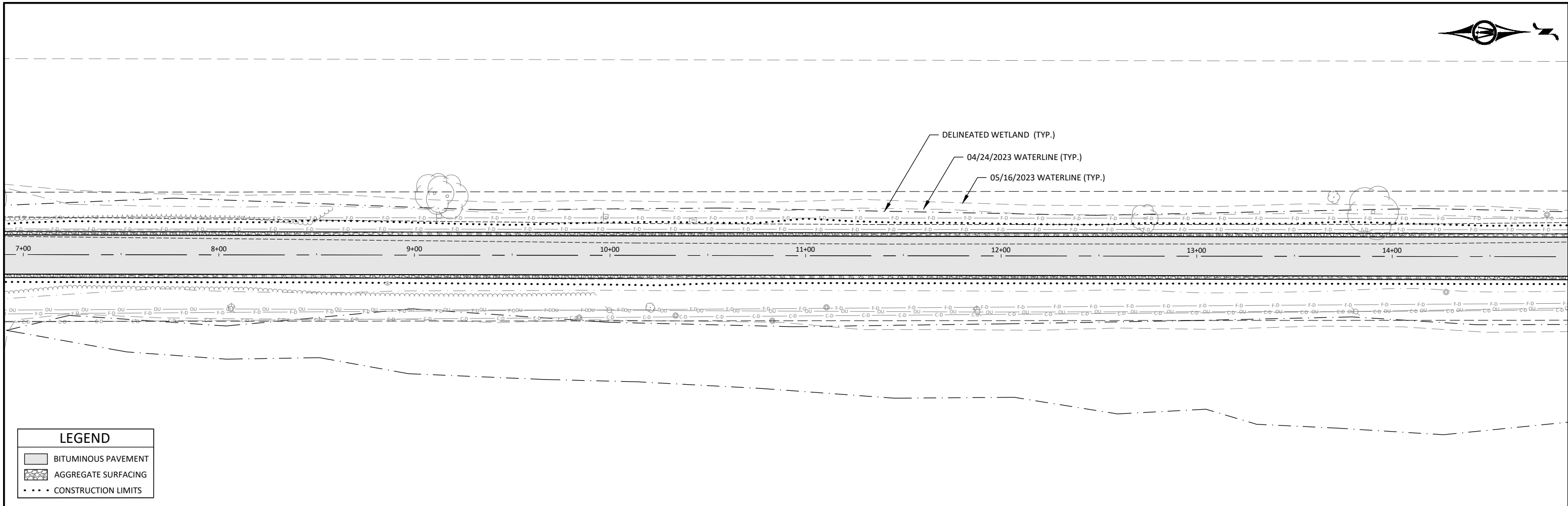


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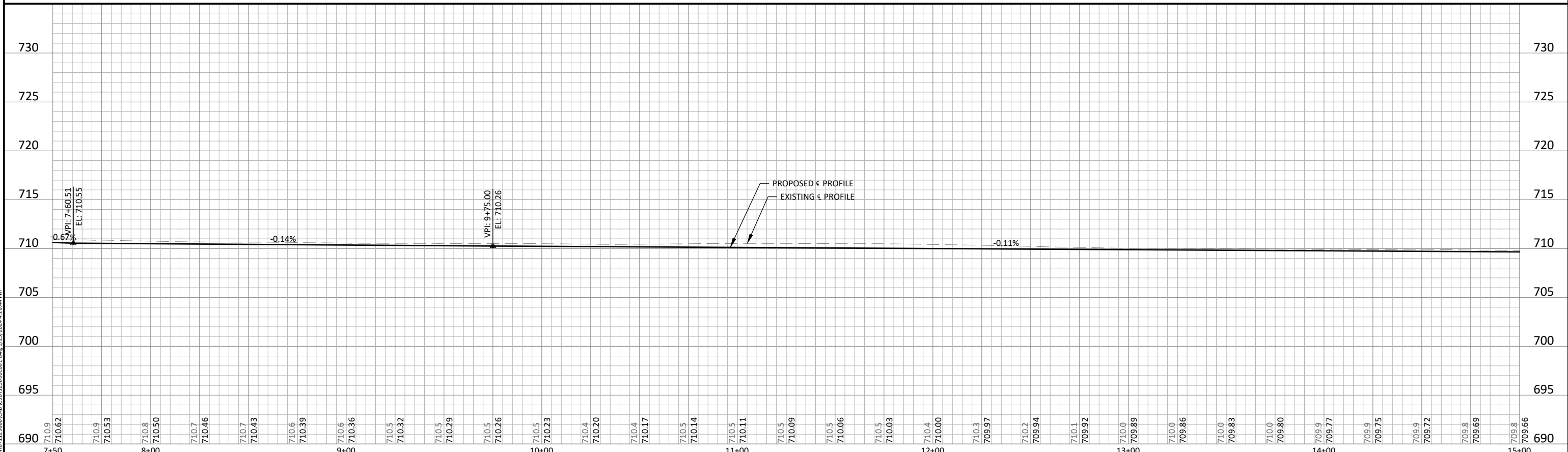
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LOWER MINNESOTA RIVER WATERSHED DISTRICT
 VERNON AVENUE IMPROVEMENTS
 STREET PLAN & PROFILE

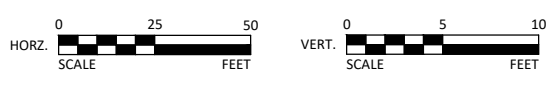
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| LEGEND | |
|--------|---------------------|
| | BITUMINOUS PAVEMENT |
| | AGGREGATE SURFACING |
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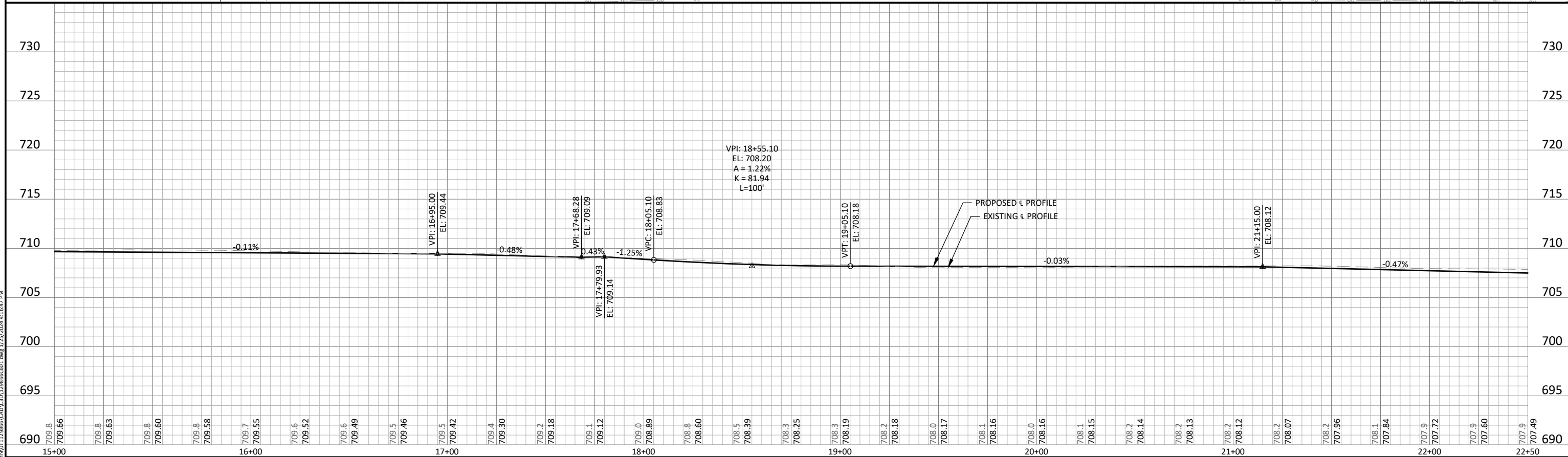
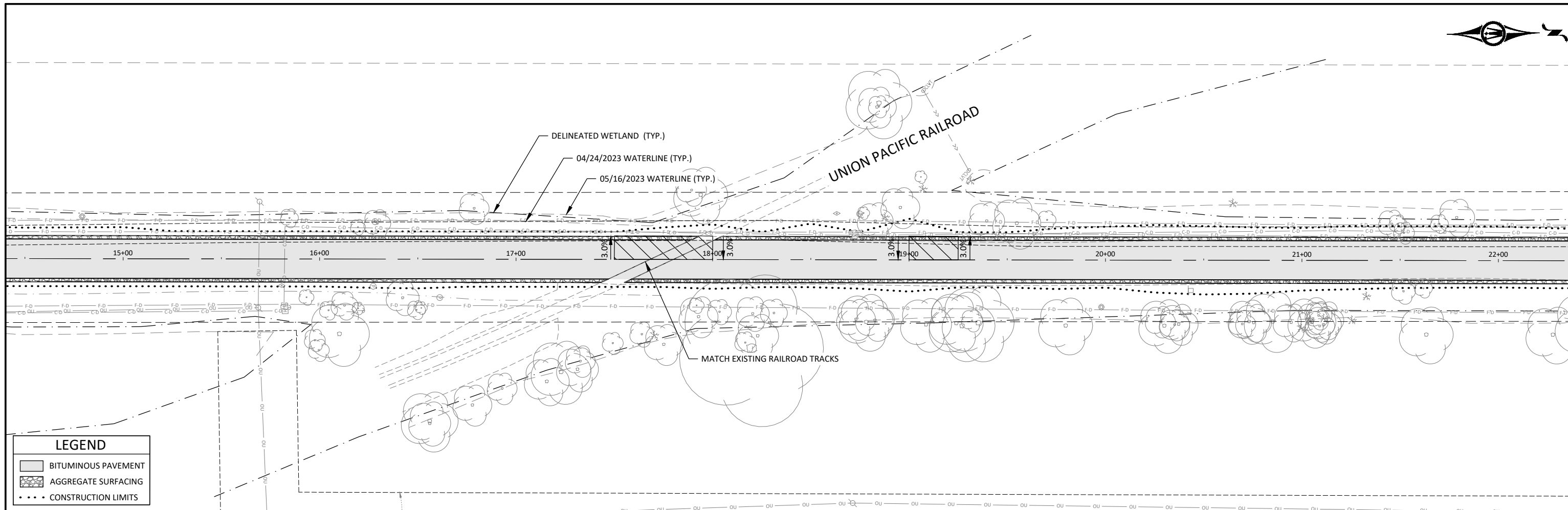


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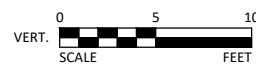
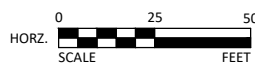
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LOWER MINNESOTA RIVER WATERSHED DISTRICT
 VERNON AVENUE IMPROVEMENTS
 STREET PLAN & PROFILE

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C6.02



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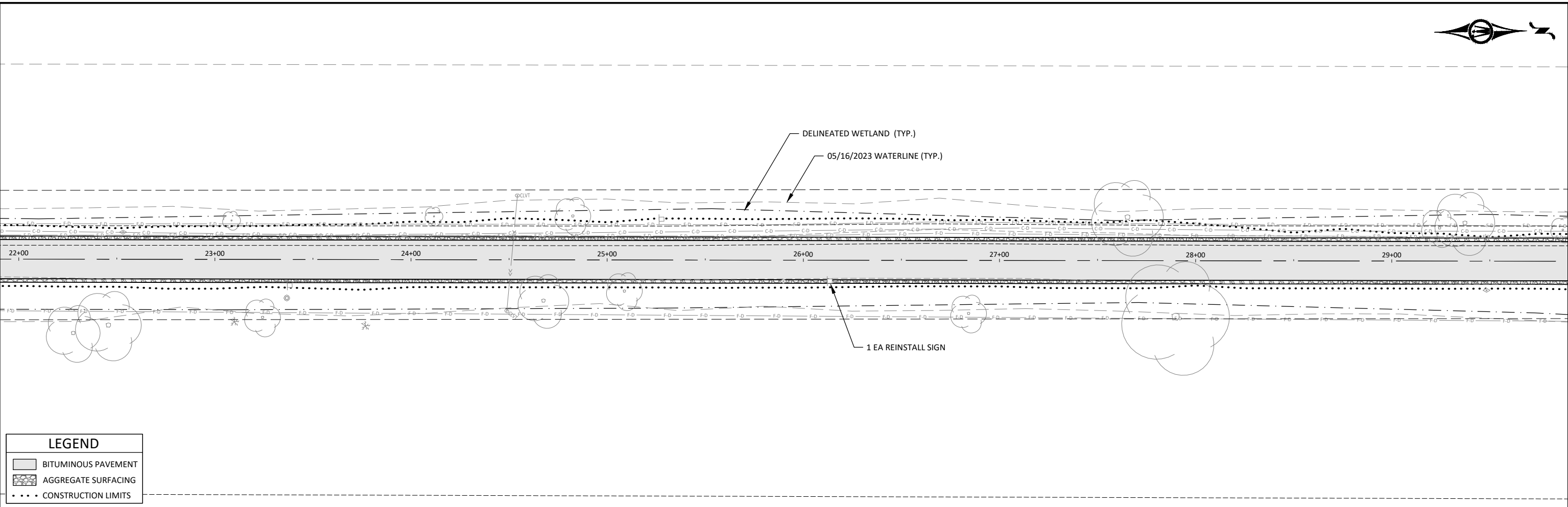


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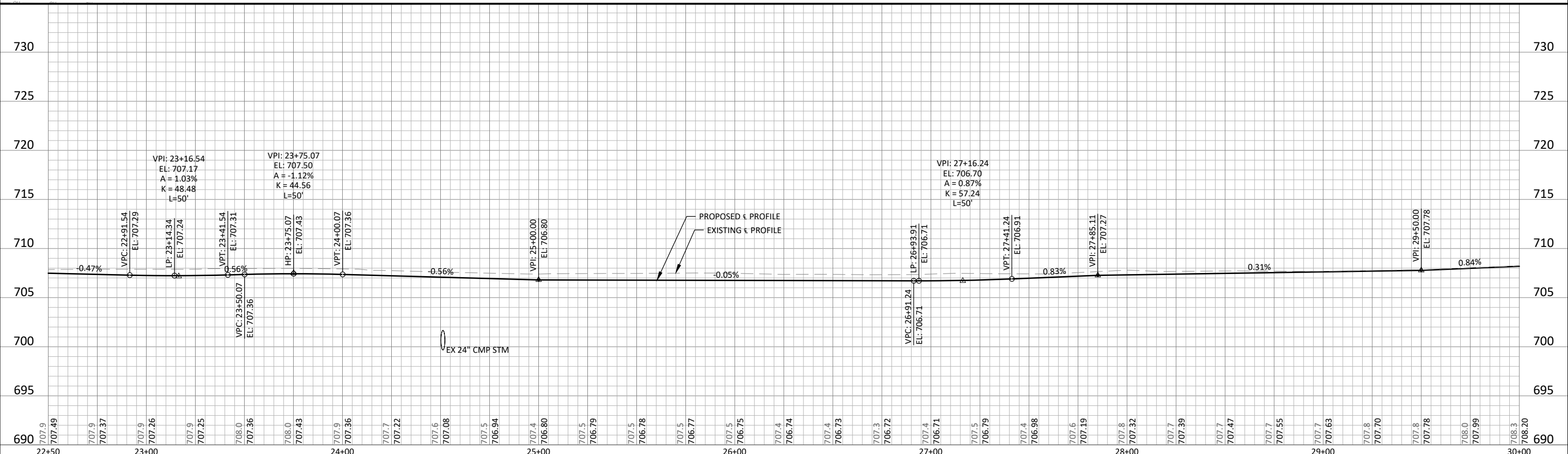
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LOWER MINNESOTA RIVER WATERSHED DISTRICT
 VERNON AVENUE IMPROVEMENTS
 STREET PLAN & PROFILE

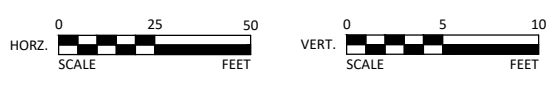
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| LEGEND | |
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| | BITUMINOUS PAVEMENT |
| | AGGREGATE SURFACING |
| | CONSTRUCTION LIMITS |



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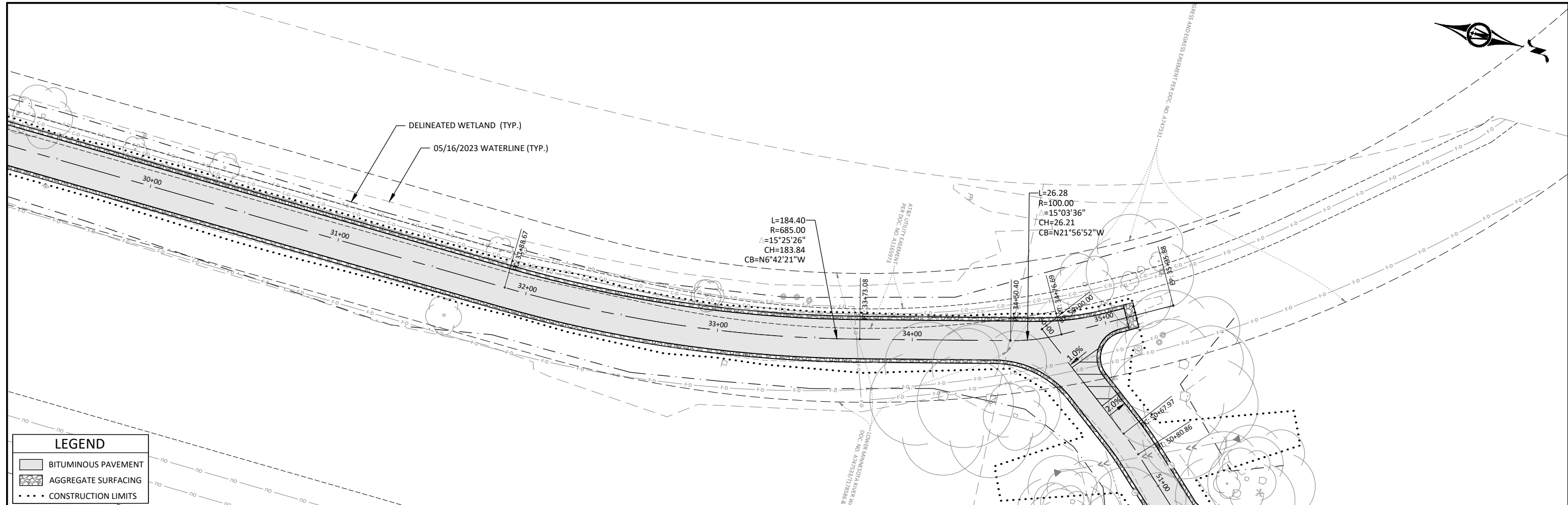


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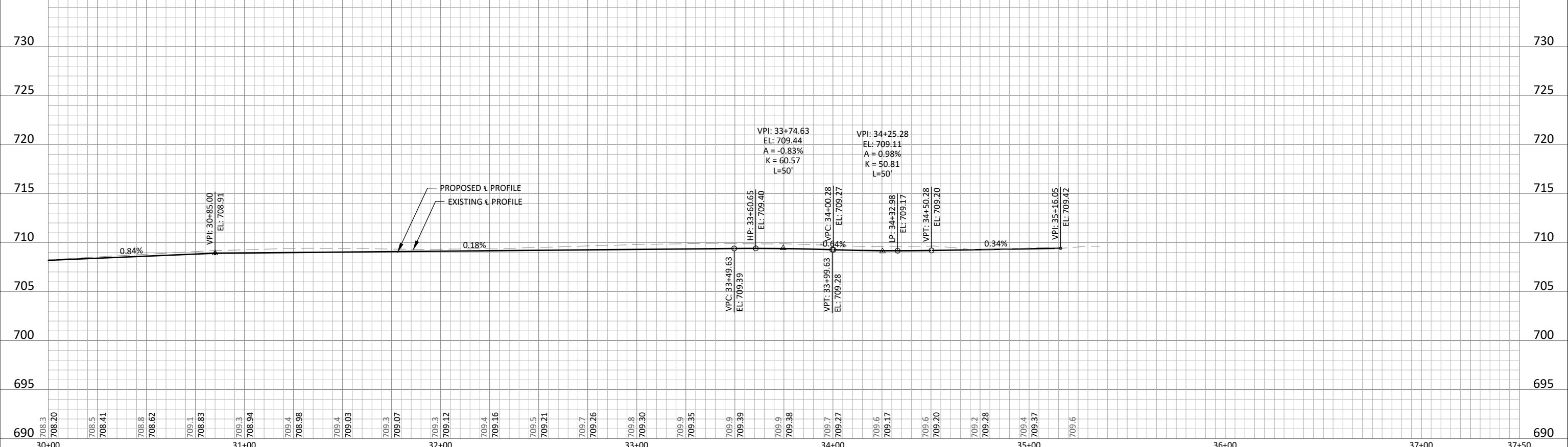
LOWER MINNESOTA RIVER WATERSHED DISTRICT
 VERNON AVENUE IMPROVEMENTS
 STREET PLAN & PROFILE

SHEET
C6.04



LEGEND

- BITUMINOUS PAVEMENT
- AGGREGATE SURFACING
- CONSTRUCTION LIMITS



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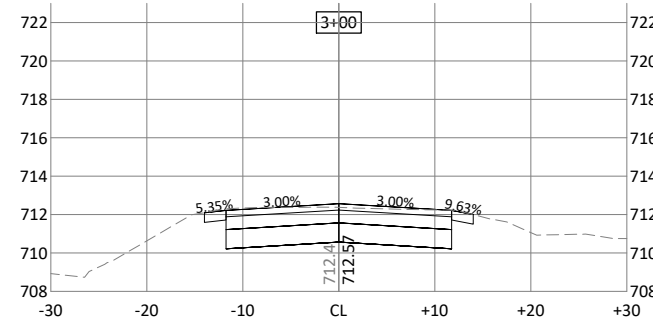
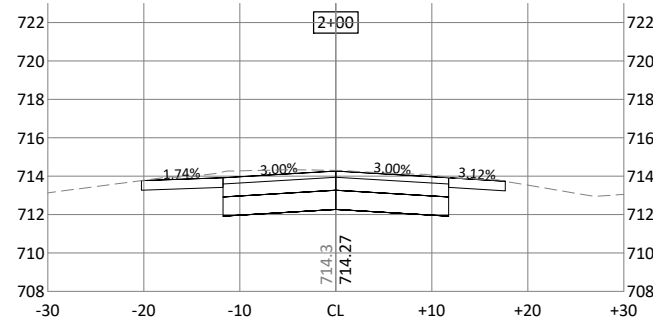
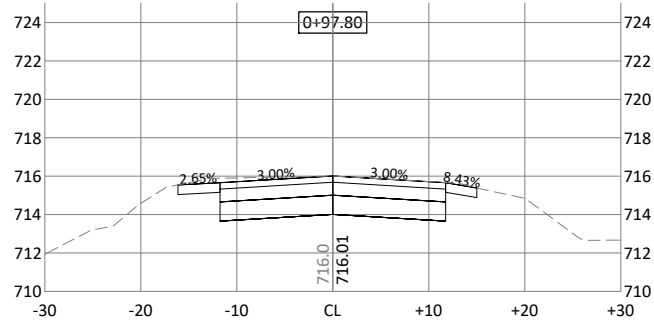
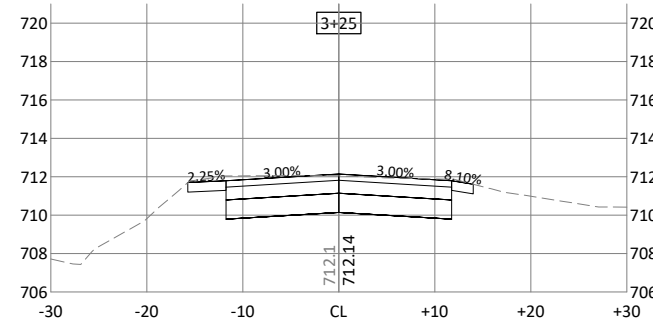
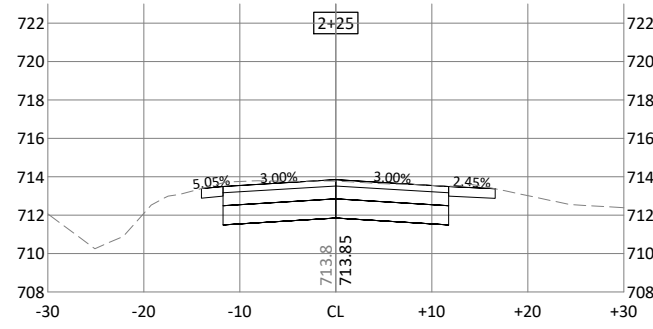
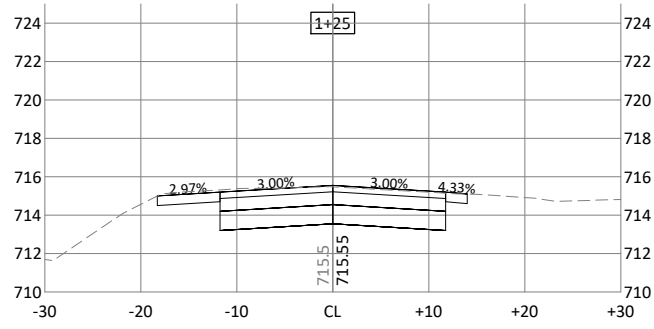
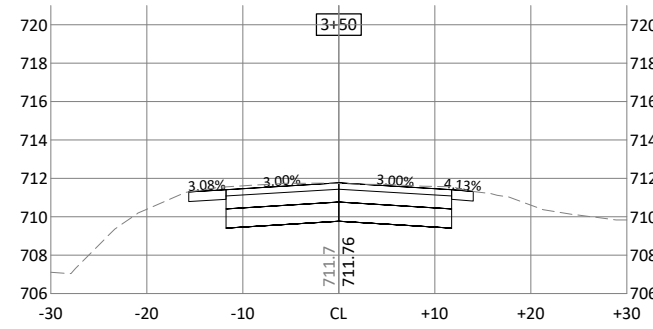
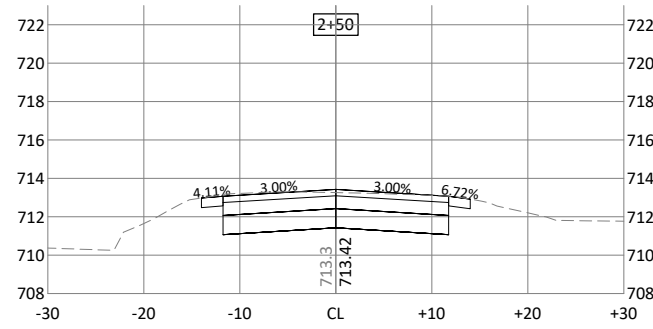
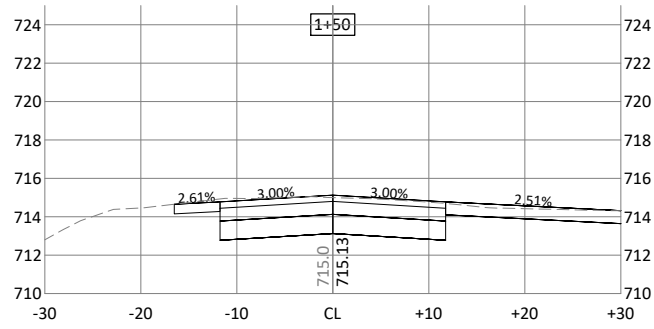
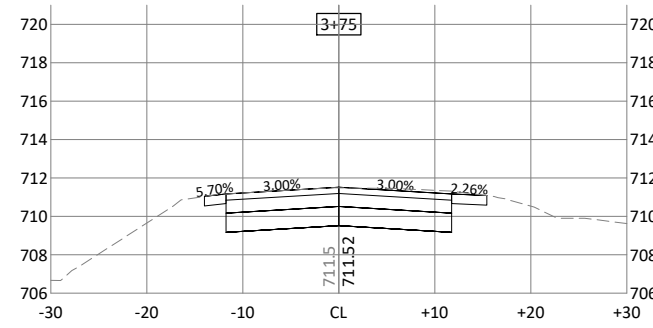
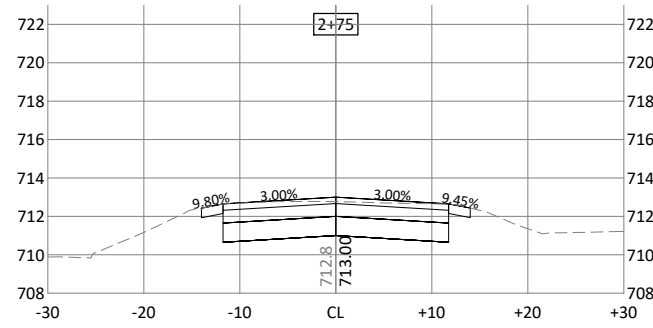
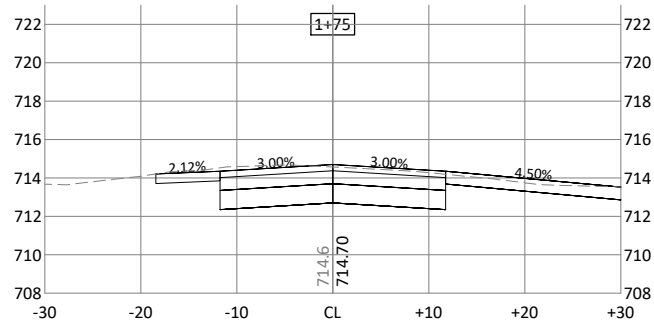


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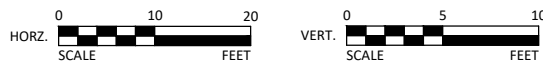
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| CLIENT PROJ. NO. | 0T1.129866 | | |

LOWER MINNESOTA RIVER WATERSHED DISTRICT
 VERNON AVENUE IMPROVEMENTS
 STREET PLAN & PROFILE

SHEET
C6.05



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Bradley J Fisher
 BRADLEY J FISHER
 LIC. NO. 56595 DATE 02/21/2024

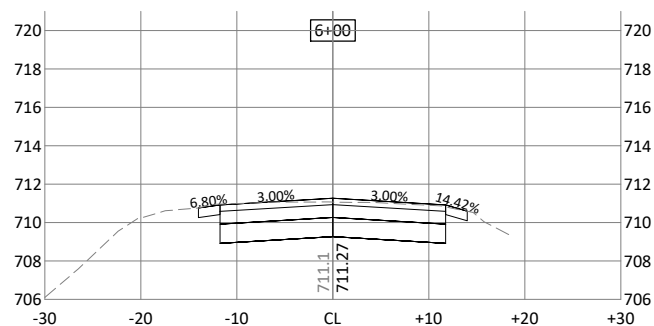
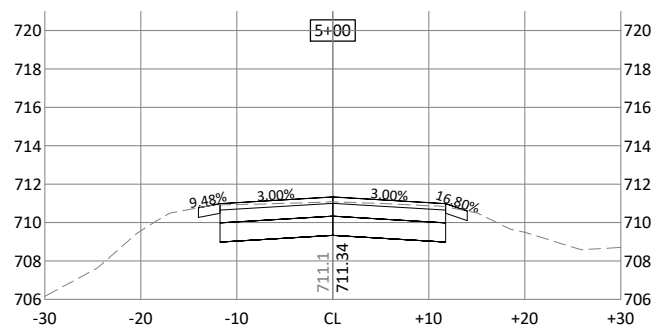
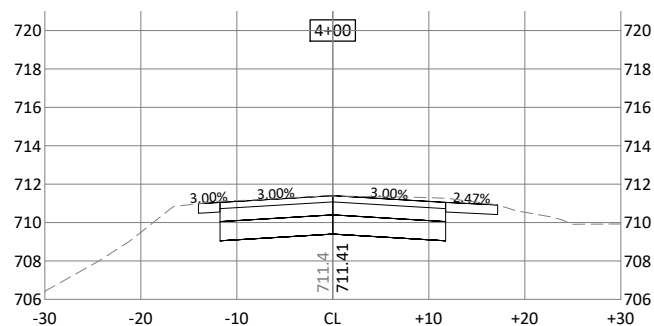
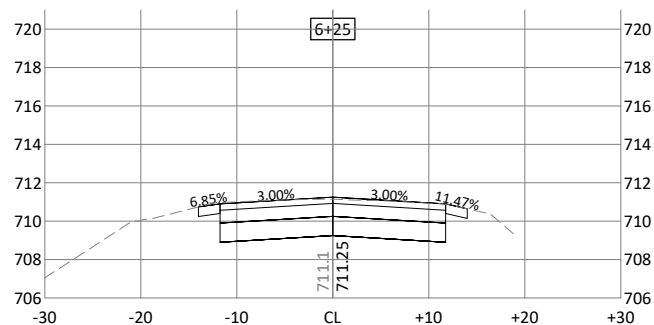
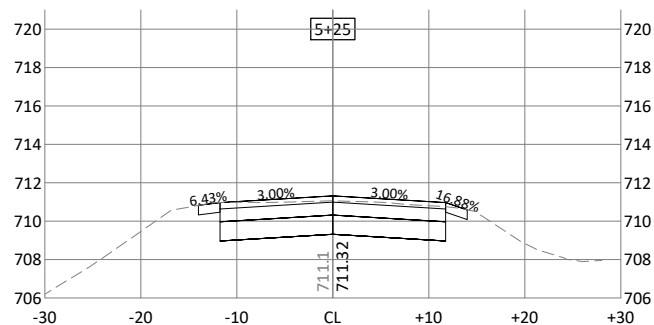
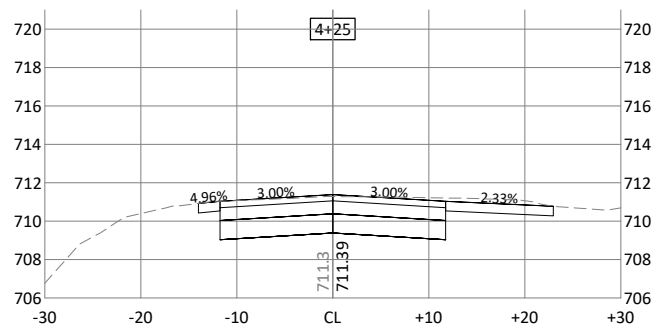
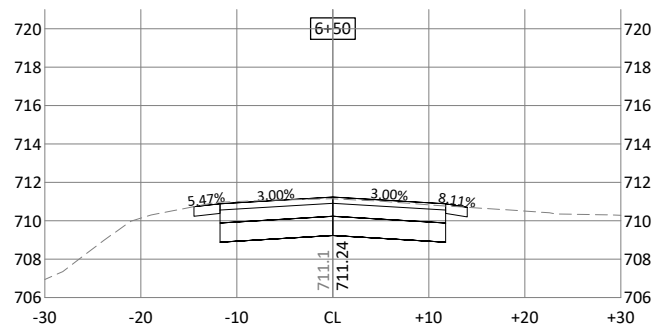
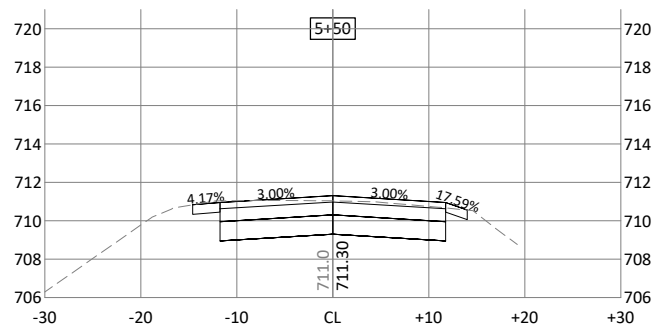
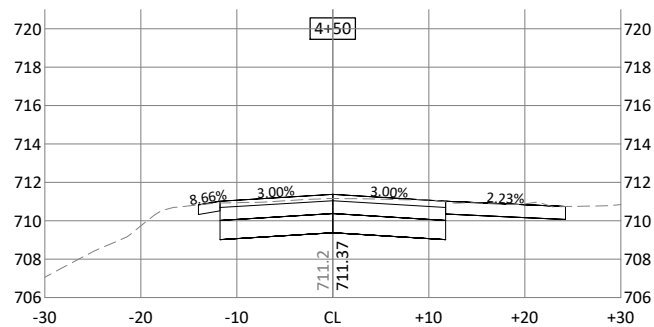
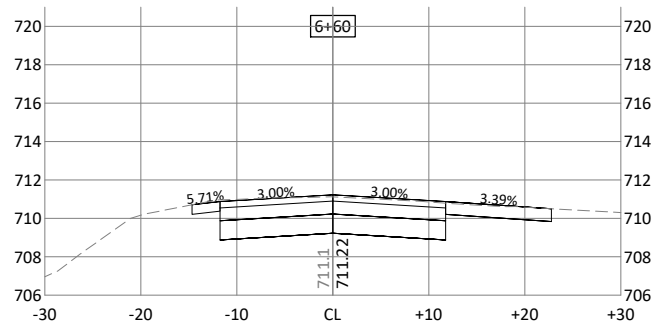
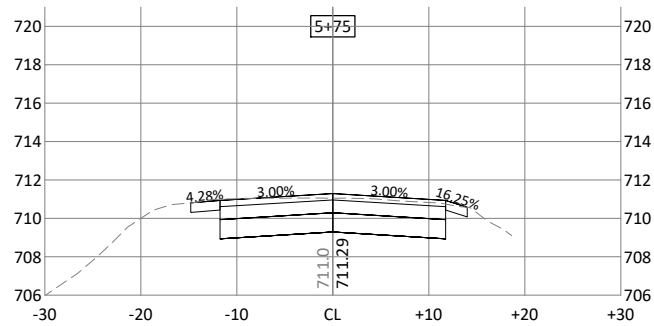
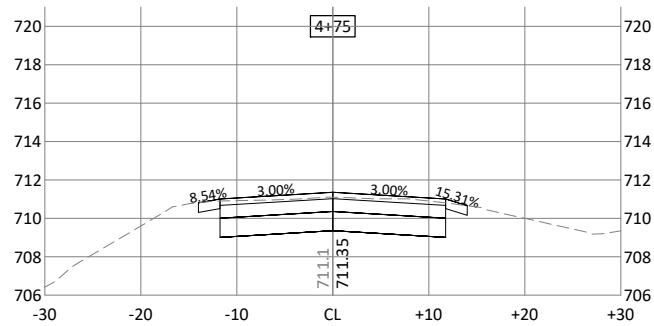


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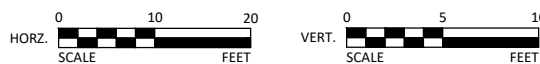
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| CLIENT PROJ. NO. | | | |
| 011.129866 | | | |

LOWER MINNESOTA RIVER WATERSHED DISTRICT
 VERNON AVENUE IMPROVEMENTS
 CROSS SECTIONS
 VERNON AVENUE

SHEET
C8.01



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Bradley J Fisher
 BRADLEY J FISHER
 LIC. NO. 56595 DATE 02/21/2024

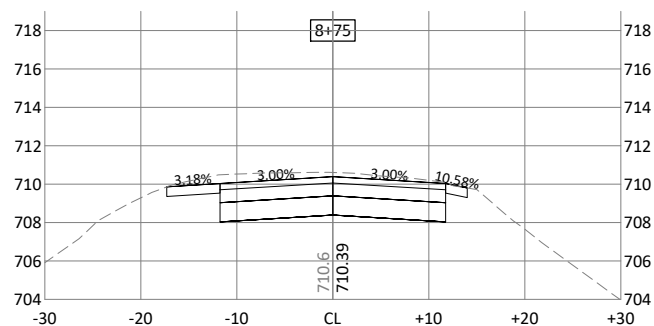
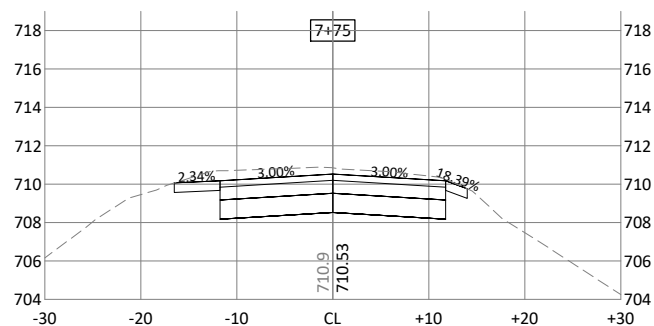
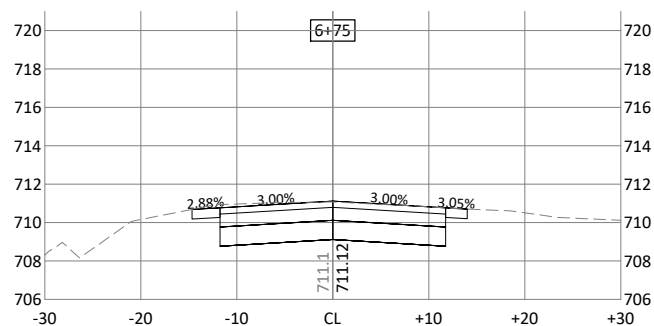
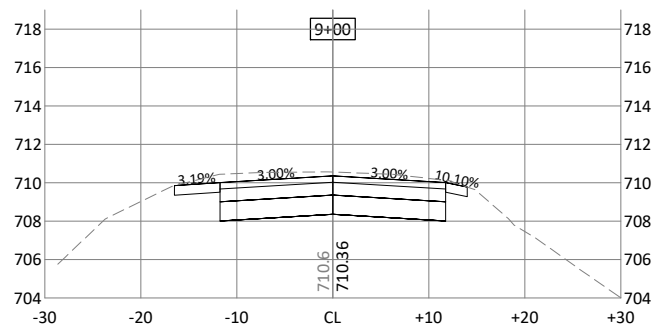
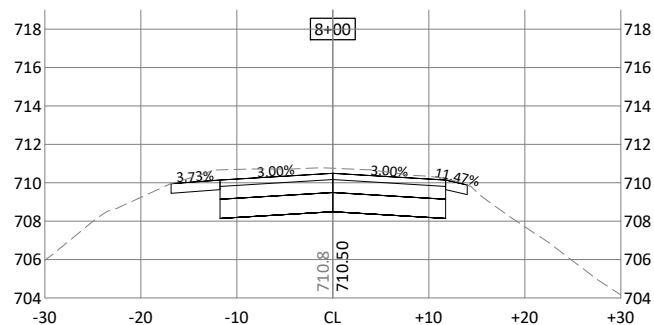
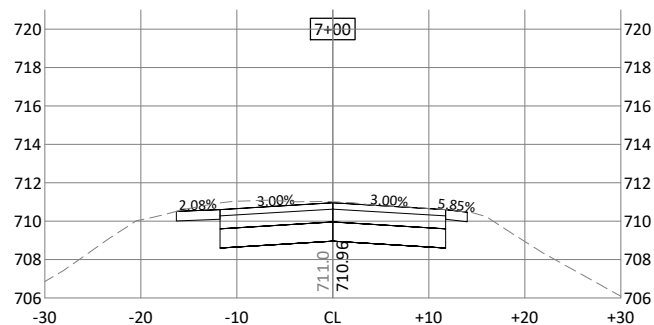
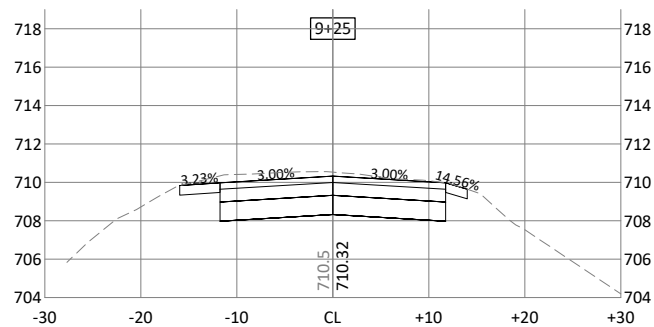
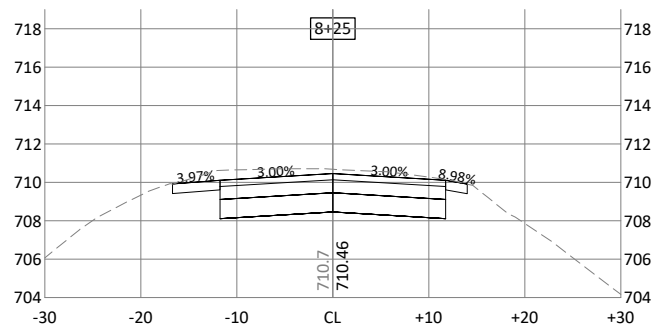
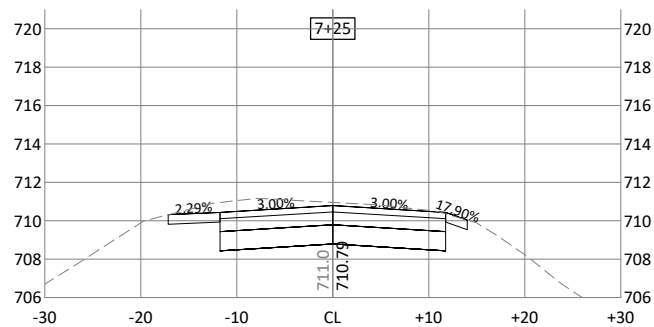
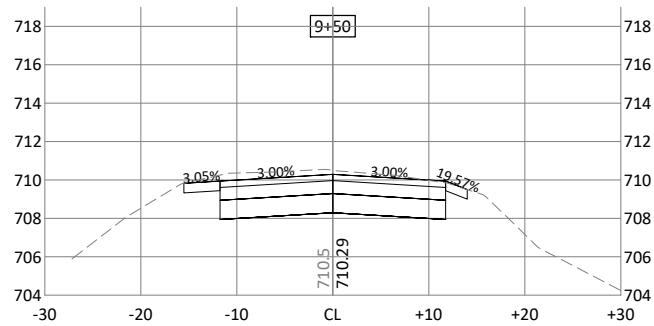
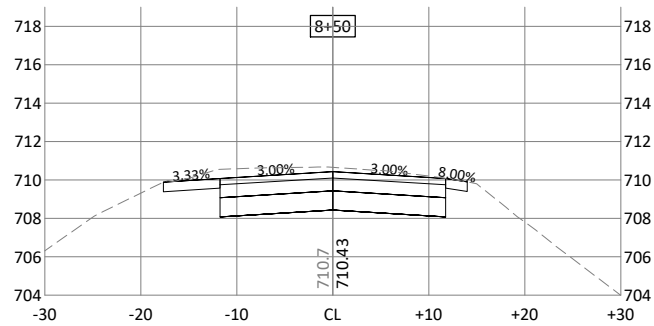
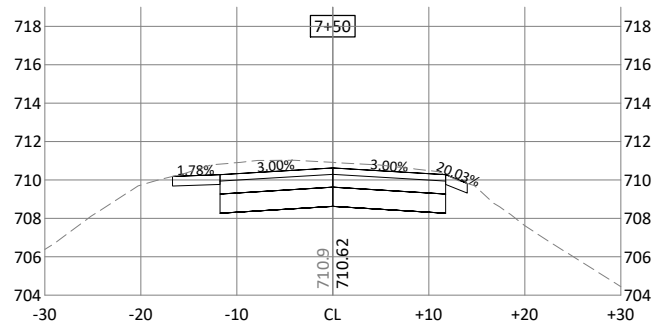


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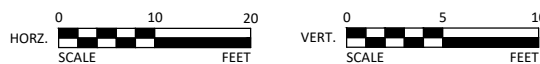
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| 011.129866 | | | |

LOWER MINNESOTA RIVER WATERSHED DISTRICT
 VERNON AVENUE IMPROVEMENTS
 CROSS SECTIONS
 VERNON AVE N

SHEET
C8.02



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Bradley J Fisher
 BRADLEY J FISHER
 LIC. NO. 56595 DATE 02/21/2024

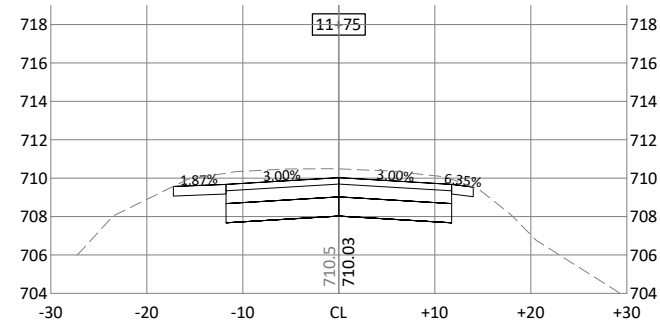
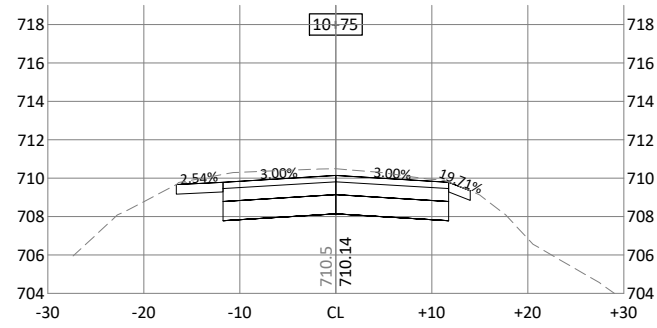
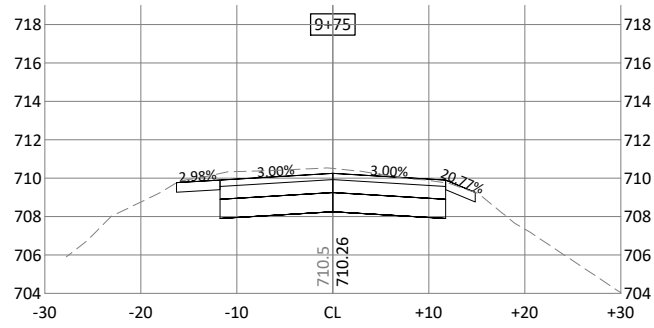
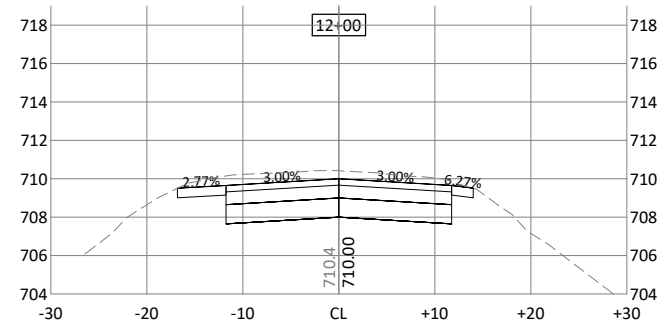
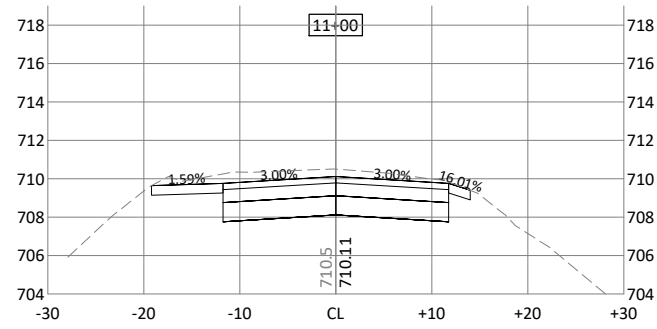
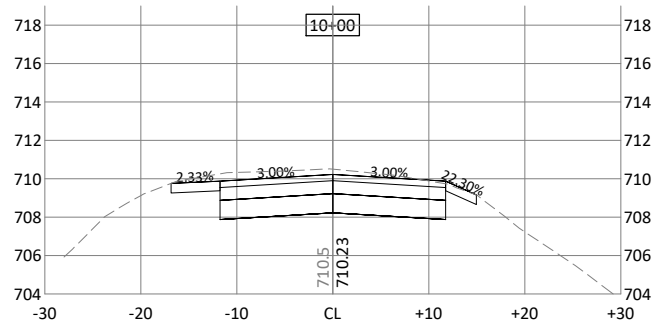
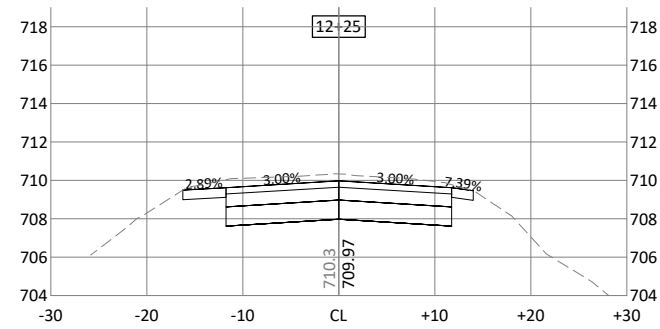
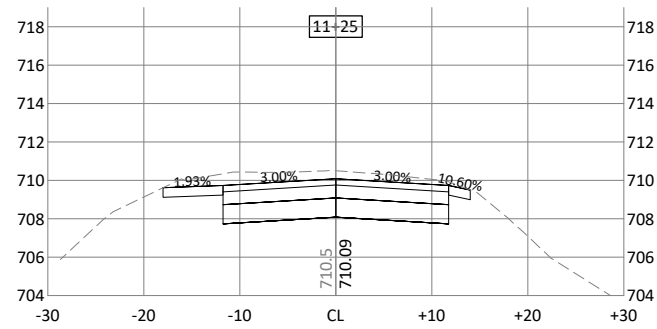
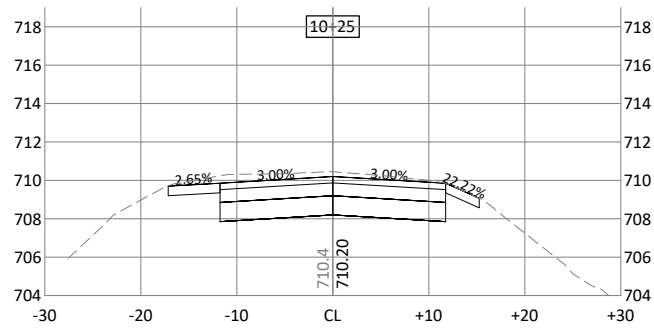
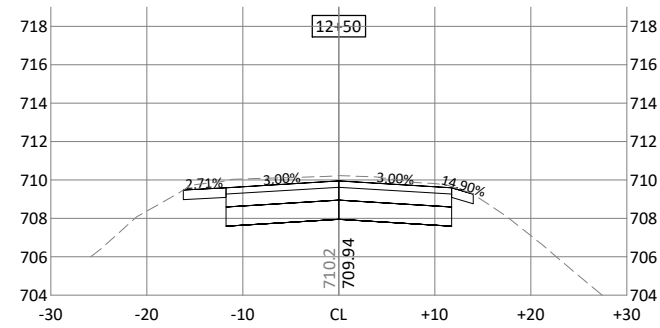
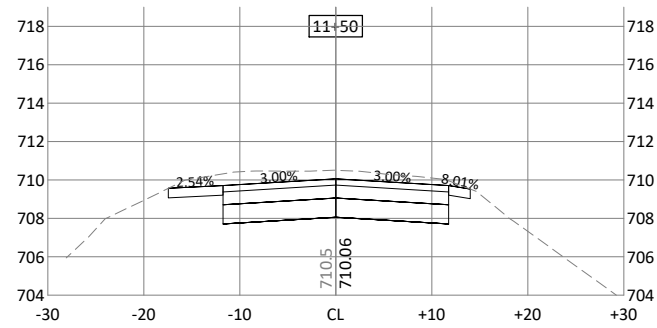
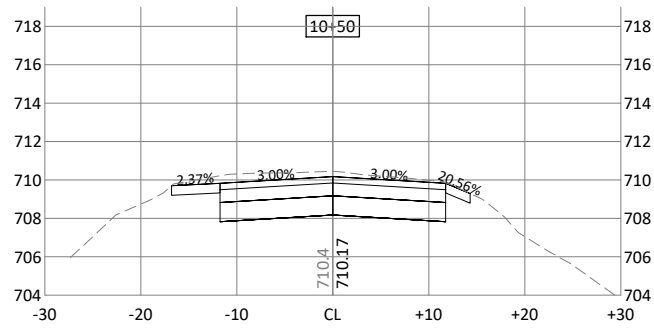


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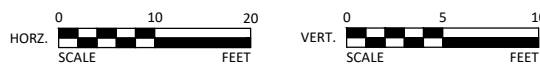
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| CLIENT PROJ. NO. | | | |
| 01129866 | | | |

LOWER MINNESOTA RIVER WATERSHED DISTRICT
 VERNON AVENUE IMPROVEMENTS
 CROSS SECTIONS
 VERNON AVE N

SHEET
C8.03



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Bradley J Fisher
 BRADLEY J FISHER
 LIC. NO. 56595 DATE 02/21/2024

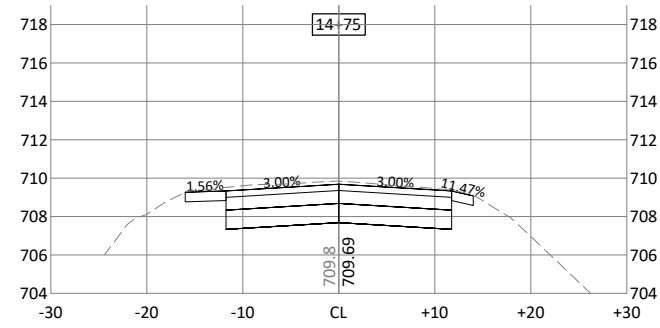
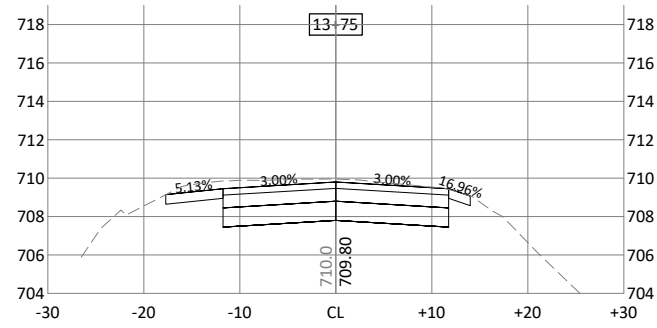
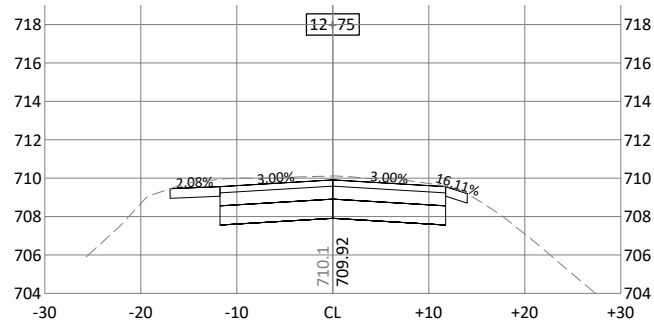
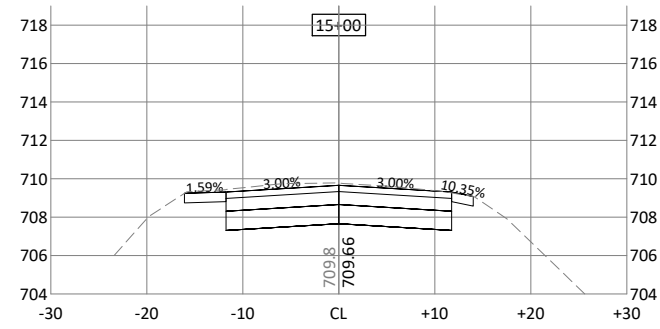
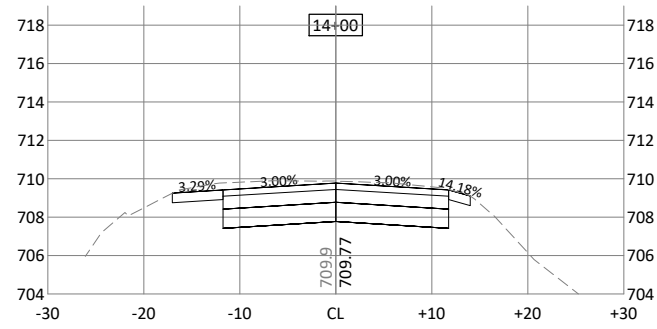
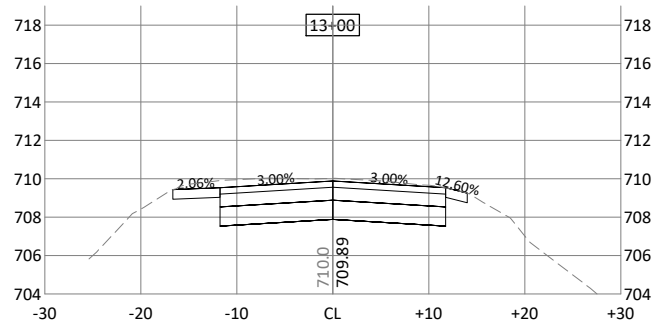
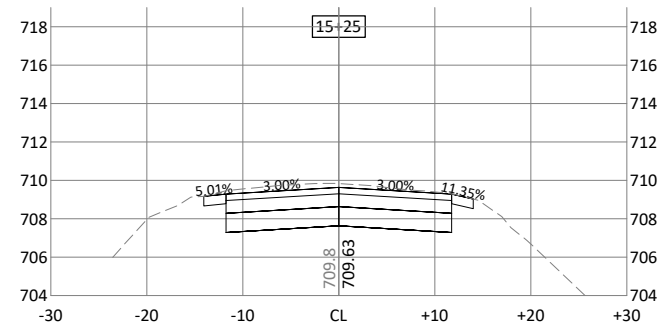
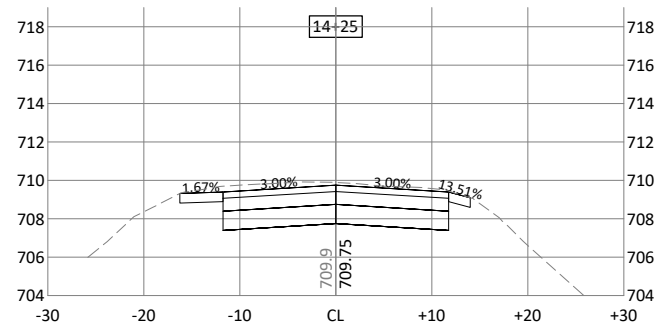
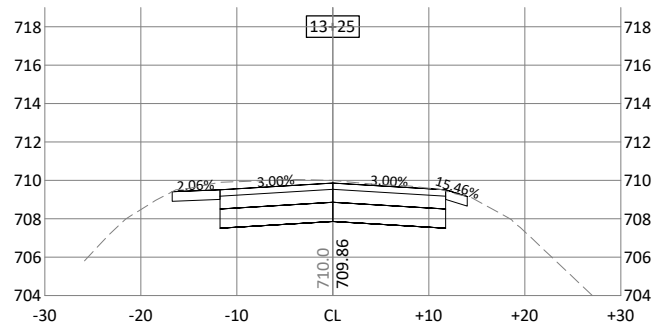
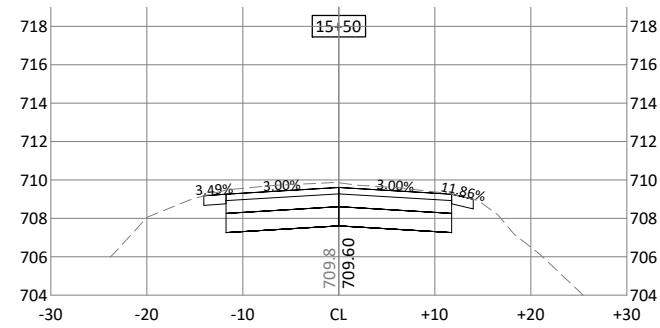
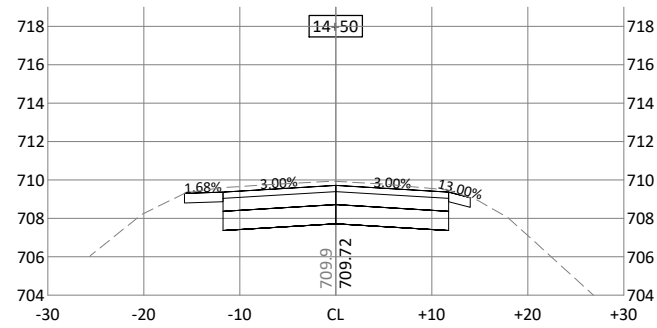
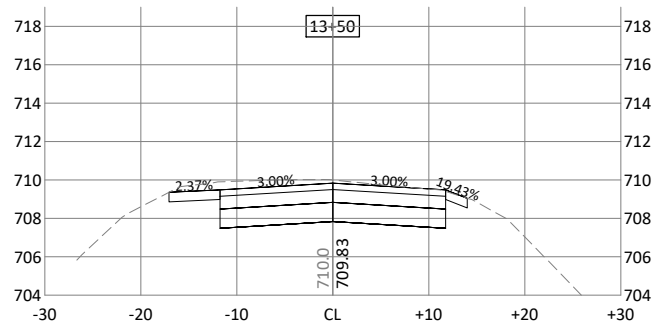


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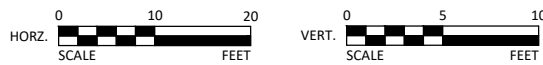
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| CLIENT PROJ. NO. | | | |
| 011.129866 | | | |

LOWER MINNESOTA RIVER WATERSHED DISTRICT
 VERNON AVENUE IMPROVEMENTS
 CROSS SECTIONS
 VERNON AVE N

SHEET
C8.04



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Bradley J Fisher
 BRADLEY J FISHER
 LIC. NO. 56595 DATE 02/21/2024

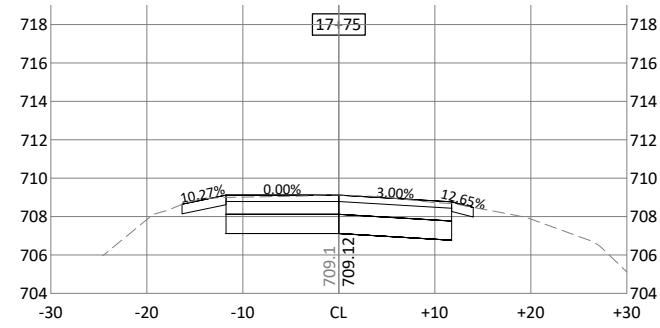
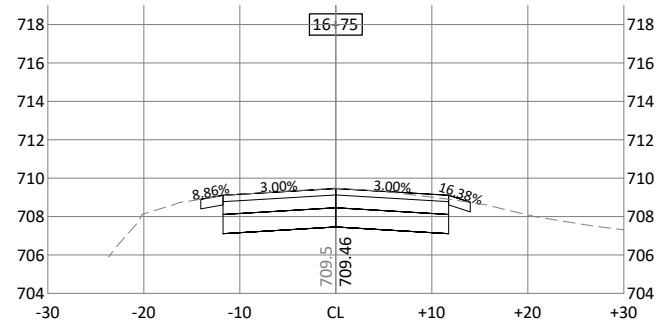
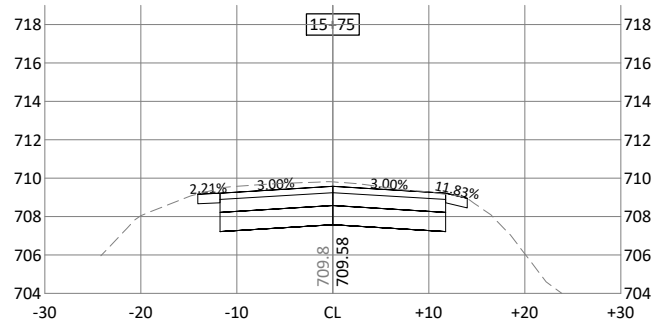
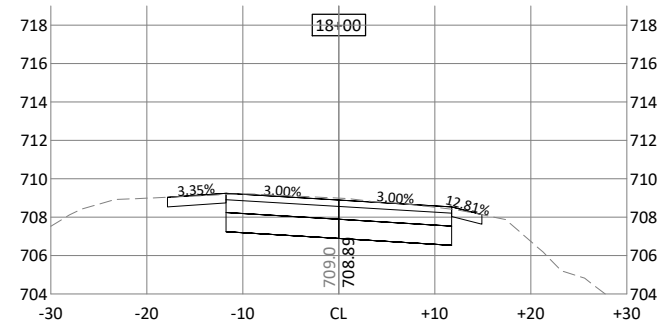
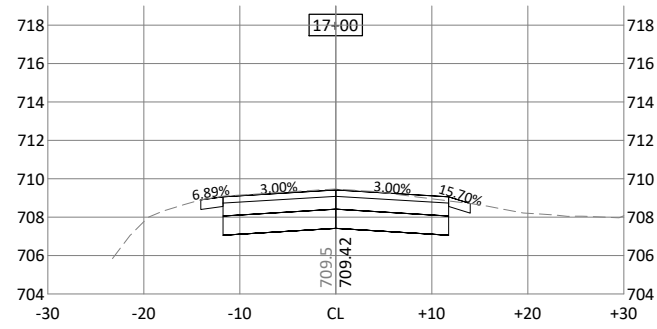
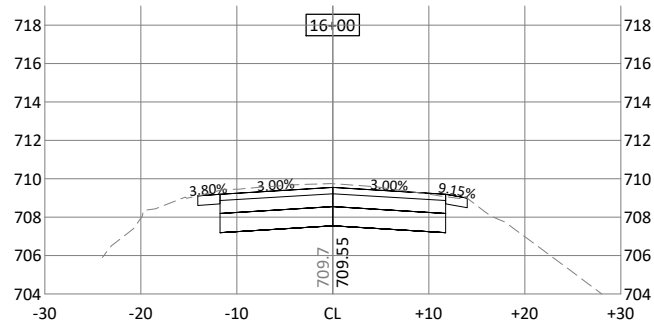
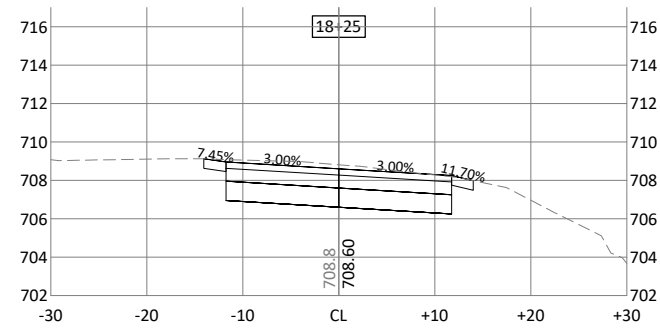
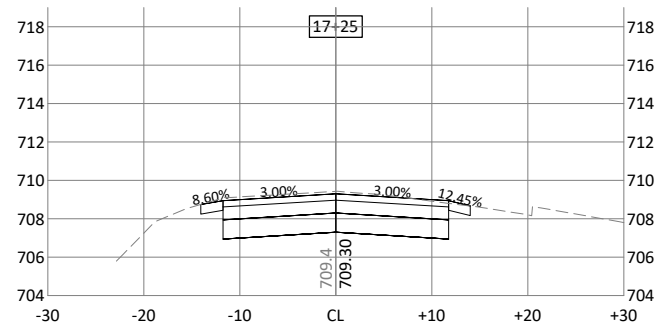
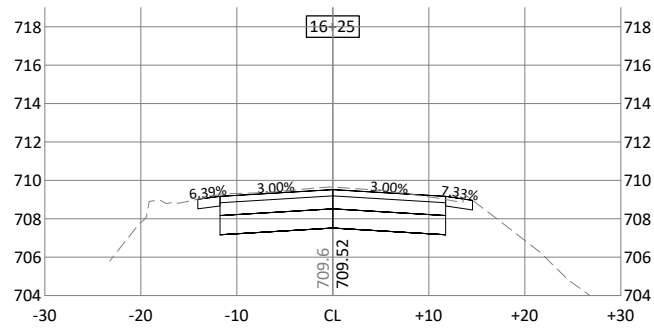
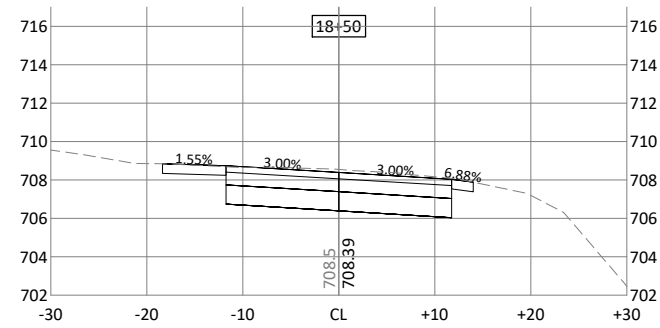
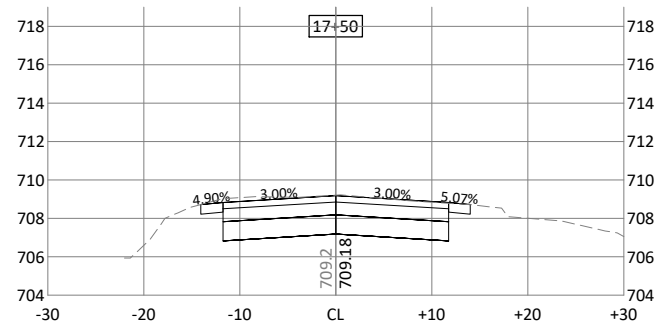
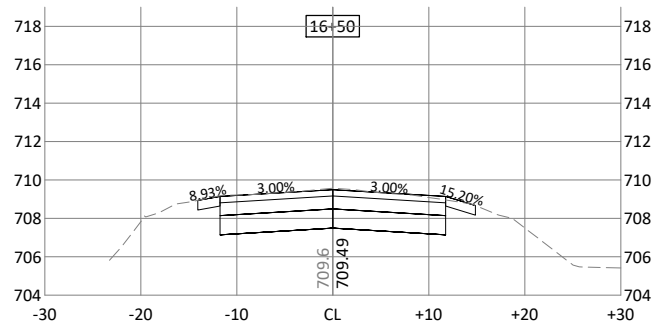


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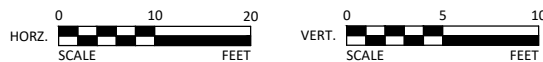
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LOWER MINNESOTA RIVER WATERSHED DISTRICT
 VERNON AVENUE IMPROVEMENTS
 CROSS SECTIONS
 VERNON AVE N

SHEET
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Bradley J Fisher
 BRADLEY J FISHER
 LIC. NO. 56595 DATE 02/21/2024

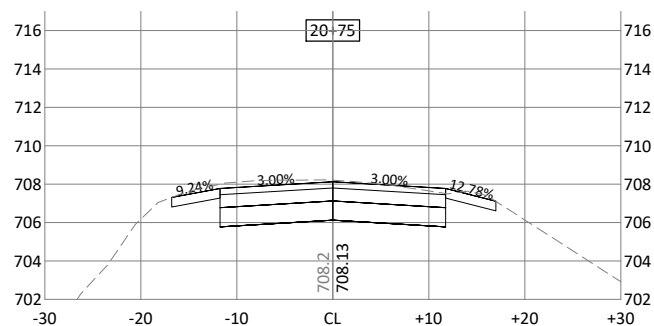
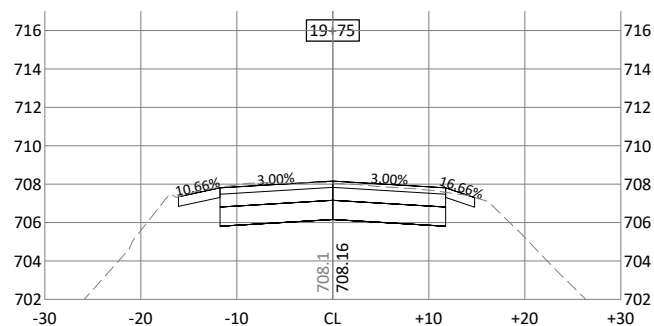
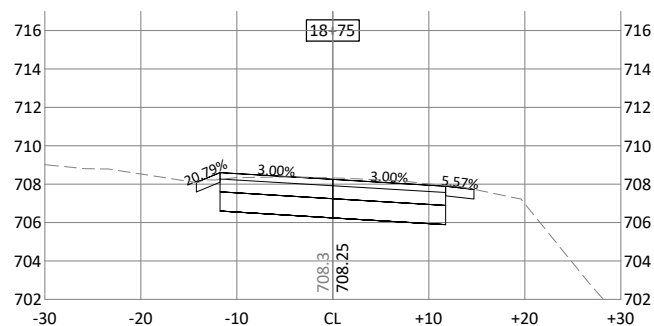
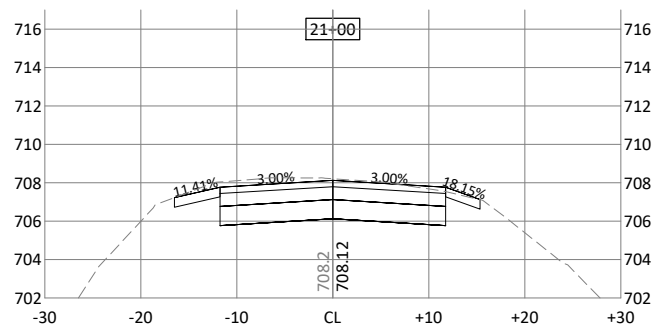
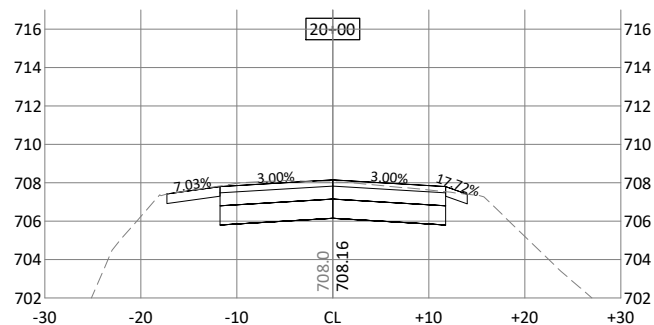
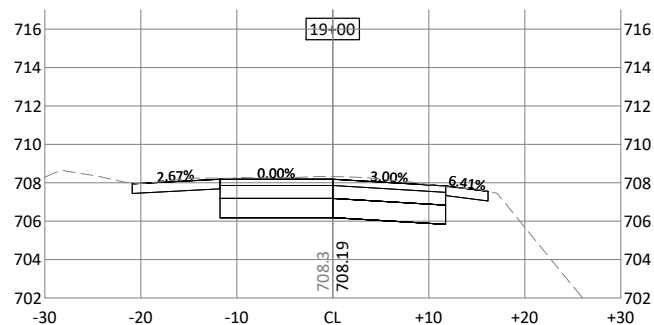
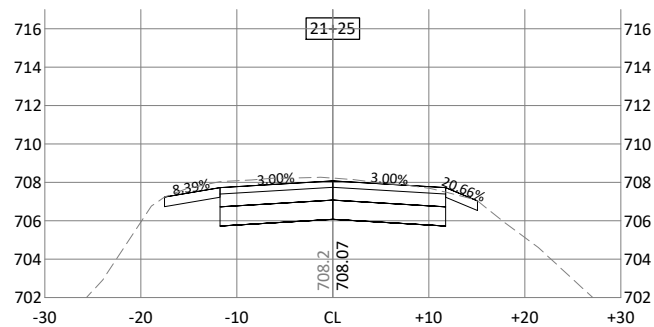
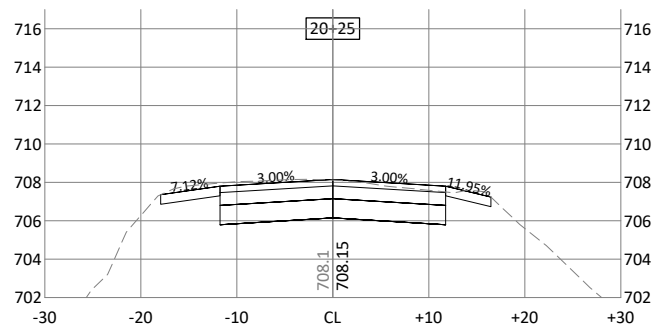
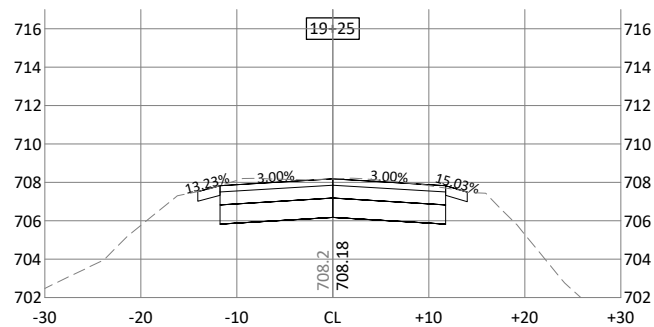
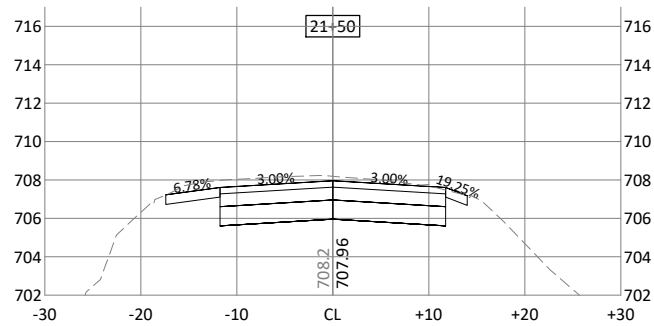
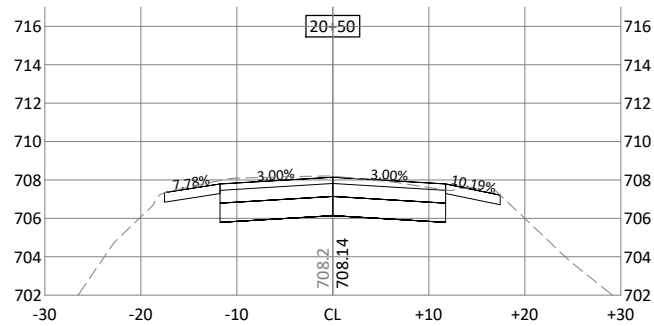
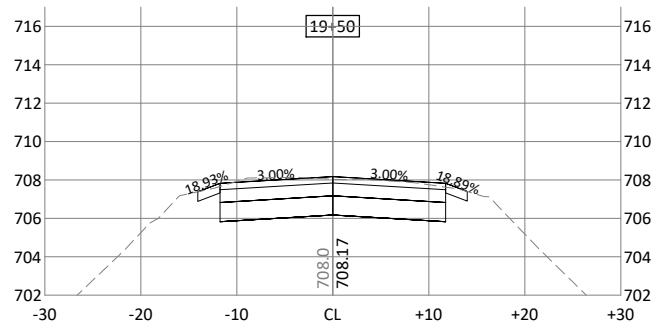


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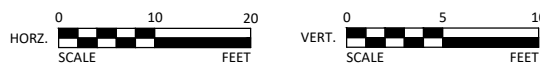
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| DRAWN | JLW | | |
| CHECKED | BJF | | |
| CLIENT PROJ. NO. | 0T1.129866 | | |

LOWER MINNESOTA RIVER WATERSHED DISTRICT
 VERNON AVENUE IMPROVEMENTS
 CROSS SECTIONS
 VERNON AVENUE

SHEET
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Bradley J Fisher
 BRADLEY J FISHER
 LIC. NO. 56595 DATE 02/21/2024

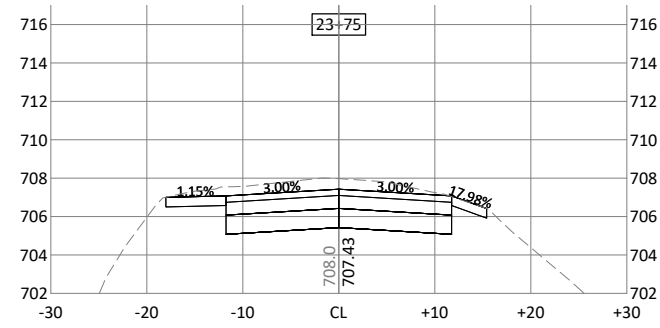
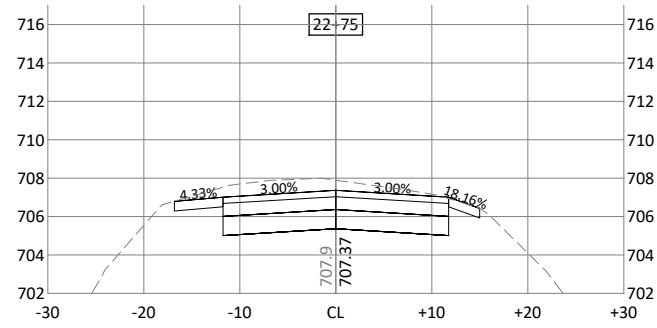
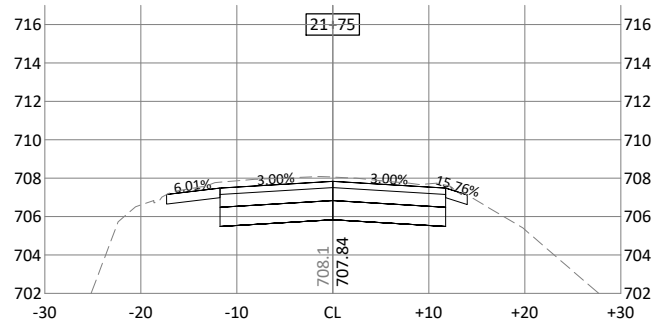
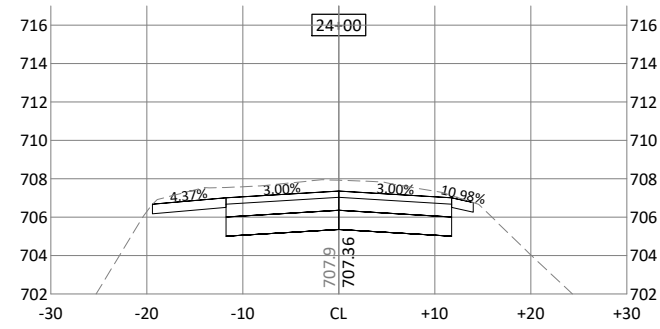
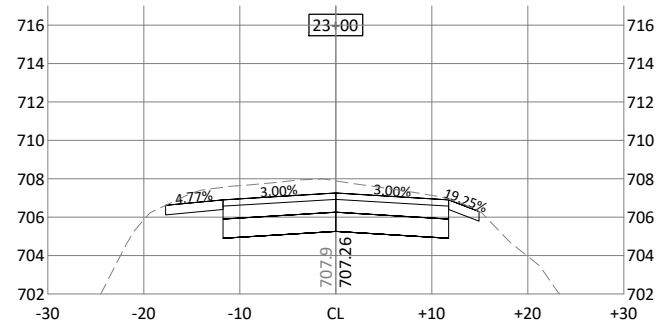
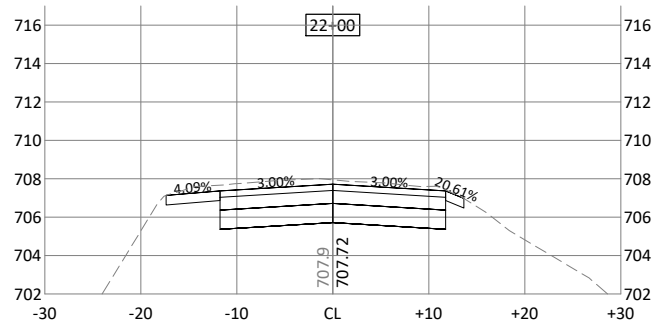
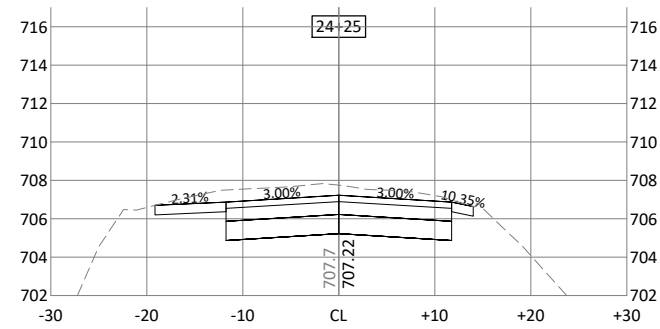
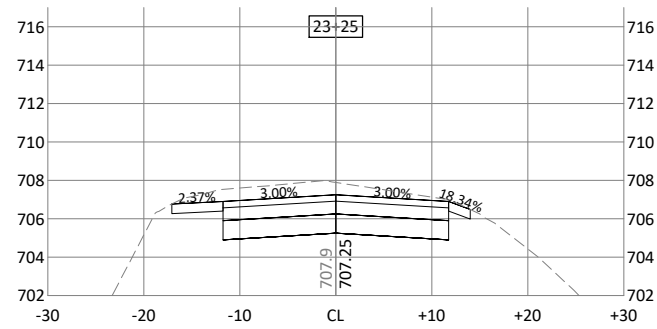
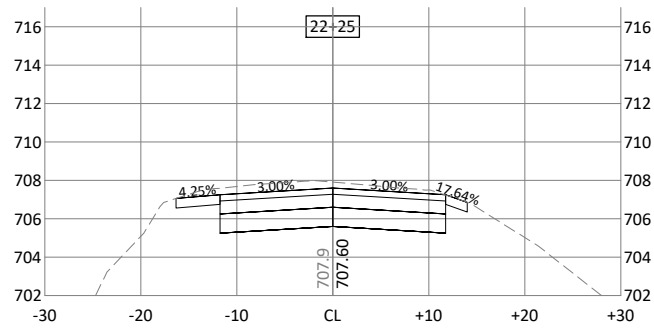
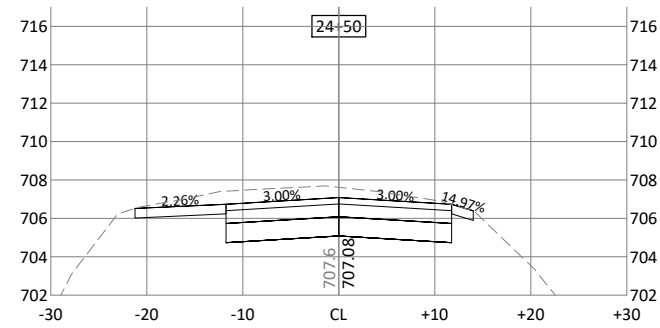
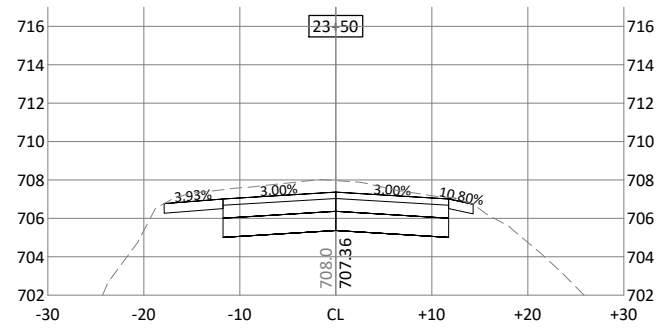
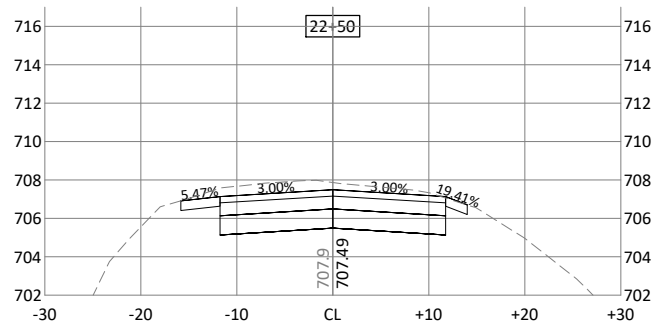


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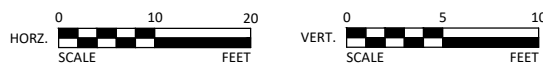
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| CLIENT PROJ. NO. | 0T1.129866 | | |

LOWER MINNESOTA RIVER WATERSHED DISTRICT
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Bradley J Fisher
 BRADLEY J FISHER
 LIC. NO. 56595 DATE 02/21/2024

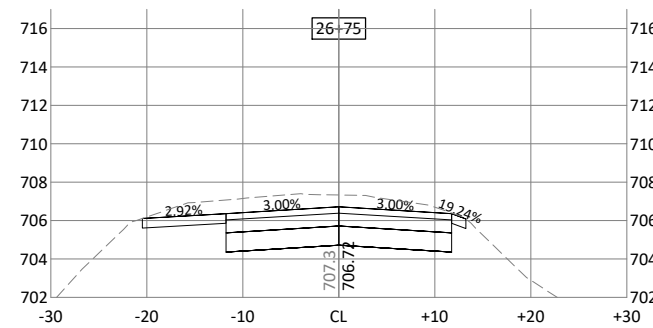
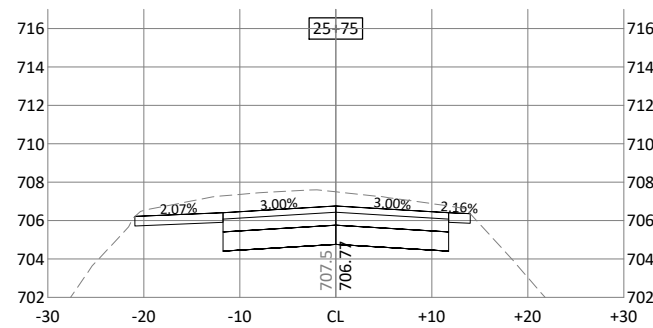
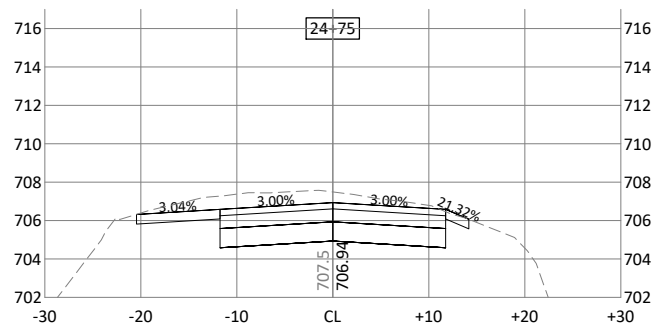
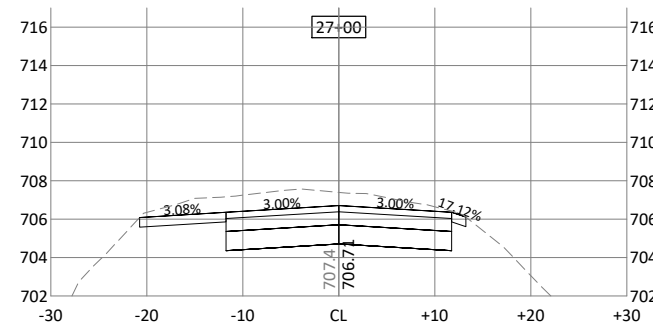
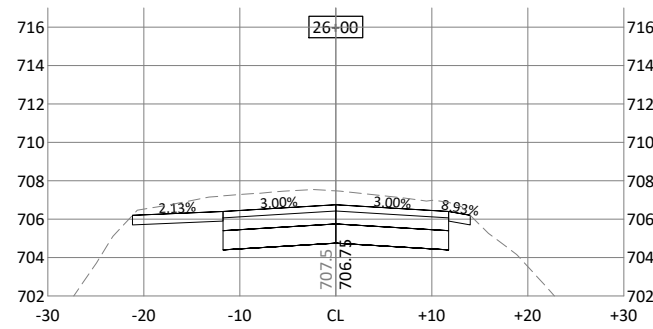
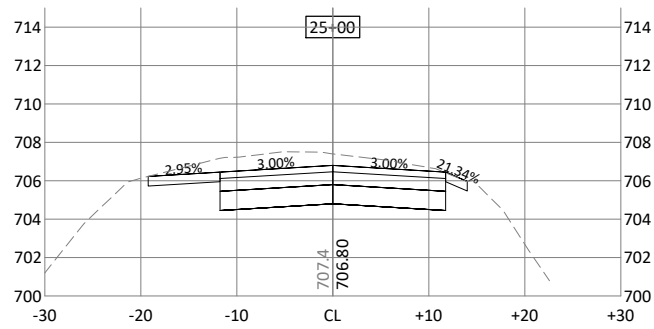
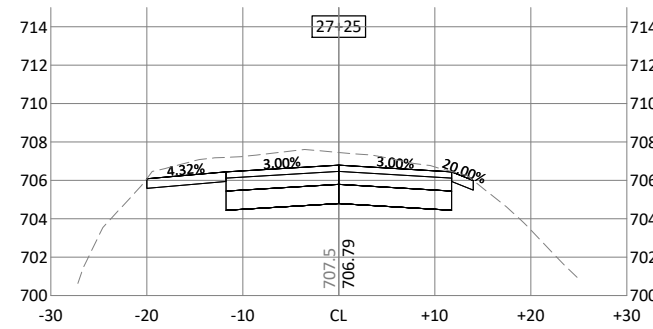
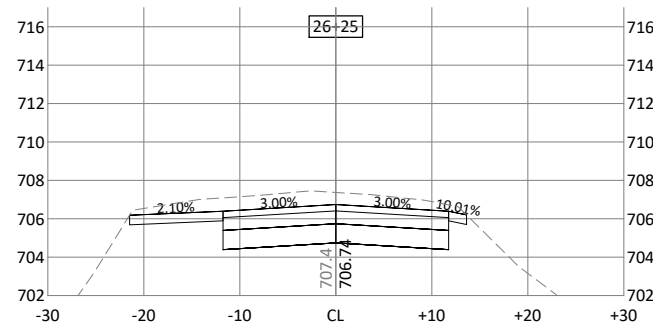
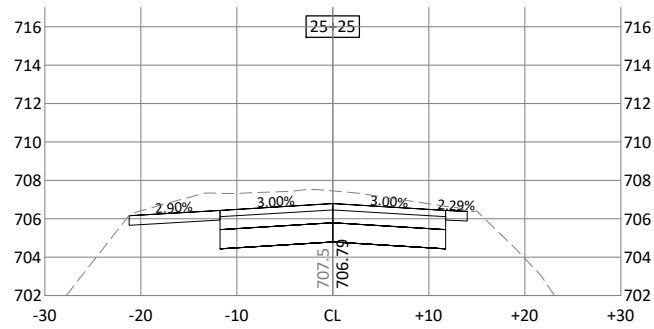
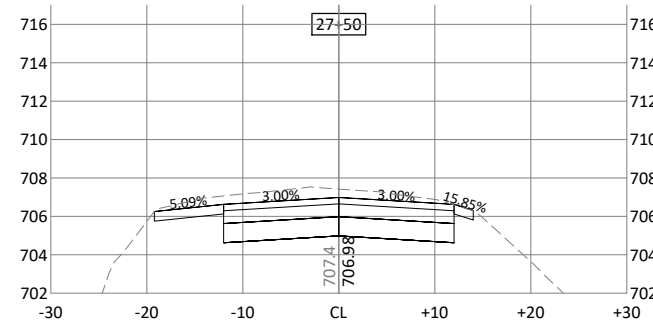
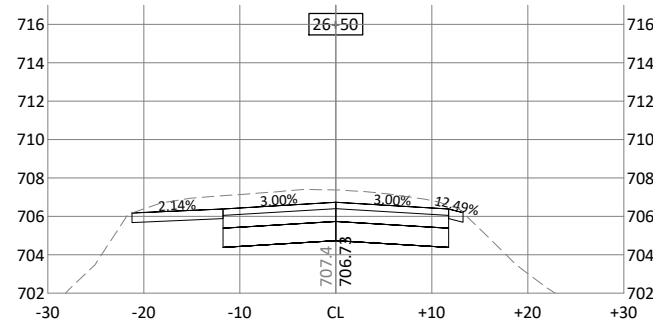
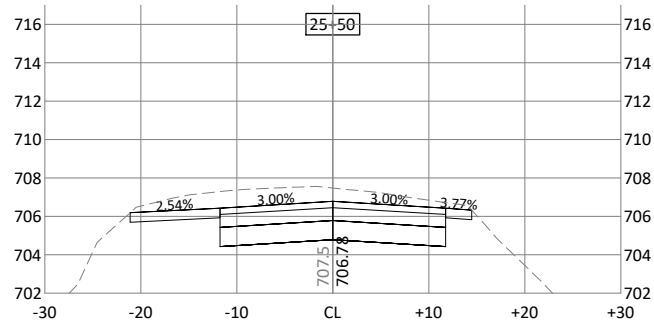


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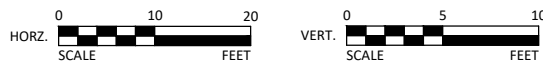
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| DRAWN | JLW | | |
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| CLIENT PROJ. NO. | 0T1.129866 | | |

LOWER MINNESOTA RIVER WATERSHED DISTRICT
 VERNON AVENUE IMPROVEMENTS
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Bradley J Fisher
 BRADLEY J FISHER
 LIC. NO. 56595 DATE 02/21/2024



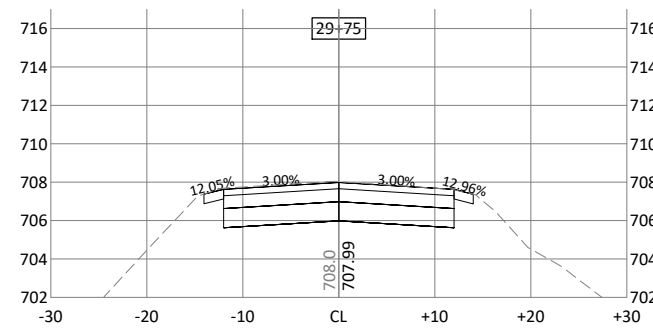
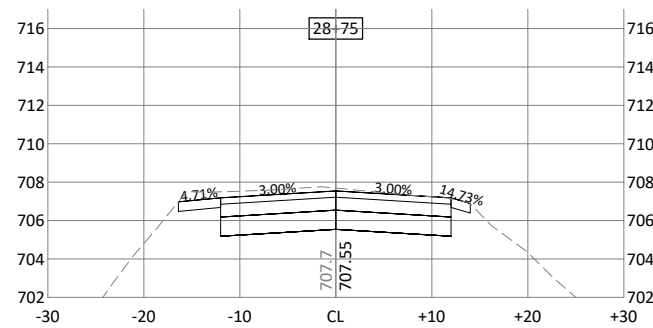
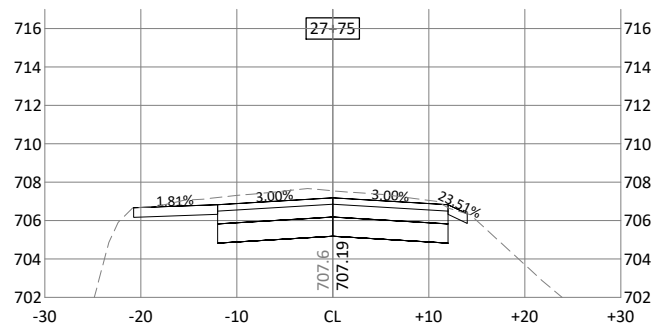
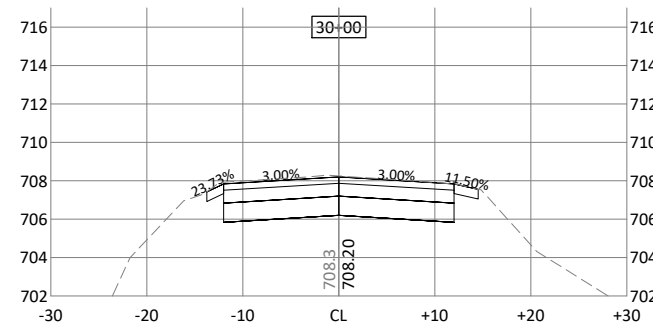
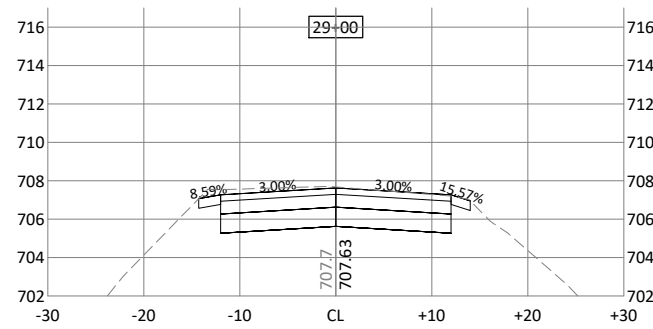
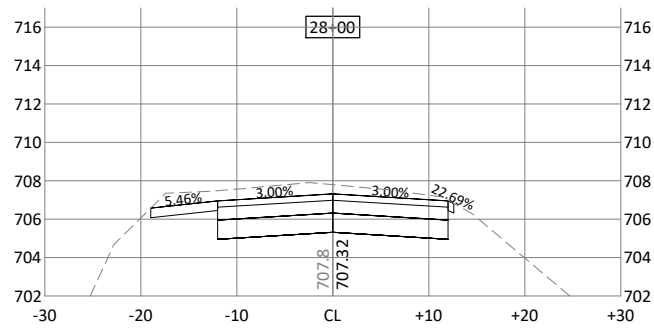
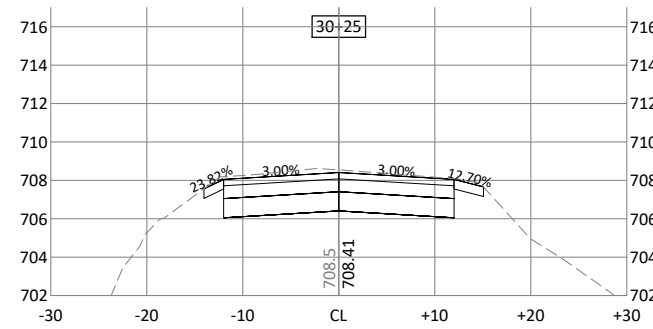
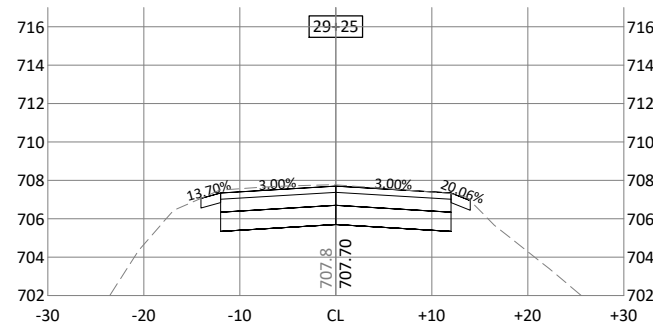
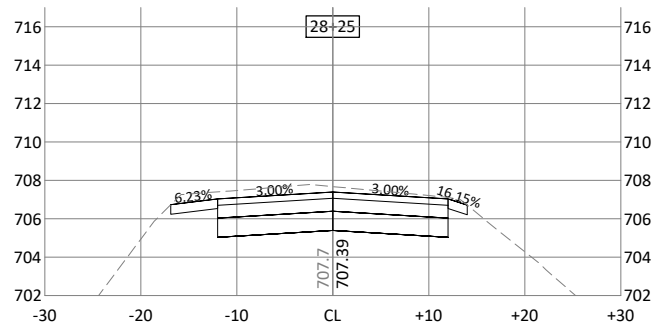
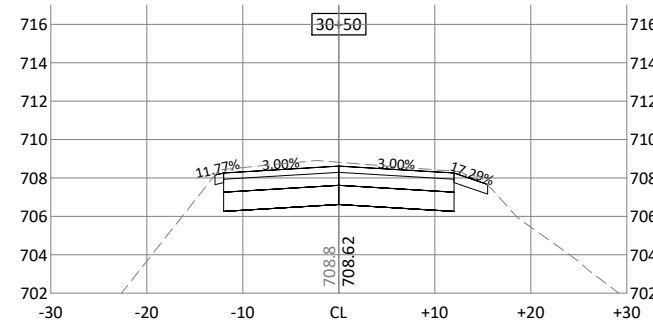
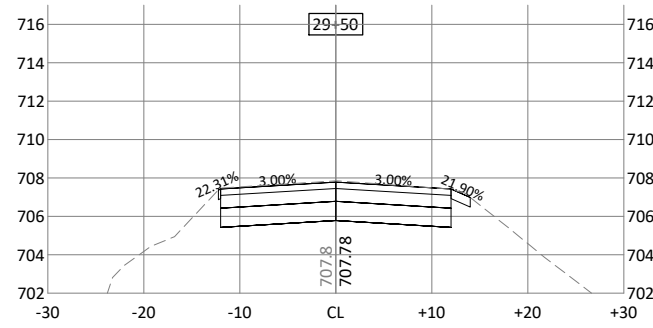
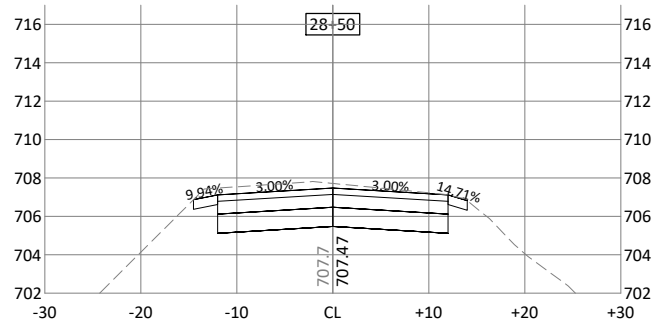
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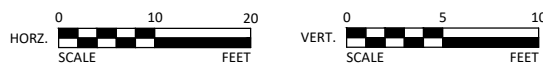
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 VERNON AVENUE IMPROVEMENTS
 CROSS SECTIONS
 VERNON AVENUE

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Bradley J Fisher
 BRADLEY J FISHER
 LIC. NO. 56595 DATE 02/21/2024

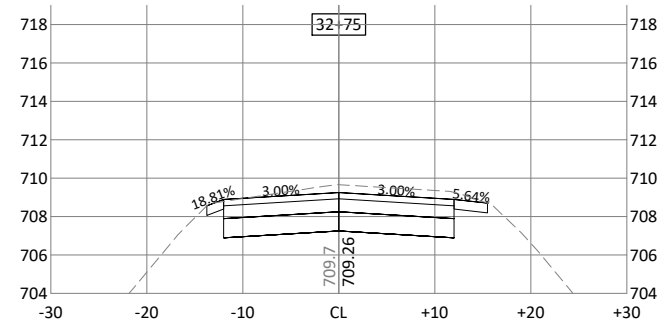
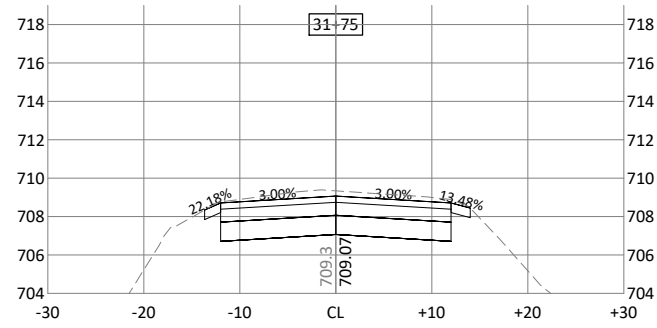
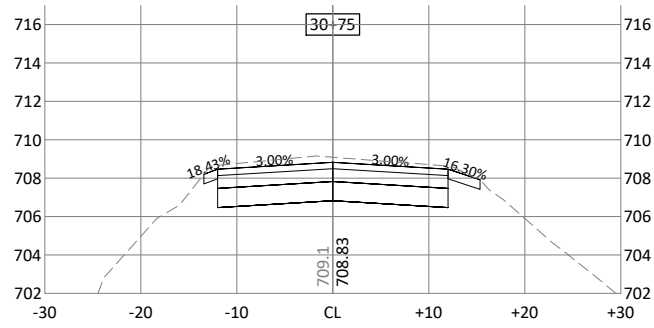
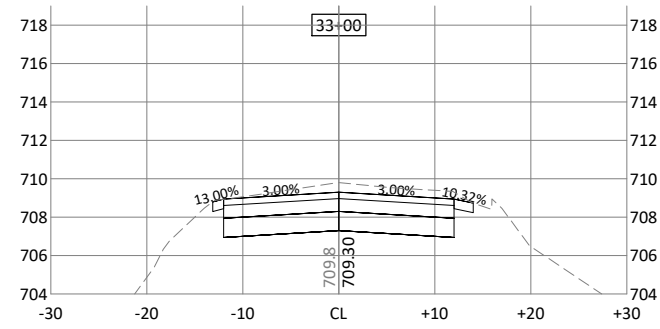
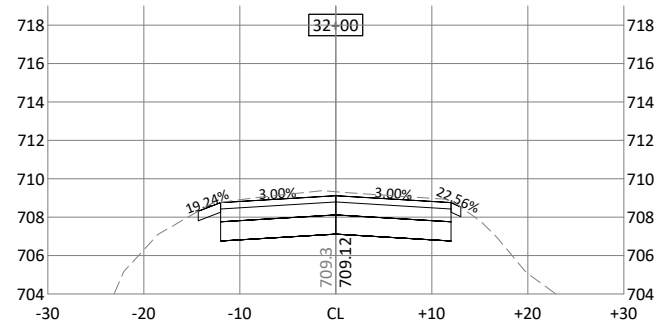
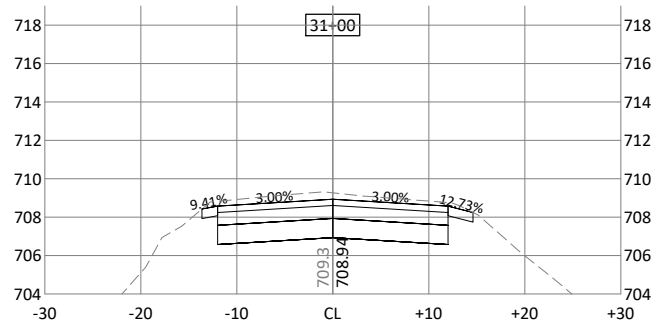
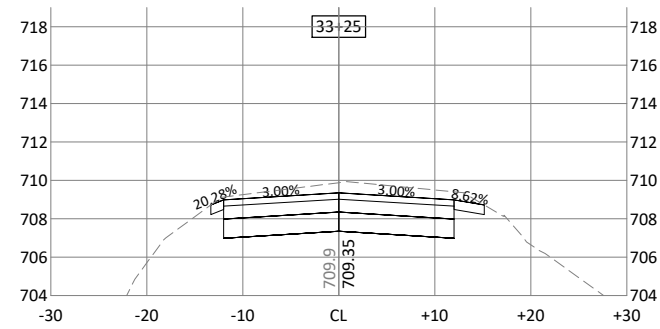
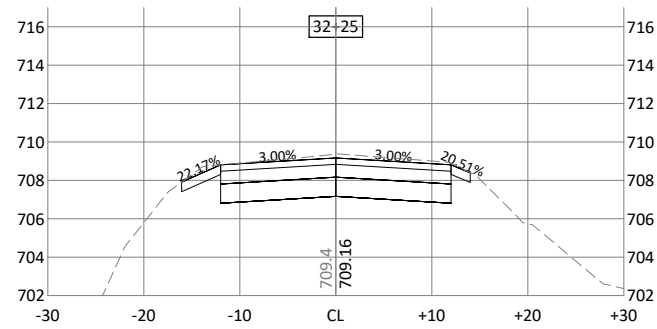
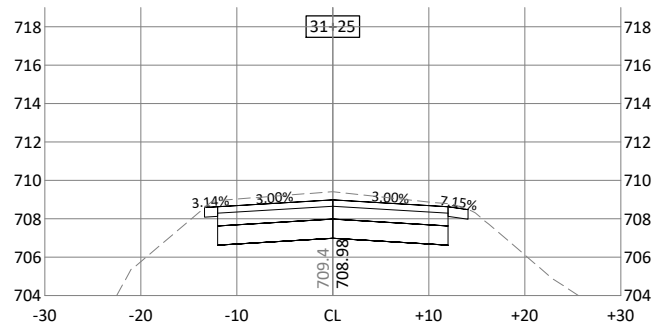
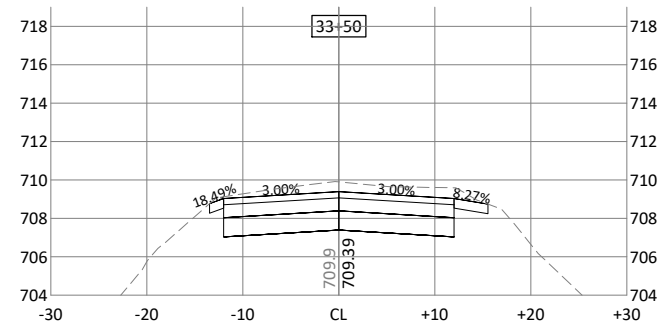
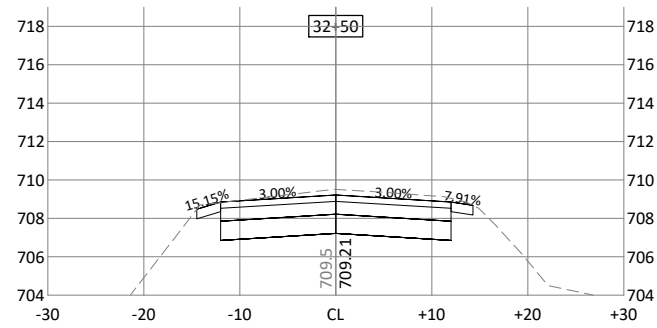
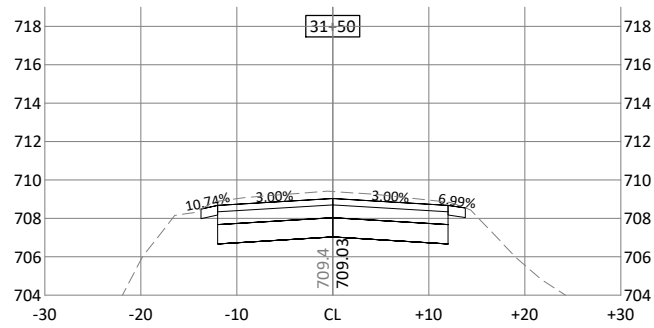


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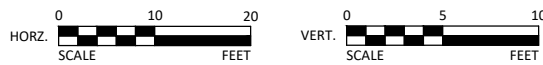
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| CHECKED | BJF | | |
| CLIENT PROJ. NO. | 0T1.129866 | | |

LOWER MINNESOTA RIVER WATERSHED DISTRICT
 VERNON AVENUE IMPROVEMENTS
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SHEET
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Bradley J Fisher
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 LIC. NO. 56595 DATE 02/21/2024

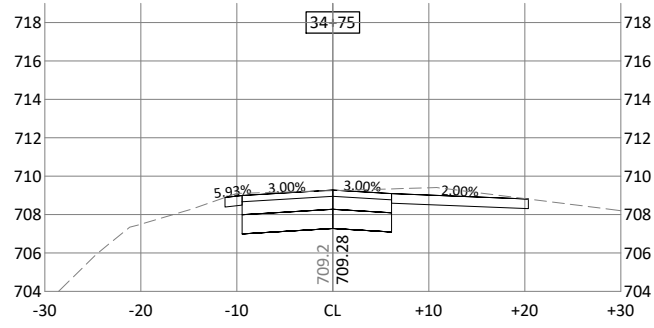
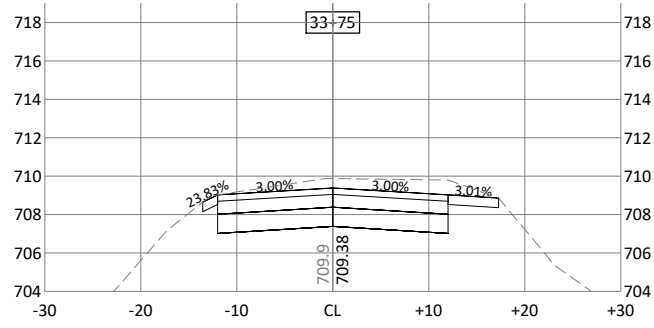
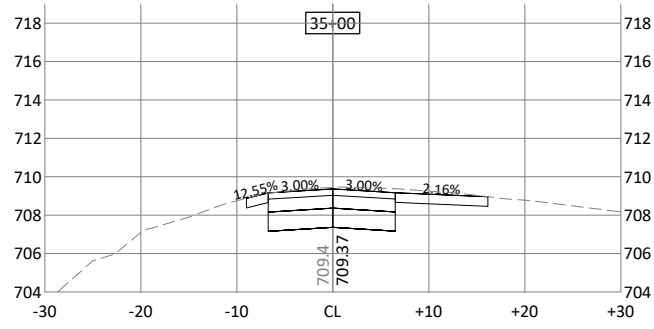
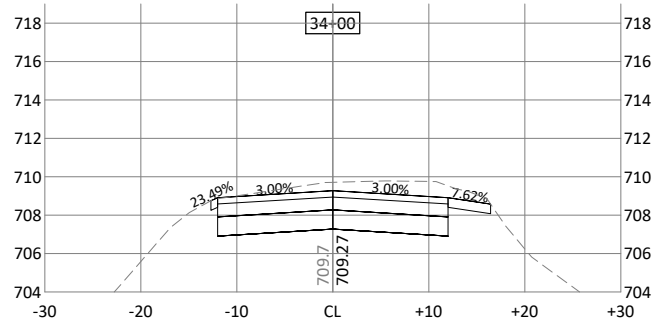
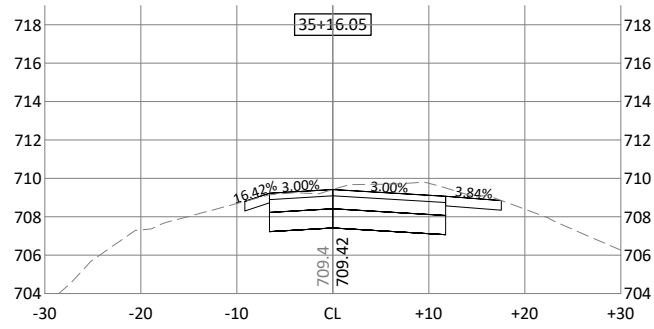
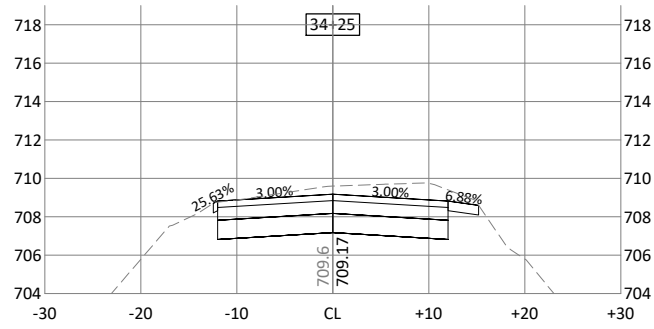
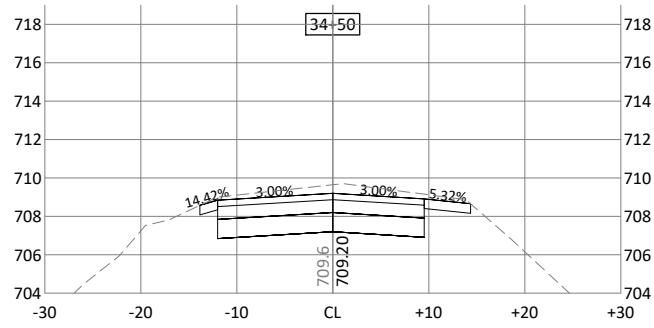


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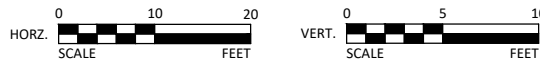
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LOWER MINNESOTA RIVER WATERSHED DISTRICT
 VERNON AVENUE IMPROVEMENTS
 CROSS SECTIONS
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I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

Bradley J Fisher
 BRADLEY J FISHER
 LIC. NO. 56595 DATE 02/21/2024

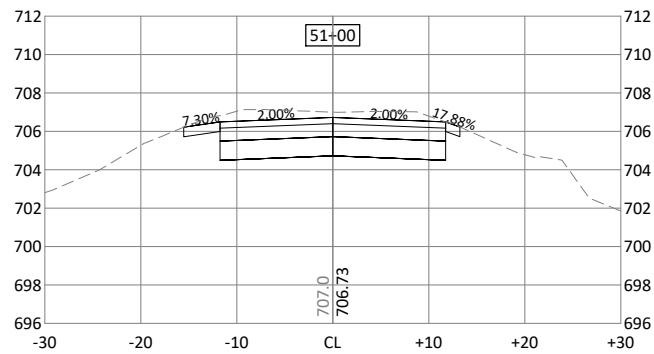
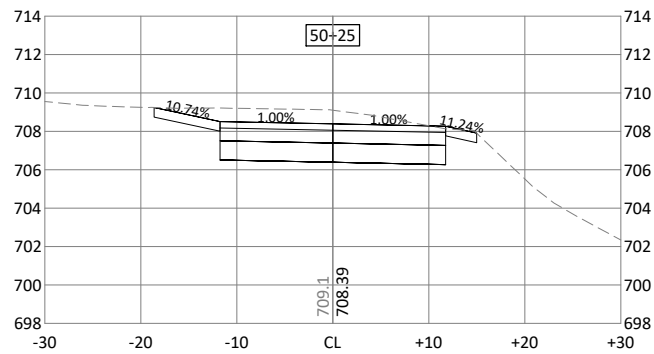
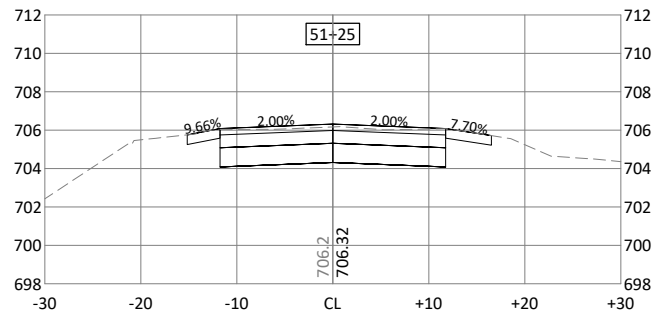
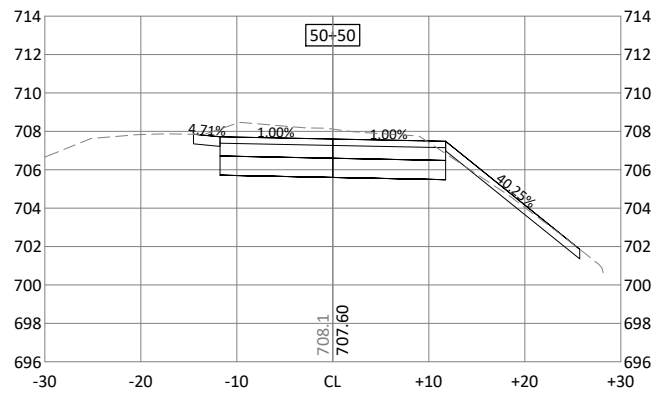
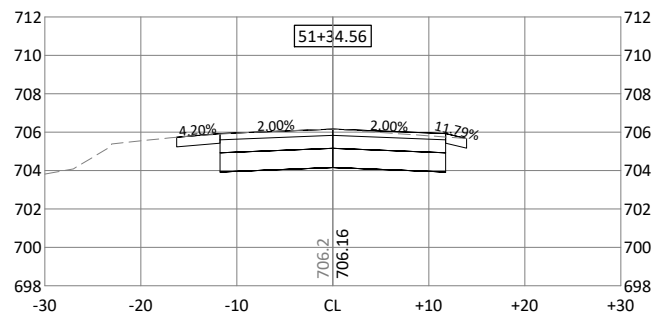
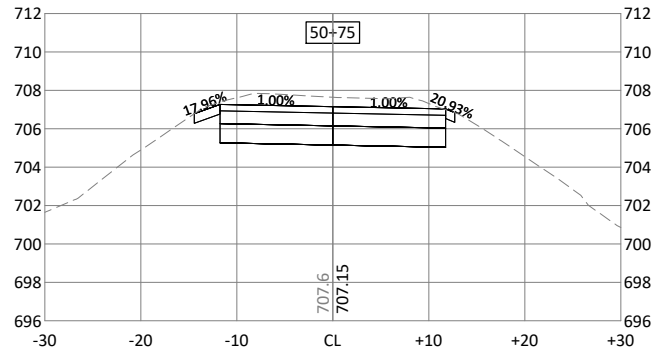


12224 NICOLLET AVENUE
 BURNSVILLE, MINNESOTA 55337
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 Email: BurnsVille@bolton-menk.com
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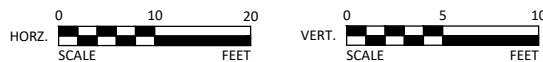
| DESIGNED | NO. | ISSUED FOR | DATE |
|------------------|-----|------------|------|
| JLW | | | |
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| CLIENT PROJ. NO. | | | |
| 011.129866 | | | |

LOWER MINNESOTA RIVER WATERSHED DISTRICT
 VERNON AVENUE IMPROVEMENTS
 CROSS SECTIONS
 VERNON AVE N

SHEET
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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.

Bradley J Fisher
 BRADLEY J FISHER
 LIC. NO. 56595 DATE 02/21/2024



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| DESIGNED | NO. | ISSUED FOR | DATE |
|------------------|------------|------------|------|
| JLW | | | |
| DRAWN | | | |
| JLW | | | |
| CHECKED | | | |
| BJF | | | |
| CLIENT PROJ. NO. | 011.129866 | | |

LOWER MINNESOTA RIVER WATERSHED DISTRICT
 VERNON AVENUE IMPROVEMENTS
 CROSS SECTIONS
 DREDGE SITE ACCESS ROAD

SHEET
C8.13

ENGINEER'S ESTIMATE

LOWER MINNESOTA RIVER WATERSHED DISTRICT

VERNON AVENUE IMPROVEMENTS

CITY OF SAVAGE, MINNESOTA

BMI PROJECT NO. OT1.129866

SCHEDULE "A" - BASE BID

| ITEM NO. | SPEC. REF | DESCRIPTION | NOTES | UNIT | TOTAL ESTIMATED QUANTITY | ESTIMATED UNIT PRICE | ESTIMATED TOTAL PRICE |
|--|-----------|--|---------|----------|--------------------------|----------------------|-----------------------|
| 1 | 2021.501 | MOBILIZATION | | LUMP SUM | 1.00 | \$30,000.00 | \$ 30,000.00 |
| 2 | 2101.502 | CLEARING | | EACH | 48.00 | \$400.00 | \$ 19,200.00 |
| 3 | 2101.502 | GRUBBING | | EACH | 48.00 | \$300.00 | \$ 14,400.00 |
| 4 | 2104.502 | SALVAGE SIGN | | EACH | 1.00 | \$60.00 | \$ 60.00 |
| 5 | 2104.503 | SAWING BITUMINOUS PAVEMENT (FULL DEPTH) | | LIN FT | 26.00 | \$4.00 | \$ 104.00 |
| 6 | 2104.503 | REMOVE SEWER PIPE (STORM) | (1) | LIN FT | 96.00 | \$30.00 | \$ 2,880.00 |
| 7 | 2104.504 | REMOVE BITUMINOUS PAVEMENT | (P)(2) | SQ YD | 9320.00 | \$3.50 | \$ 32,620.00 |
| 8 | 2104.507 | REMOVE RIPRAP | (EV) | CU YD | 40.00 | \$60.00 | \$ 2,400.00 |
| 9 | 2106.507 | EXCAVATION - COMMON | (EV)(P) | CU YD | 6358.00 | \$15.00 | \$ 95,370.00 |
| 10 | 2106.507 | EXCAVATION - SUBGRADE | (EV)(3) | CU YD | 262.00 | \$16.00 | \$ 4,192.00 |
| 11 | 2106.507 | SELECT GRANULAR EMBANKMENT | (CV)(P) | CU YD | 3366.00 | \$25.00 | \$ 84,150.00 |
| 12 | 2106.507 | STABILIZING AGGREGATE | (CV)(3) | CU YD | 262.00 | \$35.00 | \$ 9,170.00 |
| 13 | 2106.601 | DEWATERING | (4) | LUMP SUM | 1.00 | \$5,000.00 | \$ 5,000.00 |
| 14 | 2106.603 | MINOR GRADING | (5) | LIN FT | 80.00 | \$50.00 | \$ 4,000.00 |
| 15 | 2118.507 | AGGREGATE SURFACING CLASS 2 | (CV)(P) | CU YD | 188.00 | \$62.00 | \$ 11,656.00 |
| 16 | 2123.510 | COMMON LABORERS | (3) | HOUR | 15.00 | \$90.00 | \$ 1,350.00 |
| 17 | 2123.510 | DOZER | (3) | HOUR | 5.00 | \$200.00 | \$ 1,000.00 |
| 18 | 2123.610 | CRAWLER MOUNTED BACKHOE | (3) | HOUR | 5.00 | \$220.00 | \$ 1,100.00 |
| 19 | 2211.507 | AGGREGATE BASE CLASS 5 | (CV)(P) | CU YD | 2244.00 | \$35.00 | \$ 78,540.00 |
| 20 | 2357.506 | BITUMINOUS MATERIAL FOR TACK COAT | | GAL | 550.00 | \$2.50 | \$ 1,375.00 |
| 21 | 2360.509 | TYPE SP 9.5 WEARING COURSE MIXTURE (3,C) | | TON | 1848.00 | \$85.00 | \$ 157,080.00 |
| 22 | 2501.502 | 48" RC PIPE APRON | (6)(7) | EACH | 2.00 | \$3,250.00 | \$ 6,500.00 |
| 23 | 2503.503 | 48" RC PIPE SEWER CLASS III | (7) | LIN FT | 84.00 | \$300.00 | \$ 25,200.00 |
| 24 | 2511.507 | RANDOM RIPRAP CLASS III | (8) | CU YD | 80.00 | \$85.00 | \$ 6,800.00 |
| 25 | 2563.601 | TRAFFIC CONTROL | | LUMP SUM | 1.00 | \$5,000.00 | \$ 5,000.00 |
| 26 | 2563.621 | TRAFFIC CONTROL SPECIAL (RR FLAGGING) | | DOL | 15000.00 | \$1.00 | \$ 15,000.00 |
| 27 | 2564.602 | INSTALL SIGN | (9) | EACH | 1.00 | \$200.00 | \$ 200.00 |
| 28 | 2572.602 | TREE PRUNING | (3) | HOUR | 12.00 | \$200.00 | \$ 2,400.00 |
| 29 | 2573.501 | STABILIZED CONSTRUCTION EXIT | | LUMP SUM | 1.00 | \$1,500.00 | \$ 1,500.00 |
| 30 | 2573.502 | STORM DRAIN INLET PROTECTION | | EACH | 3.00 | \$200.00 | \$ 600.00 |
| 31 | 2573.503 | FLOTATION SILT CURTAIN TYPE STILL WATER | | LIN FT | 40.00 | \$20.00 | \$ 800.00 |
| 32 | 2573.503 | SEDIMENT CONTROL LOG TYPE WOOD FIBER | | LIN FT | 14000.00 | \$3.75 | \$ 52,500.00 |
| 33 | 2574.507 | COMMON TOPSOIL BORROW | (LV) | CU YD | 1426.00 | \$30.00 | \$ 42,780.00 |
| 34 | 2575.504 | ROLLED EROSION PREVENTION CATEGORY 20 W/ SEED MIX (25-141) | (10) | SQ YD | 8295.00 | \$3.00 | \$ 24,885.00 |
| 35 | 2575.504 | ROLLED EROSION PREVENTION CATEGORY 20 W/ SEED MIX (34-181) | (10) | SQ YD | 257.00 | \$3.00 | \$ 771.00 |
| ESTIMATED CONSTRUCTION SUBTOTAL | | | | | | | \$ 740,583.00 |
| 10% CONTINGENCY | | | | | | | \$ 74,058.30 |
| ESTIMATED CONSTRUCTION TOTAL | | | | | | | \$ 814,641.30 |
| 20% OVERHEAD | | | | | | | \$ 162,928.26 |
| ESTIMATED PROJECT TOTAL | | | | | | | \$ 977,569.56 |

LMRWD Permit Program Summary



| Permit Number | Project Name | Status | Pre-Permit Meeting | Date Received | Date Considered Complete | Board Actions | | | Permit Issued | Permit Expiration Date | First Renewal Expiration | Second Renewal Expiration | Construction Completed | Date Permit Closed |
|--------------------|--|---------|--------------------|---------------|--------------------------|------------------|----------------------|------------|---------------|------------------------|--------------------------|---------------------------|------------------------|--------------------|
| | | | | | | Information Only | Conditional Approval | Approval | | | | | | |
| 2019-065 | TH 101 Chanhassen | Closed | | 11/8/2019 | | | | 11/20/2019 | 11/20/2019 | 1/20/2020 | | | | 11/22/2022 |
| 2019-085 | Minnesota Bluffs LRT Regional Trail Repair | Closed | | 12/12/2019 | | | | | 5/20/2020 | 6/1/2023 | | | | 7/22/2022 |
| 2020-100 | Peterson Farms Road Maintenance | Closed | | 5/6/2020 | 5/6/2020 | | | 5/20/2020 | 5/21/2020 | 5/21/2021 | | | | 8/11/2022 |
| 2020-103 | Prairie Heights Development | Closed | | 5/27/2020 | 6/5/2020 | | 6/17/2020 | | 10/23/2020 | 10/23/2021 | | | | 4/25/2023 |
| 2020-105 | Freeway Landfill | On Hold | | 8/19/2022 | | 9/21/2022 | | | | | | | | |
| 2020-110 | CSAH 11 Reconstruction | Closed | | 9/28/2020 | 11/3/2020 | | 12/16/2020 | | 4/13/2021 | 4/13/2022 | 4/20/2023 | | 10/4/2022 | 8/1/2023 |
| 2020-112 | Vierling Industrial Project | Closed | | 6/25/2020 | 6/29/2020 | | 7/15/2020 | | | | | | | 10/14/2022 |
| 2020-113 | Fort Snelling Redevelopment (2019-057) | Active | | 7/20/2020 | 8/12/2020 | | 8/19/2020 | | 9/11/2020 | 8/19/2022 | 8/19/2023 | 8/19/2024 | | |
| 2020-115 | Quarry Lake Park Improvements | Closed | | 7/23/2020 | 9/8/2020 | | 9/16/2020 | | 9/16/2020 | 9/16/2021 | | | | 8/5/2022 |
| 2020-116 | Shakopee Memorial Bridge | Closed | | 8/24/2020 | 10/5/2020 | | 10/21/2020 | | 10/23/2020 | 10/23/2021 | | | | 7/20/2022 |
| 2020-117 | Greystone HQ | Closed | | 7/24/2020 | 9/10/2020 | | | 9/16/2020 | 9/16/2020 | 9/16/2021 | | | | 10/3/2022 |
| 2020-123 | Gaughan Companies Demolition | Closed | | 8/27/2020 | 8/27/2020 | | | 9/16/2020 | 9/17/2020 | 9/17/2021 | | | | 10/15/2021 |
| 2020-123 (amended) | Shakopee Flats | Closed | 10/29/2020 | 11/2/2020 | 11/2/2020 | | | 11/18/2020 | 2/17/2021 | 9/16/2021 | | | | 7/25/2022 |
| 2020-126 | Texas Roadhouse | Closed | | 9/17/2020 | 11/5/2020 | | | 11/18/2020 | 11/19/2020 | 11/18/2021 | | | | 7/26/2022 |
| 2020-132 | 77th Underpass | Expired | 10/18/2020 | 10/21/2020 | 11/12/2020 | 11/18/2020 | 12/16/2020 | | 7/27/2021 | 7/27/2022 | 7/27/2023 | | | |
| 2020-135 | Canterbury Crossings | Active | | 11/19/2020 | 12/3/2020 | | 12/16/2020 | | 5/11/2021 | 5/11/2022 | 4/20/2023 | 4/20/2025 | | |
| 2021-002 | CSAH 61 Drainage Ditch | Closed | | 2/1/2021 | 10/11/2021 | | | 10/20/2021 | 10/21/2021 | 5/31/2022 | 10/20/2023 | | 7/25/2023 | 9/29/2023 |
| 2021-003 | Southwest Logistics Center | Closed | | 2/11/2021 | 3/12/2021 | | 3/17/2021 | | 4/21/2021 | 4/21/2022 | 8/17/2023 | | | 11/22/2022 |
| 2021-007 | Burnsville Cemetery Expansion | Closed | 3/5/2021 | 9/2/2021 | 9/17/2021 | | 10/20/2021 | | 11/17/2021 | 10/20/2022 | | | 10/21/2022 | 8/1/2023 |
| 2021-009 | Burnsville Industrial IV | Closed | 4/2/2021 | 3/22/2021 | 3/31/2021 | | 4/21/2021 | | 4/23/2021 | 4/21/2022 | | | | 10/5/2022 |
| 2021-011 | 2021 Shakopee Street Reconstruction | Closed | 3/30/2021 | 3/30/2021 | 4/16/2021 | | 4/21/2021 | | 4/28/2021 | 4/28/2022 | | | | 7/25/2022 |
| 2021-012 | Canterbury Park Parking Lots Phase 2 | Closed | 4/1/2021 | 4/2/2021 | 4/10/2021 | | 4/21/2021 | | 5/11/2021 | 5/11/2022 | | | | 7/25/2022 |
| 2021-013 | Summerland Place | Closed | | 4/8/2021 | 5/27/2021 | | 4/21/2021 | | 4/26/2021 | 4/22/2022 | | | | 3/22/2022 |
| 2021-015 | Stagecoach Rd Improvements | Closed | 4/16/2021 | 4/12/2021 | 4/30/2021 | | 5/5/2021 | | 5/7/2021 | 5/5/2022 | | | | 3/23/2022 |

| Permit Number | Project Name | Status | Pre-Permit Meeting | Date Received | Date Considered Complete | Board Actions | | | Permit Issued | Permit Expiration Date | First Renewal Expiration | Second Renewal Expiration | Construction Completed | Date Permit Closed |
|---------------|--|-----------------------|--------------------|---------------|--------------------------|------------------|----------------------|-----------|---------------|------------------------|--------------------------|---------------------------|------------------------|--------------------|
| | | | | | | Information Only | Conditional Approval | Approval | | | | | | |
| 2021-016 | Whispering Waters | Active | | 4/14/2021 | 6/4/2021 | | 6/16/2021 | | 7/13/2021 | 7/13/2022 | 7/13/2023 | 7/13/2024 | | |
| 2021-017 | Capstone35 | Closed | | 4/20/2021 | 5/12/2021 | | 5/19/2021 | | 8/19/2021 | 8/17/2022 | | | | 11/22/2022 |
| 2021-018 | Jefferson Court | Closed | | 4/22/2021 | 5/17/2021 | | 6/2/2021 | | 6/3/2021 | 6/2/2022 | 6/2/2023 | 6/2/2024 | | 8/11/2023 |
| 2021-019 | Cretex Site | Closed | 4/23/2021 | 4/26/2021 | 4/30/2021 | | 5/5/2021 | | 5/7/2021 | 5/5/2022 | | | | 5/5/2022 |
| 2021-020 | Core Crossing Apartments (Prev. Southbridge) | Closed | | 6/14/2021 | 7/13/2021 | | 7/21/2021 | | 8/5/2021 | 6/15/2023 | 6/17/2023 | | 11/1/2022 | 9/21/2023 |
| 2021-022 | 2021 Security & Safety Center | Active | | 5/18/2021 | 10/29/2021 | | 11/17/2021 | | 3/18/2022 | 3/18/2023 | 3/18/2024 | 3/18/2024 | | |
| 2021-023 | 106th Improvements Project | Closed | | 5/25/2021 | 5/28/2021 | | 6/2/2021 | | 6/17/2022 | 6/17/2022 | 6/17/2023 | | 4/17/2023 | 8/1/2023 |
| 2021-025 | TH13/Dakota Ave Improvement | Active | | 6/11/2021 | 6/15/2021 | | 2/16/2022 | | 5/20/2022 | 5/20/2023 | 5/20/2024 | 5/20/2025 | | |
| 2021-030 | Building Renovation Park Jeep | Active | | 7/9/2021 | 7/16/2021 | | 9/15/2021 | | 6/21/2022 | 6/21/2023 | 8/15/2023 | 8/15/2024 | | |
| 2021-031 | Caribou Coffee | Closed | 6/1/2021 | 7/9/2021 | 8/10/2021 | | 8/18/2021 | | 8/19/2021 | 8/19/2022 | | | | 10/4/2022 |
| 2021-033 | MN MASH | Active | 6/23/2021 | 9/17/2021 | | | | 6/15/2022 | 6/17/2022 | 6/17/2023 | 11/30/2023 | 11/30/2024 | | |
| 2021-034 | Circle K Holiday Station Stores | Closed | 8/25/2021 | 7/26/2021 | 9/10/2021 | | 9/15/2021 | | 10/19/2021 | 9/15/2022 | | | | 7/12/2022 |
| 2021-035 | 135W Frontage Trail | Construction Complete | | 12/15/2021 | 12/22/2021 | | 1/19/2022 | | 11/3/2022 | 11/3/2023 | 11/3/2024 | | 10/16/2023 | |
| 2021-039 | River Bluffs Improvements | Closed | | 7/23/2021 | 8/12/2021 | | 8/18/2021 | | 10/1/2021 | 8/18/2022 | | | | 10/12/2022 |
| 2021-040 | Omry Independent Living | Active | | 8/11/2021 | 8/19/2021 | | 9/15/2021 | 9/15/2022 | 8/19/2022 | 10/1/2023 | 10/1/2024 | | | |
| 2021-041 | Line 0832 | Closed | | 9/7/2021 | 9/7/2021 | | 9/15/2021 | | 9/17/2021 | 9/15/2022 | | | | 6/27/2022 |
| 2021-042 | Hwy 13 & Lone Oak | Closed | | 8/27/2021 | 9/16/2021 | | 10/20/2021 | | 10/22/2021 | 10/22/2022 | 6/30/2023 | | 6/20/2023 | 8/1/2023 |
| 2021-045 | Triple Crown Residences Phase II | Active | | 9/22/2021 | 10/27/2021 | | 11/17/2021 | | 11/19/2021 | 11/17/2022 | 11/17/2023 | 11/17/2024 | | |
| 2021-046 | CenterPoint Dakota Station Facility | Closed | | 9/21/2021 | 10/15/2021 | | 10/20/2021 | | 10/22/2021 | 10/22/2022 | | | | 9/12/2022 |
| 2021-049 | Stump Road Maintenance | Closed | 10/20/2021 | 10/22/2021 | 10/29/2021 | | 11/17/2021 | | 11/19/2021 | 11/17/2022 | | | | 9/5/2022 |
| 2021-052 | Shakopee Dental Office | Closed | | 11/3/2021 | 12/14/2021 | | 12/15/2021 | | 12/17/2021 | 12/15/2022 | | | 12/1/2022 | 8/11/2023 |
| 2021-057 | Cliff Road Ramps | Active | | 12/14/2021 | 1/4/2022 | | 1/19/2022 | | 6/8/2022 | 6/8/2023 | 12/1/2023 | 12/1/2024 | | |
| 2021-058 | Perimeter Gate Improvements | Closed | | 12/15/2021 | 12/16/2021 | | 1/19/2022 | | 4/27/2022 | 4/27/2023 | 10/31/2023 | | 8/1/2023 | 9/29/2023 |
| 2022-002 | CenterPoint MBL Nicollet River Crossing | Active | | 1/18/2022 | | | 3/16/2022 | | 4/25/2022 | 4/25/2023 | 10/31/2023 | 10/31/2024 | | |
| 2022-003 | Ivy Brook Parking East | Closed | | 1/19/2022 | 2/25/2022 | | 3/16/2022 | | 5/16/2022 | 5/16/2023 | | | 2/16/2023 | 10/10/2023 |
| 2022-004 | CHS Savage Terminal | On Hold | | 1/27/2022 | | | | | | | | | | |

| Permit Number | Project Name | Status | Pre-Permit Meeting | Date Received | Date Considered Complete | Board Actions | | | Permit Issued | Permit Expiration Date | First Renewal Expiration | Second Renewal Expiration | Construction Completed | Date Permit Closed |
|---------------|---|-----------------------|--------------------|---------------|--------------------------|------------------|----------------------|------------|---------------|------------------------|--------------------------|---------------------------|------------------------|--------------------|
| | | | | | | Information Only | Conditional Approval | Approval | | | | | | |
| 2022-005* | Chaska West Creek Apt | Active | | 2/8/2022 | 3/29/2023 | | 4/19/2023 | | 6/6/2023 | 6/6/2024 | 6/6/2025 | | | |
| 2022-007 | Engineered Hillside | Active | | 2/15/2022 | 3/14/2022 | | | 4/20/2022 | 4/21/2022 | 4/21/2023 | 9/20/2024 | | | |
| 2022-008 | Ivy Brook Parking West | Closed | | 2/16/2022 | 2/25/2022 | | 3/16/2022 | | 5/31/2022 | 5/31/2023 | | | 2/27/2023 | 8/1/2023 |
| 2022-010 | Quarry Lake Trail and Ped Bridge | Active | | 2/24/2022 | | | 4/20/2022 | | 3/1/2023 | 3/1/2024 | 3/1/2025 | | | |
| 2022-011 | Biffs, Inc. | Closed | | 2/28/2022 | 3/29/2022 | | 4/20/2022 | | 8/16/2022 | 8/16/2023 | 10/31/2023 | | 9/30/2023 | 10/20/2023 |
| 2022-013 | Normandale & 98th St | Closed | | 3/22/2022 | 4/1/2022 | | 4/20/2022 | | 4/22/2022 | 4/22/2023 | 11/30/2023 | | 7/21/2023 | 11/6/2023 |
| 2022-014 | TH41 & CSAH61 Improvements | Active | 1/6/2022 | 3/23/2022 | 5/11/2022 | | 5/18/2022 | | 12/13/2022 | 12/13/2023 | 12/13/2024 | | | |
| 2022-015 | Xcel Driveway | Active | 5/25/2023 | 6/21/2023 | 7/31/2023 | | 8/16/2023 | | 9/21/2023 | 9/21/2024 | | | | |
| 2022-016 | ORF Relocation | Active | | 4/20/2022 | 6/30/2023 | | 7/19/2023 | | 7/20/2023 | 7/20/2024 | | | | |
| 2022-017 | PLOC 2022 Bank Stabilization | Closed | | 6/30/2022 | 7/5/2022 | | | 7/20/2022 | 7/21/2022 | 7/21/2023 | | | 6/12/2023 | 8/1/2023 |
| 2022-019 | 1494 SP 2785-433 | Active | | 4/21/2022 | 6/24/2022 | | 7/20/2022 | | 4/10/2023 | 4/10/2024 | 4/10/2025 | | | |
| 2022-021 | CenterPoint Oak St N | Closed | | 4/29/2022 | | | | 6/15/2022 | 6/17/2022 | 6/17/2023 | | | 3/14/2023 | 9/5/2023 |
| 2022-022 | Ace Rent A Car | Active | | 5/10/2022 | 11/3/2023 | | | 11/15/2023 | 11/16/2023 | 11/16/2024 | | | | |
| 2022-023 | 494 Corridors of Commerce | Pre-Permit | 5/3/2022 | 5/19/2022 | | 7/20/2022 | | | | | | | | |
| 2022-024 | Gedney Pickles Holding Pond Restoration | Closed | 6/16/2022 | 8/10/2022 | | | 9/21/2022 | | 11/14/2022 | 11/14/2023 | | | 8/30/2023 | 10/19/0223 |
| 2022-026 | 10521 Spyglass Dr | Closed | 5/31/2022 | 7/13/2022 | 8/8/2022 | | | 7/20/2022 | 8/8/2022 | 8/8/2023 | | | 11/30/2022 | 8/24/2023 |
| 2022-027 | Ivy Brook Northeast | Construction Complete | | 7/5/2022 | | | 8/17/2022 | | 8/31/2022 | 8/31/2023 | 10/18/2024 | | 11/30/2022 | |
| 2022-028 | Quarry Lake Park Restroom | Closed | | 7/6/2022 | 7/8/2022 | | 7/20/2022 | | 7/22/2022 | 7/22/2023 | 12/31/2023 | | | 10/20/2023 |
| 2022-029 | Reliakor | Cancelled | | 7/20/2022 | | | 8/17/2022 | | 9/19/2022 | 9/19/2023 | | | | 10/28/2022 |
| 2022-030 | Frenchies Metals | Cancelled | | 7/22/2022 | | | | | | | | | | |
| 2022-031 | RSI Marine | Conditional Approval | | 9/20/2023 | 1/24/2024 | 8/17/2022 | 2/21/2024 | | | | | | | |
| 2022-034 | Valleyfair Parking | Cancelled | | 9/26/2022 | 10/11/2022 | | 10/19/2022 | | | | | | | |
| 2022-036 | Structures Inc. Amendment | Cancelled | | 10/6/2022 | 12/2/2022 | | 5/9/2023 | | | | | | | |
| 2022-037 | Peterson Wetland Bank | Conditional Approval | | 5/23/2023 | 6/30/2023 | 11/16/2022 | 7/19/2023 | | 1/9/2024 | 1/9/2025 | | | | |
| 2022-039* | Former Knox Site | Active | | 11/3/2022 | 12/19/2022 | | 1/18/2023 | | 6/6/2023 | 6/6/2024 | 6/6/2025 | | | |
| 2022-040 | Burnsville Sanitary Landfill | Active | | 11/21/2022 | 2/15/2023 | | 3/15/2023 | 8/16/2023 | 8/17/2023 | 8/17/2024 | | | | |

| Permit Number | Project Name | Status | Pre-Permit Meeting | Date Received | Date Considered Complete | Board Actions | | | Permit Issued | Permit Expiration Date | First Renewal Expiration | Second Renewal Expiration | Construction Completed | Date Permit Closed |
|---------------|--|-----------------------|--------------------|---------------|--------------------------|------------------|----------------------|------------|---------------|------------------------|--------------------------|---------------------------|------------------------|--------------------|
| | | | | | | Information Only | Conditional Approval | Approval | | | | | | |
| 2022-041 | 35W SP 2782-352 | Active | | 12/15/2022 | 2/10/2023 | | 2/15/2023 | | 4/10/2023 | 4/10/2024 | 4/10/2025 | | | |
| 2022-042 | 3rd Street Bridge Replacement | Conditional Approval | | 12/16/2022 | 2/2/2023 | | 2/15/2023 | | | | | | | |
| 2023-001 | Lakota Lane After-the-Fact | Under Review | | 1/10/2023 | | | | | | | | | | |
| 2023-002 | Eagle Creek Bridge | Active | | 1/13/2023 | 4/19/2023 | | 5/9/2023 | | 7/14/2023 | 7/14/2024 | | | | |
| 2023-003 | Ernst & Reidele Potential Development | No Permit Required | | 1/17/2023 | | | | | | | | | | |
| 2023-004 | CenterPoint Hwy 13 and Lynn Project | No Permit Required | | 1/24/2023 | | | | | | | | | | |
| 2023-005 | Cargill Savage West Safety Improvement Project | No Permit Required | | 1/25/2023 | | | | | | | | | | |
| 2023-006 | Borca Family DNR Dewater Review | No Permit Required | | 1/23/2023 | | | | | | | | | | |
| 2023-007 | MN River Greenway Trail | Active | | 3/1/2023 | 3/15/2023 | | 4/19/2023 | | 11/6/2023 | 11/6/2024 | | | | |
| 2023-008 | Chaska Tech Center Amendment | Active | | 3/4/2023 | 4/11/2023 | | 4/19/2023 | 7/19/2023 | 5/15/2023 | 5/15/2024 | 5/15/2025 | | | |
| 2023-009* | AT&T Bloomington to Eureka Fiber | Active | | 3/31/2023 | 5/19/2023 | | 6/21/2023 | | 6/26/2023 | 6/26/2024 | 6/26/2025 | | | |
| 2023-010 | MN River Greenway RR Bridge | On Hold | 4/5/2023 | 4/5/2023 | | | | | | | | | | |
| 2023-011 | Quarry Lake Playground | Construction Complete | | 4/19/2023 | 4/24/2023 | 5/9/2023 | | 4/24/2023 | 4/24/2023 | 4/24/2024 | 4/24/2025 | | 10/16/2023 | |
| 2023-012 | Concourse G Infill Pods 2-3 | Active | | 5/4/2023 | 5/30/2023 | 6/21/2023 | | 5/31/2023 | 5/31/2023 | 5/31/2024 | 5/31/2025 | | | |
| 2023-013 | Merriam Junction Trail | Under Review | 4/5/2023 | 5/8/2023 | | | | | | | | | | |
| 2023-014 | KTI Fencing Property | Active | | 5/16/2023 | 7/6/2023 | | 7/19/2023 | | 9/1/2023 | 9/1/2024 | | | | |
| 2023-015 | City of Bloomington Storm Sewer Maintenance | Active | | 5/24/2023 | 6/15/2023 | | 7/19/2023 | | 8/23/2023 | 8/23/2024 | | | | |
| 2023-016 | MAC Pond Maintenance Activities | Upcoming | 6/15/2023 | 6/9/2023 | | | | | | | | | | |
| 2023-017 | MN Bluffs Regional Trail | Conditional Approval | 6/14/2023 | 12/28/2023 | 2/26/2024 | | 3/20/2024 | | | | | | | |
| 2023-018 | Sibley Memorial Hwy (1901-195-TH13A) | Upcoming | 7/17/2023 | 6/6/2023 | | | | | | | | | | |
| 2023-019 | Dean Lake Wetland Fill | Active | | 8/27/2023 | 9/10/2023 | | 9/20/2023 | | 10/4/2023 | 10/4/2024 | | | | |
| 2023-020 | Tramore Heights Addition | Active | 9/1/2023 | 8/21/2023 | 1/24/2024 | | 2/21/2024 | 10/18/2023 | 10/20/2023 | | | | | |
| 2023-021 | MAC Infiltration Pond | No Permit Required | 9/27/2023 | 9/21/2023 | | | | | | | | | | |
| 2023-022* | Safety and Security Center Phase II | Active | | 10/2/2023 | | | | 4/17/2024 | | | | | | |
| 2023-023 | Vernon Avenue Road Improvements | Conditional Approval | | 10/6/2023 | | | 11/15/2023 | | | | | | | |
| 2023-024 | Carmeuse Savage Marine Improvements | Conditional Approval | | 10/11/2023 | 12/1/2023 | | 12/20/2023 | | | | | | | |

| Permit Number | Project Name | Status | Pre-Permit Meeting | Date Received | Date Considered Complete | Board Actions | | | Permit Issued | Permit Expiration Date | First Renewal Expiration | Second Renewal Expiration | Construction Completed | Date Permit Closed |
|---------------|----------------------------------|----------------------|--------------------|---------------|--------------------------|------------------|----------------------|------------|---------------|------------------------|--------------------------|---------------------------|------------------------|--------------------|
| | | | | | | Information Only | Conditional Approval | Approval | | | | | | |
| 2023-025 | 35W SP1987-140 | Under Review | 10/31/2023 | 8/23/2023 | | | | | | | | | | |
| 2023-026 | CenterPoint Pipeline Abandonment | Conditional Approval | | 1/5/2024 | 1/24/2024 | 1/20/2024 | 2/21/2024 | | | | | | | |
| 2023-027 | TH 41 ORF | Under Review | 11/6/2023 | 12/12/2023 | | 1/17/2024 | | | | | | | | |
| 2023-028 | Marystown Road and TH169 | No Permit Required | | 11/7/2023 | | | | | | | | | | |
| 2023-029 | Tarnhill Pond | Active | | 11/15/2023 | 11/22/2023 | | 12/20/2023 | 12/27/2023 | 12/27/2024 | | | | | |
| 2023-030 | Bass Ponds Berm | No Permit Required | | 11/8/2023 | | | | | | | | | | |
| 2023-031 | Bohn Properties | No Permit Required | 11/1/2023 | 10/30/2023 | | | | | | | | | | |
| 2024-001 | Saint John's Church | No Permit Required | | 1/15/2024 | | | | | | | | | | |
| 2024-002 | MnDOT Pond Maintenance | Under Review | | 3/20/2024 | | | | | | | | | | |
| 2024-003 | Port Cargill Savage | Upcoming | 2/18/2024 | | | | | | | | | | | |
| 2024-004* | 35W Early Release | Conditional Approval | | 2/20/2024 | | | 4/17/2024 | | | | | | | |
| 2024-005 | Fort Snelling Cemetary | Upcoming | 2/27/2024 | | | | | | | | | | | |
| 2024-006 | T2 North Expansion | Under Review | | 2/28/2024 | | | | | | | | | | |
| 2024-007 | Chalet Driving Range | No Permit Required | | 2/18/2024 | | | | | | | | | | |
| 2024-008 | CD Terminal Storage Pad | Under Review | | 3/22/2024 | | | | | | | | | | |
| 2024-009 | FWTEC | Under Review | | 3/28/2024 | | | | | | | | | | |
| 2024-010 | Lyndale Road | Under Review | | 3/29/2024 | | | | | | | | | | |

*Staff recommendation only, has not yet been presented to the Board for action

STATUS DEFINITIONS:

Active Permit: Applicant has a valid permit issued by LMRWD

Cancelled by Applicant: Applicant withdrew their application for a LMRWD permit

Closed: Applicant has indicated the project has completed construction and that the permit file may be closed

Conditional Approval: LMRWD managers conditionally approved the permit application, pending receipt of additional information from applicant

Expired: Applicant either obtained conditional approval, approval, and/or was issued a permit and the expiration date has passed

Incomplete: Applicant applied for a permit, but the application is incomplete

No Permit Required: Applicant applied for a permit, but during the completeness review, it was determined that the project did not trigger the regulatory thresholds

On Hold: Applicant requested their application be placed on hold

Pre-Permit: Applicant has requested pre-permit application reviews or meetings, but has not yet applied for a permit from LMRWD

Under Review: Permit application is complete and under review by LMRWD staff

Construction Complete: project construction is complete but permit is not closed

