DAKOTA COUNTY
14955 GALAXIE AVENUE
APPLE VALLEY, MN 55124

*************PROPOSAL*************

FOR HIGHWAY CONSTRUCTION
AND MAINTENANCE PROJECTS WITH
BIDS RECEIVED UNTIL 12:00 O'CLOCK P.M. ON Friday, May 22, 2026

PROPOSAL OF _____
(NAME OF FIRM)

_____
(ADDRESS)

_____
(AREA CODE) TELEPHONE NUMBER

TO FURNISH AND DELIVER ALL MATERIALS AND TO PERFORM ALL WORK IN ACCORDANCE WITH THE CONTRACT, THE PLANS AND THE APPROVED DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION, 2020 EDITION" (USING English UNITS), ON FILE IN THE OFFICE OF THE COMMISSIONER OF TRANSPORTATION EXCEPT AS STATED OTHERWISE IN THE SPECIAL PROVISIONS, WHICH ARE PART OF THIS PROPOSAL, FOR:

COUNTY PROJECT NO. **42-161**

LOCATION: 0.3 MILES NORTH WEST OF COUNTY ROAD 42 AND PLEASANT DRIVE

TYPE OF WORK: GRADING, BITUMINOUS SURFACING, ADA IMPROVEMENTS, RETAINING WALL

LENGTH: 2683.21 FT

STARTING DATE: Contractor Proposed Schedule

COMPLETION DATE: November 20, 2026

NOTICE TO BIDDERS: Submit bids in accordance with MnDOT 1206 through 1210 except as stated otherwise in the Special Provisions.

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

Jordan R. Horejsi, PE
License Number 52241 Date: 5/1/2026

****

BID RIGGING IS A SERIOUS CRIME. IF YOU HAVE ANY INFORMATION CONCERNING COLLUSIVE BIDDING, EVEN A REQUEST TO SUBMIT A COMPLIMENTARY BID, PLEASE CALL THE MINNESOTA ATTORNEY GENERAL'S OFFICE AT TELEPHONE NO. (651) 296-1796

DAKOTA COUNTY PROPOSAL

FOR HIGHWAY CONSTRUCTION AND MAINTENANCE PROJECTS

Bids will be received by Dakota County through https://questcdn.com,
until 12:00 p.m. on Friday, May 22, 2026

Company: _____

Address: _____

Contact Person: _____

Phone Number: _____

Email: _____

TO FURNISH AND DELIVER ALL MATERIALS AND TO PERFORM ALL WORK IN ACCORDANCE WITH THE CONTRACT, THE PLANS AND THE APPROVED DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION, 2025 EDITION" (USING English UNITS), ON FILE IN THE OFFICE OF THE COMMISSIONER OF TRANSPORTATION EXCEPT AS STATED OTHERWISE IN THE SPECIAL PROVISIONS, WHICH ARE PART OF THIS PROPOSAL, FOR:

COUNTY PROJECT NO.	42-161
STATE PROJECT NO.	N/A
STATE AID PROJECT NO.	N/A
FEDERAL PROJECT NO.	N/A
LOCATION:	0.3 MILES NW OF COUNTY ROAD 42 AND PLEASANT DRIVE
TYPE OF WORK:	GRADING, BITUMINOUS SURFACING, ADA IMPROVEMENTS, RETAINING WALL
LENGTH:	2683.21 FEET
STARTING DATE:	
COMPLETION DATE:	November 20, 2026

NOTICE TO BIDDERS

BIDDERS MUST SUBMIT BIDS ELECTRONICALLY AT: https://questcdn.com

THE FOLLOWING FORMS MUST BE COMPLETED IN ACCORDANCE WITH THE SPECIAL PROVISIONS OF THIS PROPOSAL AND SUBMITTED ELECTRONICALLY TO HAVE YOUR BID CONSIDERED FOR THIS PROJECT:

PROPOSAL TITLE SHEET, NOTICE TO BIDDERS - SPECIFICATIONS, STIPULATION FOR FOREIGN IRON OR STEEL MATERIALS (IF APPLICABLE), NON-COLLUSION AFFIDAVIT, NON-COLLUSION AND CONFLICT OF INTEREST STATEMENT, BID BOND, TRADE SECRET INFORMATION, RESPONSIBLE CONTRACTOR CERTIFICATE, & FORM 21126D.

BID RIGGING IS A SERIOUS CRIME. IF YOU HAVE ANY INFORMATION CONCERNING COLLUSIVE BIDDING, EVEN A REQUEST TO SUBMIT A COMPLIMENTARY BID, PLEASE CALL THE MINNESOTA ATTORNEY GENERAL'S OFFICE AT (651) 296-1796.

To Dakota County Board of Commissioners:

According to the advertisement of Dakota County inviting proposals for the improvement of the section of highway hereinbefore named, and in conformity with the Contract, Plans, Specifications and Special Provisions pertaining thereto, all on file in the office of the Auditor of Dakota County:

(I)(We) hereby certify that (I am)(we are) the only person(s) interested in this proposal as principal(s); that this proposal is made and submitted without fraud or collusion with any other person, firm or corporation at all; that an examination has been made of the site of the work and the Contract form, with the Plans, Specifications and Special Provisions for the improvement.

(I)(We) understand that the quantities of work shown herein are approximate only and are subject to increase or decrease; that all quantities of work, whether increased or decreased within the limits specified in MnDOT 1903 and 1402, are to be done at the unit prices shown on the attached schedule; that, at the time of opening bids, totals only will be read, but that comparison of bids will be based on the correct summation of item totals obtained from the unit prices bid, as provided in MnDOT 1301.

(I)(We) propose to furnish all necessary machinery, equipment, tools, labor and other means of construction and to furnish all materials specified, in the manner and at the time prescribed, all according to the terms of the Contract and Plans, Specifications, and the Special Provisions forming a part of this.

(I)(We) further propose to do all Extra Work that may be required to complete the contemplated improvement, at unit prices or lump sums to be agreed upon in writing before starting such work, or if such prices or sums cannot be agreed upon, to do such work on a Force Account basis, as provided in MnDOT 1904.

(I)(We) further propose to execute the form of Contract within 7 days after receiving written notice of award, as provided in MnDOT 1306.

(I)(We) further propose to furnish a Payment Bond and a Performance Bond each equal to the Contract Amount as required by MN Statute § 574.26, as security for the construction and completion of the improvement according to the Plans, Specifications and Special Provisions as provided in MnDOT 1305.

(I)(We) further propose to do all work according to the Plans, Specifications and Special Provisions, and to renew or repair any work that may be rejected due to defective materials or workmanship, before completion and acceptance of the Project by Dakota County.

(I)(We) agree to all provisions of Minnesota Statutes, Section 181.59.

(I)(We) further propose to begin work and to prosecute and complete the same according to the time schedule set forth in the Special Provisions for the improvement.

(I)(We) assign to Dakota County all claims for overcharges as to goods and materials purchased in connection with this Project resulting from antitrust violations that arise under the antitrust laws of the United States and the antitrust laws of the State of Minnesota. This clause also applies to subcontractors and first tier suppliers under this Contract.

NOTICE TO ALL BIDDERS

To report bid rigging activities call:

1-800-424-9071

The U.S. Department of Transportation (DOT) operates the above toll-free "hotline" Monday through Friday, 8:00 a.m. to 5:00 p.m., eastern time. Anyone with knowledge of possible bid rigging, bidder collusion, or other fraudulent activities should use the "hotline" to report such activities.

The "hotline" is part of the DOT's continuing effort to identify and investigate highway construction contract fraud and abuse and is operated under the direction of the DOT Inspector General. All information will be treated confidentially and caller anonymity will be respected.

MINNESOTA DEPARTMENT OF TRANSPORTATION
NOTICE TO BIDDERS:
SUSPENSIONS/DEBARMENTS
THIS NOTICE APPLIES TO STATE-FUNDED AND FEDERALY-FUNDED PROJECTS

Do not use suspended or debarred parties as subcontractors or material suppliers on this project!
Both the federal government and the State of Minnesota suspend and debar vendors. Review the list of suspended and debarred vendors before submitting a bid or a request to sublet. If your bid is based on using a suspended or debarred vendor, you will not be entitled to additional compensation for replacing the suspended or debarred vendor with a qualified vendor.

State Suspensions and Debarments
The State of Minnesota's list of suspended and debarred vendors is maintained by the Minnesota Department of Administration, Office of State Procurement, and can be found at this link: https://mn.gov/admin/osp/government/suspended-debarred/index2.jsp . This list includes parties suspended and debarred by the Minnesota Department of Transportation and the Minnesota Department of Administration.

Federal Suspensions and Debarments
The federal government maintains a searchable database of suspensions and debarments, called the System for Award Management (SAM), which is found at this link: https://www.sam.gov/SAM/ . You can use the "Search Records" function without registering for an account.

September 29, 2023

Notice to Bidders

Certain specification sections that have been traditionally included in the proposals are now available over the internet. These specifications are also available by request from the Dakota County Transportation Department. This in no way reduces your responsibility to strictly adhere to these specifications.

The following specifications are required by this contract and are available by request from the Dakota County Transportation Department and via the Dakota County website at:

https://www.co.dakota.mn.us/Government/DoingBusiness/BidProposalsInformation/Pages/transportation.aspx

City Engineers Association of Minnesota – Standard Specifications (2025 Edition) 83 pages

This contract requires strict adherence to these specifications. It is the contractor's responsibility to make himself/herself familiar with them. As bidder of this contract, I acknowledge that I(we) am(are) familiar with the above documents and that we will adhere to the requirements of same for this contract.

_____

Signed Date

for: _____

Documents & Planholder's List

Contractors that bid on Dakota County projects must now access the plans, specifications, and support documents online. The documents and planholder's list are available at: https://questcdn.com

*****ONLY REGISTERED PLANHOLDERS WILL BE ALLOWED TO BID ON PROJECTS*****

There is no cost to register or view the Project plans and Proposal documents. To become a registered plan holder, you must create an account at: https://questcdn.com

CP 42-161
GRADING, BITUMINOUS SURFACING, ADA IMPROVEMENTS, RETAINING WALL

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STATE FUNDED ONLY CONSTRUCTION CONTRACTS
SPECIAL PROVISIONS DIVISION A - LABOR

I. INTRODUCTION

A. **Policy Statement.** It is in the public interest that public buildings and other public works projects be constructed and maintained by the best means and the highest quality of labor reasonably available and that persons working on public works projects be compensated according to the real value of the services they perform.[1]

B. **State and Federal Regulations Govern.** This Contract is subject to the Minnesota Prevailing Wage Act[2], Minnesota Fair Labor Standards Act[3], Minnesota Rules[4], Minnesota Department of Labor and Industry (MnDLI) Wage Decision(s), MnDLI Truck Rental Rate Schedule and the Federal Fair Labor Standards Act.[5]

C. **Purpose.** These provisions: (1) outline your obligations under state and federal laws, rules and regulations; (2) explain the requirements necessary to demonstrate compliance; and (3) explain the processes that the Department will undertake to ensure compliance.

D. **Questions or Resources.** Please visit the Minnesota Department of Transportation (MnDOT) Labor Compliance Unit (LCU) website at: www.dot.state.mn.us/const/labor.

II. DEFINITIONS

Many of the terms used in these provisions are defined in MnDOT's Standard Specifications for Construction,[6] unless defined below.

A. **Apprentice.** A Worker at least 16 years of age who is employed to learn an apprenticeable trade or occupation in a registered apprenticeship program.[7]

B. **Bona Fide.** Made or carried out in good faith; authentic.[8]

C. **Certified Payroll Report (CPR).** A report comprised of two components; (1) a payroll report, and (2) a statement of compliance report.[9]

D. **Contractor.** An individual or business entity that is engaged in construction or construction service-related activities including trucking activities either directly or indirectly through a Contract, or by Subcontract with the Prime Contractor, or by a further Subcontract with any other person or business entity performing Work.[10]

E. **Employer.** An individual, partnership, association, corporation, business trust, or other business entity that hires a Worker.[11]

F. **Fringe Benefit.** An employment benefit given in addition to a Worker's wages or salary.[12]

G. **Independent Truck Owner/Operator (ITO).** An individual, partnership, or principal stockholder of a corporation who owns or holds a vehicle under lease and who contracts that vehicle and the owner's services to an entity which provides construction services to a public works project.[13]

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[1] Minn. Stat. 177.41
[2] Minn. Stat. 177.41 to 177.44
[3] Minn. Stat. 177.21 to 177.35
[4] Minn. R. 5200.1000 to 5200.1120
[5] 29 U.S.C. 201, et seq.
[6] MnDOT Standard Specifications for Construction, Section 1103
[7] Minn. Stat. 178.011, Subdivision 2
[8] The American Heritage College Dictionary, Third Edition, 2000
[9] Minn. R. 5200.1106, Subpart 10
[10] Minn. R. 5200.1106, Subpart 2(D)
[11] Minn. Stat. 177.42, Subdivision 7
[12] The American Heritage College Dictionary, Third Edition, 2000
[13] Minn. R. 5200.1106, Subpart 7(A)

H. **Journeyworker.** A person who has attained a level of skill, abilities, and competencies recognized within and industry as having mastered the skills and competencies required for the trade or occupation.[14]

I. **Prime Contractor.** An individual or business entity that enters into a Contract with the Department.[15]

J. **Subcontract.** A Contract that assigns some obligations of a prior Contract to another party.[16]

K. **Substantially In Place.** Mineral aggregate is deposited on the project site directly or through spreaders where it can be spread from or compacted at the location where it was deposited.[17]

L. **Total Prevailing Wage Rate.** The sum of the prevailing hourly "basic" and "fringe" rate that is established in a Wage Decision.

M. **Trucking Broker (Broker).** An individual or business entity, the activities of which include, but are not limited to: contracting to provide trucking services in the construction industry to users (Contractor) of such services, contracting to obtain such services from providers (ITO/MTO) of trucking services, dispatching the providers (ITO/MTO) of the services to do Work as required by the users (Contractor) of the services, receiving payment from the users (Contractor) in consideration of the trucking services provided, and making payment to the providers (ITO/MTO) for the services.[18]

N. **Trucking Firm/Multiple Truck Owner (MTO).** Any legal business entity that owns more than one vehicle and hires the vehicles out for services to Trucking Brokers or Contractors on public works projects.[19] A MTO also includes: (1) a legal business entity that is not primarily owned by the operator of the truck; and (2) a legal business entity that owns one truck that is operated by two or more individuals.

O. **Truck Rental Rate Schedule.** A document prepared by the MnDLI through a Contractor survey process that identifies the required hourly Total Prevailing Wage Rate and operating cost for various types of trucks that perform hauling activities (Work) under a Contract that is funded in whole or in part with state funds.[20]

P. **Wage Decision.** A document prepared by the MnDLI through a Contractor survey process that identifies the required hourly basic rate of pay and hourly Fringe Benefits for various labor classifications that perform Work under a Contract that is funded in whole or in part with state funds.[21]

Q. **Work (Work).** All construction activities associated with a public works project, including any required hauling activities on-the-site-of or to-or-from a public works project and conducted pursuant to a Contract, regardless of whether the construction activity or Work is performed by the Prime Contractor, subcontractor, Trucking Broker, Trucking Firm (MTO), ITO, independent contractor, or employee or agent of any of the foregoing entities.[22]

R. **Worker (Laborer or Mechanic).** A Worker in a construction industry labor class identified in or pursuant to Minnesota Rules 5200.1100, Master Job Classifications.[23]

[14] Minn. Stat. 178.011, Subdivision 9
[15] Minn. R. 5200.1106, Subpart 2(C)
[16] The American Heritage College Dictionary, Third Edition, 2000
[17] Minn. R. 5200.1106, Subpart 5(C)
[18] Minn. R. 5200.1106, Subpart 7(C)
[19] Minn. R. 5200.1106, Subpart 7(B)
[20] Minn. R. 5200.1105
[21] Minn. R. 5200.1020 to 5200.1060
[22] Minn. R. 5200.1106, Subpart 2(A)
[23] Minn. R. 5200.1106, Subpart 5(A)

III. APPLICATION & UNDERSTANDING

A. **Provisions & Prevailing Wage Rates Apply.** These provisions, along with the prevailing Wage Decision(s) that are incorporated into the Contract, apply to all Contractors contracting to do all or part of the Work.[24]

B. **Truck Rental Rates Apply.** The Truck Rental Rate Schedule incorporated into the Contract applies to all hired trucking entities that perform covered hauling activities related to the project.[25]

C. **Prevailing Wage Terms Must Be Included in All Contracts.** The Prime Contractor is required to ensure that all subcontractors performing Work receive the Contract Wage Decision(s), Truck Rental Rate Schedule, and a copy of these provisions with their written Subcontracts, agreements and/or purchase orders.[26]

D. **Responsible for Understanding All Requirements.** Each Contractor is responsible for understanding all laws, rules, regulations, plans, and specifications that are incorporated physically, or by reference, into the Contract.[27]

E. **E-Verify.** For services valued in excess of $50,000, the Contractor certifies that as of the date of services performed on behalf of State, the Contractor will have implemented or be in the process of implementing the federal E-Verify program for all newly hired employees in the United States who will perform work under the contract. The Prime Contractor is responsible to collect all subcontractor certifications and may do so utilizing the E-Verify Subcontractor Certification Form available at http://www.mmd.admin.state.mn.us/doc/EverifySubCertForm.doc. All subcontractor certifications must be kept on file with the Prime Contractor and made available to the State upon request.

IV. VENDOR REGISTRATION

Vendor Registration Required. A Contractor that performs Work, supplies material, or product must be registered with MnDOT. The Contractor must complete and submit a vendor form[28] to the MnDOT LCU[29], along with all applicable documentation that is required. This registration process is separate and distinct from other state agency requirements.

V. LABOR CLASSIFICATIONS

A. **Labor Classification Assignment.** A Worker must be paid at least the Total Prevailing Wage Rate in the same or most similar trade or occupation.[30] To determine the appropriate labor classification for a Worker, a Contractor must refer to the Wage Decision(s) incorporated into the Contract, the labor classification descriptions for laborers and special crafts established in Minnesota Rules or the United States Department of Labor's Dictionary of Occupational Titles.[31]

B. **Labor Classification Clarification & Disputes.** A Contractor needing assistance in determining a labor classification must submit a Classification Clarification Request[32] to the MnDOT LCU for a written decision. If the Contractor chooses to contest the classification assignment, it must provide written notice to the MnDOT LCU. The MnDOT LCU will forward the matter to the MnDLI for a final ruling.

C. **Performing Work in Multiple Labor Classifications.** For Workers performing Work in multiple labor classifications, the Contractor must compensate at a minimum the Total Prevailing Wage Rate, and report the hours worked, in each applicable labor classification.[33]

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[24] Minn. Stat. 177.44, Subdivision 1
[25] Minn. Stat. 177.44, Subdivision 3
[26] MnDOT Standard Specifications for Construction, Section 1801
[27] MnDOT Standard Specifications for Construction, Section 1701
[28] www.dot.state.mn.us/const/labor/documents/forms/contractorform2016.pdf or www.dot.state.mn.us/const/labor/documents/forms/truckvendorform2016.pdf
[29] lcusupport.dot@state.mn.us
[30] Minn. Stat. 177.44, Subdivision 1
[31] Minn. R. 5200.1101 and 1102 and US DOL Dictionary of Occupational Titles
[32] http://www.dot.state.mn.us/const/labor/documents/forms/classification-clarification-request.pdf
[33] Minn. Stat. 177.44, Subdivision 1

VI. WAGE DECISION(S) & WAGE RATE(S)

A. **Applicability of a Highway and Heavy Wage Decision.** A highway and heavy Wage Decision applies to a Worker that is engaged in a construction activity or performing Work to construct or maintain a highway or other public works project, such as a road, street, airport runway, bridge, power plant, dam or utility[34] that is external to a sheltered enclosure (structure). This includes, but is not limited to, the following Work: site clearing; grading; excavating backfilling; paving; curbs; gutters; sidewalks; culverts; bridges; lighting systems; traffic management systems; installing of utilities out from an exterior meter; fuel islands; communication towers; or other activities similar to highway and/or heavy Work.

B. **Applicability of a Commercial Wage Decision.** A commercial Wage Decision applies to a Worker that is engaged in a construction activity or performing Work to construct a sheltered enclosure (structure) with walk-in access for the purpose of housing persons, machinery, equipment or supplies.[35] This includes, but is not limited to, the following Work: constructing foundations, aprons, stoops; framing walls; installing windows, doors, tiling, plumbing, electrical, HVAC systems; roofing; installing utilities into the building from an exterior meter.

C. **Pay According to Wage Decision(s).**

1. **Contract with One Wage Decision.** If the Contract contains one Wage Decision, the Contractor must examine the Wage Decision and compensate the Worker at a minimum the Total Prevailing Wage Rate for the appropriate labor classification(s).

2. **Contract with Multiple Highway/Heavy Wage Decisions.** If the Contract contains multiple Highway/Heavy Wage Decisions, the Contractor must examine each Wage Decision and compensate the Worker, at a minimum, the Total Prevailing Wage Rate that is the greatest[36] for the appropriate labor classification(s).

3. **Contract with Highway/Heavy and Commercial Wage Decision(s).** If the Contract contains a Highway/Heavy and Commercial Wage Decision(s), the Contractor must first determine which Wage Decision is applicable to the Worker. The Contractor must then compensate the Worker, at a minimum, the Total Prevailing Wage Rate for the appropriate labor classification(s).

D. **Must Pay Total Prevailing Wage Rate.** A Contractor must compensate each Worker, at a minimum, the Total Prevailing Wage Rate(s) for all hours worked on the project for the appropriate labor classification(s).[37]

E. **Missing Wage Rate.** If a Wage Decision fails to include a wage rate for a labor classification(s) that will be utilized on a project, the Contractor must obtain a wage rate prior to furnishing an estimate, quote or bid.[38]

1. **Wage Rate Request.** A Contractor must complete a Request for Rate Assignment form[39] and submit it to the MnDOT LCU[40] for processing.

2. **No Contract Price Adjustment for Missing Wage Rate.** If MnDLI determines that a higher wage rate applies, the Department will not reimburse the Contractor.

F. **Salaried Worker.** A salaried Worker is not exempt from these Provisions. A Contractor must convert the Worker's salary to an average hourly rate of pay by dividing the Worker's salary by the total number of hours Worked (government and non-government) during the pay period.[41] A salaried Worker must be included on a CPR.

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[34] Minn. R. 5200.1010, Subdivision 3
[35] United States Department of Labor All Agency Memorandum #130
[36] Minn. Stat. 177.44, Subdivision 4
[37] Minn. Stat. 177.44,Subdivision 1
[38] Minn. R. 5200.1030, Subpart 2a(C)
[39] http://www.dot.state.mn.us/const/labor/documents/forms/request-for-rate-assignment.doc
[40] lcusupport.dot@state.mn.us
[41] Refer to Appendix A

G. **Reduction in Standard (Private) Contractual Regular Rate of Pay Prohibited.** A Contractor must not reduce a Worker's standard, contractual regular rate of pay when the prevailing wage rate(s) certified by the MnDLI is less.[42]

H. **Prohibited Payment Practices.** A Contractor is prohibited from taking (accepting) a rebate for the purpose of reducing or otherwise decreasing the value of the compensation paid.[43]

I. **Prohibited Deductions.** Direct or indirect deductions from a Worker's wages will not be allowed for:[44]

1. **Uniforms.** Purchased or rented uniforms or specifically designed clothing that is required by the Employer, by the nature of employment, or by statute, or as a condition of employment.

2. **Equipment.** Purchased or rented equipment used in employment. The cost of the Worker's use of equipment used outside of employment, such as tools, a motor vehicle, cell phone, may be deducted only if an agreement between the Employer and employee existed prior to the purchase of the equipment.

3. **Supplies.** Consumable supplies required in the course of employment.

4. **Travel Expenses.** Travel expenses in the course of employment except those incurred in traveling to and from the employee's residence and place of employment.

J. **Permissible Payroll Deductions.** Deduction(s) voluntarily consented to, or authorized, by the Worker in writing, and in advance of the period in which work is done, is allowable, along as the deduction(s) is bona fide and in the best interested of the Worker.[45]

VII. HOURS OF WORK

A. **Work Performed Under the Contract.** A Worker performing Work is subject to prevailing wage for all hours associated with the Contract[46], unless the Worker is exempt under state law.[47]

B. **Wait Time Subject to Prevailing Wage.** A Worker who is required to remain on the project and is waiting to Work because of the fault of the Contractor is considered "engaged to wait" and subject to prevailing wage for the time spent, unless the Worker is completely relieved of duty and free to leave the project for a defined period of time.[48]

C. **On-Call Time Subject to Prevailing Wage.** A Contractor that requires a Worker to remain on the project (or so close to the project that the Worker cannot use the time effectively for the Worker's own purposes) the Worker is considered "on-call."[49] On-call time is paid time, unless the Worker is completely relieved of duty and free to leave the project for a defined period of time.[50]

D. **Travel Time (Compensable).** The following examples are considered hours worked and the Employer must compensate the Worker under the Fair Labor Standards Act:

1. **Travel all in a Day's Work.** Time a Worker spends traveling from place-of-work to Project Site, Project Site to place-of-work, or between project sites, during working hours.[51]

2. **Travel Away from Home Community (One Day).** Time a Worker spends traveling to - and returning from - the other city. The Employer is allowed to subtract the time the Worker would normally spend traveling from home to work.[52] **(see Subpart E(1) of this section)**

[42] Minn. Stat. 181.03, Subdivision 1(2)
[43] Minn. R. 5200.1106, Subpart 6
[44] Minn. Stat. 177.24, Subdivision 4(1-4); Minn. R. 5200.1106, subpart 4
[45] United States Department of Labor Field Operation Handbook, Section 15f07(b)
[46] Minn. Stat. 177.44, Subdivision 1
[47] Minn. Stat. 177.44, Subdivision 2 or Minn. R. 5200.1106, Subpart 4
[48] United States Department of Labor Fact Sheet #22
[49] Minn. R. 5200.0120, Subpart 2
[50] Minn. R. 5200.0120, Subpart 3
[51] United States Department of Labor Fact Sheet #22
[52] United States Department of Labor Fact Sheet #22

3. **Travel Away from Home Community (Overnight).** Time a Worker spends traveling away from - and back to – their home community. The Employer is allowed to subtract the time the Worker would normally spend traveling from home to work.[53] **(see Subpart E(1) of this section)**

E. **Travel Time (Non-Compensable).** The following examples are not considered hours worked and the Employer does not need to compensate the Worker:

1. **Travel from Home to Work.** Time a Worker spends traveling from home-to-work, or work-to-home, before the workday begins, or after the workday ends.[54]

2. **Passenger in a Vehicle.** Time a Worker spends as a passenger in a vehicle traveling away from home community, outside of regular working hours, on any day of the week. This exemption only applies to a Worker that is not performing any work-related duties during the time as a passenger.[55]

VIII. FRINGE BENEFITS

A. **Funded Fringe Benefit Plan Criteria.** In order for a funded Fringe Benefit (e.g., health/medical insurance, disability insurance, life insurance, pension, etc.) to be considered and creditable towards the Total Prevailing Wage Rate it must be:[56]

1. a contribution irrevocably made by a Contractor on behalf of an Worker to a financially responsible trustee, third person, fund, plan, or program;

2. carried out under a financially responsible plan or program;

3. legally enforceable;

4. communicated in writing to the Worker; and

5. made available to the Worker once he/she has met all eligibility requirements.

B. **Unfunded Fringe Benefit Plan Criteria.** In order for a unfunded Fringe Benefit (e.g., vacation, holiday, sick leave, etc.) to be considered and creditable towards the Total Prevailing Wage Rate it must be:[57]

1. reasonably anticipated to provide a benefit;

2. a commitment that can be legally enforced;

3. carried out under a financially responsible plan or program;

4. communicated in writing to the Worker; and

5. made available to the Worker once he/she has met all eligibility requirements.

C. **Fringe Benefit Contributions for Hours Worked.** A Contractor that provides Fringe Benefits to a Worker must make contributions, not less than quarterly[58], for all hours worked,[59] including overtime hours, unless it's a defined benefit or contribution plan that provides for immediate participation and immediate or essentially immediate vesting **(see subpart D2 of this section)**.[60]

[53] United States Department of Labor Fact Sheet #22
[54] United States Department of Labor Fact Sheet #22
[55] United States Department of Labor Fact Sheet #22
[56] Minn. Stat. 177.42, Subdivision 6
[57] Minn. Stat. 177.42, Subdivision 6
[58] 29 CRF, Part 5.5(a)(1)(i)
[59] Government and non-government Work
[60] United States Department of Labor Field Operation Handbook, Section 15f14(f)(1)

D. **Hourly Fringe Benefit Credit.** An hourly Fringe Benefit credit toward the Total Prevailing Wage Rate must be determined separately for each Worker[61] based on one or more of the following methods:

1. **Monthly, Quarterly or Annual Computation Methods.** A Contractor must compute its monthly, quarterly or annual cost[62] of a particular Fringe Benefit and divide that amount by the estimated total number of hours worked (government and non-government) during the time frame used.[63] Typical plans that require monthly, quarterly or annual computations include but are not limited to: health/medical insurance, disability insurance, life insurance, vacation, holiday, sick leave and defined benefit or contribution pension plans that do not provide for immediate participation and immediate or essentially immediate vesting.

2. **Fringe Benefit Credit not Requiring Monthly, Quarterly or Annual Computation Methods.** A defined benefit or contribution pension plan that allows for a higher hourly rate of contribution for government work (prevailing wage) than non-government (non-prevailing wage) will be fully credited only if the plan provides for immediate participation and immediate or essentially immediate vesting.[64]

E. **Wages In Lieu of Fringe Benefits.** A Contractor that does not provide full Fringe Benefits must compensate a Worker the difference between the Total Prevailing Wage Rate and the rate actually paid for the appropriate labor classification(s).[65] The compensation paid is considered wages and subject to tax liabilities.

1. **Overtime**. The cash equivalent (wages paid) made in lieu of Fringe Benefits is excluded from the overtime calculation requirement, unless the cash equivalent (wages paid) is part of the Worker's standard straight time wage.[66]

F. **Administrative Costs Not Creditable.** Administrative expenses incurred by a Contractor in connection with the administration of a Bona Fide Fringe Benefit plan are not creditable towards the Total Prevailing Wage Rate.[67]

G. **Federal, State & Local Fringe Benefit Credit Prohibited.** No credit is allowed for benefits required by federal, state or local law, such as: worker's compensation, unemployment compensation, and social security contributions.[68]

H. **Transportation, Board and Lodging Costs Not Fringe Benefits.** Payments for the cost of transportation, board and lodging are not Fringe Benefits.[69] A Contractor that sends a Worker away from home to perform work outside the Worker's normal commuting distance so that, as a practical matter, the Worker can return home on the weekend only, must incur the cost of transportation, meals and lodging.[70]

IX. OVERTIME

A. **Overtime after 8 Hours per Day or 40 Hours per Week.** A Contractor must not permit or require a Worker to work longer than the prevailing hours of labor unless the Worker is paid for all hours in excess of the prevailing hours at a rate of at least 1.5 times the hourly basic rate of pay.[71] The prevailing hours of labor is defined as not more than 8 hours per day and more than 40 hours per week.[72]

[61] United States Department of Labor Field Operation Handbook, Section 15f11(c)
[62] United States Department of Labor Field Operation Handbook, Section 15f12(a-d)
[63] Refer to Appendix B
[64] United States Department of Labor Field Operation Handbook, Section 15f14(f)(1)
[65] United States Department of Labor Field Operation Handbook, Section 15f11(c)
[66] 2010 United States Department of Labor Field Operation Handbook, Section 15k06
[67] United States Department of Labor Field Operation Handbook, Section 15f18
[68] Minn. Stat. 177.42, Subdivision 6
[69] Minn. Stat. 177.44, Subdivision 4(4); Minn. R. 5200.0900, Subpart 1; Minn. R. 5200.0700, Subpart 1.
[70] 2010 United States Department of Labor Field Operation Handbook, Section 15f19
[71] Minn. Stat. 177.44, Subdivision 1 and Refer to Appendix D
[72] Minn. Stat. 177.42, Subdivision 4

B. **Wages in Lieu of Fringe Benefits Overtime.** Wages paid in Lieu of Fringe Benefits must be paid for all hours worked under the contract.

C. **Multiple Labor Classifications and Overtime.** A Worker employed in multiple labor classifications throughout a workweek must be compensated at the applicable labor classification overtime rate in effect during the hours worked in excess of 8 hours per day or 40 hours per week.

D. **Federal Fair Labor Standards Act (FLSA) and Overtime.** A Contractor subject to the FLSA may be subject to additional overtime compensation requirements.

X. PAYROLLS AND STATEMENTS

A. **Reporting.** Each Contractor that is performing Work must submit a CPR(s) to the Department.

1. **Payroll Report (Paper).** Each Contractor performing Work must submit a paper (written) payroll report to the Department. The payroll report is available on the MnDOT LCU website.[73]

2. **Statement of Compliance (Paper).** Each Contractor's paper (written) payroll report must include a paper (written) "Statement of Compliance Form". The "Statement of Compliance Form" must: (1) state whether or not Fringe Benefits are provided to a Worker; (2) provide a description of each benefit, the hourly contribution made on behalf of each Worker, along with fund/plan information; and (3) a signature attesting that the payroll and Fringe Benefit information provided is truthful and accurate.[74]

3. **Electronic Reporting.** If the Contract is subject to electronic reporting, each Contractor performing Work must submit a CPR(s) using the AASHTOWare, Civil Rights Labor (CRL) system. Refer to the **Special Provisions Division S – "Electronic Submission of Payrolls and Statements"** which is incorporated into and found elsewhere in the Contract for detailed requirements.

B. **Biweekly Payroll Reporting and Payment of Wages.** A CPR(s) must be submitted no later than 14 calendar days after the end of each Contractor's pay period[75] to the Department. A Contractor must pay its employees at least once every 14 calendar days.[76]

C. **Payroll Report Data.** Each payroll report must include all Workers that performed Work and provide at a minimum the following information:[77]

1. Contractor's name, address, and telephone number.
2. State project number.
3. Contract number (if applicable).
4. Project number.
5. Payroll report number.
6. Project location.
7. Workweek end date.
8. Each Worker's name, home address, and social security number.[78]
9. Labor classification(s) title(s) and optional three-digit code for each Worker.

[73] www.dot.state.mn.us/const/labor/certifiedpayroll.html
[74] Minn. R. 5200.1106, Subpart 10
[75] Minn. Stat. 177.43, Subdivision 3
[76] Minn. Stat. 177.30 (a)(4)
[77] Minn. Stat. 177.30 (a)(1-4) and Minn. R. 5200.1106, Subpart 10
[78] Minn. R. 5200.1106, Subpart 10A & Minn. Stat. 13.355, Subdivision 1

10. Hours worked daily and weekly in each labor classification, including overtime hours, for each Worker.

11. Wage rate paid to each Worker for straight time and overtime.

12. Authorized legal deductions for each Worker.

13. Project gross amount, weekly gross amount, and net wages paid to each Worker.

D. **Prime Contractor to Ensure Compliance.** The Prime Contractor must review the CPR(s) submitted by each lower tier Contractor and sign the "Statement of Compliance Form".[79] The Prime Contractor must ensure that each lower tier Contractor's CPR(s) include all Workers that performed Work and accurately reflect labor classifications, hours worked, regular and overtime rates of pay, gross earnings for the project and Fringe Benefits.[80]

E. **Retention of CPR(s).** The Prime Contractor must keep its written CPR(s), including those of all lower tier Contractors, for three (3) years after the final payment is issued.[81]

F. **Retention of Employment-Related Records.** Each Contractor must keep employee records, including, but not limited to: Fringe Benefit statements, time cards, payroll ledgers, check registers and canceled checks[82] for at least three (3) years after the final payment is issued.[83] Other laws may have longer retention requirements.

G. **Detailed Earning Statement.** At the end of each pay period, each Contractor must provide every Worker, in writing or by electronic means, an accurate, detailed earnings statement.[84]

H. **Reports and Records Request.** Upon a request from the Department, the Prime Contractor must promptly furnish copies of CPR(s) for its Workers and those of all lower tier Contractors, along with employment-related records, documents, and agreements that the Department considers necessary to determine compliance.[85]

XI. APPRENTICES, TRAINEES AND HELPERS

A. **Apprentice.** An Apprentice will be permitted to Work at less than the prevailing basic hourly rate only if the Apprentice is:

1. Registered with the U.S. Department of Labor (DOL), Bureau of Apprenticeship and Training or MnDLI Division of Voluntary Apprenticeship.[86]

2. Performing Work of the trade, as described in the apprenticeship agreement.[87]

3. Compensated according to the rate specified in the program for the level of progress.[88]

4. Supervised by a Journeyworker from the same company, in accordance with the program ratio requirements.[89]

B. **Ratio Requirement.** If an approved apprenticeship program fails to define a ratio allowance, the first Apprentice must be supervised by a Journeyworker within the same trade or occupation. Any subsequent Apprentice must be supervised by an additional three Journeyworkers.[90]

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[79] MnDOT Standard Specifications for Construction, Section 1701
[80] MnDOT Standard Specifications for Construction, Section 1801
[81] Minn. Stat. 177.30 (a)(5)
[82] Minn. R. 5200.1106, Subpart 10
[83] Minn. Stat. 177.30 (a)(5)
[84] Minn. Stat. 181.032
[85] Minn. Stat. 177.44, Subdivision 7; Minn. Stat. 177.33(a)(5)
[86] Minn. R. 5200.1070, Subpart 1
[87] 29 CFR, Part 29.2(j)
[88] Minn. R. 5200.1070, Subpart 1 and Refer to Appendix C
[89] Minn. Stat. 178.036, Subdivision 5
[90] Minn. Stat. 178.036, Subdivision 5

C. **Failure to Comply with Apprenticeship Requirements.** If a Contractor fails to demonstrate compliance with the terms established in this section, the Contractor must compensate the Apprentice not less than the applicable Total Prevailing Wage Rate for the actual classification of labor performed.[91]

D. **Trainee and Helper.** A trainee or helper is not exempt from prevailing wage under state law. The Contractor must assign the trainee or helper a labor classification that is the "same or most similar"[92] and compensate the trainee or helper for the actual Work performed regardless of the trainee's or helper's skill level.

XII. INDEPENDENT CONTRACTORS, OWNERS, SUPERVISORS, AND FOREMAN

A. **Independent Contractor.** An independent contractor (IC) that is not an Independent Truck Owner/Operator (ITO), who is performing Work must be properly classified and compensated.[93] The IC must submit a CPR(s) to the Department. If the IC does not receive an hourly wage, but instead a weekly, biweekly, monthly or quarterly distribution for performance, the IC must calculate its hourly rate of pay by dividing the weekly, biweekly, monthly, or quarterly company distribution by all hours worked during that time frame and report the information on a CPR. If necessary, the Department may request documentation from the IC to determine how the hourly wage rate was calculated.[94]

B. **Owners, Supervisors and Foreman.** An owner, supervisor, or foreman performing Work is subject to prevailing wage and must be properly classified, compensated and reported.[95]

XIII. TRUCKING

A. **Covered Hauling Activities.** A Contractor must ensure that all Workers, including hired Trucking Brokers, MTOs and ITOs are paid the applicable Total Prevailing Wage Rate or truck rental rate for the following Work:

1. The hauling of material to and from a Prime Contractor's material operation that is not a separately owned commercial establishment.[96]

2. The hauling of any or all stockpiled or excavated materials on the project work site to other locations on the same project even if the truck leaves the work site at some point.[97]

3. The delivery of materials from a non-commercial establishment to the project and the return haul to the starting location either empty or loaded.[98]

4. The delivery of materials from another construction project site to the public works project and the return haul, either empty or loaded. Construction projects are not considered commercial establishments.[99]

5. The hauling required to remove any materials from the project to a location off the project site and the return haul, either empty or loaded from other than a commercial establishment.[100]

6. The delivery of materials or products by trucks hired by a Contractor, subcontractor, or agent thereof, from a commercial establishment.[101]

[91] Minn. R. 5200.1070, Subpart 3
[92] Minn. Stat. 177.44, Subdivision 1
[93] Minn. Stat. 177.44, Subdivision 1
[94] Minn. Stat. 177.30(a)(5); Minn. Stat. 181.723; United States Department of Labor Field Operation Handbook, Section 15f08
[95] Minn. Stat. 177.44, Subdivision 1
[96] ALJ Findings of Fact, Conclusions of Law, and Recommendation, Conclusions (7), Case #12-3000-11993-2
[97] Minn. R. 5200.1106, Subpart 3B(1)
[98] Minn. R. 5200.1106, Subpart 3B(2)
[99] Minn. R. 5200.1106, Subpart 3B(3)
[100] Minn. R. 5200.1106, Subpart 3B(4)
[101] Minn. R. 5200.1106, Subpart 3B(5)

7. The delivery of mineral aggregate materials by or for a commercial establishment, which is deposited "Substantially in Place", and the return haul to the off-site facility either empty or loaded.[102]

B. **Hauling Activities Not Subject to Prevailing Wage or Truck Rental Rates.** A Contractor may exclude a Worker, including hired Trucking Brokers, MTOs and ITOs from prevailing wage or truck rental rates for the Work described in (1-2) of this section. However, this Work is considered hours worked and subject to standard compensation.

1. The delivery of processed or manufactured goods to a public works project by Workers hired by or employed directly for a commercial establishment, unless it is the delivery of mineral aggregate that is deposited Substantially in Place.[103]

2. The delivery of oil offsite, to a Prime Contractor's permanent (commercial) asphalt mixing facility that is not to, from, or on the project Work site.[104]

C. **Repair, Maintenance & Waiting to Load Time.** An ITO and MTO must be paid the truck rental rate for time spent repairing or maintaining equipment, and for waiting to load or unload if the repair, maintenance, or wait time is the fault of the Trucking Broker, Contractor, its agent or employees.[105]

D. **Month End Trucking Report.** A Contractor that acquires the services of an ITO or MTO must submit a "MnDOT – MTO and/or ITO Month-End Trucking Report", and a "MnDOT – Month-End Trucking Statement of Compliance Form" to the Department for each month hauling activities are performed under the Contract.[106] The forms are available on the MnDOT LCU website.[107]

E. **Broker Fee.** A Trucking Broker contracting to provide trucking services to a user (Contractor)[108] must receive payment from the user (Contractor) in consideration of the trucking services provided.[109] Broker fees must not be charged to ITOs and MTOs.[110]

F. **MTO Request to Sublet Form.** A Contractor that hires a MTO must provide a "MTO Request to Sublet Form" to the Department. The form is available on the MnDOT LCU website.[111]

XIV. OFF-SITE FACILITIES

A. **Off-Site Facility Activities Subject to Prevailing Wage.** A Contractor must ensure that all Workers performing Work at a covered off-site facility are paid the applicable Total Prevailing Wage Rate for the following Work:

1. The processing or manufacturing of material at a Prime Contractor's off-site facility that is not a separately held commercial establishment.[112]

2. The processing or manufacturing of material at an off-site facility that is not considered a commercial establishment.[113]

B. **Off-Site Facility Activities Not Subject to Prevailing Wage.** A Contractor may exclude a Worker from prevailing wage for the following work:

1. The processing or manufacturing of material or products by or for a commercial establishment.[114]

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[102] Minn. R. 5200.1106, Subpart 3B(6)
[103] Minn. R. 5200.1106, Subpart 4(C)
[104] J.D. Donovan, Inc. vs. Minnesota Department of Transportation, 878 N.W.2d 1 (2016)
[105] Minn. R. 5200.1106, Subpart 8(A)(1)
[106] Minn. R. 5200.1106, Subpart 10
[107] http://www.dot.state.mn.us/const/labor/forms.html
[108] Minn. R. 5200.1106, Subpart 7(C)(1)
[109] Minn. R. 5200.1106, Subpart 7(C)(4)
[110] Minn. R. 5200.1106, Subpart 6, Minn. R. 5200.1106, Subpart 7(A)(3)
[111] http://www.dot.state.mn.us/const/labor/documents/Contractdocs/mtosubletform.pdf
[112] ALJ Findings of Fact, Conclusions of Law, and Recommendation, Conclusions (7), Case #12-3000-11993-2
[113] Minn. R. 5200.1106, Subpart 3(A)
[114] Minn. R. 5200.1106, Subpart 4(A)

2. The work performed by Workers employed by the owner or lessee of a gravel or borrow pit that is a commercial establishment, even if the screening, washing or crushing machines are portable.[115]

XV. SUBCONTRACTING PART OF THE CONTRACT

The Prime Contractor must include the Contract Special Provisions, Wage Decision(s) and Truck Rental Rate Schedule in all Subcontracts, agreements and purchase orders with lower tier Contractors.[116] This requirement also applies to all lower tier subcontractors.

XVI. SITE OF WORK REQUIREMENTS

A. **Poster Board.** The Prime Contractor must construct and display a poster board containing all required posters. The poster board must be accurate, legible, and accessible to all project Workers from the first day of Work until the project is one hundred percent (100%) complete.[117] A poster board at an off-site location, or inside a construction trailer, does not meet this requirement.

B. **How to Obtain a Poster Board.** The Prime Contractor may obtain the required posters and the necessary contact information that is required to be inserted on each poster by visiting the MnDOT LCU website.[118]

C. **Employee Interviews.** The Contractor must permit representatives from the Department or other governmental entities[119] to interview Workers at any time during working hours on the project.[120]

XVII. CHILD LABOR

A. **No Worker under the Age of 18.** No Worker under the age of 18 is allowed to perform Work on a Project Site, except pursuant to Section XVII B below.[121]

B. **Parental Supervision.** A Worker under the age of 18 may perform Work on a Project Site if all of the following criteria are met:

1. The Contractor (Employer) is not subject to FLSA.
2. The Worker is employed in a corporation owned solely by one or both parents.
3. The Worker is supervised by the parent(s).
4. The Worker is not working in a hazardous occupation.[122]

C. **Removal of Minor from Project.** The Engineer or inspector may remove a Worker that appears to be under the age of 18 from the Project Site until the Contractor or Worker can demonstrate proof of age and compliance with all applicable federal and state regulations.[123]

XVIII. NON-COMPLIANCE AND ENFORCEMENT

A. **Case-by-Case Enforcement.** The Department has the authority to enforce the prevailing wage law on a case-by-case.[124]

B. **Prime Contractor Responsible for Unpaid Wages.** The Prime Contractor will be held liable for any unpaid wages to its Workers or those of any lower tier Contractor.[125]

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[115] Minn. R. 5200.1106, Subpart 4(B)
[116] MnDOT Standard Specifications for Construction, Section 1801
[117] Minn. Stat. 177.44, Subdivision 5
[118] www.dot.state.mn.us/const/labor/posterboards
[119] MnDLI, U.S. DOL, , U.S. Department of Transportation, Federal Highways Administration
[120] MnDOT Standard Specifications for Construction, Section 1511
[121] Minn. R. 5200.0910, Subpart F; 29 CFR Part 570.2(a)(ii)
[122] Minn. R. 5200.0930, Subpart 4
[123] Minn. Stat. 181A.06, Subdivision 4; MnDOT Standard Specifications for Construction, Section 1701
[124] *See* International Union of Operating Engineers, Local 49 v. MnDOT, No. C6-97-1582, 1998 WL 74281, at *2 (Minn. App. Feb. 24, 1998)
[125] MnDOT Standard Specifications for Construction, Section 1801

C. **Enforcement Options.** If evidence shows that a Contractor has violated prevailing wage requirements, or these Special Provisions, the Department may, after written notice, implement one or more of the following:

1. **Withholding Payment.** The Department may withhold from the Prime Contractor payments relating to prevailing wage underpayments.[126]

2. **Non-Responsible Contractor.** The Department may reject a bid from a Prime Contractor that has received two (2) or more Determination Letters within a three (3) year period from the Department finding an underpayment by the Contractor to its own employees.[127]

3. **Default.** The Department may take the prosecution of the Work out of the hands of the Prime Contractor, place the Contractor in default, and terminate the Contract for failure to comply.[128]

4. **Suspension or Debarment.** The Department may refer violations and matters of non-compliance by a Contractor to the Minnesota Department of Administration for suspension or debarment proceedings.[129]

5. **County Attorney.** The Department may refer suspected criminal violations by Contractor to the appropriate local county attorney for prosecution.[130]

6. **Financial Penalties.** Any Contractor who violates the state prevailing wage law is guilty of a misdemeanor and may be fined not more than $300 or imprisoned not more than 90 days or both. Each day that the violation continues is a separate offense.[131] A Contractor may be fined up to $1,000 for each failure to maintain records.[132]

7. **False Claims Act Violation.** All required payroll and certification reports are legal documents; knowing falsification of the documents by a Contractor may result in civil action and/or criminal prosecution[133] and may be grounds for debarment proceedings.[134]

8. **Compliance Order.** The Department may request that MnDLI issue a compliance order to a Contractor for violations of the state prevailing wage law. If the Contractor is found to have committed a violation, liquidated damages and other costs may be assessed against the Employer.[135]

9. **Private Right of Action.** The Department may direct an employee to pursue a civil action in district court against its Employer for failure to comply with the proper payment of wages.[136] If the Employer is found to have committed a violation, liquidated damages and other costs may be assessed against the Employer.[137]

10. **Fringe Benefits; Misdemeanor.** A Contractor that is obligated to deposit Fringe Benefit contributions on behalf of a Worker into a financially responsible trustee, third person, fund, plan, or program and fails to make timely contributions is guilty of a gross misdemeanor or other violations under federal law. [138]

[126] MnDOT Standard Specifications for Construction, Section 1906
[127] Minn. Stat. 16C.285
[128] MnDOT Standard Specifications for Construction, Section 1808
[129] Minn. R. 1230.1150, Subpart 2(A)(4)
[130] Minn. Stat. 177.44, Subdivision 7
[131] Minn. Stat. 177.44, Subdivision 6
[132] Minn. Stat. 177.30(b)
[133] Minn. Stat. 15C.02; , Minn. Stat. 161.315; Minn. Stat. 177.32; Minn. Stat. 177.43, Subdivision 5, Minn. Stat. 609.63
[134] Minn. Stat. 161.315 and Minn. Stat. 609.63
[135] Minn. Stat. 177.43, Subdivision 6a
[136] Minn. Stat. 177.27, Subdivision 8
[137] Minn. Stat. 177.27, Subdivision 10
[138] Minn. Stat. 181.74, Subdivision 1

THE FOLLOWING APPENDICES ARE FOR EXPLANATORY PURPOSES ONLY. FOR SPECIFIC QUESTIONS, PLEASE CONTACT LCU.[139]

APPENDIX A SALARIED WORKER WAGE COMPUTATION

Salaried Workers. In order to convert the Worker's salary into an hourly rate of pay, divide the employee's weekly, bi-weekly or monthly earnings by the total number of hours Worked (government and non-government), including overtime hours for the time period used.[140]

$800.00 (weekly salary) / 40 (total weekly hours) = $20.00

$1,600.00 (bi-weekly salary) / 80 (total bi-weekly hours) = $20.00

$3,200.00 (monthly salary) / 160 (total monthly hours) = $20.00

APPENDIX B FRINGE BENEFIT CREDIT

Fringe Benefit Credit Calculation. The Employer contributes monthly ($600.00) for medical insurance on behalf of a Worker. In order to calculate the projected hourly credit that the Employer can take, the Employer should: (1) add the monthly contributions for each Worker, (2) multiply by twelve (12) months, and (3) divide the total cost of the benefit by the total hours worked (government and non-government)[141] (see annual example below). Quarterly and monthly examples are also provided.

Annual: **($600.00) x (12 months) = $7,200.00**
($7,200.00) / (2080 hours) = $3.46 per hour credit

Quarterly: **($600.00) x (3 months) = $1,800.00**
($1,800.00) / (520 hours) = $3.46 per hour credit

Monthly: **($600.00) x (1 month) = $600.00**
($600.00) / (173 hours) = $3.47 per hour credit

End of Year Self-Audit. At the end of the calendar year, the Contractor must conduct an audit to determine if the hourly fringe benefit credit taken for each Worker was accurate. The Contractor must calculate the total annual fringe benefits paid on behalf of each Worker and divide that amount by the total number of hours worked (government and non-government) by that Worker. If the hourly fringe benefit credit was less than what was reported on a CPR, the contractor must compensate the Worker the hourly difference, multiplied by the total hours worked under the Contract.

APPENDIX C APPRENTICE RATE OF PAY

State Requirements. The Apprentice must be compensated according his/her level of progress, which is expressed as a percentage of the Journeyworker wage that is established in the program.

Journeyworker Wage Established in Program = $25.00

Apprentice Level of Progress = 60%

($25.00) * (.60) = $15.00

[139] lcusupport.dot@state.mn.us or (651) 366-4238
[140] United States Department of Labor Field Operation Handbook, Section 15f08
[141] United States Department of Labor Field Operation Handbook, Section 15f12

Overtime Hourly Rate of Pay. Here is the formula to calculate the required minimum overtime.[142]

OT = (PW * .5) + (HW) + (RF) + (F)

Definition of OT Acronyms

OT: overtime.
PW: the basic hourly prevailing wage rate established in a federal and/or state prevailing Wage Decision.
HW: hourly wage rate paid to a Worker.
RF: remaining fringe, which means the difference between the Contract hourly Fringe Benefit rate and the actual hourly Fringe Benefit rate paid by the Contractor to a third party on behalf of a Worker.
F: Fringe Benefit contributions that are bona-fide and contributed by an Employer to a third party on behalf of a Worker.

The Total Prevailing Wage Rate for a Worker is $30.00, which is comprised of an hourly basic rate of $20.00 and an hourly fringe rate of $10.00. The table below includes various hourly basic and Fringe Benefit payments that a Contractor could potentially make to a Worker.

OT CALCULATION FORMULA AND EXAMPLES
OT = (PW * .5) + (HW) + (RF) + (F)

Hourly Wage Paid	Fringe Benefits Paid	Payment To Employee (PW * .5) + (HW) + (RF)	Fringe Payment + (F)	Total Payment = OT
$ 20.00	$ 10.00	($ 20.00 * .5) + ($ 20.00) + ($ 0.00) = $ 30.00	+ $ 10.00	= $ 40.00
$ 18.00	$ 12.00	($ 20.00 * .5) + ($ 18.00) + ($ 0.00) = $ 28.00	+ $ 12.00	= $ 40.00
$ 22.00	$ 8.00	($ 20.00 * .5) + ($ 22.00) + ($ 0.00) = $ 32.00	+ $ 8.00	= $ 40.00
$ 30.00	$ 0.00	($ 20.00 * .5) + ($ 30.00) + ($ 0.00) = $ 40.00	+ $ 0.00	= $ 40.00
$ 24.00	$ 4.00	($ 20.00 * .5) + ($ 24.00) + ($ 2.00) = $ 36.00	+ $ 4.00	= $ 40.00

Regarding the last example the Contractor would be required to pay an additional $2.00 to the Worker, which is wages in lieu of fringe for a straight time hourly rate of $26.00 not $24.00.

A Contractor subject to the Fair Labor Standards Act (FLSA) may be subject to additional overtime compensation requirements.

[142] United States Department of Labor Field Operation Handbook, Section 15k

NOTICE TO BIDDERS

Minnesota Statutes require prompt payment to subcontractors:

Minn. Stat. § 471.425 PROMPT PAYMENT OF LOCAL GOVERNMENT BILLS.

Subdivision 1. **Definitions.** For the purposes of this section, the following terms have the meanings here given them.

. . . (d) "Municipality" means any home rule charter or statutory city, county, town, school district, political subdivision or agency of local government. "Municipality" means the Metropolitan Council or any board or agency created under chapter 473.

. . . Subd. 4a. **Prompt payment to subcontractors**. Each contract of a municipality must require the prime contractor to pay any subcontractor within ten days of the prime contractor's receipt of payment from the municipality for undisputed services provided by the subcontractor. The contract must require the prime contractor to 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. 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. 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.

Minn. Stat. § 15.72 PROGRESS PAYMENTS ON PUBLIC CONTRACTS; RETAINAGE.

. . . Subd. 2. **Retainage.** . . . (c) A contractor on a public contract for a public improvement must pay all remaining retainage to its subcontractors no later than ten days after receiving payment of retainage from the public contracting agency, unless there is a dispute about the work under a subcontract. If there is a dispute about the work under a subcontract, the contractor must pay out retainage to any subcontractor whose work is not involved in the dispute, and must provide a written statement detailing the amount and reason for the withholding to the affected subcontractor.

MINNESOTA DEPARTMENT OF LABOR AND INDUSTRY PREVAILING WAGES FOR STATE FUNDED CONSTRUCTION PROJECTS

THIS NOTICE MUST BE POSTED ON THE JOBSITE IN A CONSPICUOUS PLACE

Construction Type: Highway and Heavy

Region Number: 09

Counties within region:

- ANOKA-02
- CARVER-10
- CHISAGO-13
- DAKOTA-19
- HENNEPIN-27
- RAMSEY-62
- SCOTT-70
- WASHINGTON-82

Effective: 2025-11-03 Revised: 2025-12-01

This project is covered by Minnesota prevailing wage statutes. Wage rates listed below are the minimum hourly rates to be paid on this project.

All hours worked in excess of eight (8) hours per day or forty (40) hours per week shall be paid at a rate of one and one half (1 1/2) times the basic hourly rate. *Note: Overtime pay after eight (8) hours on the project must be paid even if the worker does not exceed forty (40) hours in the work week.*

Violations on MnDOT highways and road projects should be reported to:

Department of Transportation
Office of Construction
Transportation Building MS650
John Ireland Blvd
St. Paul, MN 55155
(651) 366-4209

All other prevailing wage violations and questions should be sent to:

Department of Labor and Industry
Prevailing Wage Section
443 Lafayette Road N
St Paul, MN 55155
(651) 284-5091
DLI.PrevWage@state.mn.us

LABOR CODE AND CLASS		EFFECT DATE	BASIC RATE	FRINGE RATE	TOTAL RATE
LABORERS (101 - 112) (SPECIAL CRAFTS 701 - 730)					
101	LABORER, COMMON (GENERAL LABOR WORK)	2025-11-03	44.00	26.12	70.12
102	LABORER, SKILLED (ASSISTING SKILLED CRAFT JOURNEYMAN)	2025-11-03	44.00	26.12	70.12
103		2025-11-03	31.66	22.78	54.44

LABOR CODE AND CLASS		EFFECT DATE	BASIC RATE	FRINGE RATE	TOTAL RATE
	LABORER, LANDSCAPING (GARDENER, SOD LAYER AND NURSERY OPERATOR)				
104	FLAG PERSON	2025-11-03	44.00	26.12	70.12
105	WATCH PERSON	2025-11-03	40.60	25.57	66.17
106	BLASTER	2025-11-03	22.08	6.87	28.95
107	PIPELAYER (WATER, SEWER AND GAS)	2025-11-03	47.50	26.12	73.62
108	TUNNEL MINER	2025-11-03	45.50	26.12	71.62
109	UNDERGROUND AND OPEN DITCH LABORER (EIGHT FEET BELOW STARTING GRADE LEVEL)	2025-11-03	45.50	26.12	71.62
110	SURVEY FIELD TECHNICIAN (OPERATE TOTAL STATION, GPS RECEIVER, LEVEL, ROD OR RANGE POLES, STEEL TAPE MEASUREMENT; MARK AND DRIVE STAKES; HAND OR POWER DIGGING FOR AND IDENTIFICATION OF MARKERS OR MONUMENTS; PERFORM AND CHECK CALCULATIONS; REVIEW AND UNDERSTAND CONSTRUCTION PLANS AND LAND SURVEY MATERIALS). THIS CLASSIFICATION DOES NOT APPLY TO THE WORK PERFORMED ON A PREVAILING WAGE PROJECT BY A LAND SURVEYOR WHO IS LICENSED PURSUANT TO MINNESOTA STATUTES, SECTIONS 326.02 TO 326.15.	2025-11-03	44.00	26.12	70.12
111	TRAFFIC CONTROL PERSON (TEMPORARY SIGNAGE)	2025-11-03	44.00	26.12	70.12
112	QUALITY CONTROL TESTER (FIELD AND COVERED OFF-SITE FACILITIES; TESTING OF AGGREGATE, ASPHALT, AND CONCRETE MATERIALS); LIMITED TO MN DOT HIGHWAY AND HEAVY CONSTRUCTION PROJECTS WHERE THE MN DOT HAS RETAINED QUALITY ASSURANCE PROFESSIONALS TO REVIEW AND INTERPRET THE RESULTS OF QUALITY CONTROL TESTERS.	2025-11-03	16.28	4.07	20.35

LABOR CODE AND CLASS		EFFECT DATE	BASIC RATE	FRINGE RATE	TOTAL RATE
	SERVICES PROVIDED BY THE CONTRACTOR.				
SPECIAL EQUIPMENT (201 - 204)					
201	ARTICULATED HAULER	2025-11-03	46.25	29.40	75.65
		2026-05-04	47.68	31.00	78.68
202	BOOM TRUCK	2025-11-03	48.96	29.40	78.36
		2026-05-04	50.49	31.00	81.49
203	LANDSCAPING EQUIPMENT, INCLUDES HYDRO SEEDER OR MULCHER, SOD ROLLER, FARM TRACTOR WITH ATTACHMENT SPECIFICALLY SEEDING, SODDING, OR PLANT, AND TWO-FRAMED FORKLIFT (EXCLUDING FRONT, POSIT-TRACK, AND SKID STEER LOADERS), NO EARTHWORK OR GRADING FOR ELEVATIONS	2025-11-03	41.37	29.40	70.77
		2026-05-04	42.60	31.00	73.60
204	OFF-ROAD TRUCK	2025-11-03	46.25	29.40	75.65
		2026-05-04	47.68	31.00	78.68
205	PAVEMENT MARKING OR MARKING REMOVAL EQUIPMENT (ONE OR TWO PERSON OPERATORS); SELF-PROPELLED TRUCK OR TRAILER MOUNTED UNITS.	2025-11-03	38.90	23.49	62.39
HIGHWAY/HEAVY POWER EQUIPMENT OPERATOR					
GROUP 2		2025-11-03	47.24	29.40	76.64
		2026-05-04	48.71	31.00	79.71
302	HELICOPTER PILOT (HIGHWAY AND HEAVY ONLY)				
303	CONCRETE PUMP (HIGHWAY AND HEAVY ONLY)				
304	ALL CRANES WITH OVER 135-FOOT BOOM, EXCLUDING JIB (HIGHWAY AND HEAVY ONLY)				
305	DRAGLINE, CRAWLER, HYDRAULIC BACKHOE (TRACK OR WHEEL MOUNTED) AND/OR OTHER SIMILAR EQUIPMENT WITH SHOVEL-TYPE CONTROLS THREE CUBIC YARDS AND OVER MANUFACTURER.S RATED CAPACITY INCLUDING ALL ATTACHMENTS. (HIGHWAY AND HEAVY ONLY)				
306	GRADER OR MOTOR PATROL				
307	PILE DRIVING (HIGHWAY AND HEAVY ONLY)				

LABOR CODE AND CLASS		EFFECT DATE	BASIC RATE	FRINGE RATE	TOTAL RATE
308	TUGBOAT 100 H.P. AND OVER WHEN LICENSE REQUIRED (HIGHWAY AND HEAVY ONLY)				
GROUP 3		2025-11-03	46.61	29.40	76.01
		2026-05-04	48.05	31.00	79.05
309	ASPHALT BITUMINOUS STABILIZER PLANT				
310	CABLEWAY				
311	CONCRETE MIXER, STATIONARY PLANT (HIGHWAY AND HEAVY ONLY)				
312	DERRICK (GUY OR STIFFLEG)(POWER)(SKIDS OR STATIONARY) (HIGHWAY AND HEAVY ONLY)				
313	DRAGLINE, CRAWLER, HYDRAULIC BACKHOE (TRACK OR WHEEL MOUNTED) AND/OR SIMILAR EQUIPMENT WITH SHOVEL-TYPE CONTROLS, UP TO THREE CUBIC YARDS MANUFACTURER.S RATED CAPACITY INCLUDING ALL ATTACHMENTS (HIGHWAY AND HEAVY ONLY)				
314	DREDGE OR ENGINEERS, DREDGE (POWER) AND ENGINEER				
315	FRONT END LOADER, FIVE CUBIC YARDS AND OVER INCLUDING ATTACHMENTS. (HIGHWAY AND HEAVY ONLY)				
316	LOCOMOTIVE CRANE OPERATOR				
317	MIXER (PAVING) CONCRETE PAVING, ROAD MOLE, INCLUDING MUCKING OPERATIONS, CONWAY OR SIMILAR TYPE				
318	MECHANIC . WELDER ON POWER EQUIPMENT (HIGHWAY AND HEAVY ONLY)				
319	TRACTOR . BOOM TYPE (HIGHWAY AND HEAVY ONLY)				
320	TANDEM SCRAPER				
321	TRUCK CRANE . CRAWLER CRANE (HIGHWAY AND HEAVY ONLY)				
322	TUGBOAT 100 H.P AND OVER (HIGHWAY AND HEAVY ONLY)				
GROUP 4		2025-11-03	46.25	29.40	75.65
		2026-05-04	47.68	31.00	78.68
323	AIR TRACK ROCK DRILL				
324	AUTOMATIC ROAD MACHINE (CMI OR SIMILAR) (HIGHWAY AND HEAVY ONLY)				
325	BACKFILLER OPERATOR				
326	CONCRETE BATCH PLANT OPERATOR (HIGHWAY AND HEAVY ONLY)				
327	BITUMINOUS ROLLERS, RUBBER TIRED OR STEEL DRUMMED (EIGHT TONS AND OVER)				
328	BITUMINOUS SPREADER AND FINISHING MACHINES (POWER), INCLUDING PAVERS, MACRO SURFACING AND MICRO SURFACING, OR SIMILAR TYPES (OPERATOR AND SCREED PERSON)				
329	BROKK OR R.T.C. REMOTE CONTROL OR SIMILAR TYPE WITH ALL ATTACHMENTS				
330	CAT CHALLENGER TRACTORS OR SIMILAR TYPES PULLING ROCK WAGONS, BULLDOZERS AND SCRAPERS				
331	CHIP HARVESTER AND TREE CUTTER				
332	CONCRETE DISTRIBUTOR AND SPREADER FINISHING MACHINE, LONGITUDINAL FLOAT, JOINT MACHINE, AND SPRAY MACHINE				
333	CONCRETE MIXER ON JOBSITE (HIGHWAY AND HEAVY ONLY)				
334	CONCRETE MOBIL (HIGHWAY AND HEAVY ONLY)				
335	CRUSHING PLANT (GRAVEL AND STONE) OR GRAVEL WASHING, CRUSHING AND SCREENING PLANT				
336	CURB MACHINE				
337	DIRECTIONAL BORING MACHINE				

LABOR CODE AND CLASS		EFFECT DATE	BASIC RATE	FRINGE RATE	TOTAL RATE
338	DOPE MACHINE (PIPELINE)				
339	DRILL RIGS, HEAVY ROTARY OR CHURN OR CABLE DRILL (HIGHWAY AND HEAVY ONLY)				
340	DUAL TRACTOR				
341	ELEVATING GRADER				
342	FORK LIFT OR STRADDLE CARRIER (HIGHWAY AND HEAVY ONLY)				
343	FORK LIFT OR LUMBER STACKER (HIGHWAY AND HEAVY ONLY)				
344	FRONT END, SKID STEER OVER 1 TO 5 C YD				
345	GPS REMOTE OPERATING OF EQUIPMENT				
346	HOIST ENGINEER (POWER) (HIGHWAY AND HEAVY ONLY)				
347	HYDRAULIC TREE PLANTER				
348	LAUNCHER PERSON (TANKER PERSON OR PILOT LICENSE)				
349	LOCOMOTIVE (HIGHWAY AND HEAVY ONLY)				
350	MILLING, GRINDING, PLANNING, FINE GRADE, OR TRIMMER MACHINE				
351	MULTIPLE MACHINES, SUCH AS AIR COMPRESSORS, WELDING MACHINES, GENERATORS, PUMPS (HIGHWAY AND HEAVY ONLY)				
352	PAVEMENT BREAKER OR TAMPING MACHINE (POWER DRIVEN) MIGHTY MITE OR SIMILAR TYPE				
353	PICKUP SWEEPER, ONE CUBIC YARD AND OVER HOPPER CAPACITY(HIGHWAY AND HEAVY ONLY)				
354	PIPELINE WRAPPING, CLEANING OR BENDING MACHINE				
355	POWER PLANT ENGINEER, 100 KWH AND OVER (HIGHWAY AND HEAVY ONLY)				
356	POWER ACTUATED HORIZONTAL BORING MACHINE, OVER SIX INCHES				
357	PUGMILL				
358	PUMPCRETE (HIGHWAY AND HEAVY ONLY)				
359	RUBBER-TIRED FARM TRACTOR WITH BACKHOE INCLUDING ATTACHMENTS (HIGHWAY AND HEAVY ONLY)				
360	SCRAPER				
361	SELF-PROPELLED SOIL STABILIZER				
362	SLIP FORM (POWER DRIVEN) (PAVING)				
363	TIE TAMPER AND BALLAST MACHINE				
364	TRACTOR, BULLDOZER (HIGHWAY AND HEAVY ONLY)				
365	TRACTOR, WHEEL TYPE, OVER 50 H.P. WITH PTO UNRELATED TO LANDSCAPING (HIGHWAY AND HEAVY ONLY)				
366	TRENCHING MACHINE (SEWER, WATER, GAS) EXCLUDES WALK BEHIND TRENCHER (HIGHWAY AND HEAVY ONLY)				
367	TUB GRINDER, MORBARK, OR SIMILAR TYPE				
368	WELL POINT DISMANTLING OR INSTALLATION (HIGHWAY AND HEAVY ONLY)				
GROUP 5		2025-11-03	42.77	29.40	72.17
		2026-05-04	44.06	31.00	75.06
369	AIR COMPRESSOR, 600 CFM OR OVER (HIGHWAY AND HEAVY ONLY)				
370	BITUMINOUS ROLLER (UNDER EIGHT TONS)				
371	CONCRETE SAW (MULTIPLE BLADE) (POWER OPERATED)				

LABOR CODE AND CLASS		EFFECT DATE	BASIC RATE	FRINGE RATE	TOTAL RATE
372	FORM TRENCH DIGGER (POWER)				
373	FRONT END, SKID STEER UP TO 1C YD				
374	GUNITE GUNALL (HIGHWAY AND HEAVY ONLY)				
375	HYDRAULIC LOG SPLITTER				
376	LOADER (BARBER GREENE OR SIMILAR TYPE)				
377	POST HOLE DRIVING MACHINE/POST HOLE AUGER				
378	POWER ACTUATED AUGER AND BORING MACHINE				
379	POWER ACTUATED JACK				
380	PUMP (HIGHWAY AND HEAVY ONLY)				
381	SELF-PROPELLED CHIP SPREADER (FLAHERTY OR SIMILAR)				
382	SHEEP FOOT COMPACTOR WITH BLADE . 200 H.P. AND OVER				
383	SHOULDERING MACHINE (POWER) APSCO OR SIMILAR TYPE INCLUDING SELF-PROPELLED SAND AND CHIP SPREADER				
384	STUMP CHIPPER AND TREE CHIPPER				
385	TREE FARMER (MACHINE)				
GROUP 6		2025-11-03	41.37	29.40	70.77
		2026-05-04	42.60	31.00	73.60
387	CAT, CHALLENGER, OR SIMILAR TYPE OF TRACTORS, WHEN PULLING DISK OR ROLLER				
388	CONVEYOR (HIGHWAY AND HEAVY ONLY)				
389	DREDGE DECK HAND				
390	FIRE PERSON OR TANK CAR HEATER (HIGHWAY AND HEAVY ONLY)				
391	GRAVEL SCREENING PLANT (PORTABLE NOT CRUSHING OR WASHING)				
392	GREASER (TRACTOR) (HIGHWAY AND HEAVY ONLY)				
393	LEVER PERSON				
394	OILER (POWER SHOVEL, CRANE, TRUCK CRANE, DRAGLINE, CRUSHERS, AND MILLING MACHINES, OR OTHER SIMILAR HEAVY EQUIPMENT) (HIGHWAY AND HEAVY ONLY)				
395	POWER SWEEPER				
396	SHEEP FOOT ROLLER AND ROLLERS ON GRAVEL COMPACTION, INCLUDING VIBRATING ROLLERS				
397	TRACTOR, WHEEL TYPE, OVER 50 H.P., UNRELATED TO LANDSCAPING				
TRUCK DRIVERS					
GROUP 1		2025-11-03	41.35	24.70	66.05
		2026-05-01	43.29	25.40	68.69
601	MECHANIC . WELDER				
602	TRACTOR TRAILER DRIVER				
603	TRUCK DRIVER (HAULING MACHINERY INCLUDING OPERATION OF HAND AND POWER OPERATED WINCHES)				
GROUP 2		2025-11-03	40.71	24.70	65.41

LABOR CODE AND CLASS		EFFECT DATE	BASIC RATE	FRINGE RATE	TOTAL RATE
		2026-05-01	42.63	25.40	68.03
604	FOUR OR MORE AXLE UNIT, STRAIGHT BODY TRUCK				
GROUP 3		2025-11-03	40.60	24.70	65.30
		2026-05-01	42.51	25.40	67.91
605	BITUMINOUS DISTRIBUTOR DRIVER				
606	BITUMINOUS DISTRIBUTOR (ONE PERSON OPERATION)				
607	THREE AXLE UNITS				
GROUP 4		2025-11-03	40.31	24.70	65.01
		2026-05-01	42.21	25.40	67.61
608	BITUMINOUS DISTRIBUTOR SPRAY OPERATOR (REAR AND OILER)				
609	DUMP PERSON				
610	GREASER				
611	PILOT CAR DRIVER				
612	RUBBER-TIRED, SELF-PROPELLED PACKER UNDER 8 TONS				
613	TWO AXLE UNIT				
614	SLURRY OPERATOR				
615	TANK TRUCK HELPER (GAS, OIL, ROAD OIL, AND WATER)				
616	TRACTOR OPERATOR, UNDER 50 H.P.				
SPECIAL CRAFTS					
701	HEATING AND FROST INSULATORS	2025-11-03	47.10	24.40	71.50
702	BOILERMAKERS	2025-11-03	48.35	31.93	80.28
703	BRICKLAYERS	2025-11-03	49.91	28.34	78.25
		2026-05-01	52.91	28.34	81.25
704	CARPENTERS	2025-11-03	47.57	32.17	79.74
		2026-05-01	50.76	32.17	82.93
705	CARPET LAYERS (LINOLEUM)	FOR RATE CALL 651-284-5091 OR EMAIL DLI.PREVWAGE@STATE.MN.US			
706	CEMENT MASONS	2025-11-03	49.63	27.82	77.45
707	ELECTRICIANS	2025-11-03	59.00	35.79	94.79
		2026-05-01	63.59	35.79	99.38

LABOR CODE AND CLASS		EFFECT DATE	BASIC RATE	FRINGE RATE	TOTAL RATE
711	GROUND PERSON	2025-11-03	46.41	22.77	69.18
712	IRONWORKERS	2025-11-03	46.35	37.86	84.21
		2026-05-03	49.50	37.86	87.36
713	LINEMAN	2025-11-03	59.36	26.71	86.07
714	MILLWRIGHT	2025-11-03	42.95	37.81	80.76
		2026-05-01	46.15	37.81	83.96
715	PAINTERS (INCLUDING HAND BRUSHED, HAND SPRAYED, AND THE TAPING OF PAVEMENT MARKINGS)	2025-11-03	48.00	29.09	77.09
		2026-05-04	50.50	29.09	79.59
716	PILEDRIVER (INCLUDING VIBRATORY DRIVER OR EXTRACTOR FOR PILING AND SHEETING OPERATIONS)	2025-11-03	47.71	31.98	79.69
		2026-05-01	50.90	31.98	82.88
717	PIPEFITTERS . STEAMFITTERS	2025-11-03	56.24	39.30	95.54
		2026-05-01	61.24	39.30	100.54
719	PLUMBERS	2025-11-03	61.28	31.52	92.80
721	SHEET METAL WORKERS	2025-11-03	56.71	35.82	92.53
		2026-05-01	60.96	35.82	96.78
723	TERRAZZO WORKERS	FOR RATE CALL 651-284-5091 OR EMAIL DLI.PREVWAGE@STATE.MN.US			
724	TILE SETTERS	2025-11-03	34.76	23.29	58.05
725	TILE FINISHERS	FOR RATE CALL 651-284-5091 OR EMAIL DLI.PREVWAGE@STATE.MN.US			
727	WIRING SYSTEM TECHNICIAN	2025-11-03	51.07	24.02	75.09
		2026-07-01	54.44	24.02	78.46
728	WIRING SYSTEMS INSTALLER	2025-11-03	35.78	18.73	54.51

LABOR CODE AND CLASS		EFFECT DATE	BASIC RATE	FRINGE RATE	TOTAL RATE
729	ASBESTOS ABATEMENT WORKER	2025-11-03	41.23	25.99	67.22
730	SIGN ERECTOR	FOR RATE CALL 651-284-5091 OR EMAIL DLI.PREVWAGE@STATE.MN.US			

DEPARTMENT OF LABOR AND INDUSTRY

Dec. 22, 2025

Notice of truck rental rate certification and effective date

The Department of Labor and Industry (DLI) commissioner has certified the minimum truck rental rates for state-funded highway projects effective December 22, 2025. This certification follows the publication of the Notice of Truck Rental Rate Determination in the State Register on Dec. 1, 2025, and the informal conference held pursuant to Minnesota Rules, part 5200.1105 on Dec. 12, 2025.

According to Minnesota Rules, part 5200.1105, the purpose of the informal conference was for DLI to obtain further input regarding the determined rates prior to the certification. No written input regarding the determination was received by DLI prior to the informal conference.

The truck rental rate is determined for each equipment type by adding the average hourly cost of operating the vehicle to the certified prevailing-wage rate for the driver. The average hourly operating costs are determined by voluntary survey of truck owner operators, trucking contractors and trucking firms. Cost data used in DLI's analysis must be representative of five trucking firms of various size and five independent truck owner operators for each type of truck.

The determination of the minimum truck rental rates by region are as follows.

Three-axle units

Region	Effective date	607 driver rate	Operating cost	Truck rental rate
Region 1	Certification date	$64.83	$37.35	$102.18
	Increase May 01, 2026	$67.42	$37.35	$104.77
Region 2	Certification date	$57.49	$37.35	$94.84
	Increase May 01, 2026	$59.79	$37.35	$97.14
Region 3	Certification date	$46.26	$37.35	$83.61

Region	Effective date	607 driver rate	Operating cost	Truck rental rate
Region 4	Certification date	$60.37	$37.35	$97.72
Region 5	Certification date	$48.01	$37.35	$85.36
Region 6	Certification date	$57.25	$37.35	$94.60
Region 7	Certification date	$47.10	$37.35	$84.45
Region 8	Certification date	$43.50	$37.35	$80.85
Region 9	Certification date	$65.30	$37.35	$102.65
	Increase May 01, 2026	$67.91	$37.35	$105.26
Region 10	Certification date	$59.51	$37.35	$96.86

Four or more axle units

Region	Effective date	604 driver rate	Operating cost	Truck rental rate
Region 1	Certification date	$64.95	$73.41	$138.36
	Increase May 01, 2026	$67.55	$73.41	$140.96
Region 2	Certification date	$54.72	$73.41	$128.13
Region 3	Certification date	$41.98	$73.41	$115.39
Region 4	Certification date	$53.73	$73.41	$127.14
Region 5	Certification date	$54.76	$73.41	$128.17

Region	Effective date	604 driver rate	Operating cost	Truck rental rate
Region 6	Certification date	$62.86	$73.41	$136.27
	Increase May 01, 2026	$65.37	$73.41	$138.78
Region 7	Certification date	$57.65	$73.41	$131.06
	Increase May 01, 2026	$59.96	$73.41	$133.37
Region 8	Certification date	$46.00	$73.41	$119.41
Region 9	Certification date	$65.41	$73.41	$138.82
	Increase May 01, 2026	$68.03	$73.41	$141.44
Region 10	Certification date	$56.06	$73.41	$129.47

Tractor

Region	Effective date	602 driver rate	Operating cost	Tractor-only truck rental rate	Plus trailer operating cost	Tractor trailer rental rate
Region 1	Certification date	$65.58	$54.96	$120.54	$11.46	$132.00
	Increase May 01, 2026	$68.20	$54.96	$123.16	$11.46	$134.62
Region 2	Certification date	$58.25	$54.96	$113.21	$11.46	$124.67
	Increase May 01, 2026	$60.58	$54.96	$115.54	$11.46	$127.00
Region 3	Certification date	$48.35	$54.96	$103.31	$11.46	$114.77
Region 4	Certification date	$50.27	$54.96	$105.23	$11.46	$116.69

Region	Effective date	602 driver rate	Operating cost	Tractor-only truck rental rate	Plus trailer operating cost	Tractor trailer rental rate
Region 5	Certification date	$28.84	$54.96	$83.80	$11.46	$95.26
Region 6	Certification date	$63.50	$54.96	$118.46	$11.46	$129.92
	Increase May 01, 2026	$66.04	$54.96	$121.00	$11.46	$132.46
Region 7	Certification date	$58.25	$54.96	$113.21	$11.46	$124.67
	Increase May 01, 2026	$60.58	$54.96	$115.54	$11.46	$127.00
Region 8	Certification date	$47.50	$54.96	$102.46	$11.46	$113.92
Region 9	Certification date	$66.05	$54.96	$121.01	$11.46	$132.47
	Increase May 01, 2026	$68.69	$54.96	$123.65	$11.46	$135.11
Region 10	Certification date	$58.25	$54.96	$113.21	$11.46	$124.67
	Increase May 01, 2026	$60.58	$54.96	$115.54	$11.46	$127.00

The current operating costs and truck rental rates may be reviewed by accessing DLI's website at https://dli.mn.gov/business/employment-practices/prevailing-wage-minimum-truck-rental-rates. Questions about the truck rental rates or the informal conference notice below can be answered by calling 651-284-5192.

The minimum truck rental rate for these four types of trucks in the State's 10 highway and heavy construction areas will be effective for all highway and heavy construction projects financed in whole or part with state funds advertised for bid on or after the day the notice of certification is published in the *State Register*.

Sincerely,

Nicole Blissenbach

DLI commissioner

MINNESOTA DEPARTMENT OF TRANSPORTATION
PRIME CONTRACTOR – SUBCONTRACTOR'S
STATEMENT OF COMPLIANCE
FEDERAL COPELAND ACT / DAVIS BACON ACT
MINNESOTA PREVAILING WAGE STATUTES

REPORT NUMBER	STATE PROJECT NUMBERS (S)		DATE
PRIME CONTRACTOR/SUBCONTRACTOR		PHONE NUMBER	CONTRACT NUMBER
ADDRESS			FEDERAL PROJECT NUMBER
TYPE OF WORK			

(Complete as described on proposal)

STATEMENT WITH RESPECT TO COMPLIANCE AND WAGES PAID

I, _____, _____ do hereby state:
(Name of signatory party) (Title)

(1) That I pay or supervise the payment of the persons employed by _____ on said Contract; that during the payroll period commencing on the _____ day of _____ of the year _____, and ending the _____ day of _____of the year _____, there were _____ workers performing covered work on said Contract. That all persons performing work under said Contract are listed on the payroll and have been paid the full prevailing wages for all hours worked under said Contract, that no rebates and/or deductions have or will be made either directly or indirectly to or on behalf of _____ (Prime Contractor or Subcontractor) from the full wages by any person, other than permissible deductions as defined in Regulations, Part 3 (29 CFR Subtitle A), issued by the U.S. Secretary of Labor under the Copeland Act, as amended (48 Stat. 948, 63 Stat. 108, 72 Stat. 967; 76 Stat. 357; 40 U.S.C.§ 3145) and/or permissible deductions as defined in Minnesota Statutes 177.24, Subdivision 4, 181.06, and 181.79, issued by the Minnesota Commissioner of Labor and Industry and described below.

DESCRIBE LEGAL DEDUCTIONS

_____

_____

_____

(2) That the payroll submitted under said Contract is complete and accurate; that the wage rate(s) of the laborer(s), mechanic(s), and worker(s) performing work under said Contract is (are) paid according to the wage determination(s) and labor provisions incorporated in said Contract and according to applicable laws; that wages paid to laborer(s), mechanic(s), and worker(s) performing work under said Contract is at least the prevailing wage rate for the most similar classification of labor performed as defined under applicable law; and that the laborer(s), mechanic(s), and worker(s) performing work under said Contract is (are) paid for all hours in excess of the prevailing hours of labor at a rate of at least one and one-half times the applicable base rate of pay.

(3) That any apprentices employed during said payroll period are duly registered in a bona fide apprenticeship program registered with the Minnesota Department of Labor and Industry, or are registered with the Bureau of Apprenticeship and Training; United States Department of Labor.

(4) That: (Check one box only)

(a) WHERE FRINGE BENEFITS ARE PAID TO <u>ANY</u> APPROVED PLANS, FUNDS, OR PROGRAMS

☐ In addition to the basic hourly wage rates paid to each laborer, worker, or mechanic listed on said payroll, payments to current, bona fide fringe benefit programs as set forth in paragraph 4(d), have been or will be made to the program's administrators, per state and federal regulations and plan requirements, as set forth in paragraph 4(e) for the benefit of said workers, except as noted in Section 4(c).

(b) WHERE FRINGE BENEFITS ARE PAID IN CASH TO <u>ALL</u> WORKERS

☐ Each laborer, worker, or mechanic listed on said payroll has been paid, as indicated on the payroll, an amount not less than the sum of the applicable basic rate plus the fringe rate as listed in the appropriate wage determination incorporated into said Contract.

NOTE---FRINGE BENEFITS SECTION C, D, E, AND SIGNATURE BLOCK IS ON PAGE 2.

(c) EXCEPTIONS

WORKER NAME	CLASSIFICATION/OCCUPATION	EXPLANATION

(d) BENEFIT PROGRAM INFORMATION in <u>DOLLARS CONTRIBUTED PER HOUR</u> (Must be completed if 4(a) is checked)

PROGRAM TITLE, CLASSIFICATION TITLE, OR INDIVIDUAL WORKERS	HEALTH/ WELFARE	VACATION/ HOLIDAY	APPRENTICESHIP/ TRAINING	PENSION	OTHER INCLUDE TITLE
	$	$	$	$	$
	$	$	$	$	$
	$	$	$	$	$
	$	$	$	$	$
	$	$	$	$	$
	$	$	$	$	$
	$	$	$	$	$
	$	$	$	$	$
	$	$	$	$	$
	$	$	$	$	$
	$	$	$	$	$

(e) BENEFIT PROGRAM INFORMATION (Must be completed if 4(a) is checked)

NAME AND ADDRESS OF FRINGE BENEFIT FUND, PLAN, OR PROGRAM ADMINISTRATOR	BENEFIT ACCOUNT NUMBER	THIRD PARTY TRUSTEE AND/OR CONTACT PERSON	TELEPHONE NUMBER

The willful falsification of any of the above statements may subject the prime contractor or subcontractor to civil or criminal prosecution under federal and/or state law. See Minnesota Statute 15C; 16B; 161.315, Subdivision 2; 177.43, Subdivision 5; 177.44, Subdivision 6; 609.63; or United States Code 18 U.S.C. 1001; 31 U.S.C. 231; CFR 5.12.

NAME AND TITLE OF CONTRACTOR'S REPRESENTATIVE (PRINT)	SIGNATURE	DATE
As a representative of the contractor submitting the attached payroll, I hereby certify that the information is true and accurate to the best of my knowledge.		

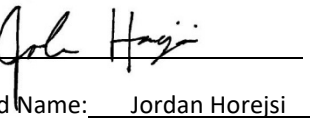
NAME AND TITLE OF PRIME CONTRACTOR (PRINT)	SIGNATURE	DATE
As a representative of the Prime Contractor, I have reviewed the attached forms and certify to the best of my knowledge that they accurately reflect operations of this company on this project and meet the contract requirements for this project.		

NOTE: For information regarding this form, submission of payroll records, or copies of the laws stated above, contact the Minnesota Department of Transportation, Labor Compliance Unit, Mail Stop 650, 395 John Ireland Boulevard, St. Paul, Minnesota 55155-1899, or call 651-366-4209 or 651-366-4204.

DIVISION S

I hereby certify that the Special Provisions for roadway construction (Division S) were prepared by me or under my general supervision, in accordance with the procedures adopted by the Minnesota Department of Transportation, and that I am a duly licensed professional engineer under the laws of the State of Minnesota. These are based on the approved, Department of Transportation "Special Provisions for Roadway Construction (Division S), December 19, 2025 Edition," except as modified below. The original, certified special provisions are on file in the Central Office of the Commissioner of Transportation.

I hereby certify that the Special Provisions for roadway construction (Division S) contained in this proposal were 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: Jordan Horejsi Date: 02/24/2026 License Number: 52241

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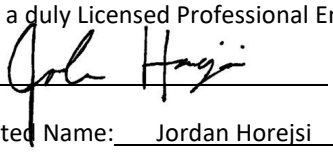
Modification Statements

Vertical change lines have been added to indicate content that has been modified from the original, certified special provisions December 19, 2025 Edition.

- Change lines are in the right margin bordering paragraphs with modification(s). The change line borders the whole paragraph, even if only one line in the paragraph has been modified.
- For tables, modification(s) have a heavy border around the modified cells.

Professional Engineer's Certification Statement

I hereby certify that Special Provisions S-28, S-29, S-30, and S-42 were prepared or modified by me or under my direct supervision in accordance with the procedures adopted by the Minnesota Department of Transportation and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

Signature: 

Typed or Printed Name: Jordan Horejsi Date: 02/24/2026 License Number: 52241

S-1 CONTACT INFORMATION

INITIAL 03/28/25

SP2025-1

Direct questions about this Project, including pre-bid questions, to Mike Adams at 651-554-6538 and Mike.Adams@CO.DAKOTA.MN.US.

S-2 PROTECTION OF FISH AND WILDLIFE RESOURCES

INITIAL 03/28/25

SP2025-5

S-2.1 Compliance with Environmental Documentation

The Project is located in an area with protected fish & wildlife resources and/or threatened & endangered species. The Contractor must protect these resources in accordance with State and Federal regulations and must implement all applicable avoidance and minimization measures (AMMs).

The Environmental Document for this Project is available. See S-13 (1712) PROTECTION AND RESTORATION OF PROPERTY.

A BLANDING'S TURTLE PROTECTION

Blanding's turtles may be present at the Project Site. The Contractor must keep a copy of the Minnesota Department of Natural Resources (DNR) Blanding's Turtle flyer prominently displayed on the job site at all times and train all staff, including any Subcontractors, in proper procedures if any Blanding's Turtles are encountered. The Contractor must provide a copy of the MN DNR's flyer to all Subcontractors preforming Work.

The DNR's flyer is available at the DNR's website http://files.dnr.state.mn.us/natural_resources/animals/reptiles_amphibians/turtles/blandings_turtle/flyer.pdf

Contractor must immediately (within 24 hours) report all turtle sightings to the Department's wildlife ecologist at protectedspecies.dot@state.mn.us.

Contractor, subcontractors must move turtles which are in imminent danger, by hand, out of harm's way. Turtles outside project Construction limits, which are not in imminent danger, should be left undisturbed.

Contractor must install silt fencing or similar turtle-proof barriers around all soil stockpiles, gravel pads, and other areas of exposed soil to prevent turtle access from May 15 to July 15. Silt fencing or similar turtle-proof barriers must be removed prior to project closeout. Filter logs do not count as a turtle-proof barrier.

Contractor must inspect trenches, holes, or similar depressions prior to beginning work each day to ensure turtles have not entered these areas. Turtles that have entered these areas are in imminent danger and must be removed, by hand.

The DNR's Blanding's Turtle Flyer with an illustration of an adult Blanding's Turtle must be conspicuously posted adjacent to the Engineer's field office.

B WOOD TURTLE PROTECTION

Wood turtles may be present at the Project Site. The Contractor must keep a copy of the Minnesota Department of Natural Resources (DNR) Wood Turtle flyer prominently displayed on the job site at all times and train all staff, including any Subcontractors, in proper procedures if any Blanding's Turtles are encountered. The Contractor must provide a copy of the MN DNR's flyer to all Subcontractors preforming Work.

The DNR's flyer is available at the DNR's website

https://edocs-public.dot.state.mn.us/edocs_public/DMResultSet/download?docId=23580249

Contractor must immediately (within 24 hours) report all turtle sightings to the Department's wildlife ecologist at protectedspecies.dot@state.mn.ushttps://www.dot.state.mn.us/environment/wildlife.html.

Contractor, subcontractors must move turtles which are in imminent danger, by hand, out of harm's way. Turtles outside project Construction limits, which are not in imminent danger, should be left undisturbed.

Contractor must install silt fencing or similar turtle-proof barriers around all soil stockpiles, gravel pads, and other areas of exposed soil to prevent turtle access from May 15 to July 15. Silt fencing or similar turtle-proof barriers must be removed prior to project closeout. Filter logs do not count as a turtle-proof barrier.

Contractor must inspect trenches, holes, or similar depressions prior to beginning work each day to ensure turtles have not entered these areas. Turtles that have entered these areas are in imminent danger and must be removed, by hand.

The DNR's Wood Turtle Flyer with a picture of an adult Wood Turtle must be conspicuously posted adjacent to the Engineer's field office.

C POLLINATOR PROTECTION

Contractor must not apply insecticides or fungicides.

Contractor must minimize the use of herbicides. If herbicides are to be used, Contractor must apply herbicides via spot treatments. Contractor must not apply herbicides through broadcast applications, including but not limited to, aerial applications or vehicle mounted sprayers.

Contractor must contact the Department's wildlife ecologist (protectedspecies.dot@state.mn.us) if exceptions are requested.

D BUMBLE BEE PROTECTION

The Project is located in an area inhabited by the endangered rusty-patched bumble bee. The Contractor must ensure all operators, employees, and Contractors working in areas of known or presumed protected bumble bee habitat are aware of environmental commitments and avoidance and minimization measures (AMMs) to protect both bumble bees and their habitat. The Contractor must notify Project Subcontractors during the preconstruction meeting.

Contractor must immediately report (within 24 hours) all bumble bee nest sightings, to the Department's wildlife ecologist at protectedspecies.dot@state.mn.us. No work within 25 feet of the nest is allowed until species-level identifications are made.

E BAT PROTECTION

The Project is located in an area inhabited by one or more protected bat species. The Contractor must ensure all operators, employees, and Contractors working in areas of known or presumed bat habitat are aware of environmental commitments and avoidance and minimization measures (AMMs) to protect both bats and their habitat. The Contractor must notify Project Subcontractors during the preconstruction meeting.

Contractor must direct temporary lighting, if used, away from wooded areas during the bat active season (April 15 to October 31, inclusive).

Contractor must immediately report (within 24 hours) all bat sightings, live or dead, to the Department's wildlife ecologist at protectedspecies.dot@state.mn.ushttps://www.dot.state.mn.us/environment/wildlife.html

E.1 Tree Clearing Requirements

Winter tree clearing required – tree clearing allowed November 1 to April 14, inclusive.

Contractor must ensure tree removal is limited to that specified in the Plans. The Contractor must provide all Subcontractors preforming Work with the clearing limits and how they are marked in the field (e.g., install bright colored stakes, flagging, or fencing) prior to any tree clearing to ensure that all clearing stays within identified clearing limits.

F BALD EAGLE PROTECTION

Bald Eagles are protected by the Bald and Golden Eagle Protection Act. No Bald Eagle nests are known within the project limits. However, if a Bald Eagle nest is discovered during Project activities, Contractor must stop Work and immediately report Bald Eagle nests to the Department's wildlife ecologist at protectedspecies.dot@state.mn.us. Contractor must not Work within 300 feet of a Bald Eagle nest at any time. This includes foot traffic, vehicle parking, and/or equipment or material staging.

Contractor must not work within 300 ft of a Bald Eagle nest at any time. This includes foot traffic, vehicle parking, and/or equipment or material staging.

Contractor must immediately report all Bald Eagle nests to the Department's wildlife ecologist at protectedspecies.dot@state.mn.us.

G MIGRATORY BIRD PROTECTION

G.1 Soil Stockpiles

The Contractor must protect soil stockpiles when any surface remains unused for 72 hours or more. To prevent birds from nesting, the Contractor must either cover the surface with fabric or tarps or grade the surface to a slope no steeper than 65 degrees.

S-3 RESPONSIBLE CONTRACTOR

The Department cannot award a construction contract in excess of $50,000 unless the Bidder is a "responsible contractor" as defined in Minnesota Statutes §16C.285, subdivision 3. A Bidder submitting a Proposal for this Project must verify that it meets the minimum criteria specified in that statute by submitting the "Responsible Contractor Verification and Certification of Compliance" form. A company owner or officer must sign the "Responsible Contractor Verification and Certification of Compliance" form under oath verifying compliance with each of the minimum criteria. THE COMPLETED FORMS MUST BE SUBMITTED WITH THE BID PROPOSAL.

A bidder must obtain a verification from each subcontractor it will have a direct contractual relationship with. At the Department's request, a bidder must submit signed subcontractor verifications. A contractor or subcontractor must obtain an annual verification from each motor carrier it has a direct contractual relationship with. A motor carrier must give immediate written notice if it no longer meets the minimum responsible contractor criteria. The requirement for subcontractor verifications does not apply to:

- Design professionals licensed under Minnesota Statutes §326.06; and
- A business or person that supplies materials, equipment, or supplies to a subcontractor on the Project, including performing delivering and unloading services in connection with the supply of materials, equipment, and supplies. But, a business or person must submit a verification if it delivers mineral aggregate such as sand, gravel, or stone that will be incorporated into the Work by depositing the material substantially in place, directly or through spreaders, from the transporting vehicle.

A bidder or subcontractor who does not meet the minimum criteria specified in the statute, or who fails to verify compliance with the criteria, is not a "responsible contractor" and is ineligible to be awarded the Contract for this Project or to work on this Project. Submitting a false verification makes the bidder or subcontractor ineligible to be awarded a construction contract for this Project. Additionally, submitting a false statement may lead to contract termination. If only one bidder submits a bid, the Department may, but is not required to, award a contract even if that bidder does not meet the minimum criteria.

S-4 EQUAL EMPLOYMENT OPPORTUNITY

INITIAL 03/28/25

SP2025-9

The Equal Employment Opportunity (EEO) Special Provisions contain the EEO rules and regulations for federal and/or state funded highway construction Projects in Minnesota.

The source of funding determines which EEO regulations and workforce participation goals apply to a specific Project:

- If the Project contains any federal funding, and has a total dollar value exceeding $10,000, federal EEO regulations and workforce participation goals apply. The Minnesota Department of Transportation's Office of Civil Rights (MnDOT's Office of Civil Rights) monitors and reviews these Projects on behalf of the Federal Highway Administration (FHWA), under federal law (23 U.S.C. § 140) and its accompanying rules (23 C.F.R. § 230). The FHWA allows MnDOT's Office of Civil Rights to apply the state's workforce participation goals to federally funded construction Contracts.

- If the Project contains any state funding, and has a total dollar value exceeding $100,000, state EEO regulations and workforce participation goals apply. MnDOT's Office of Civil Rights monitors and reviews these Projects in conjunction with the Minnesota Department of Human Rights under state law (Minn. Stat. § 363A.36) and its accompanying rules (Minn. R. 5000.3520 - .3530).

- If the Project contains any state and federal funding, and meets the total dollar value thresholds outlined above, both federal and state EEO regulations, and workforce participation goals apply. MnDOT's Office of Civil Rights monitors and reviews these Projects via a single review and monitoring process that meets federal and state requirements.

NOTICE OF REQUIREMENTS FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY

23 U.S.C. § 140, 23 C.F.R. § 230, 41 C.F.R. § 60, Minn. Stat. § 363A.36, Minn. R. 5000.3520 - .3530

A. The Contractor's attention is directed to the following:

1. Required Contract Provisions: Federal-Aid Construction Contracts Attachment (FHWA 1273) can be found here: https://edocs-public.dot.state.mn.us/edocs_public/DMResultSet/download?docId=19624648

2. Equal Employment Opportunity (EEO) State and Federal Laws, Policies and Rules Attachment: Minnesota Affirmative Action Requirements (Pages 1-2); Violence-Free and Respectful Workplace (Pages 3-7); Specific Federal Equal Employment Opportunity Responsibilities (Pages 8-11); Standard Federal and State Equal Employment Construction Contract Specifications (Pages 12-15); Equal Opportunity Clause (Pages 16-17) can be found here: https://edocs-public.dot.state.mn.us/edocs_public/DMResultSet/download?docId=19624471

B. The Contractor's compliance with 41 C.F.R. § 60-4, and Minn. Stat. § 363A.36 and its accompanying rules shall be based on the following: implementation of the Equal Opportunity Clause (Pages 16-17); adherence to the specific affirmative action obligations of the state and federal authorities outlined in these EEO Special Provisions

and the Equal Employment Opportunity (EEO) State and Federal Laws, Policies and Rules Attachment; and good faith efforts to meet the applicable workforce participation goals detailed below.

C. Highway construction Contracts in excess of $100,000 in state funds and/or $10,000 in federal funds are subject to the workforce participation goals for minorities and women established by the Commissioner of the Minnesota Department of Human Rights (MDHR) under Minn. R. 5000.3520. The FHWA allows MnDOT's Office of Civil Rights to apply the state's workforce participation goals to federally funded construction Contracts. The Contractor's attention is directed to the following:

1. Workforce participation goals are percentages of total labor hours that minorities and women should perform in each trade on the Project. Compliance is measured against the total labor hours performed. The Contractor must ensure that labor hours for minorities and women remain substantially uniform in each trade for the duration of the Project.

2. Workforce participation goals are applied on a county-by-county basis.

3. For Projects spanning more than one county, the workforce participation goals of the assigned county apply. For statewide Projects, the highest workforce participation goals of any county located within the covered work area apply.

4. If the applicable workforce participation goals will not be met, the Contractor and any Subcontractor with estimated labor hours on the Project (except independent trucking operators) must demonstrate that specific and significant actions to recruit, hire, and retain minorities and women are being taken. The Contractor is responsible for ensuring Subcontractors are making these requisite good faith efforts.

D. The transfer of minorities and/or women, including employees and trainees, from different Projects or among Contractors for the sole purpose of meeting the workforce participation goals violates 41 C.F.R. § 60-4, and Minn. Stat. § 363A.36 and its accompanying rules. Such action is a breach of Contract.

E. The Contractor is directed to the following written notification requirements concerning Subcontracts:

1. <u>If the Project is federally funded</u>: The Office of Federal Contract Compliance Programs must receive written notification of any construction Subcontract over $10,000 executed at any tier within ten (10) working days of the Contract award.

2. <u>If the Project is state funded</u>: The Office of Equity and Inclusion for Minnesota Businesses, a division of MDHR, must receive written notification of any construction Subcontracts over $100,000 executed at any tier within ten (10) working days of the Contract award.

The written notification must provide the following information: Name, address, telephone number, and employee identification number of the Subcontractor; estimated amount of the Subcontract; Project location; and estimated start and end dates.

NOTICE TO CONTRACTOR AND SUBCONTRACTORS: REPORTING REQUIREMENTS

23 U.S.C. § 140, 23 C.F.R. § 230, Minn. Stat. § 363A.36, Minn. R. 5000.3520 - .3530

Workforce participation goals are applied on a county-by-county basis. For Projects spanning more than one county, the workforce participation goals of the assigned county apply. For statewide Projects, the highest workforce participation goals of any county located within the covered work area apply.

The workforce participation goals for this Project are:

Minority: <u>22%</u>

Women: 15%

PRE-AWARD

A. The Contractor must complete and submit a Workforce Plan if the low bid amount is $5,000,000 or more.

B. The Workforce Plan includes the following documents:

1. Project Information Form: To be completed by the Contractor;

2. Contractor Workforce Commitment Form: To be completed by the Contractor and any Subcontractors with estimated labor hours on the Project;

3. Workforce Hours – Project Overview Form: To be completed by the Contractor; and

4. Total Company Workforce Report: To be completed by the Contractor and any Subcontractors upon request.

a. The Total Company Workforce Report can be found here: mndot.gov/civilrights/forms.html.

The Contractor must select the regional Workforce Plan template that corresponds with Project location. The Workforce Plan templates can be found here: mndot.gov/civilrights/bid-results.html.

C. Approval of the Workforce Plan by MnDOT's Office of Civil Rights (OCR) is a condition of Contract award.

D. Approval is contingent upon the following:

1. Completion and submission of the Workforce Plan within five (5) business days of the bid opening. The five-day (5) period begins the first full business day after the bid opening date;

2. Completion and submission of all responses to specific Workforce Plan inquiries made by MnDOT's Office of Civil Rights of the Contractor or any of its Subcontractors with estimated labor hours on the Project; and

3. Ability of the Contractor or any of its Subcontractors with estimated labor hours on the Project to demonstrate that specific and significant actions to recruit, hire, and retain minorities and/or women are being taken if the applicable workforce participation goals will not be met.

E. Failure to complete and submit the Workforce Plan will result in the bid being rejected for failure to meet a condition precedent.

F. The execution of a collective bargaining agreement granting a union exclusive referral rights does not preclude compliance with the requirements of this section. As such, the inability of a union to provide candidates for employment relieves neither the Contractor nor any of its Subcontractors with estimated labor hours on the Project of the requirement to demonstrate that specific and significant actions to recruit, hire, and retain minorities and/or women are being taken if the applicable workforce participation goals will not be met.

POST-AWARD

A. The Contractor is directed to the following requirements concerning payroll submission:

1. The Contractor and its Subcontractors must complete and submit payroll weekly via the Civil Rights Labor Management System (CRL). Workforce participation goals are percentages of total labor hours captured through Contractor payroll submission.

2. All Contractors working on federal-aid highway construction Contracts of at least $10,000 during the last week of July must report their workforce by job category, gender, and ethnicity. MnDOT's Office of Civil Rights compiles this data into a single report for the FHWA. Information on how to submit the required data can be found here: mndot.gov/civilrights/federal-aid-highway-construction-contractors-annual-eeo-report.html.

Failure to meet these post-award reporting requirements may result in the imposition of Contract sanctions, including withholding of progress payments.

B. MnDOT's Office of Civil Rights determines whether Contractors on highway construction Projects are meeting state and federal laws, rules, and regulations relating to EEO by conducting annual compliance reviews. Accordingly, it reserves the right to audit the Contractor or any of its Subcontractors.

C. Information concerning specific reporting requirements for On-the-Job Training and Tribal Employment is accessible via reference to the Index for Division S.

FINAL CLEARANCE

Pursuant to MnDOT Standard Specifications for Construction, Section 1516.3, "Completion of the Work, note (7), the Contractor must notify the Engineer and MnDOT Office of Civil Rights when work is complete. MnDOT's Office of Civil Rights will issue a Final Clearance letter under MnDOT Standard Specifications for Construction, Section 1516.3, "Completion of the Work," note (7).

S-5 (1103) DEFINITIONS

INITIAL 03/28/25

SP2025-12

S-5.1 Delete and replace the definition for "Engineer" in 1103, "Definitions," with the following:

Engineer
A Department engineer authorized as the Department's representative responsible for the engineering supervision of the Work and delegated with those duties and authorities defined in the Contract. The Contract may redefine the 'Engineer' as a specific Department engineer (i.e. Concrete Engineer, Bridge Engineer, Materials Engineer, Traffic Engineer, Roadway Engineer, etc.) with jurisdiction over the engineering details of specific construction items; however, the Engineer is the main point of contact for the Contractor and the Contractor must copy the Engineer on all correspondence between the Contractor and other Department representatives.

S-6 (1203) ACCESS TO PROPOSAL PACKAGE

The provisions of MnDOT 1203 are hereby deleted and replaced with the following:

The Department will provide bidders with access to the Proposal Package online through QuestCDN at: https://questcdn.com

The Department will require a fee for Bidders to purchase and download copies of the Proposal package.

S-7 (1206) PREPARATION AND DELIVERY OF PROPOSAL

The provisions of MnDOT 1206 are deleted and replaced with the following:

S-1.1 Electronic bidding shall be used in accordance with the requirements of the Quest VirtuBid (vBid) website (https://questcdn.com) and Division S of this Proposal.

The Bidder shall submit its Proposal by the date and time for opening Proposals. The Bidder shall submit the Proposal Guaranty electronically by the same date and time. Quest VirtuBid (vBid) will not accept Proposals past the date and time of the opening of Proposals.

An authorized representative of the Bidder must sign the Proposal.

S-1.2 In addition to submitting the bid electronically through Quest VirtuBid (vBid), submit the completed and signed documents electronically through the bidding software prior to bid opening as follows:

- Proposal title sheet
- Notice to Bidders (Specifications)
- Stipulation for Foreign Iron or Steel Materials
- Non-Collusion and Conflict of Interest Statemen
- Bid Bond (use the Bid Bond Form or Surety2000)
- Trade Secret Information
- Responsible Contractor Certification
- Form 21126D

The low bidder shall submit the signed original documents within three (3) business days if requested by the Engineer to the following address:

Dakota County – Bidding

2800 160th Street W

Rosemount, MN 55068

S-1.3 Download all addenda from the QuestCDN website before you submit your bid. If addendums are not downloaded, you will not be able to submit your bid. Acknowledge receipt of each Addendum prior to the bid opening time and date on Form 21126D included with the bid submittal documents.

Failure to complete, sign and/or submit any of the bid submittal items listed above will result in rejection of that bid.

S-1.4 RESPONSIBLE CONTRACTOR

The Department cannot award a construction contract in excess of $50,000 unless the Bidder is a "responsible contractor" as defined in Minnesota Statutes §16C.285, subdivision 3. A Bidder submitting a Proposal for this Project must verify that it meets the minimum criteria specified in that statute by submitting the "Responsible Contractor Verification and Certification of Compliance" form. A company owner or officer must sign the "Responsible Contractor Verification and Certification of Compliance" form under oath verifying compliance with each of the minimum criteria. THE COMPLETED FORMS MUST BE SUBMITTED WITH THE BID PROPOSAL.

A bidder must obtain a verification from each subcontractor it will have a direct contractual relationship with. At the Department's request, a bidder must submit signed subcontractor verifications. A contractor or subcontractor must obtain an annual verification from each motor carrier it has a direct contractual relationship with. A motor carrier must give immediate written notice if it no longer meets the minimum responsible contractor criteria. The requirement for subcontractor verifications does not apply to:

- Design professionals licensed under Minnesota Statutes §326.06; and
- A business or person that supplies materials, equipment, or supplies to a subcontractor on the Project, including performing delivering and unloading services in connection with the supply of materials, equipment, and supplies. But, a business or person must submit a verification if it delivers mineral aggregate such as sand, gravel, or stone that will be incorporated into the Work

by depositing the material substantially in place, directly or through spreaders, from the transporting vehicle.

A bidder or subcontractor who does not meet the minimum criteria specified in the statute, or who fails to verify compliance with the criteria, is not a "responsible contractor" and is ineligible to be awarded the Contract for this Project or to work on this Project. Submitting a false verification makes the bidder or subcontractor ineligible to be awarded a construction contract for this Project. Additionally, submitting a false statement may lead to contract termination. If only one bidder submits a bid, the Department may, but is not required to, award a contract even if that bidder does not meet the minimum criteria.

S-1.5

S-8 (1208) PROPOSAL GUARANTY

The provisions of MnDOT 1208 are supplemented and/or modified with the following:

S-1.6 Attached to this proposal is a copy of a bid bond form that has been approved for use and meets the minimum requirements of 1208. No proposal will be considered unless it is accompanied by a guaranty complying with these requirements.

S-1.7 The provision of MnDOT 1208(3) is deleted and replaced with the following:

(3) In the form of a bond.

S-9 (1210) REVISION OF PROPOSAL PACKAGE OR WITHDRAWAL OF PROPOSALS

The provisions of MnDOT 1210 are supplemented with the following:

The Bidder shall acknowledge receipt of each Addendum, as follows:

(1) In the Bidder's electronic Proposal, and
(2) By submitting Form 21126D to the County before the date and time for opening Proposals.

S-10 (1212) OPENING OF PROPOSALS

The provisions of MnDOT 1212 are modified with the following:

MnDOT 1212 is hereby deleted from the MnDOT Standard Specifications and replaced with the following:

1212 OPENING OF PROPOSALS

The Department will open Proposals at the time, date, and place defined in the Proposal Package and the Advertisement for Bids.

S-11 (1404) MAINTENANCE OF TRAFFIC, (1707) PUBLIC SAFETY, AND (2563) TRAFFIC CONTROL

The provisions of 1404, 1707, and 2563 are supplemented as follows:

The Contractor shall furnish, install, maintain, and remove all traffic control devices required to provide safe movement of vehicular and/or pedestrian traffic passing through the work zone during the life of the Contract from the start of Contract operations to the final completion thereof. The Engineer will have the right to modify the requirements for traffic control as deemed necessary due to existing field conditions.

Traffic control devices include, but are not limited to, barricades, warning signs, trailers, flashers, cones, drums, pavement markings and flaggers as required and sufficient barricade weights to maintain barricade stability.

The Contractor shall furnish names, addresses, and phone numbers of at least three (3) individuals responsible for the placement and maintenance of traffic control devices. At least one of these individuals shall be "on call" 24 hours per day, seven days per week during the times any traffic control devices, furnished and installed by the Contractor, are in place. The required information shall be submitted to the Engineer at the Pre-construction Conference. The Contractor shall also furnish the names, addresses, and phone numbers of those individuals to the following:

1.	Hastings Public Works Department	651-480-2334
2.	Hastings Police Department	651-480-2300
3.	Hastings Fire Department	651-480-6150
4.	Hastings City Clerk	651-480-2343

The Contractor shall, at the pre-construction conference, designate a Work Zone Safety Coordinator who shall be responsible for safety and traffic control management in the Project work zone. The Work Zone Safety Coordinator shall be either an employee of the Contractor such as a superintendent or a foreman, or an employee of a firm which has a subcontract for overall work zone safety and traffic control management for the Project. The responsibilities of the Work Zone Safety Coordinator shall include, but not be limited to:

- Coordinating all work zone traffic control operations of the Project, including those of the Contractor, subcontractors, and suppliers.

- Establishing contact with local school district, government, law enforcement, and emergency response agencies affected by construction before work begins.

- Maintaining a record of all known crashes within a work zone. This record should include all available information, such as: time of day, probable cause, location, pictures, sketches, weather conditions, interferences to traffic, etc. These records shall be made available to the Engineer upon request.

The Contractor shall inspect, on a daily basis, all traffic control devices, which the Contractor has furnished and installed, and verify that the devices are placed in accordance with the Traffic Control Layouts, these Special Provisions, and/or the MN MUTCD. Any discrepancy between the placement and the required placement shall be immediately corrected. The person performing the inspection shall be required to make a daily log. This log shall also include the date and time any changes in the stages, phases, or portions thereof go into effect. The log shall identify the location and verify that the devices are placed as directed or corrected in accordance with the Plan. All entries in the log shall include the date and time of the entry and be signed by the person making the inspection. The Engineer reserves the right to request copies of the logs as he deems necessary.

S-11.1 METHOD OF MEASUREMENT

No measurement will be made of the various Items that constitute Traffic Control but all such work will be construed to be included in the single Lump Sum payment under Item 2563.601 (Traffic Control).

S-11.2 BASIS OF PAYMENT

Partial payments for lump sum Item 2563.601 (Traffic Control) will be made as follows:

Table SP2563-2
Traffic Control Partial Payments

Percent of Original Contract Completed	Pay this Percentage of Traffic Control
5	50
10	75
50	95
All Work Completed And All Traffic Control Removed	100

S-12 (1606) STORAGE OF MATERIALS

INITIAL 03/28/25

SP2025-41

S-12.1 Add the following to 1606, "Storage of Materials:"

If the Contractor elects to crush excavated Materials within the Project Limits, the quantity of crushed Material will be limited to only the quantity required for this Project. Unless approved in writing by the Engineer, the Contractor must not crush Materials other than those found within the Project Limits or remove crushed Material from the Project Limits.

The Contractor may request to use space outside of the Project Site, and within the Department's Right-of-Way, for storing materials or placing mobile production plant and Equipment. The Contractor shall submit, in writing, to the Engineer for approval. The submittal shall include the proposed location, description of items that will be stored, erosion control plans, restoration plans, and dates that the space will be used. The use of the additional space and restoration to an acceptable condition will be at no additional cost to the Department. The use of the space shall be approved, in writing, by the Engineer prior to any use. The Engineer may revoke this approval, at any time.

S-13 (1701) LAWS TO BE OBSERVED

S-13.1 Add the following to 1701, "LAWS TO BE OBSERVED:"

The Department cannot make final payment to the Contractor until the Contractor demonstrates that it and all its Subcontractors have complied with the Income Tax withholding requirements of Minnesota Statutes, section 290.92 and section 270C.66 for wages paid for Work performed under the Contract. To establish compliance, the Contractor must submit a "Contractor Affidavit" either online or in paper form (IC134) to the Minnesota Department of Revenue. The Contractor will receive a written certification of compliance when the Department of Revenue determines that all withholding tax returns have been filed and all withholding taxes attributable to the Work performed on the Contract have been paid. The Contractor must then provide this written certification to the Department to receive final payment.

Every Subcontractor working on the Project must submit an approved "Contractor Affidavit" from the Minnesota Department of Revenue to the Contractor before the Contractor can file its own Contractor Affidavit. The Contractor is advised to obtain the certification from each Subcontractor as soon as the Subcontractor completes Work on the Project. Experience has shown that waiting until the Project is complete to obtain the forms from all Subcontractors is likely to result in significant additional Work for the Contractor as it will be difficult or impossible to collect all forms.

The Department of Revenue, in association with the Department of Employment and Economic Development, offers a free seminar to help Contractors understand tax law requirements. The Department strongly

urges the Contractor and all Subcontractors to attend the "Employment Taxes & Employer Responsibilities Seminar" or similarly offered classes. You can find a schedule and more information on the Department of Revenue website (www.revenue.state.mn.us).

Complying with this requirement is considered part of the Work under this Contract. The Department will enforce this requirement equally with all other Contract requirements. The Contractor delay in complying with this requirement will cause the Department to delay final payment and Contract Acceptance. The Department may also report non-compliance to the Department of Revenue, which may result in enforcement action by the Department of Revenue.

Contractor Affidavit requirements and Form IC134 can be found on the Department of Revenue website (www.revenue.state.mn.us).

S-14 (1712) PROTECTION AND RESTORATION OF PROPERTY

INITIAL 03/28/25

SP2025-49

S-14.1 Add the following to 1712, "Protection and Restoration of Property:"

Bidders may review environmental documents and permits concerning this Project before bidding.

The Environmental Document for this Project is available at https://edocs-public.dot.state.mn.us/edocs_public/DMResultSet/download?docId=

S-15 (1717) AIR, LAND, AND WATER POLLUTION

REVISED 09/26/25

SP2025-51

S-15.1 Add the following to 1717.2, "Stormwater Management and Erosion Control:"

The Contractor shall not use recycled concrete aggregate (RCA) in temporary work such as causeways, staging areas, or stockpiles that will be in contact with surface water or groundwater. The Contractor shall:

1) Manage stormwater runoff from temporary work such as laydown areas, staging areas, and stockpiles that contain RCA. Prevent any discharge of water that is turbid or has a pH of greater than 8.5 or less than 6.0 outside of construction limits or into surface water.
2) Monitor runoff from temporary work containing RCA during every stormwater inspection. Check for pH and turbidity. Monitor more frequently if needed to maintain acceptable clarity and pH.
3) Provide a Site Management Plan showing how they will manage stormwater runoff, monitor the pH and clarity of runoff, and isolate crushed concrete from surface water and groundwater as described above.

S-16 (1717C) MPCA NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) CONSTRUCTION STORM WATER (CSW) PERMIT

The Contractor must prevent, control, and abate the pollution of natural resources of air, land and water caused by the Contractor's operations under this Contract in accordance with the rules, regulations, and standards adopted and established by the Minnesota Pollution Control Agency (MPCA), and in accordance with this Contract, the provisions of MnDOT 1717, 2573, 2575, and these Special Provisions including the following:

By signing the Proposal and completing the electronic online NPDES CSW permit, the Contractor is a co-permittee with the County and must ensure compliance with the terms and conditions of the Construction Stormwater General Permit (MN R100001). The Contractor is responsible for those portions of the permit referencing the "operator". This Permit establishes conditions for discharging storm water to waters of the State from construction activities that disturb 1 acre or more of total land area. A copy of the permit is available at http://www.pca.state.mn.us/water/stormwater/stormwater-c.html or by calling 651-296-6300.

The Contractor shall apply and pay for the NPDES Permit on this Project. Payment for the application shall be incidental to the Contract and no direct compensation will be made. Upon request, **Dakota County** will provide the Contractor with information as may be necessary for the Contractor to complete the application. The Contractor shall complete the application process, and post the Permit and MPCA's letter of coverage onsite.

A NPDES Permit declaration form will be sent to the Contractor with the Contract award packet. Verification of the completed permit application and a signed Permit Declaration form must be returned with the Contract and bond. Submittal of the verification of the permit application and Permit Declaration is mandatory for Contract approval. The Contractor is not authorized to perform any Project work which disturbs soil or which involves work in waters of the state until the NPDES Permit is in effect and the **County** has received the required documentation.

The Contractor must provide an Erosion Control Supervisor as per MnDOT 2573.3. The Contractor is solely responsible for all inspections, maintenance, and records required in the General Permit, Section 11. Contractor must use standard forms for logging all required inspection and maintenance activities. Contractor must submit all inspection and maintenance forms used on this Project to the Engineer weekly for retention in accordance with the permit. The Contractor must also have the forms available for on-site review.

The Contractor must immediately notify the Engineer of any site visits by Local Permitting Authorities performed in accordance with Section 24.10 of the permit. The Contractor must obtain the Engineer's approval before starting any work required by regulatory authorities which (1) the Contractor believes will result in additional compensation from **Dakota County**; or (2) will impact the design or requirements of the Contract documents or impact traffic.

The Contractor must use Emergency Best Management Practices to help minimize turbidity of surface waters and relieve runoff from extreme weather events. The Contractor must report a stormwater sediment release from the project site to the Minnesota Duty Officer and the Resident Engineer at the time the Contractor or Department discovers the release. The Contractor must also immediately contact the State Duty Officer (at 1-800-422-0798 or 1-651-649-5451) during any emergency situation involving an uncontrolled stormwater release.

The Contractor must review and abide by the instructions contained in the permit package. The Contractor will indemnify and hold **Dakota County** harmless for any fines or sanctions imposed by a regulatory authority and arising from the Contractor's acts or omissions in complying, or failing to comply, with the permit or erosion control provisions of this Contract.

The NPDES Permit refers to a Storm Water Pollution Prevention Plan (SWPPP). This Project's SWPPP requirement is addressed throughout the Contract, as well as this Project's Plan. The following table identifies NPDES permit requirements

and cross-references where this Contract addresses each requirement. This table is for ease of reference only and may be incomplete.

NPDES Permit Requirements	**Cross-Reference within this Contract**
Obtain NPDES Permit; Permit Compliance; Submit Notice of Termination	MnDOT 1701, 1702; and 1717 Special Provisions: 1717 (National Pollutant Discharge Elimination System (NPDES) Permit)
Certified Personnel in Erosion / Sediment Control Site Management Develop a Chain of Command	MnDOT 1506, 1717, and 2573; Special Provisions: 1717 (National Pollutant Discharge Elimination System (NPDES) Permit)
Certified Personnel in Erosion / Sediment Control Site installation	MnDOT Specifications 2573
Project / Weekly Schedule (for Erosion / Sediment Control) Completing Inspection / Maintenance Log / Records	MnDOT 1717 and 2573; Special Provisions: 1717 (National Pollutant Discharge Elimination System (NPDES) Permit); and
Project Specific Construction Staging	The Plans; MnDOT 1717; Special Provisions: 1717 (National Pollutant Discharge Elimination System (NPDES) Permit); and 1806 (Determination and Extension of Contract Time)
Temporary Erosion / Sediment Control	The Plans; MnDOT 2573, 2574 and 2575
Maintenance of Devices / Sediment removal Removal of Tracked Sediment Removal of Devices	The Plans; MnDOT 1717.2 and 2573.3K, 2573.3.R.; Special Provisions: 1514 (Maintenance During Construction), and 1717 (National Pollutant Discharge Elimination System (NPDES) Permit)
Dewatering	MnDOT 2573.3.A.6, 3875;

NPDES Permit Requirements	Cross-Reference within this Contract
	May also require DNR Permit
Temporary work not shown in the Plans Grading areas (unfinished acres exposed to erosion)	MnDOT 1717, 2573, 2574 and 2575; Special Provisions: 1717 (National Pollutant Discharge Elimination System (NPDES) Permit), 2574.3.A.1
Permanent Erosion / Sediment Control and Turf Establishment	The Plans; MnDOT 1717, 2573, 2574, and 2575; Special Provisions: 1717 (National Pollutant Discharge Elimination System (NPDES) Permit)

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This **National Pollution Discharge Elimination Declaration** shall be executed by the bidder:

STATE OF MINNESOTA)
) ss.
COUNTY OF DAKOTA)

I, _____, do state under penalty of perjury
(*name of the person signing this declaration*)
under 28 U.S.C. 1746 of the laws of the United States:

(1) that I am the authorized representative of _____

_____,
(*name of the person, partnership or corporation submitting this proposal*)
and that I have the authority to make this declaration for and on behalf of said bidder;

(2) that in connection with this proposal, the said bidder has completed the required

Construction Stormwater General Permit Application
(aka National Pollution Discharge Elimination (NPDES) permit);

(3) that the application fee and completed application have been sent to the Minnesota Pollution Control Agency;

(4) that I have fully informed myself regarding the accuracy of the statements in this declaration.

Signed: _____ _____

(bidder or authorized representative) *Date*

SP _____ - _____ - _____ Minn.Proj.No. _____ _____ ( )

NOTICES TO CONTRACTOR

Storm Water Permit Application

The **Construction Stormwater General Permit Application** must now be completed **online** on the Minnesota Pollution Control Agency website. Guidance for applying for the permit can be found at the following link:

http://www.pca.state.mn.us/index.php/water/water-types-and-programs/stormwater/construction-stormwater/stormwater-steps-to-construction.html

Information regarding the permit application and application fee can be found using the above link. The application fee of **$400.00**, payable to Minnesota Pollution Control Agency, must also be submitted with the Application.

NPDES Declaration

The enclosed **NPDES Declaration** must be completed and mailed with a copy of the above application, and your Contracts and Bonds, to the addresses below:

Mike Adams
Phone: 651-554-6538
Email: Mike.Adams@CO.DAKOTA.MN.US

These instructions must be completed for the Contracting Agency to give Final Approval Authority to begin work on this project.

S-17 (1803) PROGRESS SCHEDULES (BAR CHART/CPM SCHEDULE)

REVISED 03/28/25

SP2025-57

S-17.1 This Contract requires the use of a Bar Chart schedule in accordance with 1803.1, "Bar Chart."

S-17.2 Delete and replace 1803.1B.1, "Weather Contingency," with the following:

The Contractor must allow for normal weather delays when developing the Bar Chart Schedule. The Department will extend the Contract Time, except as limited by 1806.4, "Extension of Contract Time Due to Weather on Calendar Day and Completion Date Contracts," for delays in excess of the anticipated Working days lost to inclement weather in accordance with Table 1803.1-1. The days in the table below are cumulative and shall be prorated when Contract Time starts or ends mid-month. For example, if Contract Time starts May 1st and there are days lost to weather in May or June, then the Contract must lose 7 days to weather (4 days from May and 3 days from June) in addition to the anticipated days in July before a time extension would be considered due to weather days lost in July.

Table 1803.1-1
Weather Contingency By Time Period

Time Period	Anticipated Working Days Lost Due To Weather
January	all
February	all
March	all
April 1-15	all
April 16-30	4

Time Period	Anticipated Working Days Lost Due To Weather
May	4
June	3
July	3
August	3
September	3
October	4
November 1-14	4
November 15-30	all
December	all

S-18 (1804) PROSECUTION OF WORK (ADA)

INITIAL 03/28/25

SP2025-58

S-18.1 Add the following to 1804, "Prosecution of Work:"

1804.3 ADA REQUIREMENTS

Pedestrian facilities on this Project must be constructed according to Public Right of Way Accessibility Guidelines (PROWAG) http://www.dot.state.mn.us/ada/pdf/PROWAG.pdf.The appropriate pedestrian ramp details for each quadrant are included in the Plan. The Engineer may provide additional details to those provided in the Plan that meet PROWAG and MnDOT ADA Standards (http://www.dot.state.mn.us/ada/pdf/MnDOT-ada-standards.pdf) as the need arises and field conditions dictate.

A Designate a certified person to assess proposed sidewalk layouts at each site at the preconstruction meeting. Certification is obtained by passing MnDOT's ADA Construction Certification Course, with in the past 3 years. For class dates and locations please refer to the following link at: http://www.dot.state.mn.us/ada/training.html.

A minimum of one person per project must possess a valid ADA Construction Certification card anytime ADA work is being performed on the project. If work on electrical components is the only ADA work taking place on the project the electrician must have in their possession a current MnDOT Signals and Lighting Certification.

ADA work includes: assessment of proposed sidewalk layouts at each site before work begins, determining and marking removal limits for work pertaining to pedestrian facilities, ADA related removals and grading, forming and finishing of concrete at pedestrian facilities, paving pedestrian crossings, placing bituminous pedestrian facilities, final grading, and pavement markings. Any ADA work not listed above can be added at the discretion of the Engineer. An ADA Certified person is not required on site if the only work being performed concerns electrical components such as traffic signals and Accessible Pedestrian Signal (APS) push button installations.

B Pedestrian facilities must be constructed to meet the following criteria:

(1) Pedestrian Access Routes (PAR) must be constructed to meet the following:

(a) Minimum 4 feet width.

(b) A maximum cross slope of 2.0%.

(c) Vertical discontinuities must be less than 1/4 inches.

(d) Must provide positive drainage without allowing any ponding and maintain existing drainage flow patterns unless indicated otherwise in the Plan.

(e) All grade breaks shall be constructed perpendicular to the path of travel.

(f) Maximum 5% running slope unless adjacent roadway profile exceeds 5%.

(2) Landings are part of the PAR and must be constructed to meet the following:

(a) 4 feet by 4 feet minimum width and shall match full width of incoming PAR.

(b) Maximum slope of 2.0% in all directions.

(c) Required at all locations where the PAR changes directions or inverse running slopes are greater than 2.0%.

(d) Must be connected to the PAR.

(e) Shall be constructed as a single plane surface having no grade breaks.

(3) Ramps are part of the PAR and must be constructed to meet either of the following criteria:

(a) Longitudinal slopes less than 5% in the direction of travel requires no landing at the top of the ramp (unless the PAR changes direction).

(b) Longitudinal slopes between 5 - 8.3% in the direction of travel require a landing at the top of the ramp.

C The Contractor and the Engineer shall work together to construct all pedestrian facilities set forth in the plans and in 1804.3B above.

Before any ADA construction begins the Project Engineer will schedule and facilitate an onsite pre-activity meeting that shall consist of a project walk through with the Prime Contractor and the Concrete Flatwork Contractor's MNDOT ADA Construction Certified person. This pre-activity meeting should discuss and document potential issues, any known plan changes, potential discrepancies, and any modifications to the construction plan. The project team should discuss the ADA construction schedule and incorporate into the requirements of 1803, "Project Schedules," including the 2-week look ahead meetings for ADA activities. The discussion should include the sequence of removals and grading, utility placement and relocations, concrete curb and gutter, curb ramp, sidewalk, driveway placements, signals and lighting, temporary pedestrian access including both commercial and residential access, Temporary Pedestrian Access Routes/Alternate Pedestrian Access Routes, and traffic control staging. The Contractor should discuss what equipment, formwork, and materials are to be utilized on the project and how the pedestrian facilities will be constructed.

Notify the Engineer if the plan or site conditions do not allow PROWAAG and MnDOT ADA standards to be met, the Contractor shall consult with the Engineer to determine a resolution. The Engineer shall respond to the Contractor, in a timely manner (up to 24 hours), with a solution on how to proceed. The Contractor shall mitigate any potential delays by progressing other available work on the project.

Pedestrian facilities constructed that are not in accordance with the Plan, do not meet requirements in 1804.3B above, or do not follow the agreed upon resolution with the Engineer, will be corrected by the Contractor at no expense to the Department.

The following Hold Points will be utilized in the construction of pedestrian facilities:

(1) Removal Limits

The Contractor and the Engineer shall use the appropriate ramp, sidewalk, and driveway details in the Plan, and calculate the removal limits for the sidewalk and curb and gutter. If it is determined that the removal limits will exceed the plan removal limits by more than 10 feet and the plan removal limits are not adequate to meet PROWAG and MnDOT ADA Standards the Contractor shall consult with the Engineer to determine a solution. Once the Engineer and the Contractor reach an agreement on how to proceed, the Contractor may finish the removals.

(2) Curb and Gutter at Quadrants

Prior to pouring the curb and gutter at curb ramps the Contractor and the Engineer must verify:

(a) that the curb and gutter will work with any vertical constraints (doorways, steps, bus stops, outwalks and landing areas).

(b) zero height curb, and curb transitions will be located as shown in the Plans and will provide an adequate detectable edge as shown on *Standard Plan 5-297.250* (Sheet 4 of 6).

(c) verify curb tapers are constructed at correct heights so that positive boulevard slopes and drainage is maintained away from landings and sidewalks, to the newly constructed curb and gutter sections.

(d) gutter flow lines shall provide positive drainage, maintain existing drainage patterns including existing gutter inflows/outflows. The curb and gutter shall be constructed as detailed in the Plan with a defined flow line and have no vertical discontinuities over 1/4 inch. For required flow line corrections including curb line raises and curb ramp cross slope “tabling”, see *Standard Plan 5-297.250* (Sheet 6 of 6). Curb shall be poured at 3 percent inflow around the radius or at a minimum distance of 10 feet from any zero height curb section when machine placed. The Contractor shall consult with the Engineer to determine a resolution if any of these conditions cannot be met. Once the Engineer and the Contractor reach an agreement on how to proceed, the Contractor may proceed with pouring the curb and gutter.

(3) Curb and Gutter at Roadway Sections

Prior to pouring curb and gutter at roadway sections the Contractor must verify:

(a) proposed curb and gutter heights will work with existing roadway and shoulder slopes.

(b) The Contractor shall verify prior to placing the pedestrian facilities that positive drainage is maintained. within public Right of Way (RW), as well as maintaining existing off RW drainage. The Contractor shall check to ensure all top back of curb elevations will allow for adequate boulevard slopes, PAR slopes, and widths as shown on *Standard Plan 5-297.254* (Sheet 4 of 4) while maintaining vertically constrained match points (doorways, steps, bus stops, outwalks and landing areas).

(c) The Contractor shall check all driveway locations and widths and conform to construction plans, Sidewalk & Driveway *Standard Plan 5-297.254* and Driveway Table for all driveway details including curb heights and curb tapers. Driveway curb sections and aprons shall be constructed to minimize changes in the sidewalk width, alignment, and profile. The Contractor shall consult with

the Engineer to determine a resolution if any of these conditions cannot be met. Once the Engineer and the Contractor reach agreement on how to proceed, the Contractor may proceed with pouring the curb and gutter.

(d) When curb ramps are adjacent to bituminous roadways the concrete curb and gutter and curb ramps including concrete flares shall be tied. Drill and grout of tie bars will be required as per 2302, "Concrete Pavement Rehabilitation," and in accordance with the details shown in *Standard Plan 5-297.250* (Sheet 6 of 6).

(4) Grading, Forming and Finishing

Foundation Preparation work shall consist of constructing all necessary Subgrade Preparation, Aggregate Base, and Grading as indicated in 2106, "Excavation and Embankment – Compacted Volume Method," 2112, "Subgrade Preparation," 2211, "Aggregate Base," *Standard Plans 5-297.250* (Sheet 6 of 6), and project plans. The testing for pedestrian facilities grading shall be in accordance with the Schedule of Materials Control.

After the curb and gutter has been correctly poured, and the Contractor has set the sidewalk forms, the Contractor shall verify prior to placing the curb ramps and sidewalks that positive drainage is maintained within public RW, as well as maintaining existing off RW drainage, and that all the requirements in 1804.3B above will be achieved.

(a) Ramps

In addition, the longitudinal slopes shown in the Construction Plans and the Standard Plan shall be utilized unless these conditions cannot be met. The starting point for setting the forms on the controlling ramp leg, landing, and sidewalk slopes should be the following:

Steep (S) = 7%

Flat (F) = 4%

Landing = 1%

Sidewalk Cross Slope = 1.5%

If any of these requirements cannot be met the Contractor shall meet with the Engineer to determine the best solution. Once the Engineer and the Contractor reach an agreement on how to proceed, the Contractor may proceed with the curb ramp and sidewalk pour.

(b) Landings

An initial landing is the first required landing of a pedestrian ramp. All initial landings required at the top of a ramped sloped surface (greater than 2% longitudinal slope), shall be formed and placed separately in an independent concrete pour. This does not include initial landings placed at roadway grade such as depressed corners, parallel ramps, rural flat landings, or flat cut-throughs. Secondary landings consist of all landings beyond the initial landing. These secondary landings do not require a separate landing pour. The Contractor shall verify initial landing alignments and elevations to ensure ramp slopes are correct prior to placing curb and gutter. At a minimum this must include string line verification or the setting of landing forms

(c) Driveways

Driveways with concrete aprons matching into concrete sidewalks shall form and place the apron independent of the concrete sidewalk placement. The Contractor shall consult with the Engineer if separate concrete placements for specific driveway locations must be placed monolithic to maintain project schedule or maintain usage of commercial driveways.

All subgrade preparation and grading for the driveways, including placement of select grading materials and aggregate base, shall be completed prior to constructing any concrete driveway flatwork including both concrete walk sections and concrete apron sections.

All necessary subgrade preparation and aggregate base placement for the entire ramp construction limit shall be done before the initial landing is constructed at each location.

D It shall be the responsibility of the Contractor, or Contractor's Surveyor if applicable, to lay out all proposed work at each intersection in accordance with the Plan and requirements listed in this Special Provision. The Contractor may confer with the Engineer for guidance in laying out the proposed work, but it will be the Contractor's responsibility to ensure the proposed work meets all the requirements of this Special Provision. This layout includes, but is not limited to placement of grade breaks, curb transitions, gutter flow lines, truncated dome placement, crosswalk marking placement, flares, landing limits, removal limits, driveway tie in limits, and ramp limits. It is important that the Contractor lay out this work properly to achieve the construction of a compliant pedestrian facility. The Department's surveyor will only stake points and elevations provided in the Plan. For custom designs, other than specific dimensions provided in the Plan, the Contractor shall be expected to scale dimensions from the Plan as needed to construct the facility. If scaled dimensions do not allow for a facility to be constructed to meet the requirements of this Special Provision, the Contractor shall follow the process listed in1804.3C above. This layout work shall be incidental.

E The Contractor shall utilize measures and methods when working near existing buildings that will avoid damaging the building's face or structure. The contractor will be responsible for any damage to the building's face or structure, both below and above ground. Any damage resulting from Contractor's operations will be repaired at the Contractor's expense to the satisfaction of the Engineer.

F The Contractor shall sawcut all concrete curb ramp, sidewalk, and driveway contraction joints. The only exception to the saw cutting contraction joints requirements will be for tooling relief joints on large driveway placements, and long sidewalk placements to prevent random cracks, and for tooling joints on minor repairs.

The Contractor shall snap chalk lines for contraction joint layouts and discuss with the Engineer the locations of all saw cutting, tooled contraction relief joints, and any modifications to Standard Plans.

The Contractor and Engineer shall coordinate and agree on all expansion joint layouts before any concrete placements.

The Contractor shall saw cut curb and gutter contraction joints within the PAR including contraction joints at zero-inch height curb locations.

G The Contractor will round all joints and edges with a 1/4 inch radius grooving or edging tool within the PAR where minor tooling is permitted. This requirement includes all curb and gutter joints at zero inch height curb sections at curb ramps. Contraction joints shall extend to at least 30 percent of walk thickness. The Contractor shall also have the option of providing saw cuts to construct the sidewalk joints. If saw cutting, provide 1/8 inch wide contraction joints within the PAR, including all curb and gutter joints at zero inch height curb sections. When greater than 50 feet of continuous sidewalk runs are constructed the Contractor shall saw cut all joints. This work shall be incidental.

The top grade break of walkable flares needs a visual joint to indicate a change in grade. To eliminate the use of excessive contraction joints in the quadrant the visual joint shall meet 2521.3D.2, "Joint Construction," except the depth requirement is reduced to 1/4 inch.

All saw cutting, tooling, expansion joint material, and separation joint material shall be incidental to payment of curb and gutter, sidewalks, driveways, curb ramps, and landings.

The Contractor shall use an approved 1/4 inch Separation Material Type F at back of curb in sections where there is concrete boulevard or driveways as per *Standard Plans 5-297.254* (Sheet 3 of 4). Separation material shall match the full height dimension of adjacent concrete.

The Contractor shall use an approved 1/2 inch expansion material meeting MNDOT Specification 3702 type A- E between the outside edge of sidewalk and existing building or structures. No expansion or separation material shall not be placed in the longitudinal joint between the sidewalk and boulevard joint, unless it is necessary to provide expansion at fixed structures.

At locations where sidewalk is adjacent to existing buildings, extend walk up to the edge of building and place 1/2 inch preformed joint filler 1/2 inch lower than top of walk whenever possible. Furnish and install Backer Rod of appropriate diameter when joints are 1/4 inch wide or greater, clean surfaces and apply approved Silicone Joint Sealant to flush with top of walk. If the transverse sidewalk and boulevard joint layouts cannot be aligned, use approved preformed joint filler with a maximum 1/8 inch width and place between the sidewalk and boulevard to prevent contraction joints from migrating into the adjacent concrete panels.

H The minimum continuous and unobstructed clear width of a Pedestrian Access Route shall be 4.0 feet. All new or reconstructed sidewalk widths shall match or exceed in place sidewalk and in no case shall it be less than 5.0 feet in width except at locations where obstructions cannot be moved or at driveways where slopes exceed the maximum allowable grades. The cross slope of the sidewalk or shared use path shall not exceed 2%, and shall be measured perpendicular to the path of travel across the entire surface width of the sidewalk or shared use path. Curb ramps should match proposed sidewalk PAR width and shall match full shared use path widths. Whenever possible, the entire landings should be placed in a single concrete placement. If this is not possible due to construction staging, follow requirements for reinforcement bar placement and tie adjacent landings together.

In areas where the sidewalk is to be constructed around fixed structures and the grade has been changed, the sidewalk shall be finished around these structures to the satisfaction of the Engineer at no additional cost.

I Longitudinal joint reinforcement- Concrete sidewalks and trails with one or more unrestricted edges that are greater than 7 ft. wide for 4-inch concrete walk, and greater than 10 ft. wide for 6-inch concrete walk shall be constructed according to Concrete Walk Adjacent to Turf detail per *Standard Plan 5-297.254* (Sheet 3 of 4).

4-inch concrete walk that requires longitudinal joint reinforcement shall be constructed monolithic as a full width concrete placement using cast in place tie bars.

6-inch concrete walk that requires longitudinal joint reinforcement may use drill and grout or cast in-place tie bars for multiple adjacent concrete placements.

Place tie bar steel to the depth and location shown on the plans. Do not place tie bars within 1' of transverse joint over transverse contraction joints.

Architectural elements such as brick pavers, concrete stamping, and multiple colored concrete placements shall be kept outside the curb ramps and landing areas. Any architectural elements that do not maintain a consistent flat smooth surface shall not be used within the PAR.

S-19 (1806) DETERMINATION AND EXTENSION OF CONTRACT TIME

INITIAL 03/28/25

SP2025-61

A The Contractor must complete all Work to meet the requirements of 1516.2, "Project Acceptance", under this Contract, and must complete all Work to have traffic on the planned permanent configuration, including all paving, permanent safety devices, signing, retaining wall, drainage structures, and the installation of permanent turf establishment under this Contract in no more than 80 Working Days or before November 20, 2026, whichever is quicker.

S-20 (1807) FAILURE TO COMPLETE THE WORK ON TIME (MONETARY DEDUCTIONS)

REVISED 06/27/25

SP2025-65

S-20.1 Add the following to 1807, "Failure to Complete the Work on Time:"

A The Department will assess the Contractor a Monetary Deduction in an amount equal to $200 for each Calendar Day that any Work specified under 1516.3, "Completion of the Work," are not met after the expiration of the 90 day period of the Semi-Final Estimate requirements.

B Bidders are advised that in addition to the requirements of 1807, other Special Provisions may contain requirements for assessment of Monetary Deductions to this Contract.

C The liquidated damages set forth in 1807, "Failure to Complete the Work on Time," and any Monetary Deductions as set forth may apply equally, separately, and may be assessed concurrently.

S-21 (1901) MEASUREMENT OF QUANTITIES

RESTORED 12/19/25

SP2020-66.1

S-21.1 Delete and replace the first paragraph of 1901.6D, "Computerized Loader Bucket Scales," with the following:

The Contractor may use computerized Loader Bucket Scales to weigh materials when the quantity of material included in the bid item list is 10,000 tons or less.

S-22 (1910) COST ESCALATION

INITIAL 03/28/25

SP2025-68

S-22.1 1910, "Cost Escalation," is hereby supplemented with the attached Fuel Escalation Clause.

S-23 (2011) AS BUILT

REVISED 12/19/25

SP2025-73

S-23.1 DESCRIPTION

This Work consists of capturing As-built Asset Features in standard Asset Class deliverable formats.

S-23.2 MATERIALS – BLANK

S-23.3 CONSTRUCTION REQUIREMENTS

A As-built Deliverables in Project Scope

Complete deliverables marked with an "X' in Table SP2011-1. Certain asset classes use multiple.

Table SP2011-1.1
As Built Deliverables

In scope	Deliverable Name
X	As-built Feature Survey Memorandum
	Blowing Snow Control Systems As-built Mark-up Plan
	Blowing Snow Control Systems As-built Survey Data
	Bridge As-built Mark-up Plan
	Bridge As-Built Data
	Bridge Uncontaminated Concrete Management Record
	Bridge Steel Coating Quality Manual Including QC Records
	Drainage As-built Mark-up Plan
	Drainage Pipes As-built Survey Data
	Drainage Ponds-Basins As-built Survey Data
X	Drainage Structures As-built Survey Data
	Drainage Ponds-Basins Bathymetry Contours
	Drainage Professional Surveyor Letter
	Facility Site As-built Survey Data
	Geotech Earth Retaining Structures (ERS) As-built Mark-up Plan
X	Geotech Earth Retaining Structures (ERS) As-built Survey Data
	Geotech Slopes (Reinforced; Anchoring; Armoring) As-built Survey Data
	Geotech Subgrade (Ground Improvement) As-built Survey Data
	Geotech Special Drainage (Groundwater Controls) As-built Survey Data
	Geotech Instrumentation As-built Survey Data *[Inclinometer, Piezometer, Shape Accel Array, Data Cabinet, etc.]*
	Lighting Systems As-built Mark-up Plan
	Lighting Systems As-built Survey Data
	Pavement Messages As-built Survey Data
	Signal Systems As-built Mark-up Plan
	Signal Systems As-built Survey Data
	Stationary Anti-Icing Systems As-built Mark-up Plan
	Stationary Anti-Icing Systems As-built Survey Data
	Traffic Management Systems (TMS) As-built Mark-up Plan
	Traffic Management Systems (TMS) As-built Survey Data
	Weigh Station Systems As-built Mark-up Plan
	Weigh Station Systems As-built Survey Data

Include installed or modified As-built Asset Features. Examples of modified features: existing Structures connected to new pipe, existing pipe with new liner, existing pond or basin regraded, existing conduit with new cable pulled through, and Bridge footings left inplace.

Use the As-built Website's respective Asset Class tab for Feature Collect Indexes, Deliverable Templates, and Go-by Examples. As-built Website URL is http://www.dot.state.mn.us/gisspec/index.html.

B As-built Mark-up Plan Deliverables

B.1 Overall Mark-up Plan Deliverable Requirements

Record As-built Asset Feature elevations, locations, and material changes on the Plans. Include mark-ups from the Contractor unit(s) that performed respective Work. Include revisions due to Change Orders. Use red text and red revision cloud to clearly highlight changes.

Subdivide the Plans by Asset Class.

Write "No Changes" if no revisions on pages. Include red box on the first page of each subdivided Plan, enclosing information:

As-built Mark-up Plan "Asset Class"
Department Inspector name
Department Engineer name
Prime Contractor Company name
Prepared By

B.2 Asset Class specific Mark-up Plan Deliverable requirements

Drainage As-built Mark-up Plan – Include final elevations for drainage pipe ends, aprons, Structures, ponds/basins, special features, etc.

Lighting Systems Mark-up Plan – Include final wiring diagrams.

Signal Systems Mark-up Plan – Include final wiring diagrams.

Traffic Management Systems (TMS) Mark-up Plan – Develop mark-up plans, including final wiring diagrams, while asset is being installed, by the party responsible for installation. Create an enlarged supplemental depiction for high-density TMS cable and structure areas. Provide mark-up plans and locates to party responsible for survey prior to when survey work is performed. Field inspector or RTMC integration staff shall verify project has been electromagnetic equipment located prior to survey can proceed. Surveys collected without mark-up plans and locating (flagged/painted) will be grounds for rejection of TMS as-built submittal.

C As-built Survey Data Deliverables

C.1 Overall As-built Survey Data Deliverable Requirements

Conduct survey of As-built Asset Features to match changes captured by As-built Mark-up Plans and use standards defined by As-built Website Templates and Feature Collect Indexes representing final elevations, locations, and descriptive attributes.

Achieve survey grade accuracy with datum criteria:

Horizontal Reference Datum: WGS 1984
Horizontal Coordinate System: Geographic (Latitude/Longitude)
Horizontal Units: Decimal Degrees
Horizontal accuracy: +/- 1 foot
Vertical datum: NAVD88; Units: Feet

Vertical accuracy: +/- 0.1 foot

Use of mapping grade Equipment (+/-3 feet horizontal) permissible for non-Bridge/Drainage/Geotechnical Asset Classes.

C.2 Asset Class specific As-built Survey Data Requirements

Drainage Pipes As-built Survey Data – Collect drainage pipe bends and reducers features prior to trench backfilling. Additional Pipe End Section elevations shall be recorded, as directed by the Engineer.

Geotechnical Subgrade (Ground Improvement) As-built Survey Data – Collect geotechnical Subgrade (ground improvement) features prior to trench backfilling.

Lighting Systems As-built Survey Data – Collect conduit and cables prior to disturbance of plow line, otherwise after electromagnetic Equipment locate.

Signal Systems As-built Survey Data – Collect conduit and cables prior to disturbance of plow line, otherwise after electromagnetic Equipment locate.

Traffic Management Systems (TMS) As-built Survey Data – For TMS deliverable, electromagnetic locate, flag/paint, and survey all ITS/TMS components installed or affected for project, including installation of new cables within in-place conduits. Survey linear assets at a minimum of every 50 feet, and closer together at each change in direction and in high-density areas. Survey all crossings at each edge of road. Multiple conduits installed together may be gps'd as one, as long as it is noted to include multiple conduits and separation of conduits is accurately depicted at structures. Preformed and sawcut loop detectors shall be collected at the nearest pull vault or handhole as a CHH or PV Feature Code.

D As-built Special Deliverables

For "Bathymetry Contours" deliverable, survey new or regraded ponds and basins with laser scan or total station, bottom must be dry if using a laser scan, total pond/basin area and 15 to 20 feet outside the pond/basin boundary unless retaining wall or other Structure is in the way, the whole pond/basin, not just what was cleaned out, DTM/TIN or DGN deliverable file provides minimum 0.5 foot contours, and includes 1 foot contour labels.

For "Drainage Professional Surveyor Letter" deliverable, enclose the following content: Minnesota Board of AELSLAGID Land Surveyor License number, signature, and statement attesting to how drainage feature coordinates and elevations data were collected to meet survey grade accuracy.

For special Bridge Asset Class deliverables, complete as instructed in respective form or report.

Bridge As-Built Data: Fill out the Bridge As-Built Data on the Plan sheet provided within each bridge Plan. Once completed, the contractor submits the deliverable sheet to the Engineer for review, confirmation, and signature, then the Engineer will submit the final deliverable to the As-built site.

Bridge Uncontaminated Concrete Management Record: Follow removal requirements of 2442, "Removal of Existing Bridges," for bridges removed under this contract. On selected projects, some bridge portions may remain as noted in replacement bridge Plans. Survey and document these elements in order to make it possible to relocate abandoned materials with the documentation. Refer to the As-built Survey Data Deliverables and Bridge Special Provisions for documentation and submittal requirements. Once completed per special provision, submit the required data to the Engineer, then the Engineer will submit the deliverable to the As-built site

Bridge Steel Coating Quality Manual including QC Records: For steel painting performed under contract, the contractor must follow the MnDOT Quality Manual as defined in 2478, "Organic Zinc-Rich Paint System," or 2479, "Inorganic Zinc-Rich Paint System." Submit paint quality control records, including measurements, along with the approved MnDOT Quality Manual. These records must show that paint preparation and application met specification tolerances and were tested in a frequency compliant with the quality manual testing schedule. Include any non-conformance reports (NCRs), Corrective Action Report (CAR), approved remedies, and measurements confirming the remedy's completion. Recorded measurements should be traceable to the painted

element where measurements were obtained. Once completed, submit the records to the Engineer for review, then the Engineer will submit the final deliverable to the As-built site.

For drainage Projects with an additional elevation for end sections, include a supplemental file identifying each by Plan ID.

E As-built Kick-off Coordination and Deliverable Submittal Process

Provide a contact list with names of Contractors assigned to submitting deliverables and attend As-built specific kick-off meeting, held at discretion of the Engineer.

Name files with convention: "State Project Number Table SP2011-1 Deliverable Name Submittal Date" (For example: 0282-34_Lighting Systems As-built Survey Data_04-19-2021.csv).

Resolve comments provided by the Engineer. The Engineer will comment no later than 20 Calendar Days upon receipt.

Email deliverables to: The Engineer, and after resolving any comments by the Engineer and obtaining any signatures where required, then submit to AsBuilts.DOT@state.mn.us. Acceptance of the deliverables is a condition of 1516.2, "Project Acceptance."

S-23.4 METHOD OF MEASUREMENT

The Engineer will measure As Built as a lump sum in accordance with 1901.10, "Lump Sum."

S-23.5 BASIS OF PAYMENT

The Department will pay for As Built on the basis of the following schedule:

Item No.	Item	Unit
2011.601	As Built	lump sum

S-24 (2021) MOBILIZATION

INITIAL 03/28/25

SP2025-77

S-24.1 Delete and replace Table 2021.5-1 of 2021.5, "Mobilization, Basis of Payment," with the following:

Table 2021.5-1
Mobilization Partial Payments

When	Contract Unit Price for mobilization is less than 10 percent of the total Contract amount, pay	Contract Unit Price for mobilization exceeds 10 percent of the total Contract amount, pay
Percent of Original Contract Amount Completed	**Percent of Mobilization**	**Percent of Original Contract Amount ***
5	50	5
15	75	7.5
25	100	10
90	100	—
*If the Contract Unit Price for mobilization exceeds 10 percent of the total original Contract amount, the Department may withhold (on any partial estimate) the portion in excess of 10 percent until the Contractor earns at least 90 percent of the original Contract amount.		

S-24.2 Add the following to 2021.5, "Mobilization, Basis of Payment:"

The Engineer is authorized to pay actual costs for the payment and performance bond ahead of scheduled mobilization payments provided:

- The remaining amount to be paid for (2021) Mobilization is greater than the cost of the payment and performance bonds.
- The Contractor provides the actual invoice for the bonds.
- The Contractor provides proof of payment for the bonds
- The amount paid for the bonds is subtracted from subsequent mobilization payments.

S-25 (2051) HAUL ROAD MAINTENANCE AND RESTORATION

INITIAL 03/28/25

SP2025-83

S-25.1 Add the following to 2051.5, "Haul Road Maintenance and Restoration, Basis of Payment:"

In addition to the amount the Contractor bids for Item 2051.501 (Maintenance and Restoration of Haul Roads), the Department agrees to reimburse the Contractor at the predetermined Unit Prices set forth below for Materials ordered by the Engineer. All Materials ordered by the Engineer for the Maintenance and Restoration of Haul Roads will be measured as set forth in the applicable section of the Standard Specifications.

Each of the following Materials measured as provided above, will be paid for at the following predetermined Unit Prices:

Table SP2051.5-1
Unit Prices for Additional Haul Road Material

Item No.	Item	Unit Price
2118.509	Aggregate Surfacing Class 1	$12.00/ton
2130.523	Water	$25.00/1000 gal.
2131.506	Calcium Chloride Solution	$0.75/gal.
2211.509	Aggregate Base Class 5	$13.00/ton
2211.509	Aggregate Base Class 6	$13.00/ton
2360.509	Type SP 9.5 Wearing Course Mixture*	$40.00/ton
2360.509	Type SP 12.5 Wearing Course Mixture*	$40.00/ton
2231.509	Bituminous Patching Mixture*	$75.00/ton

Crushing will not be required in the production of Class 1 material.

*Bituminous mixture must be (3,B) or better.

The above prices are compensation in full for Equipment, Materials and labor required to complete the Work. When Materials other than those listed above are ordered by the Engineer, they will be paid for in accordance with 1402.5, "Extra Work," with the Contractor and the Department sharing equally in the costs. Blading and reshaping necessary for the maintenance and restoration of haul Roads is Incidental.

The above shall be performed to restore visible damage.

S-26 (2108) GEOSYNTHETIC CONSTRUCTION MATERIALS

NEW 12/19/25

SP2025-104.1

S-26.1 Delete and replace the last paragraph of 2108.3C, "Geogrid," with the following:

Place Geogrid parallel to the centerline of the Roadway unless specified otherwise.

S-27 (2360) PLANT MIXED ASPHALT PAVEMENT

REVISED 09/26/25

SP2025-125

S-27.1 Delete and replace Table 2360.1-1 of MnDOT 2360.1B(4) with the following:

Table 2360.1-1
Traffic Levels

Traffic Level	20 year Design ESALs
2 *	< 1
3 ‖	1 – < 3
4	3– < 10
5	10 – ≤ 30
6	>30 (See SMA Provision)
NOTE: The requirements for gyratory mixtures in this section are based on the 20 year design traffic level of the Project, expressed in Equivalent Single Axle Loads (ESALs) 1×10^6 ESALs * AADT < 2,300 ‖ AADT > 2,300 to < 6,000	

S-27.2 Delete and replace the first paragraph of MnDOT 2360.2E.5.a(2):

At least 7 Working Days before the start of asphalt production, submit the proposed job mix formula (JMF) in writing and signed by a MnDOT Certified Bituminous Mix Designer for each combination of Aggregates to be used in the mixture. Include test data to demonstrate conformance to mixture properties as specified in Table 2360.2-4, and 3139.2, "Graded Aggregate for Bituminous Mixtures, Requirements." Use forms approved by the Department for the submission.

S-27.3 Delete and replace the first paragraph of MnDOT 2360.2E.5.b with the following:

The Contractor may use the modified mixture design if testing shows that the Aggregates meet the requirements of 3139.2, "Graded Aggregate for Bituminous Mixtures, Requirements," in the current construction season and if the MnDOT Certified Bituminous Mix Designer submitting the mixture design has at least 2 years' experience in mixture design. The Department will not require mixture submittal.

S-27.4 Delete and replace MnDOT 2360.2E.5.b(2) with the following:

E.5.b(2) JMF Submittal

At least 2 Working Days before beginning asphalt production, submit a proposed JMF in writing to the District Materials Laboratory signed by a MnDOT Certified Bituminous Mix Designer for each combination of Aggregates. For each JMF submitted, include documentation in accordance with 2360.2E.5.a, "Option 1 – Laboratory Mixture Design," to demonstrate conformance to mixture properties as specified in Table 2360.2-4 and Table 3139.2-3. Submit the JMF on forms approved by the Department.

S-27.5 Delete and replace the first paragraph of MnDOT 2360.2E.5.c with the following:

A production mixture design is a new mixture design developed by modifying an existing approved mixture design using plant produced Material or laboratory produced Material. Production mixture designs are allowed only when approved by the Engineer and require an interactive process with the District Materials Laboratory to discuss the proposed modification. Only a MnDOT Certified Bituminous Mix Designer with at least 2 years' experience in mixture design can request a production mixture design.

S-27.6 Delete and replace the first paragraph of MnDOT 2360.2E.5.c(2) with the following:

At least 2 Working Days before beginning asphalt production with the Option 3 mix design begin the interactive process with the District Materials Engineer and submit a proposed JMF. Option 3 mix design submittals must be signed by a MnDOT Certified Bituminous Mix Designer. If directed by the District Materials Engineer submit an optimum asphalt content point for the proposed JMF (new design). If the Option 3 mix design is utilized for Aggregate substitution submit an optimum asphalt content point when directed by the District Materials Engineer. When an optimum asphalt content point is required include documentation showing the mixture is in accordance with 2360.2E.5.b, "Option 2 – Modified Mixture Design," and meets the requirements of Table 2360.2-4.

S-27.7 Delete and replace the second paragraph of MnDOT 2360.2F with the following:

Show the JMF limits for gradation control Sieves in accordance with Aggregate gradation broadbands shown in Table 3139.2-2, percent asphalt binder content, air voids, and adjusted AFT. If the Department issues a Mixture Design Report, this report only confirms that the Department reviewed the mixture and that it meets volumetric properties shown in Table 2360.2-4 and Table 2360.2-5. The Department makes no guaranty or warranty, either express or implied, that compliance with volumetric properties ensures Specification compliance regarding placement and compaction of the mixture, or any other requirements.

S-27.8 Delete and replace 2360.2G.2(1) with the following:

(1) Conduct QA and verification testing

S-27.9 Delete and replace the first paragraph of MnDOT 2360.2G.3 with the following:

The Engineer will obtain at least one random verification sample per day per mix type from behind the paver or from the truck box. At least once per day, the Engineer will randomly determine when the mixture sample will be sampled. The Engineer will observe the Contractor sampling and splitting this QA-Verification sample and take immediate possession of the sample after it is split. The split of this sample, given to the Contractor, must be tested by the Contractor and will replace the next scheduled QC sample. Sample enough Material to accommodate retesting in case the samples fail.

S-27.10 Delete and replace the second paragraph of 2360.2G.4.a, "Personnel," with the following:

Provide QC technicians certified as a Bituminous Plant Tester meeting the requirements of the MnDOT Technical Certification Program for QC testing and a MnDOT Bituminous Mix Designer to make process adjustments. Provide at least one person per paving operation certified as a Bituminous Street Inspector.

S-27.11 Delete and replace the second paragraph of MnDOT 2360.2G.4.b with the following:

If coarse and fine Aggregate angularity are not evaluated for every QC sample retain the extracted gradation samples for the respective QC samples for additional testing. Keep the Aggregate samples in containers with field identification labels for a period of 10 Calendar Days. The Engineer will identify which extracted gradation sample is the verification companion and test for coarse and fine Aggregate angularity.

S-27.12 Delete and replace the first paragraph of 2360.2G.5.a, "Establishing an Ignition Oven Correction Factor, Laboratory Manual Method 1853 Appendix," with the following:

On the first day of production, for each mixture type, both the Contractor and the Department will establish an ignition oven correction factor from the produced mixture. If the Contractor chooses to determine their own extracted asphalt content, then the result must be sent to the Department by no later than 3 Working Days. If the Contractor's extracted asphalt content is not received by the District Laboratory in 3 Working Days, then the Department's extracted asphalt content will be used to determine the correction factor. Reestablish correction factors when:

S-27.13 Delete and replace the title of Table 2360.2-7 of 2360.2G.6.a, "Start-up," with the following:

Table 2360.2-7
Start-Up Production Testing

S-27.14 Delete and replace the title of Table 2360.2-8 of 2360.2G.6.b, "Production," with the following:

Table 2360.2-8
Production Testing

S-27.15 Delete and replace the second paragraph of 2360.2G.7.g, "Coarse Aggregate Angularity," with the following:

The Contractor may test mixtures containing only virgin Aggregates from composite belt samples. Test mixtures containing RAP from extracted Aggregates taken from standard production samples.

S-27.16 Delete and replace the first paragraph of 2360.2G.7.h, "Fine Aggregate Angularity," with the following:

Use *Laboratory Manual* Method 1206 to test the composite blend from Aggregates used in production of asphalt mixtures for Fine Aggregate Angularity (FAA) meeting the requirements of Table 3139.2-3. The Contractor may test mixtures that contain only virgin Aggregates from composite belt samples. Test mixtures that contain RAP from extracted Aggregates taken from standard production samples.

S-27.17 Delete and replace the second paragraph of MnDOT 2360.2G.13.a with the following:

A Certified MnDOT Bituminous Mix Designer will review the requested change for the Department. If the request meets the design requirements in Table 3139.2-2, Table 3139.2-3, and Table 2360.2-4, the Department will issue a revised Mixture Design Report. Each trial mixture design submittal in accordance with 2360.2E, "Mixture Design," may have three JMF adjustments per mixture per Project without charge.

S-27.18 Delete and Replace 2360.2G.14.a, "Ratio of New Added Asphalt Binder to Total Asphalt Binder – Acceptance Criteria," with the following:

G.14.a Ratio of New Added Asphalt Binder to Total Asphalt Binder – Acceptance Criteria

Minimum design ratio of new added asphalt binder to total asphalt binder is shown in Table 2360.2-12. During production the ratio must meet the moving average requirements as listed in Table 2360.2-12.

Table 2360.2-12
Ratio of New Added Asphalt Binder to Total Asphalt Binder Acceptance Criteria

Specified Asphalt Grade	Recycled Material		
	RAS Only	RAS + RAP	RAP Only
PG 58*-28, PG 52S-34, PG 49-34, PG 64S-22 Wear (moving average) Non Wear (moving average)	70 70	70 70	70 65
PG 58*-34 Wear & Non Wear (moving average)	80	80	80
*= S, H, V, or E			

S-27.19 Delete and replace the first paragraph of 2360.3A.1, "Asphalt Release Agents," with the following:

Do not use petroleum distillates to prevent adhesion of asphalt mixtures to Equipment. An asphalt release agent must be on the APL. Drain excess release agents from truck boxes prior to loading.

S-27.20 Delete and replace Table 2360.3-3 of 2360.3D.1.g, "Lot Determination," with the following:

Table 2360.3-3
Lot Determination

Daily Production, ton	Lots
300* – 600	1
601 – 1,000	2
1,001 – 1,600	3
1,601 – 2,600	4
2,601 – 4,600	5
> 4,600	Add one lot for each additional 900 tons or part thereof.
* If producing no greater than 300 tons of mix, add it to the next production day.	

S-27.21 Delete and replace the first paragraph of MnDOT 2360.5B.6 with the following:

If the individual test result for adjusted AFT is less than 7.5 microns, the Department may either apply monetary deductions in accordance with Table 2360.5-2 or order the Material removed and replaced represented by the individual test. This tonnage includes all Material placed from the sample point of the failing test to the sample point when the test result meets Specification requirements. If the failure occurs at the first test after the start of daily production, the Engineer may include the tonnage from the start of production that day with the tonnage subject to monetary deduction or removal and replacement.

S-27.22 Delete and replace Table 2360.5-2 of MnDOT 2360.5B.6 with the following:

Table 2360.5-2
Monetary Deduction Schedule for Individual Test Results, Adjusted AFT

Individual Adjusted AFT, microns	Monetary Deduction, percent
≥ 7.5	0
7.4 – 7.0	10
6.9 – 6.1	25
≤ 6.0	Remove and replace at no expense to the Department.

S-27.23 Delete and replace Table 2360.5-3 of 2350.5B.9, "Moving Average Failure – Production Air Voids," with the following:

Table 2360.5-3
Monetary Deductions Schedule for Moving Average Test Results

Item	Monetary Deduction, Percent *
Gradation	10
Coarse and fine Aggregate crushing	NA (individual failures only)
Adjusted AFT	20
Asphalt binder content	20
Production air voids	30
Ratio of New Added Asphalt Binder to Total Asphalt Binder	10
* Lowest Pay Factor applies when there are multiple reductions on a single test.	

S-27.24 Delete and replace the second paragraph of MnDOT 2360.5B.10 with the following:

The Engineer will calculate the moving average (n=4) Adjusted AFT during the sixth test after the beginning of mixture production of that specific mixture. The Engineer will include the individual results of calculations for tests No. 3, No. 4, No. 5, and No. 6 with this calculation. The Department may consider Material with the moving average (n=4) of the Adjusted AFT is less than 8.0 microns as unsatisfactory and apply monetary deductions of 80 percent of the relevant Contract Unit Price. The Department may calculate the quantity of Material subject to replacement or monetary deductions as the tons placed from the sample point of all Individual Adjusted AFT results less than 8.0 micrometers, which contributed to the moving average value that was less than 8.0 microns, to the sample point where the Individual Adjusted AFT is at least 8.0 microns. If the failure occurs at the first test after the start of daily production, the Engineer will include the tonnage from the start of production that day with the tonnage subject to monetary deductions.

S-27.25 Add the following to 2360.5B.10, "Moving Average Failure - Percent Asphalt Binder Content, Gradation, and Adj. AFT:"

B.10.a Moving Average Failure - Ratio of New Added Asphalt Binder to Total Asphalt Binder

If the moving average for the ratio of new added asphalt binder to total asphalt binder does not meet the requirements specified in Table 2360.2-12, the Department may apply Monetary Deductions for the placed Material in accordance with Table 2360.5-3. The Engineer will calculate the quantity of Material subject to Monetary Deductions as the tons placed from the sample point of the failing test until the sampling point where the test result meets the Specifications. If the failure occurs at the first test after the start of daily production, the Department will include the tonnage from the start of production that day with the tonnage subjected to monetary deductions.

S-28 (2411) MODULAR BLOCK RETAINING WALL

INITIAL 03/28/25

SP2025-133

S-28.1 DESCRIPTION

This Work consists of constructing modular block retaining wall in accordance with 2411, "Minor Concrete Structures."

S-28.2 MATERIALS

A Blocks .....Dry Cast Walls APL
Blocks and Soil ReinforcementDry Cast Wall Modular Block and Geogrid System Combinations APL

B Concrete 2461

C Type 1 Geotextile Fabric.....3733

D Geosynthetic Membrane ..... Standard Plan 5-297.645

E Wall Surface Sealant ..... Segmental Masonry Wall Sealants APL

S-28.3 CONSTRUCTION REQUIREMENTS

Wall and cap units shall be straight face and tan.

Construct modular block retaining wall in accordance with *Standard Plans 5-297.640, 5-297.644, and 5-297.645.*

A Quality Control

A.1 Sampling

Sample and prepare coupon specimen for testing in accordance with *ASTM C140, Standard Practice for Capping Concrete Masonry Units, Related Units and Masonry Prisms for Compression Testing*, section A1.4.1.3.

Sample and test cap units and wall units as separate block types.

Sample and test each block type at each Manufacturing facility at the rate of one set of samples per 5,000 units of continuous production or fraction thereof as part of their overall quality control testing. Each 5,000 units of continuous production shall constitute a lot.

Example: If 12,000 wall units are produced in a continuous production run, this would constitute 3 lots and 3 sets of samples would be required. If 6,000 units are produced in each of two production runs (12,000 total) then 2 sets of samples would be required from each separate production run or lot (4 sets of samples total).

Provide a minimum of 5 randomly selected units from each lot and perform the following testing on each set of samples:

(1) Compressive strength (average of 3 units)
(2) Freeze-thaw durability (average of 5 units)

A.2 Testing Requirements

Test wall and cap units in accordance with *ASTM C1372, Standard Specifications for Segmental Retaining Wall Units* and the following:

1) Wall unit minimum compressive strength is 5,500 psi for individual units and 5,800 psi for the average of 3 units.
2) Cap unit minimum compressive strength is 3,700 psi for individual units and 4,000 psi for the average of 3 units.
3) Test wall unit freeze/thaw durability in accordance with *ASTM C1262, Standard Test Method for Evaluating the Freeze-Thaw Durability of Dry-Cast Segmental Retaining Wall Units and Related Concrete Units*, in a 3% saline solution with the minimum of the following:
   a. Maximum mean weight loss of the five test specimens at the conclusion of 90 cycles is 1% of the initial weight; or
   b. Maximum mean weight loss of the 4 lowest out of 5 test specimens at the conclusion of 100 cycles is 1.5% of the initial weight.
4) Test cap unit freeze/thaw durability in accordance with *ASTM C1262* in a 3% saline solution with the minimum of the following:
   a. Maximum mean weight loss of the five test specimens at the conclusion of 40 cycles is 1% of its initial weight; or
   b. Maximum mean weight loss of the 4 lowest out of 5 test specimens at the conclusion of 50 cycles is 1.5% of its initial weight.
5) Slope cap units top surface at minimum of 1V:10H front to back or crown cap unit top surface at 1V:10H at the center.
6) Record *ASTM C1262* test results report in 10 cycle intervals showing the weight loss of all specimens and not just the mean value.
7) Retesting will only be permitted at the discretion of the Engineer when special conditions indicate additional testing is warranted.

Note: If a Manufacturer chooses to increase the sample size tested beyond the 5 units required for each block and cap type, a mean value will not be used but rather each specimen must meet the 1% requirement in 3a or 4a or 80% of the specimens must meet the 1.5% requirement in 3b or 4b (i.e., if a sample size of 10 blocks is tested, all 10 specimens must meet the 1% requirement or a minimum of 8 specimens must meet the 1.5% requirement.

Provide test results from each Manufacturer lot of production to the Engineer within 30 days of the completion of testing and prior to the incorporation of any Material. Test report will clearly state the production lot number represented by the test results corresponding with the lot number supplied with the block on the certificate of compliance.

Attach a certificate of compliance to each pallet of block in accordance with 1603, “Materials: Specifications, Samples, Tests, and Acceptance.” The certificate of compliance shall include the name and address of the manufacturing facility, date of manufacture and lot number, in addition to all other required information.

Block placed without a certificate of compliance is unauthorized Work in accordance with 1512, “Unacceptable and Unauthorized Work.”

B Quality Assurance

Submit samples for testing in accordance with the Schedule of Materials Control.

Final acceptance and payment shall be based on testing of Quality Assurance samples.

C Wall Surface Sealing

Lightly waterblast surface the top, exposed front face, and backside of the upper three courses of wall units.

Confirm wall unit surfaces are dry and free of dust, debris, and frost, before applying surface sealant.

Prepare, handle and apply surface sealant at the heaviest application rate specified by the Manufacturer in accordance with the Manufacturer's recommendations. Apply sealant to the top, exposed front face, and backside of the upper three courses of wall units.

S-28.4 METHOD OF MEASUREMENT

The Engineer will measure Modular Block Retaining Wall by the area of wall face between a line 2 feet below the finished ground line in front of the wall and the top of the wall.

S-28.5 BASIS OF PAYMENT

The Contract Unit Price for Modular Block Retaining Wall is compensation in full for Equipment, Materials and labor required to complete the Work.

The Department will pay for Modular Block Retaining Wall on the basis of the following schedule:

Item No.	Item	Unit
2411.618	Modular Block Retaining Wall	square foot

S-29 (2411) ARCHITECTURAL SURFACE FINISH (SINGLE COLOR) AND ANTI-GRAFFITI COATING

PROJECT SPECIFIC

S-29.1 DESCRIPTION

The work consists of the preparation of the concrete surfaces, cleaning the surfaces, furnishing and applying a single color concrete stain and anti-graffiti coating on the exposed structure surfaces required by the Contract. Follow the approved Quality Control Plan to produce a surface uniform in texture and appearance. Final approval of appearance will be made by the Engineer.

S-29.2 SURFACE COLOR

The surface coloring for the Architectural Surface Finish described above shall be performed using approved stains or paint systems applied in a manner consistent with the aesthetic design requirements of the Project.

For Architectural Surface Finish (Single Color), the color shall be provided by a two-coat stain application. The application of the base coat shall follow ordinary concrete finish operations and be by air or airless sprayer. Allow to thoroughly dry before applying topcoat. The topcoat shall be applied in a uniform manner, moving in one direction, 5.5 to 6.5 mils wet film thickness equivalent to 1.5 to 2.0 mils dry film thickness. Use sufficient material to provide color uniformity, but avoid buildups and runs.

Provide a finish color matching **Sherwin Williams color SW6102 "Portabello"** or approved equal. Provide a "matte" finish for all colors. Provide stain free of toxic metals and toxic pigments.

S-29.3 MATERIALS

ARCHITECTURAL SURFACE FINISH

Stain shall be a 100 percent acrylic, water-repellant, semi-opaque, tinted emulsion sealer designed for concrete and masonry surfaces. Acceptable products shall allow moisture and vapor transmission, be formulated for exterior application with resistance to freeze/thaw, moisture, alkali, acid and mildew, mold or fungus, discoloration or degradation and meet the following requirements:

A Physical or performance properties

A.1 Volume Solids…….....29-31 percent (Calculated Lab Value)

A.2 Weight Solids……..44-46 percent (Calculated Lab Value)

A.3 Viscosity……..65-85 KU (Calculated Lab Value)

A.4 Accelerated Weathering…..1,000 Hours Minimum (ASTM G-26)

B Color pigments for tinted products shall be derived from synthetic mineral oxides.

C To the greatest practical extent, all concrete finishing products shall be obtained from a single source.

D All materials shall be furnished, prepared, applied, cured and stored according to the product manufacturer's directions and as specified herein. Special attention shall be given to the recommended temperature range for application.

ANTI-GRAFFITI COATING

Anti-graffiti coatings shall be a clear, multi-component, multi-coat system designed as a permanent, nondestructive coating system for exterior architectural aesthetics. Product shall be compatible with any surface sealer and/or special surface finish that may have been previously applied to the concrete surfaces. It shall be non-yellowing, non-chalking and UV-resistant, available in a flat, matte or semi-gloss finish and shall not require reapplication after graffiti removal. Coating shall not contain paraffin (wax) or elastomeric silicones. Acceptable products shall demonstrate protection from graffiti defacement, chemical staining, ghosting, shadowing and normal environmental effects without yellowing, color change, increased dirt pick-up or damage to the coating or substrate for a minimum ten-year period. Coating from MnDOT's APL shall be used and be the same manufacturer as the stain.

S-29.4 SUBMITTALS BY CONTRACTOR

Within sixty (60) calendar days of execution and approval of the Contract, the Contractor shall submit the following to the Engineer for approval:

A Product data including manufacturer's technical information, label analysis, and application instructions for each material proposed for use.

B Laboratory test reports showing that materials proposed for use meet physical or performance property requirements.

C One foot by one foot square samples of the color system on the textured surface pattern.

D Applicator qualifications demonstrating experience in staining and coating applications. Include a list of recently completed staining and anti-graffiti coating projects. Supply name and location of project, name and telephone number of owner, and a description of products used, substrates, and applicable local environmental regulations and application procedures.

S-29.5 APPLICATION REQUIREMENTS

Sandblasting will not be allowed for cleaning concrete surfaces, as it will reduce the architectural surface treatment texture.

Architectural surface finish shall be applied in accordance with the manufacturer's recommendations.

Anti-graffiti coating shall be applied after all components of the architectural surface finish have been applied. The substrate shall be prepared, and the anti-graffiti coating product(s) shall be applied in accordance with the manufacturer's directions.

S-29.6 BASIS OF PAYMENT

The architectural surface finish and anti-graffiti coating described above shall be considered an incidental expense to 2411.618 PREFABRICATED MODULAR BLOCK WALL and no additional compensation will be made for this work.

S-30 (2451) STRUCTURAL BACKFILL

INITIAL 03/28/25

SP2025-137

S-30.1 DESCRIPTION

This Work consists of backfilling behind retaining wall in accordance with 2451, "Structure Excavations and Backfills."

S-30.2 MATERIALS

Structural Backfill 3149.2D.2

S-30.3 CONSTRUCTION REQUIREMENTS – See Standard Specifications for Construction

S-30.4 METHOD OF MEASUREMENT

The Engineer will measure Structural Backfill by Compacted Volume.

S-30.5 BASIS OF PAYMENT

The Contract Unit Price for Structural Backfill is compensation in full for Equipment, Materials and labor required to complete the Work.

The Department will pay for Structural Backfill on the basis of the following schedule:

Item No.	Item	Unit
2451.607	Structural Backfill	cubic yard

S-31 (2503) CONNECT TO EXISTING STORM SEWER

INITIAL 03/28/25

Use when Pay Item is on Project.

SP2025-146

S-31.1 DESCRIPTION

This Work consists of connecting new pipe or a new Structure into an existing storm sewer in accordance with 2503, "Pipe Sewers," and 2506, "Manholes and Catch Basins."

S-31.2 MATERIALS — See Standard Specifications for Construction.

S-31.3 CONSTRUCTION REQUIREMENTS

Neatly cut the existing pipe off and trim flush with the proposed pipe or inside wall of proposed Structure.

Provide a clean, water-tight connection between the new pipe or structure and the existing storm sewer.

Remove and replace unacceptable damage to the existing storm sewer at no cost to the Department in accordance with 1512, "Unacceptable and Unauthorized Work."

S-31.4 METHOD OF MEASUREMENT

The Engineer will measure the number of connections constructed.

S-31.5 BASIS OF PAYMENT

The Contract Unit Price for Connect to Existing Storm Sewer is compensation in full for Equipment, Materials and labor required to complete the Work.

The Department will pay for Connect to Existing Storm Sewer on the basis of the following schedule:

Item No.	Item	Unit
2503.602	Connect to Existing Storm Sewer	each

S-32 (2506) MANHOLES AND CATCH BASINS

NEW 12/19/25

SP2025-149.1

S-32.1 Delete and replace 2506.2B, "Mortar," with the following:

B Masonry Mortar 3107.2A

S-33 (2515) REVETMENT SYSTEMS

INITIAL 03/28/25

SP2025-154

S-33.1 Add the following to the first paragraph of 2515.3B, "Subgrade Preparation:"

Do not use bedding material contains recycled concrete aggregate (RCA).

S-33.2 Delete and replace 2515.3G, "Filling and Vegetation," with the following:

If vegetation is shown in the Plans, fill voids of the revetment system with screened common topsoil borrow per 3877 "Topsoil Material." Plant Mesic Inslope Seed Mixture per 3876 "Seed" and 2575 "Establishing Vegetation and Controlling Erosion." Install category 30 rolled erosion prevention product per 3885 "Rolled Erosion Prevention Products" and 2575 "Establishing Vegetation and Controlling Erosion" unless otherwise shown in the Plans. Perform filing and vegetation after the Engineer completes inspection of any required clamping and anchoring systems.

S-34 (2540) CONCRETE PICNIC TABLE

S-34.1 DESCRIPTION

This Work consists of placing concrete picnic tables at the locations shown on the construction plan sheets.

S-34.2 CONSTRUCTION REQUIREMENTS

Place concrete picnic table including concrete foundation. The foundation shall be buried 4' deep and shall be poured 14'L x 12'W fiber reinforced 5000psi slab. Installation includes concrete, assembly and ensuring that the table is stable, sturdy, and ready for use.

S-34.3 METHOD OF MEASUREMENT

The Engineer will measure the number of concrete picnic tables.

S-34.4 BASIS OF PAYMENT

The Contract Unit Price for Concrete Picnic Table is compensation in full for Equipment, Materials and labor required to complete the Work.

The Department will pay for Concrete Picnic Table on the basis of the following schedule:

Item No.	Item	Unit
2540.602	Concrete Picnic table	each

S-35 (2540) BENCH

S-35.1 DESCRIPTION

This Work consists of installing the benches at the locations shown on the construction plan sheets.

S-35.2 CONSTRUCTION REQUIREMENTS

Bench including concrete foundation. The foundation shall be buried 4' deep and shall be poured 8'L x 4'W slab.

METHOD OF MEASUREMENT

The Engineer will measure the number of benches.

S-35.3 BASIS OF PAYMENT

The Contract Unit Price for placing bench is compensation in full for Equipment, Materials and labor required to complete the Work.

The Department will pay for bench on the basis of the following schedule:

Item No.	Item	Unit
2540.602	Bench	each

S-36 (2557) WOODEN FENCE

S-36.1 DESCRIPTION

This Work consists of furnishing and erecting wooden fence as indicated in the plans.

S-36.2 CONSTRUCTION REQUIREMENTS

Construction methods for split rail fence shall be in accordance with manufacturers' specifications. Install posts by digging post hole, pouring concrete foundation, and backfilling after the concrete is hardened. Post foundation shall be buried 3' deep and shall be 2' deep foundation and 18" diameter.

S-36.3 METHOD OF MEASUREMENT

The quantity of wooden fence will be measured in linear feet, measured in place from center of each post to center of end post.

There will be no separate measurement for timber rails, posts, braces, fasteners and incidental materials required to complete the wooden fence as directed by the Engineer.

S-36.4 BASIS OF PAYMENT

The Department will pay for wooden fence on the basis of the following schedule:

Item No.	Item	Unit
2557.603	Wooden Fence	lin ft

S-37 (2571) PLANT INSTALLATION AND ESTABLISHMENT

NEW 12/19/25

SP2025-202.1

S-37.1 Delete and replace 2571.3D.3, "Wet Soils, Rock, and Debris," with the following:

D.3 Wet Soils, Rock, and Debris

If the Contractor encounters excessively wet soils, bedrock, or excessive quantities of boulders and construction debris, the Contractor may request the Engineer's approval to relocate or delete plantings, or modify soil or drainage characteristics.

S-37.2 Delete the last sentence of 2571.3E.1, "Pruning – Top Growth and Roots."

S-37.3 Delete and replace the last paragraph of 2571.3F.1, "Installation of Plants, General," with the following:

Ensure drainage in the planting hole and bed areas. For a suspected drainage problem, perform a percolation test by filling a 16 inches deep planting hole with water and measuring the time it takes the water to drain from the hole. The Engineer considers adequate drainage equal to or greater than a percolation rate of 1/2 inch per hour. If drainage does not meet these requirements, request approval from the Engineer to relocate or delete affected planting locations.

S-37.4 Delete and replace the first paragraph of 2571.3G, "Watering," with the following:

Provide watering Equipment and forces on the Project capable of completely watering plants as often as necessary to maintain soil moisture in the root zones in compliance with *Standard Plan 5-297.301.*

S-37.5 Delete and replace 2571.3I.2, "Rodent Protection," and 2571.3I.3, "Seedling Tree Shelters," with the following:

I.2 Tree Trunk Protection

Place tree trunk protection around deciduous, pine, and larch trees in accordance with *Standard Plan 5-297.301.*

I.3 Woodly Seedling Shelter

Install woody seedling shelter in accordance with *Standard Plan 5-297.301.*

S-37.6 Delete and replace notes (3) and (4) of 2571.3K.2.a, "All Plants," with the following:

(3) Maintain soil moisture in accordance with the watering guidelines of *Standard Plan 5-297.301* and 2571.3G, "Watering."

(4) Repair, adjust, or replace staking and guying, planting soil, tree trunk protection, woody seedling shelters, and other items in accordance with the Plans and *Standard Plan 5-297.301.*

S-37.7 Delete and replace note (9) of 2571.3K.2.a, "All Plants," with the following:

(9) Prune to remove dead, rubbing, damaged, or diseased branches, unwanted suckers, and to improve plant form and structure in accordance with *Standard Plan 5-297.301.*

Herbicide Application and Applicators

1. *Herbicide applicators must be state-certified.*

2. *DNR Operational Order 59 (Pesticides and Pest Control: http://files.dnr.state.mn.us/assistance/grants/habitat/heritage/oporder_59.pdf) and appropriate discipline guidelines must be followed when working on all lands and waters, regardless of ownership.*

3. *Herbicide application must follow industry standards for temperature and weather conditions, according to label directions and the State of Minnesota Commercial Pesticide Applicator Manual.*

4. *Use least toxic herbicide or formula with lowest soil residual; Glyphosate is preferred. (Milestone or Transline is suitable for legumes, but CONTRACTOR must first consult with DAKOTA COUNTY before applying these herbicides.) Aquatic formula is required when applying within 100 feet of a wetland.*

5. *Surfactants added to herbicides mixes applied on or near water must be non-ionic (e.g., Activator 90, Agri-Dex).*

6. *As much as possible, herbicides should be applied when there is some biological activity in the plant (e.g. Apr-Nov).*

7. *Avoid windy days and ensure a rain-free period of at least 3 hours after application.*

8. *Take maximum care to avoid chemical drift or contact with non-target plants. In native prairie areas, invasives should be spot-treated by wick application if feasible or with a backpack sprayer. Do not treat plants if doing so is likely to hit conservative (Conservation Coefficient of 4 or greater, as designated by University of Wisconsin) native plants.*

9. *A copy of the record of all pesticide/herbicide applications shall*

Non-Native Forbs - Prairie

1. *Prevent herbicide drift to adjacent plants.*

2. *Manage all herbaceous species listed in Herbaceous Exotic Species List (**Attachment B**), and all others as detected. Species shall be managed by the CONTRACTOR such that seed set is reduced or eliminated and the ability of the plant to compete with desirable vegetation is greatly reduced. Some species (discuss with DAKOTA COUNTY) will be dealt with aggressively by CONTRACTOR, with a final goal of eradication of these species from the restored areas during the contract period.*

Preparing Work Area

1. *Contractor to notify DAKOTA COUNTY a minimum of four (4) days in advance of any work to occur on-site.*

2. *Contractor to coordinate with DAKOTA COUNTY all additional site herbicide or seeding prep visits.*

3. *Remove/kill invasive/weedy vegetation (including species in **Attachment A and B**) prior to installing native seed. If area to be seeded was treated with herbicide, contractor shall follow all label requirements for seeding. Prescribed burning may be an acceptable component of Work Area preparation. A suitable seedbed must be prepared and approved by the County Representative prior to seed installation.*

4. *Contractor shall provide invasive species removal and control prior to final seeding.*

Installing Seed

1. *DAKOTA COUNTY will provide all seed for this project.*

2. *Seeding shall be preferentially conducted as a late fall dormant seeding (after October 15, but before the soil starts to freeze) or in early spring (as soon as the soil is free of frost and in a workable condition but no later than June 10).*

3. *Where obstructions (e.g., trees) are absent or limited, and slopes allow, install seed with broadcast seeder in two directions, perpendicular to one another. Areas that cannot be broadcast with equipment may be hand broadcast seeded using a mechanical seeder that can evenly disperse all, including fluffy, seed. Prior to hand broadcasting, seed shall be divided into two equal parts. The entire area shall be sown with first half before spreading second half, using two perpendicular passes. All seed shall be spread evenly throughout seeding zones. Within 24 hours, or as soon as Work Area conditions permit, hand broadcast seeded areas shall be rolled with a cultipacker perpendicular to the slope, or alternatively, raked in to ensure good seed-to-soil contact.*

4. *All trail buffer areas within 2.5 feet of the bituminous trail edge are assumed to have a (low-maintenance fescue mix. Cover crop will depend on seed installation timing; Oats are for spring seeding, winter wheat for late fall seeding.*

Timing

1. *For Prairie and Savanna seeded areas, the Establishment Management period begins immediately following Preparing Work Area and Installing Seed respectively.*

Tree and Shrub Planting

1. *Follow MnDOT Standard Specification 2571 PLANT INSTALLATION AND ESTABLISHMENT for tree and shrub planting specifications.*
2. *Plant tree and shrub species and spacing as described in Table 5 for Tree/Shrub Area and Savannah Area.*
3. *No single species may comprise more than 40% of canopy trees installed, 33% of understory species installed or 15% of shrubs installed.*

Establishment Mowing

1. *Establishment mowings will occur following installation of native seed for the establishment of prairie or oak savanna. At no time is the vegetation to be taller than 12", and mowing height shall be no less than 6". Do not allow vegetation to grow so tall that it smothers growth when cut. Do not mow immediately after rain when cut vegetation will clump.*

Table 1 Seeding Zone Rates

MIX	***RATE (PLS lbs / ac) with 250 lbs/ac cover crop (oats/ww)***	***AREA***
Upland Prairie Mix	*74*	*1.03 ac*
Shady Woodland Mix	*70.1*	*0.41 ac*
Low Maintenance Fescue	*250*	*0.20 ac*

Table 2 Upland Prairie Seed Mix

Graminoids					
Scientific Name	***Common Name***	***Net # seeds/s.f.***	***oz/acre***	***PLS oz***	***PLS lb***
Andropogon gerardii	*big bluestem*	*7.80*	*33.98*	*41.6*	*2.12*
Bouteloua curtipendula	*side-oats grama*	*8.13*	*58.99*	*72.2*	*3.69*
Bouteloua gracilis	*blue grama*	*3.25*	*10.62*	*13.0*	*0.22*
Bromus kalmii	*kalm's brome*	*0.10*	*0.54*	*0.7*	*0.04*
Elymus canadensis	*nodding wild rye*	*3.90*	*32.67*	*40.0*	*2.04*
Elymus trachycaulus	*slender wheatgrass*	*0.20*	*1.26*	*1.5*	*0.10*
Elytrigia smithii	*western wheatgrass*	*0.10*	*0.61*	*0.7*	*0.05*
Koeleria pyramidata	*junegrass*	*0.80*	*0.17*	*0.2*	*0.01*

Panicum oligosanthes	*Scribner's panic grass*	*0.24*	*1.16*	*1.4*	*0.09*
Schizachyrium scoparium	*little bluestem*	*13.65*	*39.64*	*48.6*	*2.48*
Sorghastrum nutans	*Indian grass*	*0.28*	*1.02*	*1.2*	*0.08*
Sporobolus heterolepis	*prairie dropseed*	*0.48*	*1.31*	*1.6*	*0.10*
Forbs					
Scientific Name	***Common Name***	***Net # seeds/s.f.***	***oz/acre***	***PLS oz***	***PLS lb***
Agastache foeniculum	*blue giant hyssop*	*0.48*	*0.23*	*0.3*	*0.02*
Allium stellatum	*Prairie Wild Onion*	*0.28*	*1.11*	*1.4*	*0.08*
Amorpha canescens	*lead plant*	*0.42*	*1.50*	*1.8*	*0.11*
Anemone cylindrica	*long-headed thimbleweed*	*0.40*	*0.67*	*0.8*	*0.05*
Anemone patens	*pasque flower*	*0.32*	*0.77*	*0.9*	*0.06*
Antennaria neglecta	*field pussytoes*	*1.08*	*0.11*	*0.1*	*0.01*
Antennaria plantaginifolia	*plantain-leaved pussytoes*	*0.92*	*0.15*	*0.2*	*0.01*
Artemisia ludoviciana	*prairie sage*	*0.80*	*0.14*	*0.2*	*0.01*
Asclepias syriaca	*common milkweed*	*0.06*	*0.65*	*0.8*	*0.05*
Asclepias tuberosa	*butterfly milkweed*	*0.16*	*1.62*	*2.0*	*0.12*
Asclepias verticillata	*whorled milkweed*	*0.28*	*1.11*	*1.4*	*0.08*
Aster ericoides	*heath aster*	*0.40*	*0.09*	*0.1*	*0.01*
Aster oolentangiensis	*skyblue aster*	*0.56*	*0.30*	*0.4*	*0.02*
Astragalus canadensis	*Canada milk vetch*	*0.32*	*0.82*	*1.0*	*0.06*
Astragalus crassicarpus	*ground plum*	*0.08*	*0.67*	*0.8*	*0.05*
Campanula rotundifolia	*harebell*	*0.92*	*0.04*	*0.1*	*0.00*
Coreopsis palmata	*bird's foot coreopsis*	*0.36*	*1.57*	*1.9*	*0.12*
Dalea candida	*white prairie clover*	*0.48*	*1.10*	*1.3*	*0.08*
Dalea purpurea	*purple prairie clover*	*1.30*	*3.84*	*4.7*	*0.29*
Delphinium virescens	*Carolina delphinium*	*0.24*	*0.17*	*0.2*	*0.01*

Desmodium canadense	*Canada tick trefoil*	*0.16*	*1.27*	*1.6*	*0.10*
Gentiana puberulenta	*downy gentian*	*1.12*	*0.11*	*0.1*	*0.01*
Geum triflorum	*prairie smoke*	*0.60*	*0.97*	*1.2*	*0.07*
Helianthus pauciflorus	*stiff sunflower*	*0.18*	*1.96*	*2.4*	*0.15*
Heliopsis helianthoides	*ox-eye*	*0.20*	*1.38*	*1.7*	*0.11*
Lespedeza capitata	*round-headed bush clover*	*0.30*	*1.63*	*2.0*	*0.13*
Liatris aspera	*rough blazing star*	*0.48*	*1.31*	*1.6*	*0.10*
Liatris punctata	*dotted blazing star*	*0.30*	*1.87*	*2.3*	*0.14*
Monarda fistulosa	*wild bergamot*	*0.48*	*0.30*	*0.4*	*0.02*
Oenothera biennis	*common evening primrose*	*0.52*	*0.25*	*0.3*	*0.02*
Pediomelum esculentum	*prairie turnip*	*0.12*	*4.75*	*5.8*	*0.36*
Potentilla arguta	*tall cinquefoil*	*0.84*	*0.16*	*0.2*	*0.01*
Ratibida pinnata	*gray-headed coneflower*	*0.40*	*0.58*	*0.7*	*0.04*
Rosa arkansana	*prairie rose*	*0.04*	*1.94*	*2.4*	*0.15*
Rudbeckia hirta	*black-eyed susan*	*0.60*	*0.28*	*0.3*	*0.02*
Sisyrinchium campestre	*field blue-eyed grass*	*0.40*	*0.39*	*0.5*	*0.03*
Solidago nemoralis	*gray goldenrod*	*0.92*	*0.13*	*0.2*	*0.01*
Solidago ptarmicoides	*upland white aster*	*0.48*	*0.33*	*0.4*	*0.03*
Solidago rigida	*stiff goldenrod*	*0.40*	*0.42*	*0.5*	*0.03*
Tradescantia bracteata	*bracted spiderwort*	*0.24*	*1.05*	*1.3*	*0.08*
Verbena stricta	*hoary vervain*	*0.20*	*0.31*	*0.4*	*0.02*
Viola pedatifida	*bearded birdfoot violet*	*0.20*	*0.31*	*0.4*	*0.02*
Zizia aptera	*heart-leaved alexanders*	*0.14*	*0.51*	*0.6*	*0.04*

Table 3 Shady Woodland Mix

Graminoids				
Scientific Name	***Common Name***	***Net # seeds/ s.f.***	***Oz/ acre***	***Lb/ acre***

Andropogon gerardii	*big bluestem*	*4.05*	*17.6*	*1.10*
Bouteloua curtipendula	*side-oats grama*	*0.625*	*4.5*	*0.28*
Bromus kalmii	*kalm's brome*	*1.13*	*6.1*	*0.38*
Carex brevior	*short sedge*	*1.25*	*1.9*	*0.12*
Carex pensylvanica	*Pennsylvania sedge*	*1.5*	*2.2*	*0.14*
Carex sprengelii	*Sprengel's sedge*	*0.75*	*3.3*	*0.20*
Dalea purpurea	*purple prairie clover*	*2.25*	*6.5*	*0.41*
Elymus canadensis	*nodding wild rye*	*2.70*	*22.6*	*1.41*
Elymus hystrix	*bottlebrush grass*	*4.50*	*25.8*	*1.61*
Juncus tenuis	*path rush*	*6.25*	*0.3*	*0.02*
Schizachyrium scoparium	*little bluestem*	*6.30*	*18.3*	*1.14*
Sorghastrum nutans	*Indian grass*	*6.30*	*22.9*	*1.43*
Sporobolus heterolepis	*prairie dropseed*	*0.4*	*1.1*	*0.07*
Forbs				
Scientific Name	***Common Name***	***Net # seeds/ s.f.***	***Oz/ acre***	***Lb/ acre***
Achillea millefolium	*common yarrow*	*0.8*	*0.2*	*0.01*
Agastache foeniculum	*blue giant hyssop*	*0.6*	*0.3*	*0.02*
Amorpha canescens	*lead plant*	*0.5*	*1.8*	*0.11*
Anemone virginiana	*tall thimbleweed*	*0.5*	*0.8*	*0.05*
Aquilegia canadensis	*columbine*	*0.5*	*0.6*	*0.04*
Artemisia ludoviciana	*prairie sage*	*1*	*0.2*	*0.01*
Astragalus canadensis	*Canada milk vetch*	*0.4*	*1.0*	*0.06*
Campanula americana	*tall bellflower*	*0.95*	*0.2*	*0.02*
Campanula rotundifolia	*harebell*	*2.3*	*0.1*	*0.01*
Cryptotaenia canadensis	*Honewort*	*0.25*	*1.6*	*0.10*
Eutrochium purpureum	*sweet Joe pye weed*	*0.5*	*0.5*	*0.03*
Geranium maculatum	*wild geranium*	*0.5*	*4.4*	*0.27*

Helianthus pauciflorus	*stiff sunflower*	*0.12*	*1.3*	*0.08*
Heliopsis helianthoides	*ox-eye*	*0.625*	*4.3*	*0.27*
Heuchera richardsonii	*alumroot*	*5*	*0.3*	*0.02*
Monarda fistulosa	*wild bergamot*	*1.5*	*0.9*	*0.06*
Osmorhiza claytonii	*Clayton's sweet cicely*	*0.15*	*2.6*	*0.16*
Rudbeckia hirta	*black-eyed susan*	*1.25*	*0.6*	*0.04*
Scrophularia lanceolata	*Lance-leaved Figwort*	*2*	*0.5*	*0.03*
Solidago flexicaulis	*zigzag goldenrod*	*0.7*	*0.4*	*0.02*
Solidago nemoralis	*gray goldenrod*	*1.15*	*0.2*	*0.01*
Solidago rigida	*stiff goldenrod*	*0.5*	*0.5*	*0.03*
Symphyotrichum ericoides	*heath aster*	*0.8*	*0.2*	*0.01*
Symphyotrichum laeve	*smooth aster*	*0.5*	*0.4*	*0.02*
Thalictrum dioicum	*early meadow-rue*	*0.25*	*1.5*	*0.09*
Zizia aptera	*heart-leaved alexanders*	*0.875*	*3.2*	*0.20*

Table 4: Number of Trees/Shrubs per planting zone

Planting Zone	***Area of Planting***	***Number of Canopy Trees***	***Number of Understory Trees***	***Number of Shrubs***
Tree/Shrub Planting Area	*0.30 acres*	*33*	*110*	*220*
Savannah Planting Area	*0.22 acres*	*4*	*0*	*0*

Table 5: Preferred Tree/shrub species list

Scientific Name	***Common Name***	***Spacing (ft) for Tree/Shrub Area***	***Spacing ft for Savannah Area***
Canopy Trees			
Quercus alba	*White Oak*	*20*	*50*
Quercus macrocarpa	*Bur oak*	*20*	*50*

Quercus rubra	*Northern red oak*	*20*	*50*
*Ulmus americana**	*American elm**	*20*	*50*
Understory Trees			
Ostrya virginiana	*Ironwood*	*10*	
Prunus serotina	*Black cherry*	*10*	
Tilia americana	*Basswood*	*10*	
Shrubs			
Amelanchier interior	*Juneberry*	*6*	
Amelanchier laevis	*Allegheny serviceberry*	*6*	
Cornus alternifolia	*Pagoda dogwood*	*6*	
Cornus racemosa	*Gray dogwood*	*6*	
Corylus americana	*American hazelnut*	*6*	
Diervilla lonicera	*Bush honeysuckle*	*6*	
Prunus virginana	*Chokecherry*	*6*	
Rosa arkansana	*Prairie rose*	*6*	
Rosa blanda	*Smooth wild rose*	*6*	
Sambucus racemosa	*Red-berried Elder*	*6*	
Symphoricarpos alba	*Snowberry*	*6*	
Viburnum lentago	*Nannyberry*	*6*	

** Dutch elm disease resistant*

Maintenance

*For **Upland Prairie** and **Shady Woodland** seeded areas, the Establishment Management period begins immediately following Preparing Work Area and Installing Seed, respectively.*

Performance Standards

Restoration /Enhancement Task	***Payment Schedule***	***Checkpoint 1: Performance Standards***	***Checkpoint 2 Performance Standards***	***Corrective Measures***
Task 1. Prepare Work Area and Install Native Seed	*Full payment (less a 5% retainage) upon completion and achievement of Checkpoint 1 performance standard.*	*Undesirable species have been adequately controlled and the seedbed has been appropriately prepared prior to seed installation.* *100% of areas designated to receive seed have been seeded.*	*No 2nd checkpoint*	
Task 2. Establishment Management/Invasive Species Management (Attachments A and B)	*Payment based on completion of work, and achievement of performance standards (less the 5% retainage). Invoices to be submitted to the County up to four times per calendar year per schedule as described under Task "c" Invoicing Schedule*	*For Upland Prairie and Shady Woodland seeded areas:* *For the growing season following seed installation:* *For all species listed in Attachments A and B: Less than 5% cover to set seed within any 100 sq m area. More than 95% of target species in Attachments A and B are spot treated with herbicide within any 100 sq m area.* *If there is bare ground present in seeded areas (>= 1 sq. m), these areas must be re-seeded by Contractor. Random sample contains at least 1 native forb and 3 native grass seedlings per square meter.* *Establishment mowings or spot mowings occurred at a height and frequency appropriate for*	*For Upland Prairie and Shady Woodland seeded areas:* *For subsequent growing seasons:* *For all species listed in Attachments A and B: less than 2.5% cover to set seed within any 100 sq. m area. More than 98% of target species in Attachments A and B are spot treated with herbicide within any 100 sq m area.* *Establishment mowings or spot mowings occurred at a height and frequency appropriate for establishing vegetation. At no time is the vegetation to be taller than 16", and mowing height shall be no less than 6". In the final year or at any time during the*	*If mowing results in any clumping, smothering of new growth, or if ruts are formed, CONTRACTOR will CEASE activity until conditions improve. If detriment has already occurred, CONTRACTOR will take measure to mitigate, including re-doing site preparation and seeding if necessary at soonest appropriate time, and mitigating rutting damage.*

		establishing native seed and preventing invasive/weedy species from seedset. At no time is the vegetation to be taller than 16", and mowing height shall be no less than 6".	*establishment period, the Contractor and County Representative may come to mutual agreement that establishment mowings are no longer necessary.*	

Attachment A: List of Woody Species Designated for Removal

SCIENTIFIC NAME	***COMMON NAME***	***DISPOSITION***
Acer ginnala	*Amur maple*	*Remove all*
Acer platanoides	*Norway maple*	*Remove all*
Acer negundo	*Boxelder*	*Reduce per owner's instruction**
Acer saccharinum	*Silver maple*	*Reduce per owner's instruction**
Berberis thunbergii	*Japanese barberry*	*Remove all*
Caragana arborescens	*Siberian peashrub*	*Remove all*
Celastrus orbiculatus	*Oriental bittersweet*	*Remove all*
Eleagnus angustifolia	*Russian olive*	*Remove all*
Eleagnus umbellata	*Autumn olive*	*Remove all*
Euonymus alatus	*Winged euonymus*	*Remove all*
Frangula alnus	*Glossy buckthorn*	*Remove all*
Fraxinus pennsylvanica	*Green ash*	*Reduce per owner's instruction**
Lonicera x bella	*Showy fly honeysuckle*	*Remove all*
Lonicera morrowii	*Morrow's honeysuckle*	*Remove all*
Lonicera tatarica	*Tartarian honeysuckle*	*Remove all*
Lonicera xylosteum	*European fly honeysuckle*	*Remove all*
Morus alba	*White mulberry*	*Remove all*
Populus alba	*White poplar, European poplar*	*Remove all*
*Populus tremuloides**	*Aspen*	*Reduce per owner's instruction**
Prunus serotina	*Black cherry*	*Reduce per owner's instruction**

Quercus ellipsoidalis	*Northern pin oak*	*Reduce per owner's instruction**
Quercus rubra	*Northern red oak*	*Reduce per owner's instruction**
Rhamnus cathartica	*Common buckthorn*	*Remove all*
Rhus spp.	*Sumac*	*Reduce per owner's instruction**
Ribes spp.	*Gooseberry/currant*	*Reduce per owner's instruction**
Rubus spp.	*Raspberry/blackberry*	*Reduce per owner's instruction**
Robinia pseudoacacia	*Black locust*	*Remove all*
Rosa multiflora	*Multiflora rose*	*Remove all*
Sorbus aucuparia	*European mountain-ash*	*Remove all*
Ulmus americana	*American elm*	*Reduce per owner's instruction**
Ulmus pumila	*Siberian elm*	*Remove all*
Zanothoxylum americanum	*Prickly ash*	*Reduce per owner's instruction**

**Should be controlled but not eradicated. Cut near ground level; only treat with chemical per COUNTY's direction.*

Attachment B: Herbaceous Exotic Species List

SCIENTIFIC NAME	***COMMON NAME***	***DISPOSITION***
Alliaria petiolata	*Garlic mustard*	*Control aggressively*
Arctium minus	*Common burdock*	*Control aggressively*
Bromus inermis	*Smooth brome grass*	*Control aggressively*
Cardamine impatiens	*Narrowleaf bittercress*	*Control aggressively*
Carduus acanthoides	*Plumeless thistle*	*Control aggressively*
Carduus nutans	*Musk thistle*	*Control*
Centaurea stoebe ssp. micranthos	*Spotted knapweed*	*Control aggressively*
Cirsium arvense	*Canada thistle*	*Control aggressively*
Cirsium vulgare	*Bull thistle*	*Control*
Dactylis glomerata	*Orchard grass*	*Monitor. Control if necessary.*
Daucus carota	*Queen Anne's lace*	*Control*
Echinochloa muricata	*Barnyard grass*	*Control*
Elytrigia repens	*Quack grass*	*Monitor. Control if necessary.*
Euphorbia esula	*Leafy spurge*	*Control aggressively*
Fallopia japonica	*Japanese knotweed*	*Control aggressively*
Hesperis matronalis	*Dame's rocket*	*Control aggressively*
Linaria vulgaris	*Common toadflax (Butter & eggs)*	*Control aggressively*
Lotus corniculatus	*Birds foot trefoil*	*Control*
Lythrum salicaria	*Purple loosestrife*	*Control aggressively*
Medicago sativa	*Alfalfa*	*Control*
Melilotus alba	*White sweet clover*	*Control*
Melilotus officinalis	*Yellow sweet clover*	*Control*
Pastinaca sativa	*Wild parsnip*	*Eradicate*
Phalaris arundinacea	*Reed canary grass*	*Control aggressively*

Phleum pratense	*Timothy*	*Monitor. Control if necessary.*
Phragmites australis ssp. australis	*Common Reed Grass, non-native subspecies*	*Eradicate*
Poa pratensis	*Kentucky bluegrass*	*Control*
Rumex crispus	*Curly dock*	*Control*
Saponaria officinalis	*Soapwort (Bouncing Bet)*	*Control aggressively*
Securigera varia	*Crown vetch*	*Control aggressively*
Setaria spp.	*Foxtail grasses*	*Monitor. Control if necessary.*
Solanum dulcamara	*Bittersweet nightshade*	*Control aggressively*
Tanacetum vulgare	*Common tansy*	*Eradicate*
Torilis japonica	*Japanese hedge parsley*	*Eradicate*
Trifolium pratense	*Red clover*	*Control*
Trifolium repens	*White clover*	*Monitor. Control if necessary.*
Verbascum thapsus	*Mullein*	*Control*

This list may not be comprehensive. If more exotic invasive species are found on the site, control them also. Discuss with DAKOTA COUNTY staff methods and goals for control of these species. Some should be controlled more aggressively than others.

S-38 (2573) STORM WATER MANAGEMENT

INITIAL 03/28/25

SP2025-205

S-38.1 Add the following to 2573.5, "Storm Water Management, Basis of Payment:"

I Unit Prices

In addition to stormwater management Pay Items included in the Plan, the Engineer may require the items listed below. Payment for additional items as ordered by the Engineer will be made in accordance with the following schedule:

Wheel Wash off..... $5,000.00/each
Flocculant Sock (250,000 gal. treatment vol.)..... $265.00 each
Bale Barrier..... $8.00/foot
Silt Fence, Type HI $4.50/foot
Silt Fence, Type SD $30.00/foot
Silt Fence, Type MS $2.75/foot
Flotation Silt Curtain, Type: Moving, 1.2 m (4 foot) depth $22.50/foot
Sediment Control Log, Type Wood Fiber $4.00/foot
Sediment Control Log, Type Compost..... $4.00/foot
Sediment Control Log, Type Rock $12.00/foot
Sediment Trap Excavation.....$10.00/cubic yard

Sandbag Barrier ..... $15.00/square foot
Sand Tote Bag $75.00/each
Sediment Removal, Backhoe $240.00/hour
Sediment Removal, Vacuum truck $425.00/hour
Temporary Slope Drain (18" diameter) ..... $100.00/linear foot
Water Treatment Type Sediment Tank $20,250.00/each

S-39 (2575) ESTABLISHING VEGETATION AND CONTROLLING EROSION

REVISED 09/26/25

SP2025-208

S-39.1 DESCRIPTION – See Standard Specification for Construction

S-39.2 MATERIALS – See Standard Specification for Construction

A Seed ..... S-48 (3876) Seed

S-39.3 CONSTRUCTION REQUIREMENTS– See Standard Specification for Construction

S-39.4 METHOD OF MEASUREMENT

The Engineer will measure Seed in accordance with 2575.4B, "Seed."

S-39.5 BASIS OF PAYMENT

The Contract Unit Price for Seed is compensation in full for Equipment, Materials and labor required to complete the Work.

The Department will pay for Seed on the basis of the following schedule:

Item No.	Item	Unit
2575.608	Seed _____	pound

S-40 (3116) NATURAL POZZOLAN

INITIAL 03/28/25

SP2025-214

S-40.1 SCOPE

Provide natural pozzolan for use in concrete and other applications.

S-40.2 REQUIREMENTS

Provide raw or calcined natural pozzolan material listed on the *Approved/Qualified Products List,* meeting the requirements of *ASTM C618*, *Standard Specification for Coal Ash and Raw or Calcined Natural Pozzolan for Use in Concrete.*

Include the following standardized Certification Statement with delivery invoices: "(insert company name) certifies that the (material name) produced at (insert plant and location) conforms to 3116 for Class N Natural Pozzolan."

S-40.3 SAMPLING AND TESTING

Provide samples for testing meeting the requirements of fly ash in the *Schedule of Materials Control*.

S-41 (3138) AGGREGATE FOR SURFACE AND BASE COURSES

NEW 12/19/25

SP2025-214.1

S-41.1 Delete and replace note (3) of 3138.2C, "Recycled Materials," with the following:

(3) When mixing recycled Aggregate with virgin Aggerate, the maximum Los Angeles Rattler of virgin carbonate is 40 percent. Meet all other virgin Aggregate requirements in 3138.2B, "Virgin Materials."

S-42 (3149) GRANULAR MATERIAL

NEW 06/27/25

SP2025-216.1

S-42.1 Replace Table 3149.2-3 of 3149.2D.2, "Structural Backfill," with the following:

Table 3149.2-3
Structural Backfill Requirements

Requirement	Percent
3/4 inch Sieve	100 passing
Percent Passing Ratio # 40/# 10	0 – 65 passing
No.200 Sieve	0 – 5.0 passing
Clay	1.5 maximum

S-43 (3245) THERMOPLASTIC PIPE

INITIAL 03/28/25

SP2025-218

S-43.1 Delete and replace 3245.2(2), (3), (5), and (6) with the following:

(2) *ASTM D3034, Standard Specification for Type PSM Poly(Vinyl Chloride) (PVC) Sewer Pipe and Fittings*, DR 35, (Unperforated only),

(3) *ASTM F758, Standard Specification for Smooth-Wall Poly(Vinyl Chloride) (PVC) Plastic Underdrain Systems for Highway, Airport, and Similar Drainage*, Type PS 46 (Perforated and unperforated)

(5) *ASTM D1785, Standard Specification for Poly(Vinyl Chloride) (PVC) Plastic Pipe*, Schedules 40, 80, and 12, Schedule 40, perforated and unperforated as applicable with one of the following:

(a) Perforated: Slotted with maximum slot width of 1/16 inch and minimum slot area of 1.5 inches squared/linear foot for pipe 4 inches in diameter and greater and 1.0 inches squared/linear foot for pipe less than 4 inches in diameter
(b) Perforated: Circular holes with 2 to 4 rows of holes. Hole diameter = 3/16 inch - 3/8 inch, and minimum area of holes 1.5 inches squared/linear foot for pipe 4 inches in diameter and greater and 1.0 inches squared/linear foot for pipe less than 4 inches in diameter
(c) Unperforated

(6) *ASTM F949, Standard Specification for Poly(Vinyl Chloride) (PVC) Corrugated Sewer Pipe With a Smooth Interior and Fittings,* (CP) dual-wall, Type "S" (unperforated), or "SP" (perforated) pipe, PS 50

S-44 (3278) CORRUGATED POLYETHYLENE DRAINAGE TUBING

INITIAL 03/28/25

SP2025-219

S-44.1 Delete and replace the second and third paragraphs of 3278.2, "Corrugated Polyethylene Drainage Tubing, Requirements," with the following:

A Ordinary Corrugated PE Drainage Tubing

For all uses, except the 2 inch perforated pipe shown on the Bridge approach panel Standard Plan sheets: Provide corrugated (PE) tubing and fittings meeting the requirements of *AASHTO M 252*, "Standard Specification for Corrugated Polyethylene Drainage Pipe."

Types include Type C, CP (Type C with Class 2 perforations), S, and SP (Type S with Class 1 or Class 2 perforations). Types C and CP are corrugated both inside and outside. Type S and SP are corrugated on the outside and have a smooth inner liner.

Sizes include 3 inch (Type C and CP only), 4 inch, 6 inch, 8 inch, and 10 inch.

Perforations are either Class 1 or Class 2. Class 1 perforations are located on the bottom side of the tubing and are holes only. Class 2 perforations are located around the entire tubing and may be holes or slotted. Unless specified, SP tubing has Class 2 perforations.

B Perforated pipe located on Bridge Approach Panel Sill

For the 2 inch perforated pipe on the approach panel sill shown on the Bridge approach panel Standard Plan sheets, provide corrugated and slotted drainpipe meeting the requirements listed in Table 3278.2-1.

S-45 (3702) PREFORMED JOINT FILLERS

NEW 06/27/25

SP2025-220.1

S-45.1 Add the following to 3702.2, "Requirements:"

(7) Type F – Preformed Sponge Rubber, Cork, and Recycled PVC meeting the requirements of *ASTM D1752, Standard Specification for Preformed Sponge Rubber, Cork and Recycled PVC Expansion Joint Fillers for Concrete Paving and Structural Construction or Recycled Rubber* and Table 3702.2-1, "Preformed Joint Filler Requirements.".

S-45.2 Delete and replace Table 3702.2-1 of 3702.2, "Requirements:" with the following:

Table 3702.2-1
Preformed Joint Filler Requirements

Properties	Type						
	A	B	C	D-1	D-2	E	F
Compression	50-1500 psi *	50-1500 psi *	50-1500 psi *	5-30 psi ‖	30-60 psi ‖	100-750 psi *	50-2000 psi *
Recovery	> 90 percent	> 90 percent	> 90 percent	> 95 percent	> 80 percent	> 70 percent	> 90 percent
Extrusion	< 0.25 inches	< 0.25 inches	< 0.25 inches	< 0.25 inches	< 0.25 inches	< 0.25 inches	< 0.25 inches
Density ł	-	-	> 30 pounds / cubic feet	-	> 3.5 pounds / cubic feet	> 19 pounds / cubic feet	> 50 pounds / cubic feet
Water Absorption	-	-	-	-	< 1 percent	< 15 percent	< 1 percent
Asphalt Content	-	-	-	-	-	> 35 percent	-

Expansion	-	> 140 percent	-	-	-	-	-
* To 50% of the original thickness ‖ Compression requirements per ASTM D7174 Ł Air-dried							

S-46 (3721) PREFORMED ELASTOMERIC COMPRESSION JOINT SEALERS FOR CONCRETE

INITIAL 03/28/25

SP2025-221

S-46.1 Delete and replace 3721.2C, "Physical Properties," with the following:

Provide joint sealers meeting the requirements of *ASTM D2628, Standard Specification for Preformed Polychloroprene Elastomeric Joint Seals for Concrete Pavements*.

S-47 (3733) GEOSYNTHETIC MATERIALS

REVISED 09/26/25

SP2025-222

S-47.1 Delete and replace Table 3733.2-1 of 3733.2B, "Geotextiles," with the following:

Table 3733.2-1
Geotextile Properties for Types 1, 3, 4, 5, 6, 7

Geotextile Property	ASTM Test Method Units	Type *						
		1		3	4	5	6	7 †
		Fabric	Knit sock ‖					
B1 Grab Tensile Strength minimum, each principal direction	*D4632* Pounds	100	—	100	200	250	‡	300
B2 Elongation minimum, each principal direction	*D4632* Percent	—	—	50	50	—	‡	50
B3 Seam Breaking Strength minimum #	*D4632* Pounds	90	—	90	180	180	‡	270
B4 Apparent Opening Size (AOS) §	*D4751* U.S. Sieve	40	40 as applied	50	50	30	‡	50
B5 Permittivity minimum**	*D4491* sec^{-1}	0.7	2.75 relaxed	0.5	0.5	0.60	‡	0.5
B6 Puncture strength minimum	*D6241* Pounds	—	180	—	—	1000	—	—
B7 Wide Width Strip Tensile Strength minimum each principal direction	*D4595* pounds/feet	—	—	—	—	2460	‡	—

* Minimum Average Roll Values (MARV) based on an average of at least three tests per swatch.

‖ Provide socks made of knit polymeric Materials and meeting the requirements of *ASTM D6707-06*, *Standard Specification for Circular-Knit Geotextile for Use in Subsurface Drainage Applications*, for Type H as given for properties B4, B5, and B6 fabric. Ensure the sock exhibits minimum snag or run potential, is factory-applied to maintain uniform installed mass, and conforms to the outside diameter of the tubing with a snug fit.

† Needle-punched nonwoven. Do not use thermally bonded (heat-set) fabric.

‡ Requirements are project specific and will be as specified in the Contract.

Adhere to this requirement if the Contract requires or allows seams. Strength Specifications apply to factory and field seams. Use thread for sewing that has the strength of at least 25 pounds. Sew seams with a Federal Type 401 stitch (*ASTM D6193-16, Standard Practices for Stiches and Seams*) using a two-spool sewing machine and install seams facing upward. For seaming with adhesives, see the *Approved/Qualified Products List* available on the Department's website.

§ For U.S. Sieve sizes, the AOS Number must be equal to or greater than the Sieve size specified.

** Permittivity: P = K/L, where K = fabric permeability and L = fabric thickness.

S-47.2 Delete and replace Table 3733.2-3 of 3733.2B, "Geotextiles," with the following:

Table 3733.2-3
Types 9, 10, 11, and 12 Geotextile Properties

Properties	Test Method	Unit	Type 9		Type 11		Type 12	
			Minimum Average Roll Value					
			MD	CD	MD	CD	MD	CD
Tensile Strength at Ultimate	*ASTM D4595*	lbs/ft	3,500	3,200				
Tensile Strength @ 2 Percent Strain	*ASTM D4595*	lbs/ft			600	1,000	480	1,800
Tensile Strength @ 5 Percent Strain	*ASTM D4595*	lbs/ft			1,800	2,200	1,400	4,300
Cyclic Tensile Modulus @ 2 Percent Strain	*ASTM D7556 "Method C"*	lbs/ft			50,000	70,000	50,000	120,000
Interaction Coefficient: Ci*	*ASTM D6706*				0.89		0.90	
Properties	Test Method	Unit	Maximum Roll Value					
Apparent Opening Size (AOS)	*ASTM D4751*	U.S. Sieve	30		40		40	
Properties	Test Method	Unit	Minimum Average Roll Value					
Permittivity	*ASTM D4491*	sec^{-1}	0.5		0.90		0.90	
Flow Rate	*ASTM D4491*	$gal/min/ft^2$	40		75		75	
Properties	Test Method	Unit	Minimum Roll Value					
UV Resistance (at 500 hours exposure)	*ASTM D4355*	Percent Strength Retained	70		90		90	
Seam Breaking Strength	*ASTM D4884*	Pounds/ inch	200‖					
For Type 10, meet the requirements of *AASHTO M288* Class 4A – Geotextile.								
* Perform test with a normal pressure of 1.0 psi. Use material in the mold consisting of GW or SP with a maximum internal angle of friction of 34 degrees. ‖ If required, use thread with a minimum strength of 25 pounds. Sew seams with a *ASTM D6193* Federal Type 401 stitch using a two-spool sewing machine, and install seams facing upward.								

S-47.3 Delete and replace Table 3733.2-5 of 3733.2B, "Geotextiles," with the following:

Table 3733.2-5
Geogrid Properties

Geogrid Property	ASTM Test Method Units	Type 1	Type 2
Ultimate Tensile Strength minimum, MD direction	*D6637** pound/foot	850	1300
Ultimate Tensile Strength minimum, XMD direction	*D6637** pound/foot	1300	1950
Tensile Strength at 5 percent Strain minimum MD Direction	*D6637** pound/foot	550	800
Tensile Strength at 5 percent Strain minimum XMD Direction	*D6637** pound/foot	900	1300
Resistance to UV Degradation	*D4355*‖ *Percent*	90	90
Grid Aperture Size MD	*Nominal* *Inches*	1.0	1.0
Grid Aperture Size XMD	*Nominal* *Inches*	1.3	1.3

** ASTM D6637, Standard Test Method for Determining Tensile Properties of Geogrids by the Single or Multi-Rib Tensile Method*
‖ ASTM D4355, Standard Test Method for Deterioration of Geotextiles by Exposure to Light, Moisture and Heat in a Xenon Arc-Type Apparatus

S-48 (3876) SEED

INITIAL 03/28/25

SP2025-223

S-48.1 Delete and replace Table 3876.2-1 of 3876.2A.1, "Standard Seed Mixes," with the following:

Table 3876.2-1
MnDOT Seed Mixes

Seed Mixture	Application Rate (PLS pounds per acre)
Oats	100
Winter Wheat	100
Oats and Peas	110
Two-year Cover Crop	25
Patch Mix	30
Northern Boulevard	150
Southern Boulevard	160
Turfgrass	200
Snow Fence Ground Cover	84
Mesic Inslope	65
High-traffic Inslope	60
Sandy Inslope	65
Wet Ditch	20
Northeast Roadside	26
Northwest Shortgrass Roadside	26
Northwest Tallgrass Roadside	26
Southern Shortgrass Roadside	26
Southern Tallgrass Roadside	26

S-48.2 Delete and replace 3876.2 B, "Blending," with the following:

B **Blending**

Provide Uniformly blended seed mixtures as required by the Contract and meeting the requirements of the Seeding Manual. Blend mixtures according to the requirements of the Department's Approved Seed Vendor Agreement.

B.1 Cover crop and turfgrass mixtures

Combine all components of cover crop, patch, boulevard, turfgrass, ground cover, and inslope mixtures.

B.2 Roadside and Wet Ditch mixtures

Blend and package components of these mixtures according to size to allow installation from the appropriate seed box of native seeding Equipment and in the following groups:

(1) Combine seeds of sedges, rushes, and forbs with small or medium seeds for installation with the small seeds box.

(2) Combine the seeds of grasses and large-seeded forbs for installation with the fluffy seed box.

(3) Keep the seeds of grain cover crops such as oats and winter wheat separate for installation with the grain box.

INSURANCE
TERMS

Contractor agrees to provide and maintain at all times during the term of this Contract such insurance coverages as are indicated herein and to otherwise comply with the provisions that follow. Such policy(ies) of insurance shall apply to the extent of, but not as a limitation upon or in satisfaction of, the Contract indemnity provisions. The provisions of this section shall also apply to all Subcontractors, Sub-subcontractors, and Independent Contractors engaged by Contractor with respect to this Contract, and Contractor shall be entirely responsible for securing the compliance of all such persons or parties with these provisions.

APPLICABLE SECTIONS ARE CHECKED

☒ 1. Workers Compensation.

Workers' Compensation insurance in compliance with all applicable statutes including an All States or Universal Endorsement where applicable. Such policy shall include Employer's Liability coverage in an amount no less than $500,000. If Contractor is not required by Statute to carry Workers' Compensation Insurance, Contractor agrees: (1) to provide County with evidence documenting the specific provision under Minn. Stat. § 176.041 which excludes Contractor from the requirement of obtaining Workers' Compensation Insurance; (2) to provide prior notice to County of any change in Contractor's exemption status under Minn. Stat. § 176.041; and (3) to defend, hold harmless and indemnify County from and against any and all claims and losses brought by Contractor or any subcontractor or other person claiming through Contractor for Workers' Compensation or Employers' Liability benefits for damages arising out of any injury or illness resulting from performance of work under this Contract. If any such change requires Contractor to obtain Workers' Compensation Insurance, Contractor agrees to promptly provide County with evidence of such insurance coverage.

☒ 2. General Liability.

"Commercial General Liability Insurance" coverage, providing coverage on an "occurrence" basis. Policy shall include, but not be limited to, coverage for Bodily Injury, Property Damage, Personal Injury, Contractual Liability (applying to this Contract), Independent Contractors, "XC&U" and Products-Completed Operations liability (if applicable). An Insurance Services Office "Comprehensive General Liability" policy which includes a Broad Form Endorsement GL 0404 (Insurance Services Office designation) shall be considered to be an acceptable equivalent policy form. Claims-made coverage is acceptable.

A total combined general liability policy limit of at least $2,000,000 per occurrence and aggregate, applying to liability for Bodily Injury, Personal Injury, and Property Damage, which total limit may be satisfied by the limit afforded under its Commercial General Liability policy, or equivalent policy, or by such policy in combination with the limits afforded by an Umbrella or Excess Liability policy (or policies); provided, that the coverage afforded under any such Umbrella or Excess Liability policy is at least as broad as that afforded by the underlying Commercial General

Liability policy (or equivalent underlying policy). Coverage under such policy may be subject to a deductible, not to exceed $25,000 per occurrence. Contractor agrees to maintain such insurance for at least one (1) year from Contract termination.

☒ Such policy(ies) shall name Dakota County, its officers, employees and agents as Additional Insureds thereunder.

☐ 3. Professional Liability

Professional Liability (errors and omissions) insurance with respect to its professional activities to be performed under this Contract. This amount of insurance shall be at least $2,000,000 per occurrence and aggregate. Coverage under such policy may be subject to a deductible, not to exceed $25,000 per occurrence. Contractor agrees to maintain such insurance for at least one (1) year from Contract termination.

Contractor therefore agrees that it will not seek or voluntarily accept any such change in its Professional Liability insurance coverage if such impairment of Dakota County's protection could result; and further, that it will exercise its rights under any "Extended Reporting Period" ("tail coverage").

☒ 4. Automobile Liability.

Business Automobile Liability insurance covering liability for Bodily Injury and Property Damage arising out of the ownership, use, maintenance, or operation of all owned, non-owned and hired automobiles and other motor vehicles utilized by Contractor in connection with its performance under this Contract. Such policy shall provide total liability limits for combined Bodily Injury and/or Property Damage in the amount of at least $2,000,000 per accident

☒ Such policy, shall include Dakota County, its officers, employees and agents as Additional Insureds thereunder.

☐ 5. Network Security and Privacy Liability.

Network security and privacy liability insurance, including first-party costs, for any breach that compromises data obtained while providing services under this Agreement. This insurance should to cover claims which may arise from failure of Contractor's security resulting in, but not limited to, computer attacks, unauthorized access, disclosure of not public data including but not limited to confidential or private information, transmission of a computer virus or denial of service. The required limit shall not be less than $2,000,000 per occurrence with a $4,000,000 aggregate limit. Claims-made coverage is acceptable. Such insurance shall name Dakota County, its officials, employees, volunteers and agents as additional insureds. The policy shall provide an extended reporting period of not less than thirty-six (36) months from the expiration date of the policy, if the policy if not renewed.

☒ 6. Evidence of Insurance.

Contractor shall promptly provide Dakota County with a Certificate of Insurance prior to commencement of any work. At least 10 days prior to termination of any such coverage, Contractor shall provide Dakota County with evidence that such coverage will be renewed or replaced upon termination with insurance that complies with these provisions.

☒ 7. Insurer: Policies.

All policies of insurance shall be issued by financially responsible insurers licensed to do business in the State of Minnesota by a n insurer with a current A.M. Best Company rating of at least A:VII.

☒ 8. Release and Waiver.

Contractor agrees to rely entirely upon its own property insurance for recovery with respect to any damage, loss or injury to the property interests of Contractor. Contractor hereby releases Dakota County, its officers, employees, agents, and others acting on their behalf, from all claims, and all liability or responsibility to Contractor, and to anyone claiming through or under Contractor, by way of subrogation or otherwise, for any loss of or damage to Contractor's business or property caused by fire or other peril or event, even if such fire or other peril or event was caused in whole or in part by the negligence or other act or omission of Dakota County or other party who is to be released by the terms here of, or by anyone for whom such party may be responsible.

Contractor agrees to effect such revision of any property insurance policy as may be necessary in order to permit the release and waiver of subrogation agreed to herein. Contractor shall, upon the request of Dakota County, promptly provide a Certificate of Insurance, or other form of evidence as may be reasonably requested by Dakota County, evidencing that the full waiver of subrogation privilege contemplated by this provision is present; and/or, if so requested by Dakota County, Contractor shall provide a full and complete copy of the pertinent property insurance policy(ies).

1910 Fuel Escalation Clause

The provisions set forth in 1910, “Cost Escalation” are hereby supplemented with the following:

This provision provides for compensation adjustments in the cost of motor fuels (diesel and gasoline) consumed in prosecuting the Contract work. The Engineer will calculate the Fuel Cost Adjustments. Payments or credits will be applied to progress, semi-final, and final payments for work items set forth herein.

The Department will establish a Base Fuel Index (BFI) for fuel to be used on the Contract. The BFI will be the average of the high and low rack prices shown for Ultra Low Sulfur Diesel Undyed in the “DTN FastRack” for the day of the Contract letting.

A Current Fuel Index (CFI) in cents per gallon will be established for each week. The CFI will be the average of the high and low rack prices shown for Ultra Low Sulfur Diesel Undyed in the “DTN FastRack” indicated each Wednesday.

The Engineer will compute the ratio of the CFI to the BFI (CFI/BFI) each week. If that ratio is between 0.85 and 1.15, no fuel adjustment will be made for the week following the CFI computation. If the ratio is less than 0.85, a credit to the Department will be computed. If the ratio is greater than 1.15, additional payment to the Contractor will be computed.

Credit of additional payment will be computed as follows:

1. The Engineer will estimate the quantity of work done in that week under each of the Contract items listed in Table 1910-1.
2. The Engineer will compute the gallons of fuel used in that week for each of the Contract items listed in Table 1910-1 by applying the unit fuel usage factors shown.
3. The Engineer will determine the Fuel Cost Adjustment (FCA) from the following formulas
    a. If the CFI is greater than the BFI: [(CFI/BFI)-1.15]*Q*BFI = amount of FCA to be paid to the Contractor.
    b. If the CFI is less than the BFI: [(CFI/BFI)-0.85]*Q*BFI = amount of FCA to be credited to the Department
        i. FCA = Fuel Cost Adjustment (cents)
        ii. CFI = Current Fuel Index (cents per gallon)
        iii. BFI = Base Fuel Index (cents per gallon)
        iv. Q = Weekly total gallons of fuel per item

Basis of Payment

A FCA payment to the Contractor will be made as a price adjustment to each eligible item for each payment period based on the last published CFI. An FCA credit to the Department will be deducted each payment period

from any monies due the Contractor. Only items shown in Table 1901-1 will be considered for compensation adjustments.

Table 1901-1 Schedule of Work Items

Specification Number	Item	Unit	Gallons of Fuel per Unit
2105	Common Excavation	CY	0.17
2105	Rock Excavation	CY	0.27
2105	Muck Excavation	CY	0.17
2105	Subgrade Excavation	CY	0.17
2105	Unclassified Excavation	CY	0.23
2105	Granular Borrow (EV)	CY	0.17
2105	Granular Borrow (CV)	CY	0.19
2105	Granular Borrow (LV)	CY	0.14
2105	Select Granular Borrow (EV)	CY	0.17
2105	Select Granular Borrow (CV)	CY	0.19
2105	Select Granular Borrow (LV)	CY	0.14
2105	Common Borrow (EV)	CY	0.17
2105	Common Borrow (CV)	CY	0.19
2105	Common Borrow (LV)	CY	0.14
2105	Topsoil Borrow (EV)	CY	0.17

Specification Number	Item	Unit	Gallons of Fuel per Unit
2105	Topsoil Borrow (CV)	CY	0.19
2105	Topsoil Borrow (LV)	CY	0.14
2106	Excavation – Common	CY	0.17
2106	Excavation – Subgrade	CY	0.17
2106	Excavation – Rock	CY	0.27
2106	Excavation – Muck	CY	0.17
2106	Common Embankment (CV)	CY	0.19
2106	Granular Embankment (CV)	CY	0.19
2106	Select Granular Embankment (CV)	CY	0.19
2106	Select Granular Embankment (CV) Modified (___%) (CV)	CY	0.19
2211	Aggregate Base	Ton	0.55
2211	Aggregate Base (LV)	CY	0.77
2211	Aggregate Base (CV)	CY	0.99
2211	Open Graded Aggregate Base (CV)	CY	0.99
2221	Shoulder Base Aggregate, Class	Ton	0.55
2221	Shoulder Base Aggregate (LV), Class	CY	0.77
2221	Shoulder Base Aggregate (CV), Class	CY	0.99

Specification Number	Item	Unit	Gallons of Fuel per Unit
2232	Mill Bituminous Surface *t* inches	SY	0.019**t*
2301	Concrete Pavement *t* inches	SY	0.027**t*
2301	Place Concrete Pavement *t* inches	SY	0.027**t*
2360	Type SP ( ) Wearing Course Mixture	Ton	0.90
2360	Type SP ( ) Wearing Course Mixture	Ton	0.90
2360	Type ( ) Mixture *t* inches thick	SY	0.051**t*
2501	Pipe Culvert	Lin Ft	0.70
2501	Pipe Arch Culvert	Lin Ft	0.70
2501	Pipe Culvert Des 3006	Lin Ft	0.70
2503	Pipe Sewer	Lin Ft	0.70
2503	Pipe Arch Sewer	Lin Ft	0.70
2503	Pipe Sewer Des 3006	Lin Ft	0.70

t = Thickness in inches

The Department will not pay adjustments for pipes less than 12” in diameter, jacked pipes, or directionally drilled pipes.

The Department will not pay adjustments for fuel used for drying or heating aggregates.

HRGreen

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HRGREEN.COM

APPROVED
jfortney , 11/25/2025, 3:22:42 PM
Subject to landowner authorization

May 29, 2025

Justin Fortney, City Planner
City of Hastings
101 4th Street East
Hastings, MN 55033
Sent via email to jfortney@hastingsmn.gov

Re: MRCCA Vegetation Clearing and Land Disturbance Applications 5/28/25 Updates

Dear Mr. Fortney:

Please see the attached revised MRCCA Vegetation Clearing and Land Disturbance permit applications. This response dated May 29, 2025 includes responses to comments received in May 2025.

The project will improve the condition and access of the Mississippi River Greenway (MRG) trail within the MRCCA corridor. The purpose of the project is to improve safety, resiliency, and accessibility for all MRG users accessing the MRCCA system through a trail reconstruction area and trail resurfacing. The trail reconstruction is needed to address non-compliant vertical grade, horizontal curve, and sight distance around the curves as detailed in the following applications.

The project will involve grading and vegetation removal within the bluff impact zone (BIZ). However, it will mitigate land alteration and vegetation clearing impacts by restoring 2.3 acres of degraded habitat with invasive species to a managed 2.6-acre habitat restoration area of native tree, shrub and savannah prairie plantings. The project will improve the quality and quantity of adjacent vegetative communities. The goal of the replanting is to sustain and improve the natural character within the construction area to match existing and historic native communities. The project will incorporate wildlife friendly fencing and erosion control. Additionally, heavy construction will be timed to limit open cut conditions exposure to torrential rain events and limit closure impacts during the trail's popular summer months.

The applications show minimization efforts to reconstruct a section of the MRG trail and resurface adjacent sections for this important city and regional resource. We believe the preferred alignment shown represents the least amount of impact while obtaining the grades and sightlines needed for safe use of the trail.

We understand the tree clearing and temporary closure of the trail is a concern for the project's neighbors. Mailers have been sent regarding the tree clearing and project schedule to adjacent neighbors and the project website includes details on the proposed tree clearing at the project website.

Variances

We understand the project will require three variances for the MRCCA Vegetation Clearing and Land Disturbance permits. You requested additional detail on:

a. What particular physical surroundings, shape or topographic conditions of the land involved, create a practical difficulty in this reasonable proposal?,
b. Why can't the proposal be reasonably accomplished under the current Ordinance requirements? and
c. Why would these proposed variances not alter the essential character of the locality.

These are answered below for each of the three variances.

1) Construction of a retaining wall in the BIZ for a purpose other than to correct an established erosion control problem as determined by the City.
    a. The trail needs to be lowered to meet trail grade and turn radius needs. To accomplish this a retaining wall offset from the existing retaining wall is required to limit further impacts to the BIZ.
    b. The purpose of the retaining wall is not erosion control and not allowed under the Ordinance requirements.
    c. The retaining wall will allow for an existing retaining wall to remain, allow for a tiered wall aesthetic, and the area will maintain a natural area character with native plantings.
2) Construction of a retaining wall greater than 5 feet in height for a purpose other than to correct an established erosion control problem as determined by the City.
    a. The height of the new wall is necessitated by the offset from the existing retaining wall and the elevation of the proposed trail. To keep separation between the existing and proposed retaining wall greater than 10 feet and to keep the slope between the walls at 1:6 or flatter, the wall height is 7 feet for portions of the wall.
    b. The purpose of the retaining wall is not erosion control and its required height is over 5 feet which are not allowed under the Ordinance requirements.
    c. The retaining wall will allow for an existing retaining wall to remain, allow for a tiered wall aesthetic, and the area will maintain a natural area character with native plantings.
3) Construction of a hard surface trail on greater than 30% slopes
    a. The project is in the location of an existing trail. The reconstructed trail needs to be in the same general location for the trail system to maintain its current function and connectivity to other trails.
    b. The Ordinance requirements do not allow paved trail construction on BIZ areas with greater than 30% slope.
    c. The general character of a trail through a natural area will be maintained.

Schedule

A proposed schedule for the project follows:

Anticipated Schedule for MRG Trail Design, MRCCA Permit Approval, and Construction

	Task	2025								2026											2027-2029		
		May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	Jun	Jul	Aug	Sept	Oct	Nov	Dec			
1	Submit MRCCA & Land Alteration Application																						
2	MRCCA Permit Application Review																						
3	Variance Process (est.)																						
4	MRCCA & Land Alteration Approval (est.)																						
5	Advertise Tree Clearing and Contract																						
6	Tree Clearing																						
7	SWPPP Tree Clearing Erosion Control Measures in Place																						
8	SWPPP Heavy Construction Erosion Control Measures																						
9	Trail Closure/Heavy Construction																						
10	Planting/Substantial Completion																						
11	Vegetation Monitoring/Maintenance																						

The application includes this cover letter, MRCCA Vegetation Clearing and Land Disturbance permit applications, and the following exhibits. The applications and exhibits are bookmarked in the pdf application.

A1: Existing and Proposed Conditions figure
A2: Vegetative Communities and Photos
A3: Vegetation Management Plan Figure
A4: MRG Trail 100% Plans
A5: Tree Clearing Plans
A6: Resurfacing Plans
A7; Engineers Statement Regarding Retaining Walls dated 5/28/25
B1: Previous Vegetative Clearing Application package submitted 1/30/25

Please let us know if you have any questions with your review.

Sincerely,
HR GREEN, INC.

Ted McCaslin, AICP, PWS
Lead Environmental Planner

Cc: John Hinzman, City of Hastings; Mike Adams, Dakota County Greenways; Jordan Horejsi, HR Green

APPROVED
jfortney , 11/25/2025, 3:22:21 PM
Subject to landowner authorization

Mississippi River Corridor Critical Area (MRCCA) – Vegetation Clearing Permit Application

Directions. Within the MRCCA, all intensive vegetation clearing in Primary Conservation Areas (PCAs) requires a vegetation clearing permit and restoration plan. A complete permit application is needed to evaluate compliance with the city of Hastings' vegetation clearing standards. Please review the Property Owner Guidance for Vegetation Clearing Permits before completing this application.

Applicant Information

Property Owner: Dakota County; Mike Adams, Greenways Senior Project Manager	Contractor/Agent: Ted McCaslin (HR Green)
Mailing Address: 14955 Galaxie Ave; Apple Valley, MN 55124	Mailing Address: 2550 University Ave. Suite 400N, St. Paul, MN, 55104
Phone: 651-5546538	Phone: 651-659-7708
Email: Mike.Adams@co.dakota.mn.us	Email: tmccaslin@hrgreen.com

Site information

Site Address: N/A
Parcel #: 196390000030, 190200077011, 196390002170, 196390002160, 196390002150, 196390002140, 196390002130, 196390002120, 196390002110, 196390002100

1. Identify the Primary Conservation Areas (PCAs) in which intensive vegetation clearing is proposed. View the DNR's online PCA mapper to determine if your proposed clearing activity will occur in any of these PCAs (check all that apply). If none, do not complete this application.

See Figure A1 for project areas within the following zones:

☒ Shore impact zone
☒ Areas within 50 feet of a wetland or natural drainage route
☒ Bluff impact zone
☒ Areas containing native plant communities
☒ Significant existing vegetative stands

2. Identify the purpose(s) of the proposed intensive vegetation clearing (check all that apply):

☐ Clearing of vegetation that is dead, diseased, dying, or hazardous
☐ Clearing to prevent the spread of diseases or insect pests
☒ Clearing to remove invasive non-native species
☐ Clearing to prepare for restoration and erosion control management activities consistent with a plan approved by the City of Hastings.
☒ The minimum clearing necessary for development allowed with a building permit or allowed as an exemption under Section 12 of Chapter section 152A, of the city of Hastings.

Note: All other intensive vegetation clearing within PCAs is prohibited.

3. Explain how the proposed clearing is the minimum necessary and designed to blend with the natural terrain and minimize visual impacts to public river corridor views and other scenic views. If the clearing is required for development allowed with a permit, also explain how the project was located to minimize the removal or disturbance of natural vegetation: Click or tap here to enter text.

The project is in the location of an existing trail with the minimum vegetation clearing necessary to construct the project.

The design of the cut-section trail (lowered trail with tie-slopes angled up to match existing ground, see Figure 2) minimizes the impact to the surrounding vegetation. Side slopes of the trail were designed between 1:2 and 1:3 wherever practical to limit the impact on tree clearing and earthwork. If the tie-slopes were graded out flatter or horizontally to match in the existing slope to the river, the vegetative clearing area would be significantly greater than the proposed design.

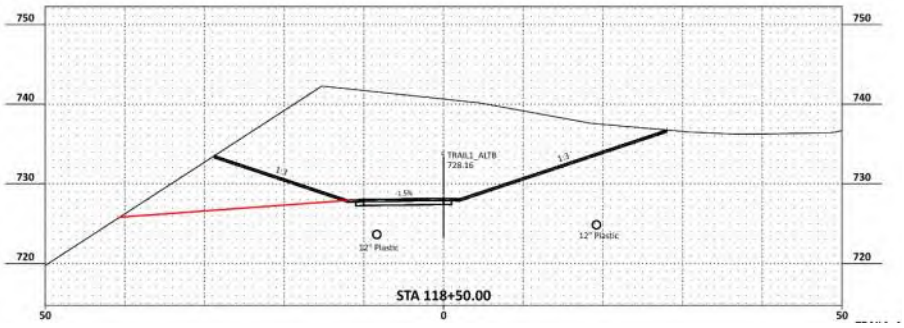


Figure 1 – Cross section showing the proposed cut section vs grading to the existing slope (red line) in the BIZ

There is a section of the proposed design that has a flatter tie-in grading to the existing slope instead of the cut-section design. This was chosen for a few reasons including perpetuating existing drainage patterns, a more natural slope design, and very minimal difference in grading impacts.

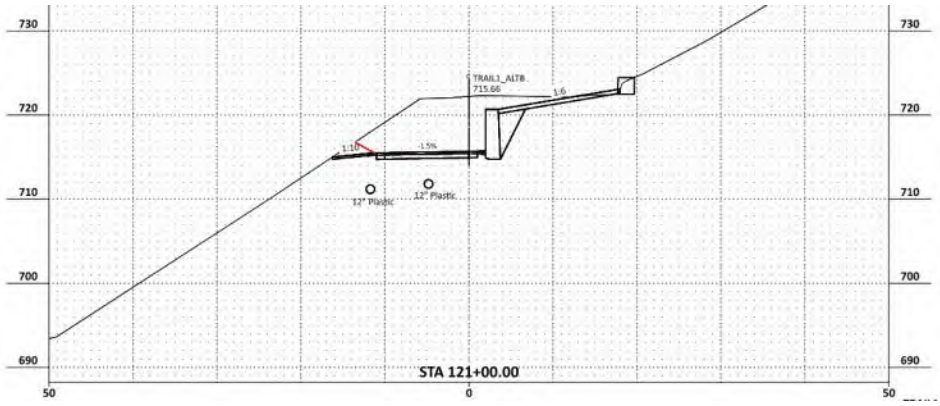


Figure 2 shows the graded tie-slope vs a cut-section design (red line) for a short segment of the MRG Trail

There are no water quality BMPs on this linear project, but rather sump catch basin structures were leveraged to provide sediment control in the corridor and limit the project footprint. This design limits the need for vegetation clearing and blends with the existing landscape using existing drainage features. The existing trail overlook was shortened significantly to reduce the overall

impervious pavement of the project and align the overlook location with the best view of the Mississippi River and lock and dam. The removed segment of bituminous trail provides approximately 2,800 square feet of area that will be leveraged to plant natives to match the historical vegetation.

4. Describe (and attach photo of) the vegetation being removed (ground cover, understory, tree), and names of plants, if known:

Vegetation along the trail reconstruction area was identified and divided into 10 generalized plant communities. Areas of the communities are in the table below. See the Exhibit A2 Vegetation Communities.

Map ID	Community Type	Square Feet in Clear Area	Acres in Clear Area
1	Brome Unmaintained	4339	0.100
2	Cedar/Siberian Elm Dominant	27346	0.628
3	Disturbed not vegetated area	859	0.020
4	Maintained Turfgrass	16557	0.380
5	Mixed spruce and pine	1391	0.032
6	Mixed switchgrass, cedar, prickly ash	18056	0.415
7	Oak, Maple, Cottonwood, Ironwood	3056	0.070
8	Ornamental Shrubs	259	0.006
9	Sparse Cedar/Cottonwood	236	0.005
10	Sumac/Buckthorn	2836	0.065
	TOTAL	74934	1.720

5. Explain how vegetation removal activities will be conducted or phased in order to expose the smallest area of soil to erosion for the least possible time:

The initial phase project action is to cut trees prior to April 1, 2025 to limit potential impacts to protected bats and maintain a project a construction schedule during the bat presence season (roughly April 1 – October 31). The initial tree clearing will cut trees, but no grubbing of roots ground disturbance will occur outside of tree removal equipment movement. Any disturbance will be stabilized by temporary turf establishment and placement of wood chips on disturbed areas. Silt fence and storm drain inlet protection will occur prior to the tree clearing. See Exhibit A5 Tree Clearing Plans. Exhibit A4 100% Plans shows the more intensive grading phase of the project. Intensive ground disturbance will only occur with the grading phase.

6. Identify the restoration priority areas on your property (check all that apply and show on submitted aerial photo or site plan):

☒ Areas with soils showing signs of erosion, especially on or near the top and bottom of steep slopes and bluffs

☐ Shoreline areas within 25 of the water with no natural vegetation, degraded vegetation, or planted with turf grass.

☒ Areas on steep slopes and bluffs that are visible from the river with no natural vegetation, degraded vegetation, or planted with turf grass.

☐ None of the above exist. The following restoration opportunity area is proposed instead: **See restoration plan details below.**

Restoration Plan Performance Standards. All activities requiring a vegetation clearing permit require a planting plan that must meet the following standards:

- Restored vegetation is planted in one or more of the restoration priority areas or opportunity areas identified under #6.
- Restored vegetation provides suitable habitat, and effective soil stability, runoff retention, and infiltration capability to address concerns specific to the priority or opportunity area.
- If any highly erodible soils are disturbed during removal and/or restoration, they are stabilized by deep-rooted vegetation with a high stem density.
- The area (sq. ft.) of the restored vegetation is similar to that removed to the greatest extent practicable.
- For **restoration of removed native plant communities** (identified under #1), restored vegetation must also provide biological and ecological function equivalent to the removed native plant communities. Vegetation species, composition, density, and diversity must be guided by nearby patches of native plant communities. The area (sq. ft.) of the restored vegetation should be equivalent to that removed.

Submittal Requirements. Submit all of the following along with this application form:

☒ An aerial photo and/or site plan showing:

- ✓ Property boundaries
- ✓ Location and label of existing PCAs identified under #1
- ✓ The location and area (sq. ft.) of the vegetation proposed to be cleared within identified PCAs
- ✓ Location and area (sq. ft.) of the restored vegetation in the priority areas identified under #6

See attached

☒ Photos of the vegetation proposed for removal.

See attached

☒ A planting plan(s) for the identified restoration priority area(s) showing the location, type (ground cover, understory, tree), and name of proposed plants. A plant list with codes referencing plants shown on the plan is suggested for complex plans. Property owners may complete their own planting plan, provided the submitted plan meets the relevant performance standards. If the plan does not meet the standards, a qualified landscape professional recognized by the city of Hastings will be needed.

See attached Exhibit A3 and Turf Establishment Plans in Sheets 24-36 of Exhibit A4 100% Plans.

Additional details are described here:

- **All trail buffer areas within 2.5 feet of the bituminous trail edge are assumed to have a turf mix (low-maintenance fescue mix suggested). Cover crop will depend on seed installation timing; Oats are for spring seeding, winter wheat for late fall seeding.**

- **Temporary stabilization mixes containing perennial rye, red clover, alfalfa, and/or birdsfoot trefoil are prohibited – contractors who install mixes will be asked to spray out and reseed with the desired seed mix at their own cost.**
- **The 0.3 ac area designated "Oak Savanna" is a simplified version of the Tree and Shrub matrix planting, in that it would consist only of white and bur oaks could be planted at ~50ft intervals. Both these woody species planting plans would be planted after the seed mix had been installed / blanketed.**
- **Ideally, larger caliper (ball & burlap and >#5 containerized) trees should be protected with tree tubes and watering bags.**

Seed Mixes

MIX	RATE (PLS lbs / ac) with 60 lbs/ac cover crop (oats/ww)	Area
Upland Prairie Mix	74	1.22 ac
Shady Woodland Mix	70.1	0.70 ac

Upland Prairie Seed Mix

Graminoids					
Scientific Name	**Common Name**	**Net # seeds/s.f.**	**oz/acre**	**PLS oz**	**PLS lb**
Andropogon gerardii	big bluestem	7.80	33.98	41.6	2.12
Bouteloua curtipendula	side-oats grama	8.13	58.99	72.2	3.69
Bouteloua gracilis	blue grama	3.25	10.62	13.0	0.22
Bromus kalmii	kalm's brome	0.10	0.54	0.7	0.04
Elymus canadensis	nodding wild rye	3.90	32.67	40.0	2.04
Elymus trachycaulus	slender wheatgrass	0.20	1.26	1.5	0.10
Elytrigia smithii	western wheatgrass	0.10	0.61	0.7	0.05
Koeleria pyramidata	junegrass	0.80	0.17	0.2	0.01
Panicum oligosanthes	Scribner's panic grass	0.24	1.16	1.4	0.09
Schizachyrium scoparium	little bluestem	13.65	39.64	48.6	2.48
Sorghastrum nutans	Indian grass	0.28	1.02	1.2	0.08
Sporobolus heterolepis	prairie dropseed	0.48	1.31	1.6	0.10
Forbs					
Scientific Name	**Common Name**	**Net # seeds/s.f.**	**oz/acre**	**PLS oz**	**PLS lb**
Agastache foeniculum	blue giant hyssop	0.48	0.23	0.3	0.02

Allium stellatum	Prairie Wild Onion	0.28	1.11	1.4	0.08
Amorpha canescens	lead plant	0.42	1.50	1.8	0.11
Anemone cylindrica	long-headed thimbleweed	0.40	0.67	0.8	0.05
Anemone patens	pasque flower	0.32	0.77	0.9	0.06
Antennaria neglecta	field pussytoes	1.08	0.11	0.1	0.01
Antennaria plantaginifolia	plantain-leaved pussytoes	0.92	0.15	0.2	0.01
Artemisia ludoviciana	prairie sage	0.80	0.14	0.2	0.01
Asclepias syriaca	common milkweed	0.06	0.65	0.8	0.05
Asclepias tuberosa	butterfly milkweed	0.16	1.62	2.0	0.12
Asclepias verticillata	whorled milkweed	0.28	1.11	1.4	0.08
Aster ericoides	heath aster	0.40	0.09	0.1	0.01
Aster oolentangiensis	skyblue aster	0.56	0.30	0.4	0.02
Astragalus canadensis	Canada milk vetch	0.32	0.82	1.0	0.06
Astragalus crassicarpus	ground plum	0.08	0.67	0.8	0.05
Campanula rotundifolia	harebell	0.92	0.04	0.1	0.00
Coreopsis palmata	bird's foot coreopsis	0.36	1.57	1.9	0.12
Dalea candida	white prairie clover	0.48	1.10	1.3	0.08
Dalea purpurea	purple prairie clover	1.30	3.84	4.7	0.29
Delphinium virescens	Carolina delphinium	0.24	0.17	0.2	0.01
Desmodium canadense	Canada tick trefoil	0.16	1.27	1.6	0.10
Gentiana puberulenta	downy gentian	1.12	0.11	0.1	0.01
Geum triflorum	prairie smoke	0.60	0.97	1.2	0.07
Helianthus pauciflorus	stiff sunflower	0.18	1.96	2.4	0.15
Heliopsis helianthoides	ox-eye	0.20	1.38	1.7	0.11
Lespedeza capitata	round-headed bush clover	0.30	1.63	2.0	0.13
Liatris aspera	rough blazing star	0.48	1.31	1.6	0.10
Liatris punctata	dotted blazing star	0.30	1.87	2.3	0.14
Monarda fistulosa	wild bergamot	0.48	0.30	0.4	0.02
Oenothera biennis	common evening primrose	0.52	0.25	0.3	0.02
Pediomelum esculentum	prairie turnip	0.12	4.75	5.8	0.36

Potentilla arguta	tall cinquefoil	0.84	0.16	0.2	0.01
Ratibida pinnata	gray-headed coneflower	0.40	0.58	0.7	0.04
Rosa arkansana	prairie rose	0.04	1.94	2.4	0.15
Rudbeckia hirta	black-eyed susan	0.60	0.28	0.3	0.02
Sisyrinchium campestre	field blue-eyed grass	0.40	0.39	0.5	0.03
Solidago nemoralis	gray goldenrod	0.92	0.13	0.2	0.01
Solidago ptarmicoides	upland white aster	0.48	0.33	0.4	0.03
Solidago rigida	stiff goldenrod	0.40	0.42	0.5	0.03
Tradescantia bracteata	bracted spiderwort	0.24	1.05	1.3	0.08
Verbena stricta	hoary vervain	0.20	0.31	0.4	0.02
Viola pedatifida	bearded birdfoot violet	0.20	0.31	0.4	0.02
Zizia aptera	heart-leaved alexanders	0.14	0.51	0.6	0.04

Shady Woodland Mix

Graminoids				
Scientific Name	**Common Name**	**Net # seeds/ s.f.**	**Oz/ acre**	**Lb/ acre**
Andropogon gerardii	big bluestem	4.05	17.6	1.10
Bouteloua curtipendula	side-oats grama	0.625	4.5	0.28
Bromus kalmii	kalm's brome	1.13	6.1	0.38
Carex brevior	short sedge	1.25	1.9	0.12
Carex pensylvanica	Pennsylvania sedge	1.5	2.2	0.14
Carex sprengelii	Sprengel's sedge	0.75	3.3	0.20
Dalea purpurea	purple prairie clover	2.25	6.5	0.41
Elymus canadensis	nodding wild rye	2.70	22.6	1.41
Elymus hystrix	bottlebrush grass	4.50	25.8	1.61
Juncus tenuis	path rush	6.25	0.3	0.02
Schizachyrium scoparium	little bluestem	6.30	18.3	1.14
Sorghastrum nutans	Indian grass	6.30	22.9	1.43
Sporobolus heterolepis	prairie dropseed	0.4	1.1	0.07

Forbs				
Scientific Name	**Common Name**	**Net # seeds/ s.f.**	**Oz/ acre**	**Lb/ acre**
Achillea millefolium	common yarrow	0.8	0.2	0.01
Agastache foeniculum	blue giant hyssop	0.6	0.3	0.02
Amorpha canescens	lead plant	0.5	1.8	0.11
Anemone virginiana	tall thimbleweed	0.5	0.8	0.05
Aquilegia canadensis	columbine	0.5	0.6	0.04
Artemisia ludoviciana	prairie sage	1	0.2	0.01
Astragalus canadensis	Canada milk vetch	0.4	1.0	0.06
Campanula americana	tall bellflower	0.95	0.2	0.02
Campanula rotundifolia	harebell	2.3	0.1	0.01
Cryptotaenia canadensis	Honewort	0.25	1.6	0.10
Eutrochium purpureum	sweet Joe pye weed	0.5	0.5	0.03
Geranium maculatum	wild geranium	0.5	4.4	0.27
Helianthus pauciflorus	stiff sunflower	0.12	1.3	0.08
Heliopsis helianthoides	ox-eye	0.625	4.3	0.27
Heuchera richardsonii	alumroot	5	0.3	0.02
Monarda fistulosa	wild bergamot	1.5	0.9	0.06
Osmorhiza claytonii	Clayton's sweet cicely	0.15	2.6	0.16
Rudbeckia hirta	black-eyed susan	1.25	0.6	0.04
Scrophularia lanceolata	Lance-leaved Figwort	2	0.5	0.03
Solidago flexicaulis	zigzag goldenrod	0.7	0.4	0.02
Solidago nemoralis	gray goldenrod	1.15	0.2	0.01
Solidago rigida	stiff goldenrod	0.5	0.5	0.03
Symphyotrichum ericoides	heath aster	0.8	0.2	0.01
Symphyotrichum laeve	smooth aster	0.5	0.4	0.02
Thalictrum dioicum	early meadow-rue	0.25	1.5	0.09
Zizia aptera	heart-leaved alexanders	0.875	3.2	0.20

Canopy Trees & Understory Trees	
Quercus alba	White oak
Quercus macrocarpa	Bur oak
Quercus rubra	Northern red oak

Ulmus americana	American elm
Understory Trees	
Ostrya virginiana	Ironwood
Prunus serotina	Black cherry
Tilia americana	Basswood
Shrubs	
Amelanchier interior	Juneberry
Amelanchier laevis	Allegheny serviceberry
Cornus alternifolia	Pagoda dogwood
Cornus racemosa	Gray dogwood
Corylus americana	American hazelnut
Diervilla lonicera	Bush honeysuckle
Prunus virginiana	Chokecherry
Rosa arkansana	Prairie rose
Rosa blanda	Smooth wild rose
Sambucus racemosa	Red-berried Elder
Symphoricarpos alba	Snowberry
Viburnum lentago	Nannyberry

For **large, complex projects**, also provide: ***These items to be provided with final design submittal***

☒ Planting plan completed by a qualified person as defined by the city of Hastings

☒ Scaled plans, surveys, and drawings.

☒ A three-year maintenance plan that includes provisions for controlling invasive species and plant replacement.

Native Vegetation Maintenance Plan Establishment and Enhancement

Herbicide and Applicators

- **Herbicide applicators must be state-certified.**
- **DNR Operational Order 59 (Pesticides and Pest Control: http://files.dnr.state.mn.us/assistance/grants/habitat/heritage/oporder_59.pdf) and appropriate discipline guidelines must be followed when working on all lands and waters, regardless of ownership.**
- **Herbicide application must follow industry standards for temperature and weather conditions, according to label directions and the State of MN Commercial Pesticide Applicator Manual.**
- **Use least toxic herbicide or formula with lowest soil residual; Glyphosate is preferred. (Milestone or Transline is suitable for legumes, but CONTRACTOR must first consult with DAKOTA COUNTY before applying these herbicides.) Aquatic formula is required when applying within 100 feet of a wetland.**
- **Surfactants added to herbicides mixes applied on or near water must be non-ionic (e.g., Activator 90, Agri-Dex).**
- **As much as possible, herbicides should be applied when there is some biological activity in the plant (e.g. Apr-Nov).**
- **Avoid windy days and ensure a rain-free period of at least 3 hours after application.**

- ***Take maximum care to avoid chemical drift or contact with non-target plants*. In native prairie areas, invasives should be spot-treated by wick application if feasible or with a backpack sprayer. Do not treat plants if doing so is likely to hit conservative (Conservation Coefficient of 4 or greater, as designated by University of Wisconsin) native plants.**
- **In high quality areas, as designated by DAKOTA COUNTY Natural Resource Staff, check with DAKOTA COUNTY staff before applying herbicides.**
- **A copy of the record of all pesticide/herbicide applications shall be submitted to DAKOTA COUNTY. Submitting records with invoices is acceptable.**

Non-native forbs - prairie

- **Prevent herbicide drift to adjacent plants.**
    - **Manage all herbaceous species listed in Herbaceous Exotic Species List (Attachment C), and all others as detected. Species shall be managed by the CONTRACTOR such that seedset is reduced or eliminated and the ability of the plant to compete with desirable vegetation is greatly reduced. Some species (discuss with DAKOTA COUNTY) will be dealt with aggressively by CONTRACTOR, with a final goal of eradication of these species from the restored areas of this park during the contract period.**

Prepare Work Area and Install Native Seed:

Work Area Preparation:

Remove/kill invasive/weedy vegetation (including species in Attachment B and C) prior to installing native seed. If area to be seeded was treated with herbicide, contractor shall follow all label requirements for seeding. Prescribed burning may be an acceptable component of Work Area preparation. A suitable seedbed must be prepared and approved by the County Representative prior to seed installation.

Seeding:

Dakota County will provide all seed for this project.

Seeding shall be preferentially conducted as a late fall dormant seeding (after October 15, but before the soil starts to freeze) or in early spring (as soon as the soil is free of frost and in a workable condition but no later than June 10).

Where obstructions (e.g., trees) are absent or limited, and slopes allow, install seed with broadcast seeder in two directions, perpendicular to one another. Areas that cannot be broadcast with equipment may be hand broadcast seeded using a mechanical seeder that can evenly disperse all, including fluffy, seed. Prior to hand broadcasting, seed shall be divided into two equal parts. The entire area shall be sown with first half before spreading second half, using two perpendicular passes. All seed shall be spread evenly throughout seeding zones. Within 24 hours, or as soon as Work Area conditions permit, hand broadcast seeded areas shall be rolled with a cultipacker perpendicular to the slope, or alternatively, raked in to ensure good seed-to-soil contact.

Establishment Management of Prairie/Savanna Seeded Areas

Timing:

For Prairie and Savanna seeded areas, the Establishment Management period begins immediately following Preparing Work Area and Installing Seed) respectively.

Activities:

Establishment Mowing:

Establishment mowings will occur following installation of native seed for the establishment of prairie or oak savanna. At no time is the vegetation to be taller than 12", and mowing height shall be no less than 6". Do not allow vegetation to grow so tall that it smothers growth when cut. Do not mow immediately after rain when cut vegetation will clump.

Performance Standards

Restoration /Enhancement Task	**Checkpoint** 1: **Performance Standards**	**Checkpoint 2** **Performance Standards**	**Corrective Measures**
Task: Prepare Work Area and Install Native Seed	Undesirable species have been adequately controlled and the seedbed has been appropriately prepared prior to seed installation. 100% of areas designated to receive seed have been seeded.	No 2nd checkpoint	
Task:. Establishment Management/Invasive Species Management	**For Prairie and Savanna seeded areas:** *For the growing season following seed installation:* For all species listed in Attachments B and C: Less than 5% cover to set seed within any 100 sq m area. More than 95% of target species in Attachments B and C are spot treated with herbicide within any 100 sq m area. If there is bare ground present in seeded areas (>= 1 sq. m), these areas must be re-seeded by Contractor. Random sample contains at least 1 native forb and 3 native grass seedlings per square meter. Establishment mowings or spot mowings occurred at a height and frequency appropriate for establishing native seed and preventing invasive/weedy species from seedset. At no time is the vegetation to be taller than 16", and	**For Prairie and Savanna seeded areas:** *For subsequent growing seasons:* For all species listed in Attachments B and C: less than 2.5% cover to set seed within any 100 sq. m area. More than 98% of target species in Attachments B and C are spot treated with herbicide within any 100 sq m area. Establishment mowings or spot mowings occurred at a height and frequency appropriate for establishing vegetation. At no time is the vegetation to be taller than 16", and mowing height shall be no less than 6". In the final year or at any time during the establishment period, the Contractor and County Representative may come to mutual	If mowing results in any clumping, smothering of new growth, or if ruts are formed, CONTRACTOR will CEASE activity until conditions improve. If detriment has already occurred, CONTRACTOR will take measure to mitigate, including re-doing site preparation and seeding if necessary at soonest appropriate time, and mitigating rutting damage.

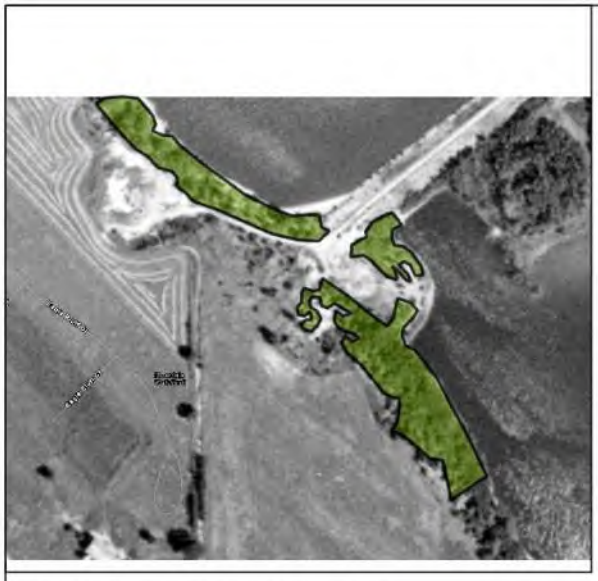
	mowing height shall be no less than 6".	agreement that establishment mowings are no longer necessary.	

For **restoration of native plant communities**, also provide:

☒ Identification of the type and location of nearby native plant communities used to guide restoration.

Nearby plant communities are generalized into ten plant communities described in Item 4 above and Exhibit A2. Furthermore:

- **Native woods are primarily located below the bluff line and adjacent to the Mississippi River comprised of oak species (red, white, and bur observed), basswood, ironwood, native elms**
- **Areas of native switchgrass interspersed with cedar and prickly ash are likely remnant from the initial trail construction in 1999-2000.**
- **Disturbed woods primarily located inside of the trail's hairpin turn and above the bluff line comprised of mostly of Siberian elm, buckthorn and cedar but with interspersed native red oak, bur oak, basswood, and ironwood. Disturbed woods are mainly in current forested areas shown as disturbed and treeless in this 1957 aerial photo comparison.**



1957 Aerial Imagery with forested area outlined

1957 Historic Forested area shown on current aerial imagery

Signatures

I certify that the information contained in this application is true and correct to the best of my knowledge. I grant the city of Hastings officials permission to enter the subject property for inspection of the vegetation removal and restoration sites during normal business hours until three years from the date of the certificate of completion. This is to insure adherence to the maintenance conditions of the permit. I understand failure to conform to approved plans and conditions or to comply with lawful directives to abate violations arising from work undertaken contrary to this permit may be cause for future enforcement actions to remedy said violations.

Property owner signature: Justin Fatney Date: 11/25/2025

Contractor signature (if applicable): _____ Date: 5/29/2025

APPROVED
jfortney , 11/25/2025, 3:22:03 PM
Subject to landowner authorization

Mississippi River Corridor Critical Area (MRCCA) – Land Alteration Permit Application

Directions. Within the MRCCA, land alterations in certain areas require a permit. A complete permit application is needed to evaluate compliance with the city of Hastings' land alteration standards. Projects that involve vegetation removal may also require the completion of a separate MRCCA vegetation clearing permit application. Please review the Property Owner Guidance for Land Alteration Permits before completing this application.

Applicant Information

Property Owner: Dakota County; Mike Adams, Greenways Senior Project Manager	Contractor/Agent: Ted McCaslin (HR Green)
Mailing Address: 14955 Galaxie Ave; Apple Valley, MN 55124	Mailing Address: 2550 University Ave. Suite 400N, St. Paul, MN, 55104
Phone: 651-5546538	Phone: 651-659-7708
Email: Mike.Adams@co.dakota.mn.us	Email: tmccaslin@hrgreen.com

Site information

Site Address: Click or tap here to enter text.
Or Parcel #: 196390000030, 190200077011, 196390002170, 196390002160, 196390002150, 196390002140, 196390002130, 196390002120, 196390002110, 196390002100

Type of land alteration project

A land alteration permit is required for the following activities in riparian areas and the bluff impact zone (see table in Property Owner Guidance for Land Alteration Permits for riparian areas subject to permit requirements). Please indicate the type of land alteration project being proposed (check all that apply). If none, a land alterations permit is not required and this application is not needed.

☒ Land disturbance of more than 10 cubic yards or an area greater than 1,000 square feet in riparian areas.

Land alteration in the shoreland impact zone is 5,663 square feet/0.13 acres.

☒ Construction or replacement of riprap, retaining walls and other erosion control structures in riparian areas and/or the bluff impact zone. (Repair of existing erosion control structures above the Ordinary High Water Level (OHWL) does not require a permit if it does not involve any land alteration or disturbance.)

Checked for non erosion control purposed retaining wall construction See Exhibit A1.

☐ Erosion control developed under a plan approved by the City of Hastings or a resource agency, in the bluff impact zone.

☒ Access paths, stairways, lifts, and landings, and other development allowed as an exemption in the bluff impact zone under Section 12 of Ordinance Section 152A of the city of Hastings.

See hard-surface path discussion below.

☒ Repair and maintenance of existing buildings and facilities in the bluff impact zone.

The project will repair and maintain the Mississippi River Greenway within the BIZ.

All other land alteration activities in the bluff impact zone are prohibited.

Submittal Requirements. Submit all of the following along with this application form:

☒ A brief project description. **The proposed project will reconstruct a degrading and design insufficient portion of the Mississippi River Greenway (MRG) Trail and resurface MRG sections along the adjacent dam and CL Jaycee Park Trail. This reconstruction portion will be graded down to a meet American Disability Act (ADA) design standards and improve safety versus the current trail alignment. The proposed project will involve the construction of a retaining wall within the Bluff Impact Zone (BIZ) and prairie and forest restoration.**

☒ An aerial photo and/or site plan showing:
- ✓ Property boundaries
- ✓ Location and label of riparian areas and/or the bluff impact zone
- ✓ The location of the proposed land alteration area, including the outer grading limits.

See Exhibits A1 and A4.

<u>For riprap, retaining Walls or other erosion control structures, also submit the following:</u>

☒ Photos showing that an established erosion problem exists.

See photos in Exhibit A2 and B1.

☒ Explanation that the proposed structures are the minimum necessary to correct the problem.

See retaining wall description below.

☐ Construction plans showing consistency with the following design standards:

- ✓ For retaining walls, the walls must not exceed five feet in height and must be placed a minimum horizontal distance of ten feet apart.
- ✓ For shoreline riprap, the height must not be higher than the regulatory flood protection elevation (RFPE).

☒ For retaining walls and rip rap exceeding these design standards, submit design drawings and a statement by a professional engineer testifying that a larger structure is needed to correct the erosion problem.

The proposed retaining wall is a maximum of 7 feet in height. This larger structure will limit the grading required for the MRG improvements, preserve the existing retaining wall, and allow for ADA compliant trail to be constructed. See Sheet 15 in the Exhibit A4 100% Plans.

The change in trail elevation is 8 feet in the lower tangent portion of the trail and affected the alignment of the trail adjacent to the existing retaining wall. Keeping the trail on the same alignment with a lowered elevation would require removal of the existing trail and then construction of a 20-foot-tall retaining wall. By shifting the trail away from the existing retaining wall, the proposed wall can be constructed in front of the existing retaining wall, that is 7 feet tall at its tallest point, giving a tiered wall aesthetic with approximately 15 feet of vegetation between the walls. Reconstructing a 20-foot-tall high wall would have had significant impact to the cost of the project and would have had impacts to vegetation behind the wall for grading and construction.

☐ For projects involving work below the Ordinary High Water Level (OHWL), an email or permit from the DNR documenting approval of work below the OHWL.

For activities in the bluff impact zone, also submit the following:

☒ For access paths, stairways, lifts, and landings, and other developments allowed as an exception under Section 12, explain how the project was designed, phased or sited to minimize land alteration. If not applicable, state so.

A trail currently exists in the BIZ within the proposed land alteration impact area. Alternate routing was investigated for trail routing that would still meet the purpose of the project to improve safety, resiliency, and accessibility for all MRG users accessing the MRCCA system. Alternate routes minimizing impacts the BIZ were reviewed and no viable alternative routes were identified due to bluff slopes, greater vegetation and land alteration impacts within the MRCCA, significant rerouting of the MRG, and property concerns. Accommodating vertical and turning radius improvements along the existing trail corridor is required for these improvements.

Within the reconstruction impact area land alteration will be minimized by the construction of a new retaining wall and protective fencing. The proposed trail location will preserve an existing retaining wall, limit impacts to the south of the existing retaining wall, and limit visual impacts for the proposed project. Also, the proposed trail will eliminate maintenance and safety concerns associated with a 20-foot-tall new retaining wall that would be required in place of the minor impact of the proposed hard-surface trail over the area with slopes exceeding 30%. Approximately 2,125 square feet of the proposed path along 410 linear feet of the hard surface of the reconstructed trail are proposed on existing slopes exceeding 30% within the BIZ. See Exhibit A4 Sheets 9-15 red hatched area in Cross Sections STA 119+00 – 121+50 showing hard surface area exceeding 30% slopes. Dakota County understands this element of the proposed trail reconstruction is not exempt per Section 12 of Ordinance Section 152A and 152A.08.G.3.a. "Hard-surface trails are not allowed on the face of bluffs with a slope exceeding 30%."

☐ For erosion control developed under a plan approved by the city of Hastings or a resource agency, submit the approved plan. In this situation, if the above submittal requirements are included in the plan, then the above items do not need to be submitted separately.

Signatures

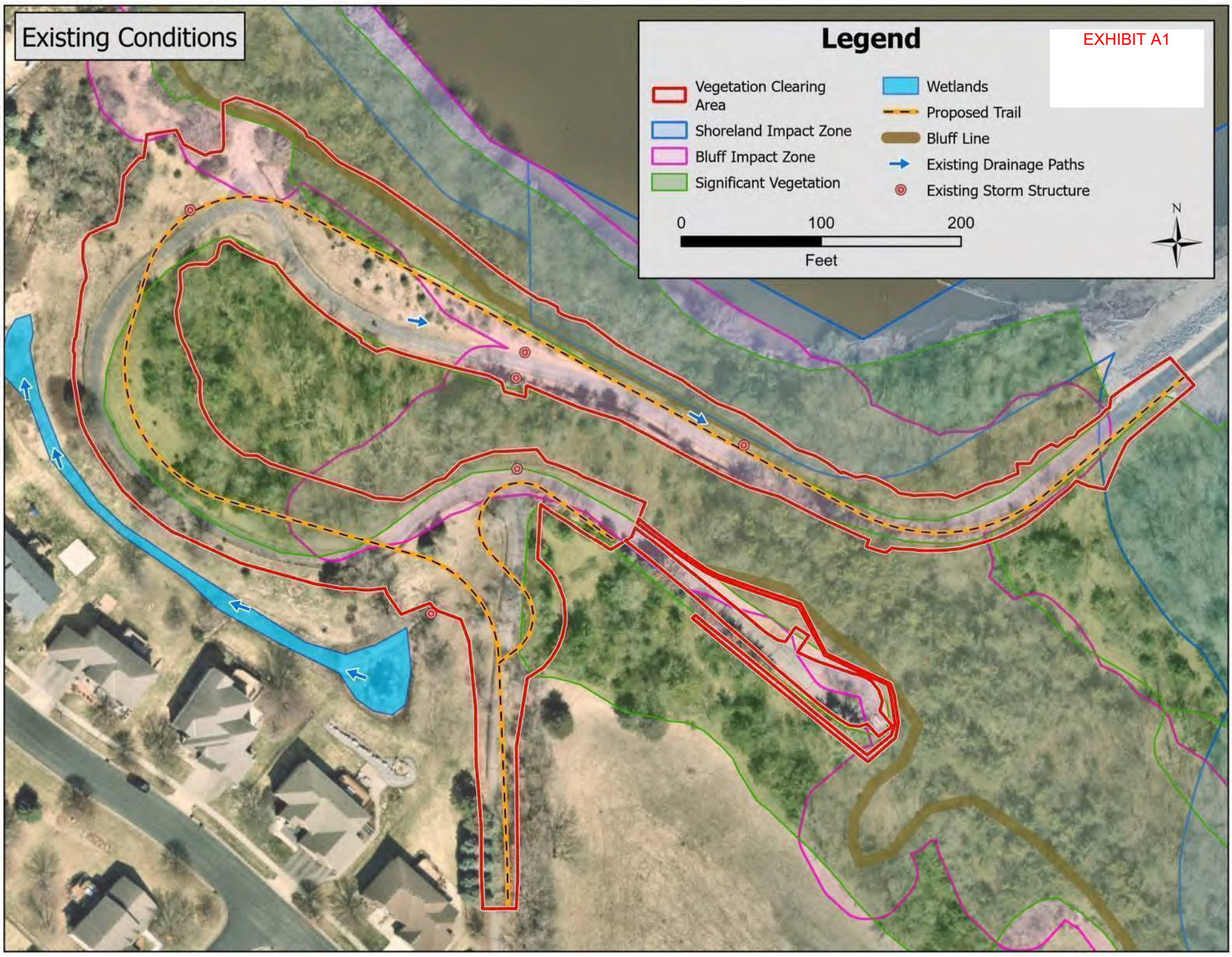
I certify that the information contained in this application is true and correct to the best of my knowledge. I understand failure to conform to approved plans and conditions or to comply with lawful directives to abate violations arising from work undertaken contrary to this permit may be cause for future enforcement actions to remedy said violations.

Property owner signature: Justin Tarney Date: 11/25/2025

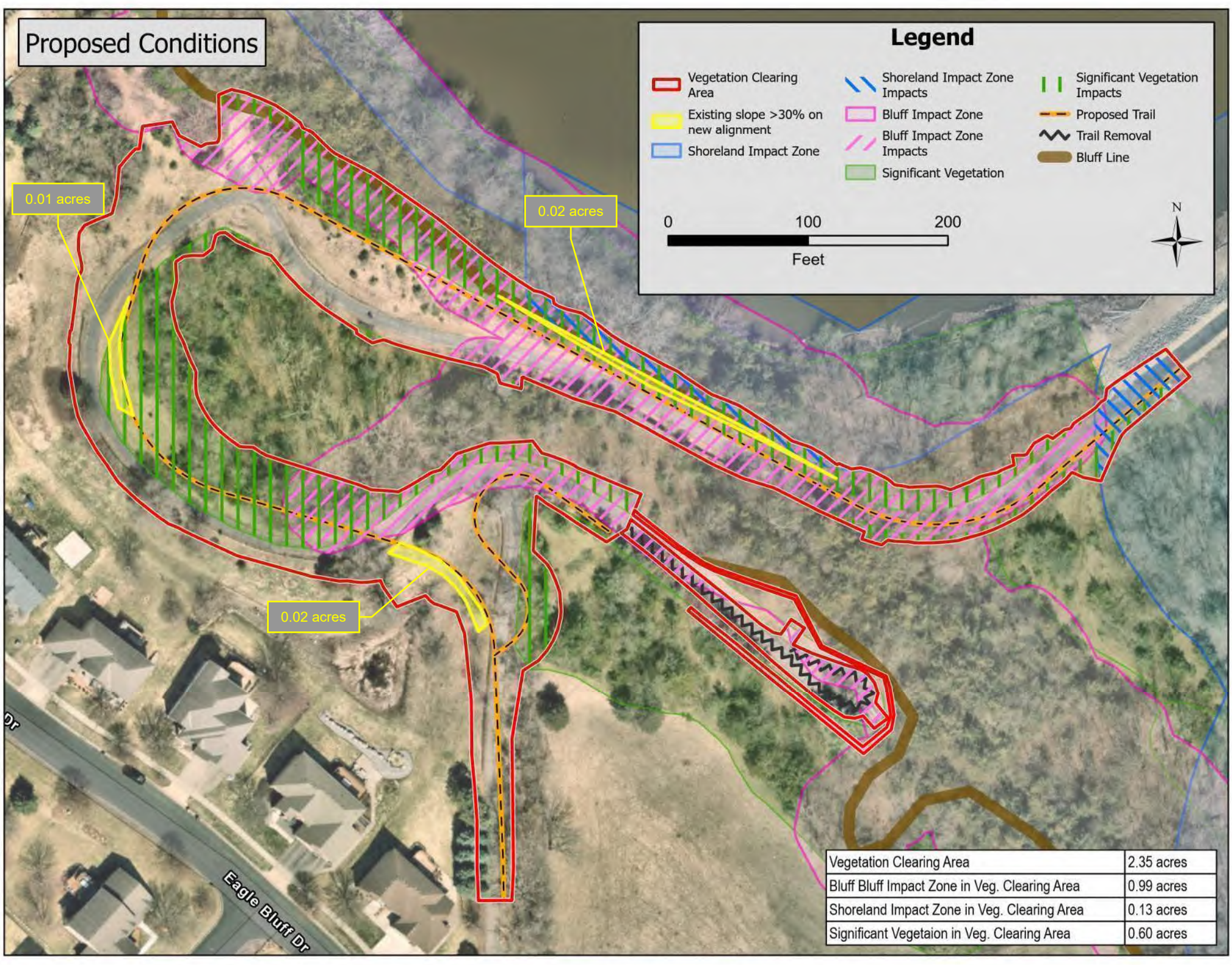
Contractor signature (if applicable): _____ Date: 5/29/2025

EXHIBIT A1

Existing Conditions



Proposed Conditions



Vegetation Clearing Area	2.35 acres
Bluff Bluff Impact Zone in Veg. Clearing Area	0.99 acres
Shoreland Impact Zone in Veg. Clearing Area	0.13 acres
Significant Vegetaion in Veg. Clearing Area	0.60 acres

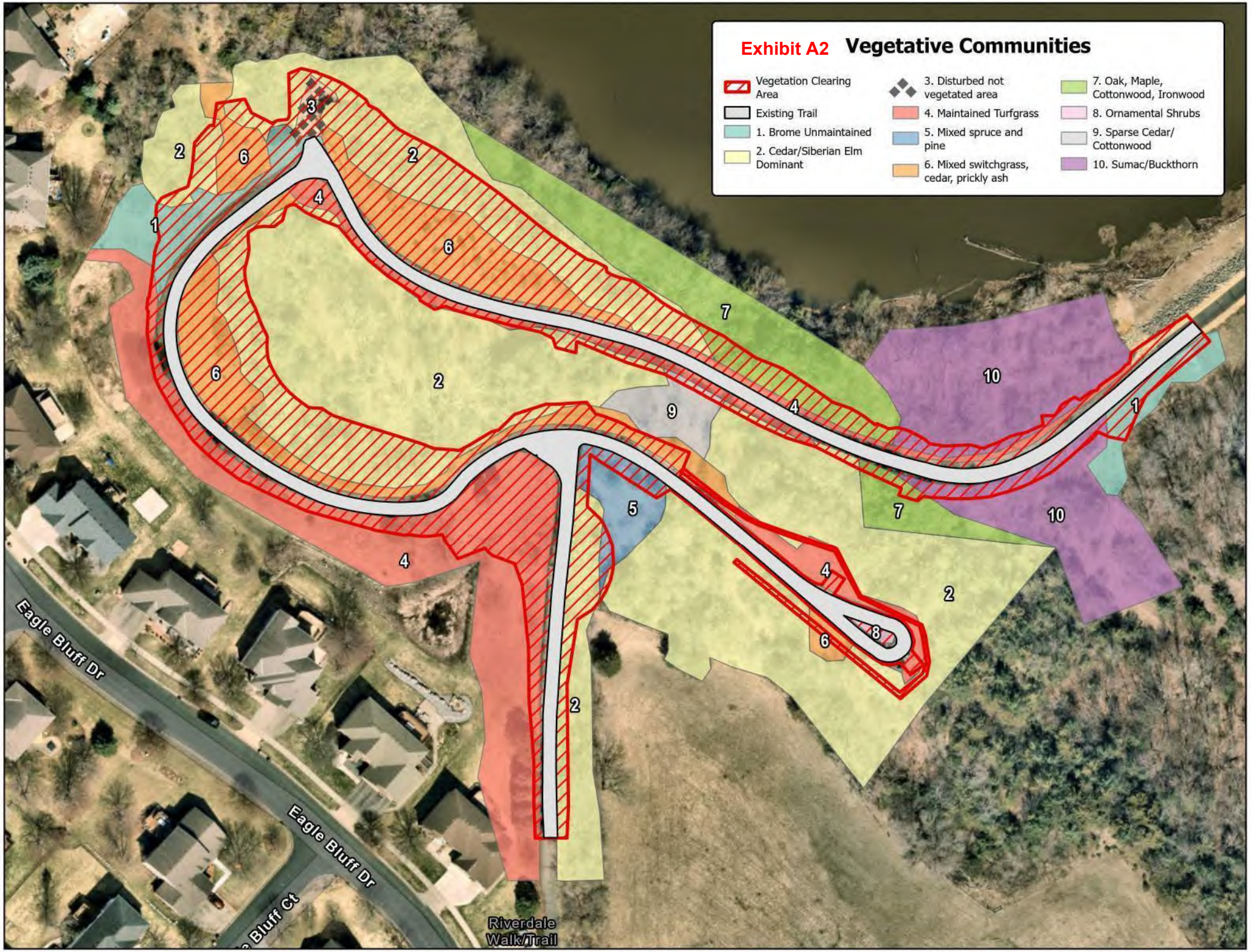


Exhibit A2
Vegetative Communities
Vegetation Clearing Area
Existing Trail
1. Brome Unmaintained
2. Cedar/Siberian Elm Dominant
3. Disturbed not vegetated area
4. Maintained Turfgrass
5. Mixed spruce and pine
6. Mixed switchgrass, cedar, prickly ash
7. Oak, Maple, Cottonwood, Ironwood
8. Ornamental Shrubs
9. Sparse Cedar/ Cottonwood
10. Sumac/Buckthorn
Eagle Bluff Dr
Eagle Bluff Dr
Riverdale Walk/Trail

Survey: Hastings MRCCA Photos

Region: General Field Observation

Sampling Point:
N/A

1. Brome Unmaintained area

Smooth brome with crab apple and swamp white oak planting. Vegetation left to the cedar (dark green evergreen at left of photo) will be removed.

Direction

Lat Lon from photo
44.75499166, -92.87993888

764 Elevation in feet

Photo date: Sun, Feb 23, 2025 3:12 PM CST

Sampling Point:
N/A

2. Cedar/Siberian Elm Dominant

The most common plant community in the trail reconstruction area. This area west of the intersection at south end of reconstruction area will be completely removed.

Direction

Lat Lon from photo
44.75453333, -92.87954166

771 Elevation in feet

Photo date: Sun, Feb 23, 2025 3:07 PM CST

Generated with ecobot

Survey: Hastings MRCCA Photos

Region: General Field Observation

Sampling Point:
N/A

3. Disturbed not vegetated area

Eroded hillslope. Vegetation will be removed to top of small hill visible in photo.

Direction

Lat Lon from photo
44.75517777, -92.87956111

748 Elevation in feet

Photo date: Sun, Feb 23, 2025 3:14 PM CST

Sampling Point:
N/A

3. Disturbed not vegetated area

Mixed glacial till and sand on unvegetated hillslope.

Direction

Lat Lon from photo
44.75528888, -92.87953055

761 Elevation in feet

Photo date: Sun, Feb 23, 2025 3:16 PM CST

Survey: Hastings MRCCA Photos

Region: General Field Observation

Sampling Point:
N/A

4. Maintained turfgrass

Turfgrass in front of retaining wall. Vegetation removal not proposed in in front or behind retaining wall.

Direction

Lat Lon from photo
44.75464722, -92.87811388

735 Elevation in feet

Photo date: Sun, Feb 23, 2025 3:25 PM CST

Sampling Point:
N/A

5. Mixed Spruce and pine at right of photo

Looking east at overlook/dead end area. No vegetation removal proposed. Trail will be demolished and replanted with native trees and shrubs.

Direction

Lat Lon from photo
44.75463055, -92.87862777

758 Elevation in feet

Photo date: Sun, Feb 23, 2025 3:02 PM CST

Generated with ecobot

Survey: Hastings MRCCA Photos

Region: General Field Observation

Sampling Point:
N/A

6. Mixed switchgrass, cedar, prickly ash

Mixed switchgrass dominant area with smaller cedar and prickly ash. Switchgrass likely planted with initial trail construction approximately 25 years ago. Vegetation removal will occur throughout this area.

Direction

Lat Lon from photo
44.75463333, -92.87976944

768 Elevation in feet

Photo date: Sun, Feb 23, 2025 3:10 PM CST

Sampling Point:
N/A

7. Oak, Maple, Cottonwood, Ironwood

Silver maple, red oak, eastern cottonwood, ironwood on river side of bluff line. Minimal vegetation removal will occur below the bluff line to accommodate the proposed retaining wall.

Direction

Lat Lon from photo
44.754825, -92.87851388

745 Elevation in feet

Photo date: Sun, Feb 23, 2025 3:23 PM CST

Survey: Hastings MRCCA Photos

Region: General Field Observation

Sampling Point:
N/A

8. Sparse cedar/cottonwood

Snowy area above retaining wall visible from dam. Contrast highlights snow. No vegetation removal proposed in this area.

Direction

Lat Lon from photo
44.75499444, -92.87700555

702 Elevation in feet

Photo date: Sun, Feb 23, 2025 4:10 PM CST

Sampling Point:
N/A

9. Sumac/Buckthorn

Buckthorn and sumac adjacent to trail fence. Minimal vegetation removal proposed in this area.

Direction

Lat Lon from photo
44.75453888, -92.87762222

725 Elevation in feet

Photo date: Sun, Feb 23, 2025 3:27 PM CST

Survey: Hastings MRCCA Photos

Region: General Field Observation

Sampling Point:
N/A

View from dam near

Direction

Lat Lon from photo
44.75526111, -92.87628611

712 Elevation in feet

Photo date: Sun, Feb 23, 2025 4:01 PM CST

Sampling Point:
N/A

View from dam trail halfway

Retaining wall and houses along Riverbluff Drive apparent.

Direction

Lat Lon from photo
44.75627777, -92.87447222

712 Elevation in feet

Photo date: Sun, Feb 23, 2025 3:58 PM CST

Generated with ecobot

Survey: Hastings MRCCA Photos

Region: General Field Observation

Sampling Point:
N/A

View from other side of dam

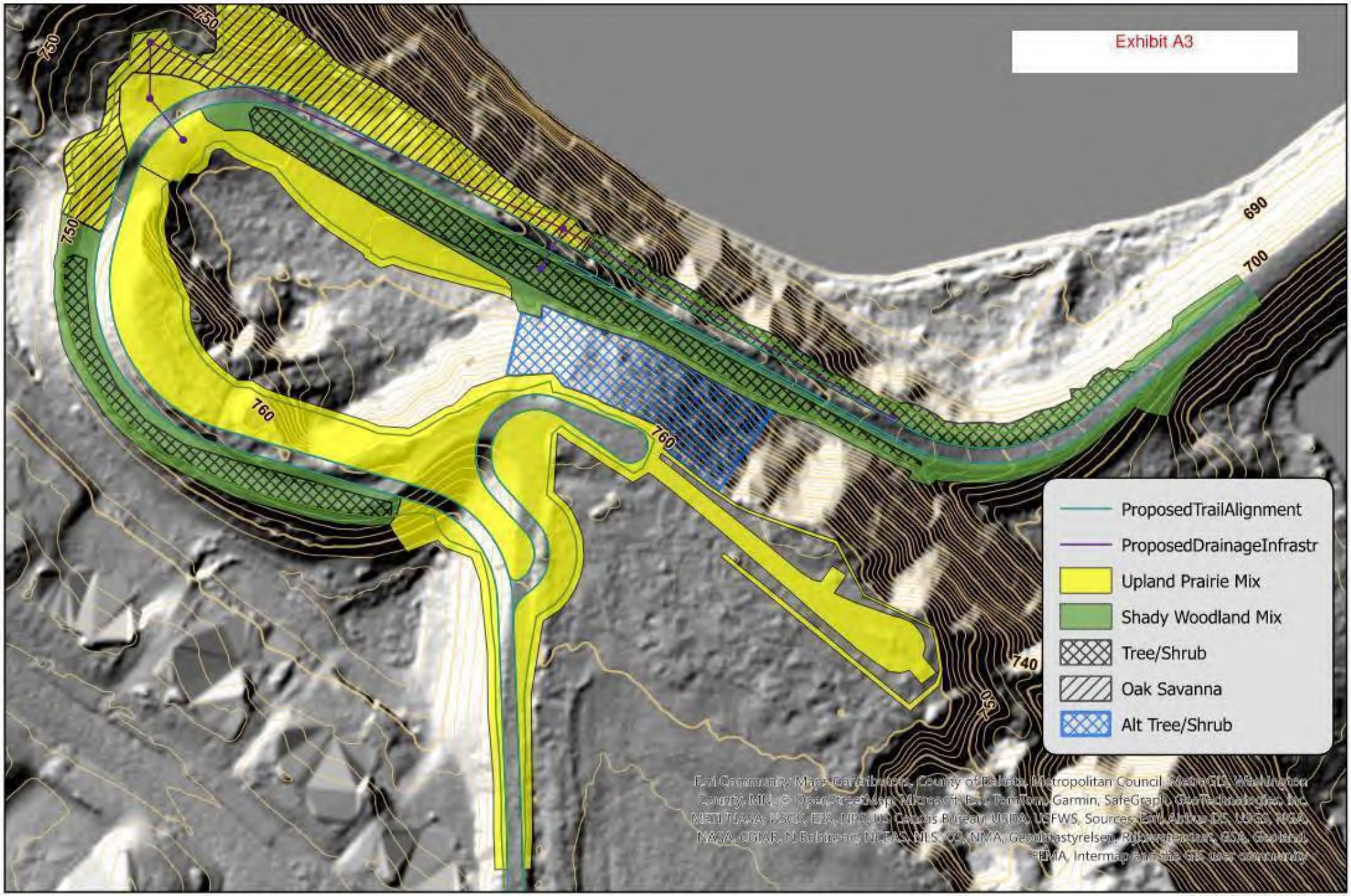
Direction

Lat Lon from photo
44.75871388, -92.87023888

711 Elevation in feet

Photo date: Sun, Feb 23, 2025 3:51 PM CST

Generated with ecobot



0 62.5 125 250 375 500 Feet

Scale: 1:1,000

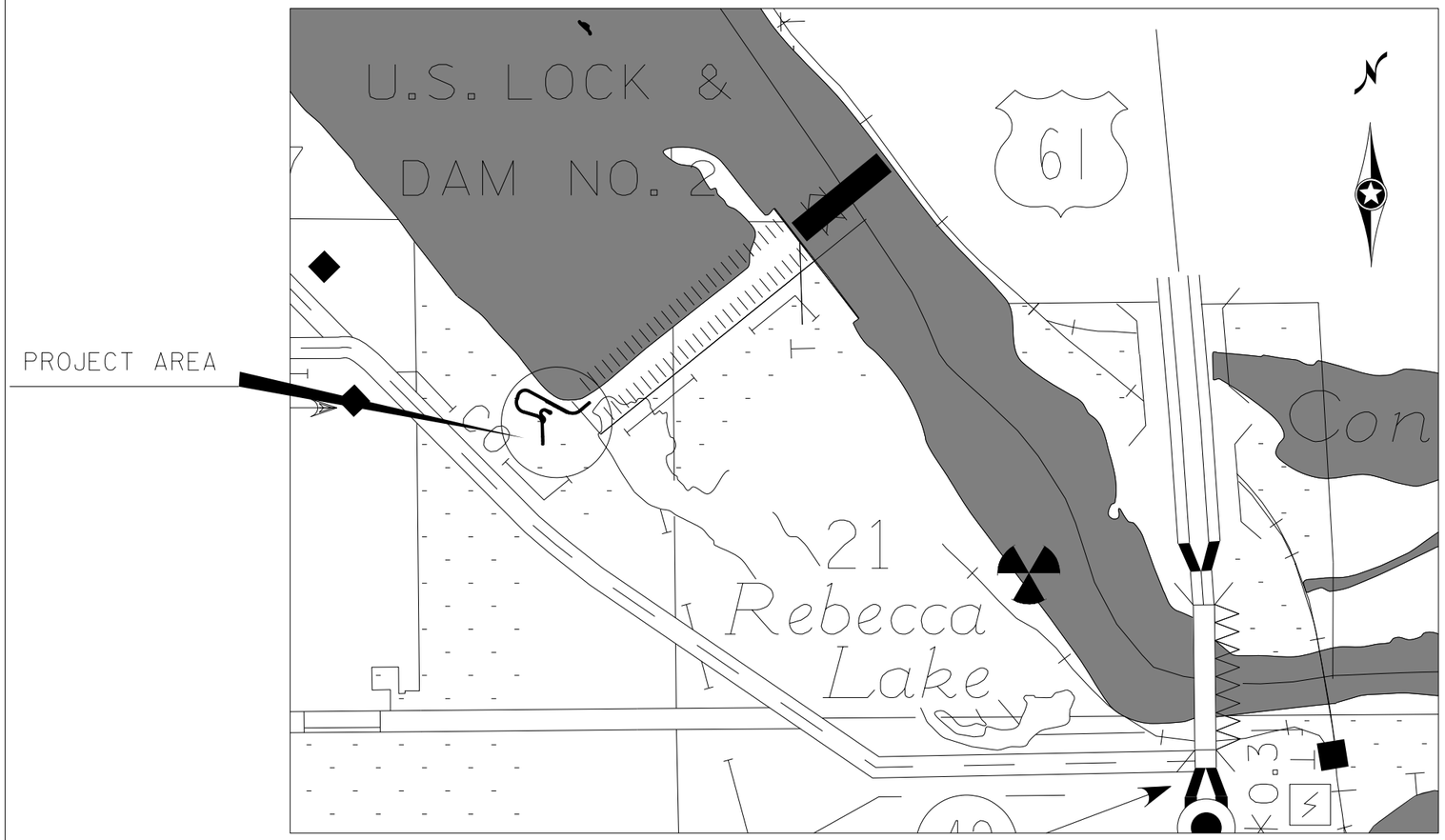
N

EXHIBIT A4

DAKOTA COUNTY

CONSTRUCTION PLAN FOR GRADING, BITUMINOUS SURFACING, ADA IMPROVEMENTS, RETAINING WALL

LOCATED ON MISSISSIPPI RIVER GREENWAY TRAIL 0.3 MILES NORTH WEST OF COUNTY RD 42 AND PLEASANT DR



SCALES

INDEX MAP	1500'	
GENERAL LAYOUT	400'	
PLAN	40'	
PROFILE	100' HORIZ.	VAR VERT.

PLAN REVISIONS		
DATE	SHEET NO.	APPROVED BY

PROJECT LOCATION

COUNTY : DAKOTA

Dakota COUNTY

GOVERNING SPECIFICATIONS

THE 2020 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" SHALL GOVERN.

INDEX

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	GENERAL LAYOUT
3	STATEMENT OF ESTIMATED QUANTITIES
4	CONSTRUCTION NOTES, STANDARD PLANS AND STANDARD PLATES
5	TYPICAL SECTIONS
6	ALIGNMENT PLANS AND TABULATIONS
7-9	REMOVAL PLANS
10-12	CONSTRUCTION PLANS
13-14	CONSTRUCTION PROFILES
15	RETAINING WALL PLAN AND PROFILE
16-17	DRAINAGE PLANS AND PROFILES
18-20	STORM WATER POLLUTION PREVENTION PLAN
21-23	EROSION CONTROL PLANS
24-26	TURF ESTABLISHMENT PLANS
X1-X22	CROSS SECTIONS

THIS PLAN CONTAINS 26 SHEETS

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

PRINT NAME: JORDAN R HOREJSI LICENSE # 52241

SIGNATURE: NOT FOR CONSTRUCTION DATE: 2/28/2025

DESIGN SQUAD GABRIEL FROMM, BRETT JOHNSON
KENDAL RUSTEN, CONNER DUNTEMAN

HRGreen
COURT INTERNATIONAL BUILDING
2550 UNIVERSITY AVENUE W., SUITE 400N
ST. PAUL, MINNESOTA 55114-2015
P: 651.644.4389 F: 713.965.0044

APPROVED _____ 20____
CITY OF HASTINGS

APPROVED _____ 20____
DAKOTA COUNTY PROJECT MANAGER

Last Saved: 2/28/2025 Model: Title Sheet [Sheet] File: \\hrgreen.com\hrg\Data\2022\2202947\CAD\Road_Design\sheets\CD2202947_100tsh.dgn

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NO.	REVISIONS	BY	APR.	DATE

DESIGNED BAJ | CHECKED KRR
DRAWN GGF | APPROVED JRH
DATE 2/28/2025 | JOB NO. XXXX-XX

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NOT FOR CONSTRUCTION

LIC. NO. 52241

TYPED NAME JORDAN R HOREJSI DATE 2/28/2025

HRGreen
Building Communities. Improving Lives.
COURT INTERNATIONAL BUILDING
2550 UNIVERSITY AVENUE W., SUITE 400N
ST. PAUL, MINNESOTA 55114-1052
P: 651.644.4389 F: 651.644.9446

Dakota COUNTY

DAKOTA COUNTY

GENERAL LAYOUT
SHEET 1 OF 1

SHEET 2
OF 26

SHEET NO	TAB	ITEM NUMBER	ITEM DESCRIPTION	NOTES	UNIT	TOTAL ESTIMATED QUANTITY
		2011.601	AS BUILT		LUMP SUM	
		2021.501	MOBILIZATION		LUMP SUM	
		2051.501	MAINT. & RESTORATION OF HAUL ROADS		LUMP SUM	
		2101.505	GRUBBING		ACRE	
		2104.502	REMOVE VEHICULAR GATE		EACH	
		2104.502	REMOVE MANHOLE OR CATCH BASIN		EACH	
		2104.502	REMOVE SIGN TYPE C		EACH	
		2104.502	SALVAGE PICNIC TABLE		EACH	
		2104.502	SALVAGE BENCH		EACH	
		2104.503	SAWING BITUMINOUS PAVEMENT (FULL DEPTH)		LIN FT	
		2104.503	REMOVE PIPE SEWERS		LIN FT	
		2104.503	REMOVE CHAIN LINK FENCE		LIN FT	
		2104.503	REMOVE MANHOLES OR CATCH BASINS		LIN FT	
		2104.503	SAWING BITUMINOUS PAVEMENT (FULL DEPTH)		LIN FT	
		2104.504	REMOVE BITUMINOUS PAVEMENT		SQ YD	
		2104.518	REMOVE CONCRETE SLAB		SQ FT	
		2106.507	EXCAVATION - COMMON		CU YD	
		2211.507	AGGREGATE BASE (CV) CLASS 5		CU YD	
		2232.504	MILL BITUMINOUS SURFACE (3.0")		SQ YD	
		2360.509	TYPE SP 9.5 WEARING COURSE MIX (2, B)		TON	
		2411.618	PREFABRICATED MODULAR BLOCK WALL		SQ FT	
		2502.503	4" PERF TP PIPE DRAIN		LIN FT	
		2503.503	12" PVC PIPE SEWER		LIN FT	
		2503.602	CONNECT TO EXISTING STORM SEWER		EACH	
		2503.602	CONNECT TO EXISTING MANHOLES		EACH	
		2506.502	CONSTRUCT DRAINAGE STRUCTURE DESIGN H		EACH	
		2506.502	CONSTRUCT DRAINAGE STRUCTURE DESIGN 48-4020		EACH	
		2506.502	ADJUST FRAME & RING CASTING		EACH	
		2540.602	INSTALL PICNIC TABLE		EACH	
		2540.602	INSTALL BENCH		EACH	
		2540.602	INSTALL BENCH		EACH	
		2571.502	PERENNIAL		EACH	
		2573.502	STORM DRAIN INLET PROTECTION		EACH	
		2573.502	CULVERT END CONTROLS		EACH	
		2573.503	SILT FENCE; TYPE HI		LIN FT	
		2575.504	ROLLED EROSION PREVENTION CATEGORY 20		SQ YD	
		2575.504	ROLLED EROSION PREVENTION CATEGORY 25		SQ YD	
		2575.605	SEEDING		ACRE	
		2575.608	SEED WINTER WHEAT		POUND	
		2575.608	SEED MESIC INSLOPE		POUND	

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NO.	REVISIONS	BY	APR.	DATE

DESIGNED BAJ | CHECKED KRR
DRAWN GGF | APPROVED JRH
DATE 2/28/2025 | JOB NO. XXXX-XX

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NOT FOR CONSTRUCTION

LIC. NO. 52241

TYPED NAME JORDAN R HOREJSI DATE 2/28/2025

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Dakota COUNTY

DAKOTA COUNTY

ESTIMATED QUANTITIES
SHEET 1 OF 1

SHEET 3
OF 26

CONSTRUCTION NOTES:

PERPETUATE DRAINAGE ON ALL AREAS DISTURBED BY CONSTRUCTION (INCIDENTAL).

ALL MATERIAL NOT UTILIZED ON THIS PROJECT SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND DISPOSED OF OFF THE R/W IN ACCORDANCE WITH SPEC 2104.

EARTHWORK FINISHING AND TOPSOIL COVERING OPERATIONS SHALL BE CONDUCTED CONCURRENTLY WITH GRADING OPERATIONS SO FAR AS TO PERMIT COMPLETION OF THE EROSION CONTROL ITEMS AT THE EARLIEST PRACTICAL TIME. TOPSOIL COVERING SHALL BE COMPLETED AS SOON AS POSSIBLE AFTER THE GRADING SOILS HAVE BEEN FINISHED TO GRADE IN ANY SIGNIFICANT AREA.

EXCAVATED MATERIAL SHOULD BE USED TO THE FULLEST EXTENT PRACTICAL, SO FAR AS THE EXCAVATED MATERIAL IS DESIGNATED SUITABLE WITH RESPECT TO THE REQUIREMENTS OF THE PROJECT. SEE MN/DOT'S SPECIFICATION 2106.

UNSUITABLE SOILS ARE DEFINED AS SOILS WHICH DO NOT MEET OR ARE NOT MANUFACTURED TO MEET ANY OF THE DEFINED CATEGORIES IN SPEC 2106. THESE SOILS ARE THEREFORE NOT REUSABLE AS STRUCTURAL BACKFILL OR EMBANKMENT. MATERIALS DEFINED AS UNSUITABLE (TOPSOIL, ORGANIC MATERIAL, DEBRIS) MUST BE REMOVED FROM THE EMBANKMENT FOUNDATION. THE UNSUITABLE MATERIALS SHALL BE DISPOSED OF IN ACCORDANCE WITH SPEC 2104 & 2106. MATERIALS SUCH AS PEAT, MARL, MULCH AND OTHER UNSTABLE MATERIALS NOT TO BE USED IN THE PAVEMENT EMBANKMENTS SHALL BECOME PROPERTY OF THE CONTRACTOR AND BE DISPOSED OF OFF THE RIGHT OF WAY. NO DIRECT COMPENSATION WILL BE MADE THEREFORE.

SUITABLE GRADING MATERIAL (COMMON EMBANKMENT) ON THIS PROJECT SHALL CONSIST OF ALL SOILS ENCOUNTERED WITH THE EXCEPTION OF DEBRIS, ORGANIC MATERIAL, AND OTHER UNSUITABLE MATERIAL. EXISTING AGGREGATE AND TOPSOIL SHOULD BE SALVAGED AND REUSED IN NEW CONSTRUCTION WHERE POSSIBLE. SEE MN/DOT'S SPECIFICATION 2106.

BITUMINOUS SURFACING, CONCRETE ITEMS, ABANDONED UTILITY ITEMS OR ANY OTHER MATERIAL WHICH MAY BE ENCOUNTERED DURING CONSTRUCTION THAT ARE NOT SUITABLE FOR SALVAGE OR FOR ROADWAY CONSTRUCTION, MUST BE DISPOSED OF BY THE CONTRACTOR OFF THE RIGHT-OF-WAY IN ACCORDANCE WITH SPEC. 2104.

CONCRETE TRUCKS THAT WASH OUT WITHIN THE PROJECT LIMITS MUST DO SO AT A LOCATION APPROVED BY THE ENGINEER. HARDENED CONCRETE WASTE MUST BE REMOVED FROM THE PROJECT LIMITS AND PROPERLY DISPOSED IN ACCORDANCE WITH SPEC. 2104.(INCIDENTAL).

SURVEYS AND RIGHT OF WAY

THE CONTRACTOR SHALL PRESERVE ALL LAND, AND PROPERTY CORNERS, VERTICAL AND HORIZONTAL CONTROLS, AND RIGHT OF WAY MONUMENTS.

GRADING

EXCAVATION LIMIT LINES AS SHOWN ON THE TYPICAL SECTIONS AND DETAILS IN THIS PLAN ARE FOR THE COMPUTATION OF PAY QUANTITIES. TEMPORARY AND INTERMEDIATE EXCAVATION LIMITS AND SLOPES ARE TO BE DETERMINED BY THE CONTRACTOR DURING CONSTRUCTION, DEPENDING ON SOIL PROPERTIES AND SAFETY FACTORS. ADDITIONAL EXCAVATION AND BACKFILL BEYOND THE LIMITS SHOWN IN THE PLAN FOR SOIL AND SAFETY ISSUES WILL BE CONSIDERED THE CONTRACTOR'S RESPONSIBILITY WITH NO DIRECT PAYMENT.

GRADING GRADE IS DEFINED AS THE BOTTOM OF THE AGGREGATE BASE (CV) CLASS 5.

TEMPORARY TURF ESTABLISHMENT

TEMPORARY EROSION CONTROL DEVICES AND THEIR SUGGESTED LOCATIONS HAVE BEEN SHOWN IN THE PLANS ALONG WITH PAY ITEMS FOR THEIR USE. THIS DOES NOT, HOWEVER, RELIEVE THE CONTRACTOR OF THEIR RESPONSIBILITIES TO CONDUCT THEIR CONSTRUCTION IN A MANNER THAT WILL CONTROL EROSION. RESPONSIBILITY FOR CONTROLLING EROSION IS SET FORTH IN MN/DOT SPECIFICATIONS 1717, 1803, 2101, 2105, 2573, 2575, AND AS AMENDED BY THE SPECIAL PROVISIONS.

THE SPECIFIED EROSION AND SEDIMENT CONTROL PRACTICES ARE THE MINIMUM. ADDITIONAL PRACTICES MAY BE REQUIRED DURING THE COURSE OF CONSTRUCTION.

EXISTING TOPSOIL AND SLOPE DRESSING

ANY REFERENCE TO TOPSOIL IN THE PLAN OR SPECIAL PROVISIONS WILL PERTAIN TO THE UPPER 4" (AVERAGE) OF NATURAL (INPLACE) SOIL. THIS MATERIAL MUST BE USABLE AS 4" SLOPE DRESSING. STRIP AND STOCKPILE THE EXISTING TOPSOIL FROM ALL AREAS DISTURBED BY CONSTRUCTION FOR PLACEMENT AS SLOPE DRESSING ON CONSTRUCTION SLOPES.

THE CONTRACTOR SHALL REMOVE ALL STICKS AND ROCKS EXCEEDING 3" IN ANY DIMENSION AT THE TIME OF FINAL SLOPE DRESSING PLACEMENT AND/OR AFTER LOOSENING THE SOIL PRIOR TO SEEDING OR BOTH. THIS IS INTENDED TO PREVENT DAMAGE TO MOWING EQUIPMENT (INCIDENTAL).

TOPSOIL STRIPPING WILL BE PAID FOR AS EXCAVATION-COMMON

BITUMINOUS AND AGGREGATE

PROVIDE A UNIFORM TACK COAT AS DOCUMENTED IN THE MOST RECENT SPEC 2357 - BITUMINOUS TACK COAT REQUIREMENTS, WHICH SHALL BE INCIDENTAL.

COMPACTION FOR AGGREGATE BASE MUST BE BY THE QUALITY COMPACTION METHOD.

PERMANENT TURF ESTABLISHMENT

ALL AREAS DISTURBED BY CONSTRUCTION WILL REQUIRE TURF ESTABLISHMENT. PERMANENT TURF ESTABLISHMENT (FINAL STABILIZATION) MUST BE COMPLETED WITHIN THE TIME FRAME INDICATED IN THE SWPPP NARRATIVE.

ALL AREAS DISTURBED BY THE CONTRACTOR'S EQUIPMENT OR OPERATIONS THAT WERE NOT NECESSARY FOR THE PLANNED CONSTRUCTION MUST BE RESTORED AS INDICATED ABOVE, OR AS DIRECTED BY THE OWNER AT THE CONTRACTOR'S EXPENSE.

UTILITIES

THE SUBSURFACE UTILITY INFORMATION IN THE PLAN IS UTILITY QUALITY LEVEL D.

THE CONTRACTOR IS HEARBY REMINDED OF THEIR RESPONSIBILITIES UNDER STATE LAW TO CONTACT ALL UTILITIES THAT MAY HAVE FACILITIES IN THE AREA. THE CONTACT MUST BE MADE THROUGH GOPHER STATE-ONE-CALL.

THE FOLLOWING STANDARD PLATES, APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION, SHALL APPLY ON THIS PROJECT

STANDARD PLATES

PLATE NO.	DESCRIPTION
3007F	SHEAR REINFORCEMENT FOR PRECAST DRAINAGE STRUCTURES
4003B	30" PRECAST CATCH BASIN - DESIGN N
4010I	CONCRETE ADJUSTING RINGS
4020J	MANHOLE OR CATCH BASIN (FOR USE WITH OR WITHOUT TRAFFIC LOADS) (2 SHEETS)
4101D	RING CASTING FOR MANHOLE OR CATCH BASIN
4140D	SPECIAL GRATE CASTINGS FOR CATCH BASIN (CONVEX AND CONCAVE) - CASTING NO. 720 AND 721
4180J	MANHOLE OR CATCH BASIN STEP

THE FOLLOWING STANDARD PLANS, APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION, SHALL APPLY ON THIS PROJECT

STANDARD PLANS

INDEX NO.	SUBJECT	APPROVED	REVISED
5-297.115 (1 of 2)	STAKING INFORMATION SHEET	08-06-2014	
5-297.115 (2 of 2)	STAKING INFORMATION SHEET	08-06-2014	
5-297.301 (1 of 3)	STANDARD PLANTING DETAILS	12-11-2015	02-14-2019
5-297.301 (2 of 3)	STANDARD PLANTING DETAILS	12-11-2015	
5-297.301 (3 of 3)	STANDARD PLANTING DETAILS	12-11-2015	
5-297.404 (1 of 3)	PERMANENT EROSION CONTROL - ALONG ROADWAYS, DITCHES, AND FLUMES	02-28-2017	
5-297.404 (3 of 3)	PERMANENT EROSION CONTROL - REPP (BLANKET) STAPLE PATTERN FOR SLOPES	01-08-2020	
5-297.405 (1 of 8)	TEMPORARY SEDIMENT CONTROL - SILT CURTAIN OR SILT FENCE TYPE TB	02-28-2017	
5-297.405 (2 of 8)	TEMPORARY SEDIMENT CONTROL - FILTER BERMS, SEDIMENT CONTROL LOGS, AND BALE BARRIERS	01-08-2020	
5-297.405 (4 of 8)	TEMPORARY SEDIMENT CONTROL - STORM DRAIN INLET PROTECTION	02-28-2017	
5-297.405 (5 of 8)	TEMPORARY SEDIMENT CONTROL - CONSTRUCTION EXITS	02-28-2017	
5-297.405 (6 of 8)	TEMPORARY SEDIMENT CONTROL - SILT FENCE	02-28-2017	
5-297.405 (8 of 8)	TEMPORARY SEDIMENT CONTROL - CULVERT END CONTROLS	02-28-2017	
5-297.442	STANDARD STORM SEWER BEDDING FOR RIGID AND FLEXIBLE PIPE	11-15-2024	
5-297.640 (1 of 2)	MODULAR BLOCK RETAINING WALL GENERAL NOTES	03-29-2023	
5-297.640 (2 of 2)	MODULAR BLOCK RETAINING WALL STORMWATER MANAGEMENT AND VEGETATION NOTES	03-29-2023	
5-297.645 (1 of 2)	MODULAR BLOCK RETAINING WALL DETAILS	03-29-2023	
5-297.645 (2 of 2)	MODULAR BLOCK RETAINING WALL DETAILS	03-29-2023	

NO.	REVISIONS	BY	APR.	DATE

DESIGNED BAJ | CHECKED KRR
DRAWN GGF | APPROVED JRH
DATE 2/28/2025 | JOB NO. XXXX-XX

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NOT FOR CONSTRUCTION

LIC. NO. 52241

TYPED NAME JORDAN R HOREJSI DATE 2/28/2025

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ST. PAUL, MINNESOTA 55114-1052
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Dakota COUNTY

DAKOTA COUNTY

CONSTRUCTION NOTES, STANDARD PLANS AND STANDARD PLATES
SHEET 1 OF 1

SHEET 4 OF 26

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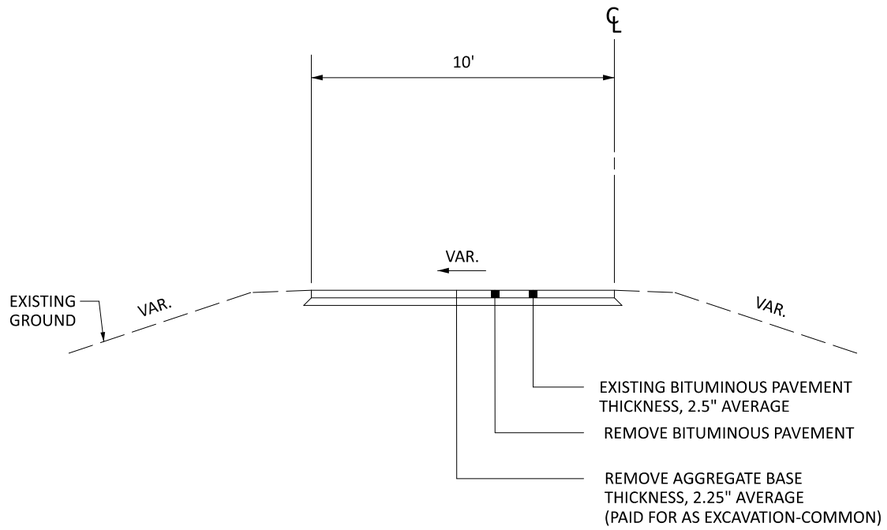
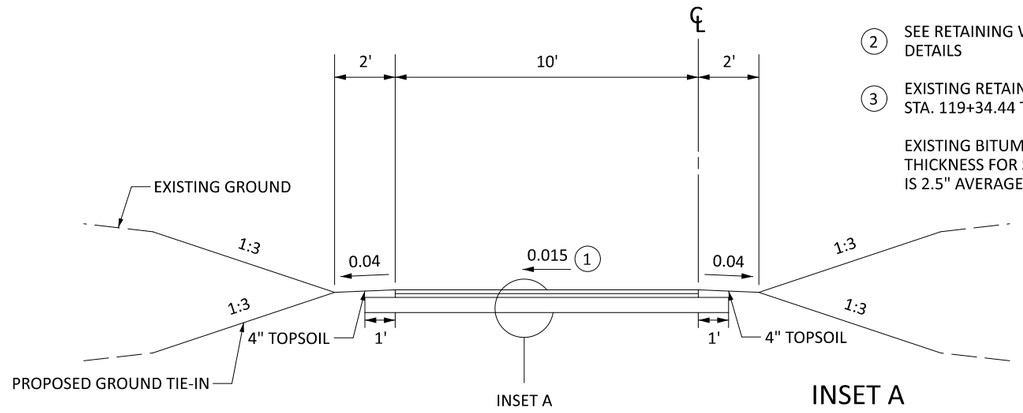
EXISTING TRAIL TYPICAL SECTION

MRG TRAIL STA. 109+29.45 TO STA. 124+59.60
OVERLOOK TRAIL STA. 0+00.00 TO STA. 1+80.35

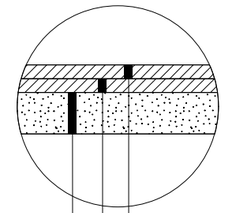


PROPOSED TRAIL TYPICAL SECTION

MRG TRAIL STA. 109+29.45 TO STA. 119+33.03
MRG TRAIL STA. 122+04.87 TO STA. 124+59.60
OVERLOOK TRAIL STA. 0+00.00 TO STA. 1+80.35



INSET A



GENERAL NOTES:

1. ALL SLOPES ARE 'FT/FT' UNLESS OTHERWISE NOTED.

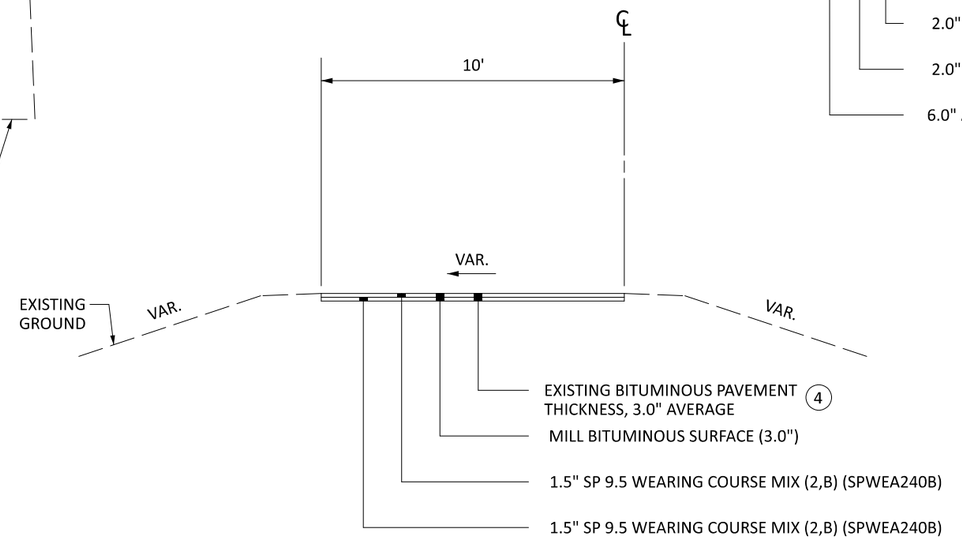
NOTES:

1. CROSS SLOPES DIRECTION VARY. SEE CONSTRUCTION PLAN AND CROSS SECTIONS FOR DETAILS.
2. SEE RETAINING WALL SHEETS FOR RETAINING WALL DETAILS
3. EXISTING RETAINING WALL MRG TRAIL STA. 119+34.44 TO STA. 120+96.96

EXISTING BITUMINOUS PAVEMENT THICKNESS FOR STA. 100+12.25 TO STA. 109+29.45 IS 2.5" AVERAGE

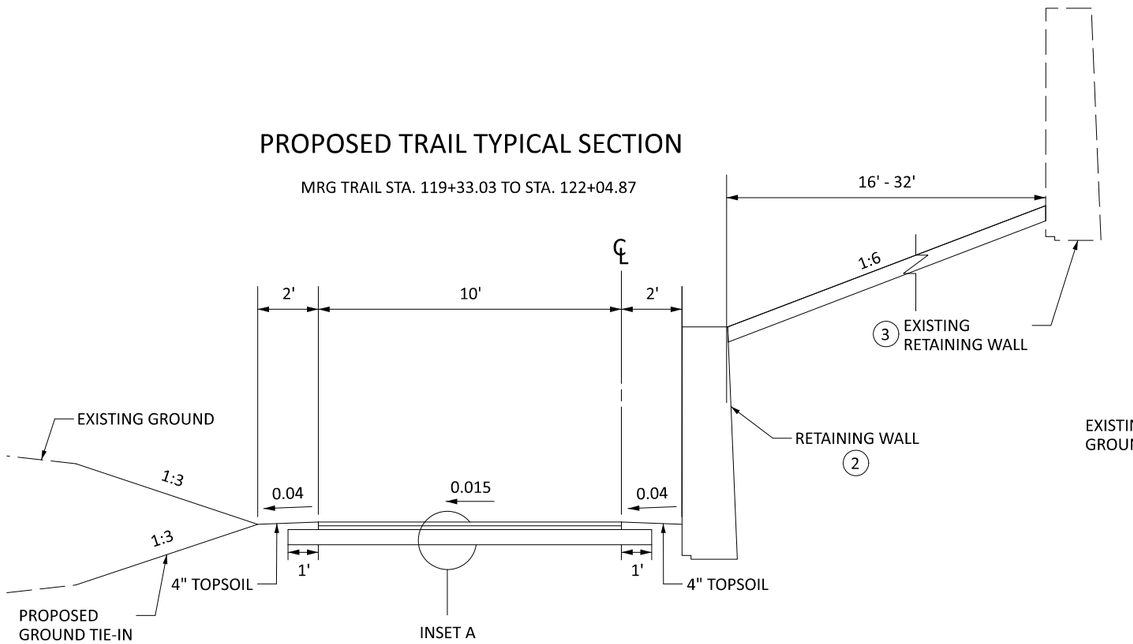
EXISTING TRAIL TYPICAL SECTION

MRG TRAIL STA. 100+12.25 TO STA. 109+29.45
MRG TRAIL STA. 124+59.60 TO STA. 147+19.66
JAYCEE PARK TRAIL STA. 200+47.16 TO STA. 227+02.53



PROPOSED TRAIL TYPICAL SECTION

MRG TRAIL STA. 119+33.03 TO STA. 122+04.87



NO.	REVISIONS	BY	APR.	DATE

DESIGNED BAJ | CHECKED KRR
DRAWN GGF | APPROVED JRH
DATE 2/28/2025 | JOB NO. XXXX-XX

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NOT FOR CONSTRUCTION

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Dakota COUNTY

DAKOTA COUNTY

TYPICAL SECTIONS
SHEET 1 OF 1

SHEET 5
OF 26

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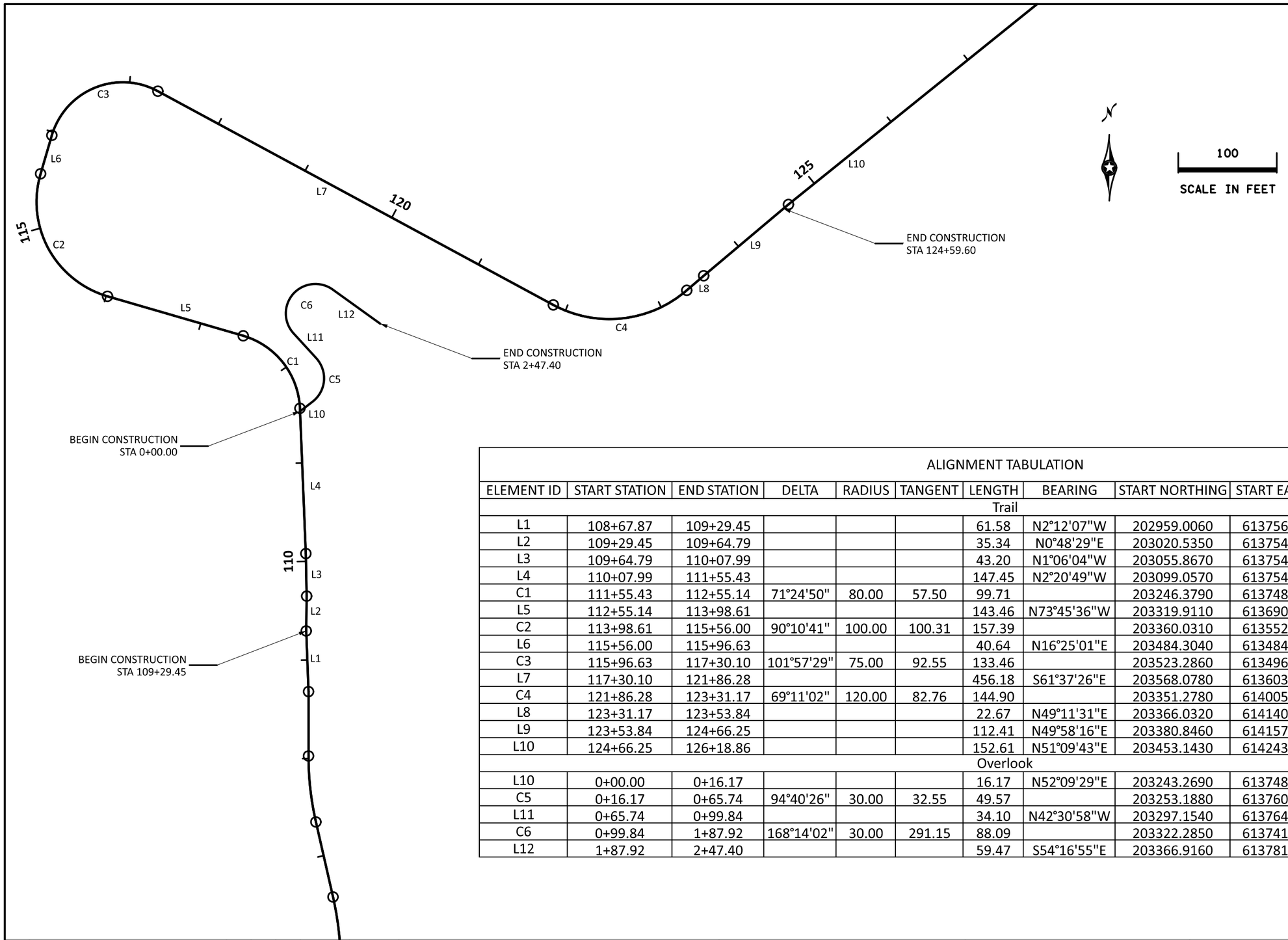

ALIGNMENT TABULATION											
ELEMENT ID	START STATION	END STATION	DELTA	RADIUS	TANGENT	LENGTH	BEARING	START NORTHING	START EASTING	END NORTHING	END EASTING
Trail											
L1	108+67.87	109+29.45				61.58	N2°12'07"W	202959.0060	613756.8250	203020.5350	613754.4590
L2	109+29.45	109+64.79				35.34	N0°48'29"E	203020.5350	613754.4590	203055.8670	613754.9570
L3	109+64.79	110+07.99				43.20	N1°06'04"W	203055.8670	613754.9570	203099.0570	613754.1270
L4	110+07.99	111+55.43				147.45	N2°20'49"W	203099.0570	613754.1270	203246.3790	613748.0890
C1	111+55.43	112+55.14	71°24'50"	80.00	57.50	99.71		203246.3790	613748.0890	203319.9110	613690.5290
L5	112+55.14	113+98.61				143.46	N73°45'36"W	203319.9110	613690.5290	203360.0310	613552.7890
C2	113+98.61	115+56.00	90°10'41"	100.00	100.31	157.39		203360.0310	613552.7890	203484.3040	613484.8320
L6	115+56.00	115+96.63				40.64	N16°25'01"E	203484.3040	613484.8320	203523.2860	613496.3170
C3	115+96.63	117+30.10	101°57'29"	75.00	92.55	133.46		203523.2860	613496.3170	203568.0780	613603.9030
L7	117+30.10	121+86.28				456.18	S61°37'26"E	203568.0780	613603.9030	203351.2780	614005.2720
C4	121+86.28	123+31.17	69°11'02"	120.00	82.76	144.90		203351.2780	614005.2720	203366.0320	614140.7260
L8	123+31.17	123+53.84				22.67	N49°11'31"E	203366.0320	614140.7260	203380.8460	614157.8820
L9	123+53.84	124+66.25				112.41	N49°58'16"E	203380.8460	614157.8820	203453.1430	614243.9540
L10	124+66.25	126+18.86				152.61	N51°09'43"E	203453.1430	614243.9540	203548.8460	614362.8230
Overlook											
L10	0+00.00	0+16.17				16.17	N52°09'29"E	203243.2690	613748.2170	203253.1880	613760.9860
C5	0+16.17	0+65.74	94°40'26"	30.00	32.55	49.57		203253.1880	613760.9860	203297.1540	613764.6940
L11	0+65.74	0+99.84				34.10	N42°30'58"W	203297.1540	613764.6940	203322.2850	613741.6520
C6	0+99.84	1+87.92	168°14'02"	30.00	291.15	88.09		203322.2850	613741.6520	203366.9160	613781.2780
L12	1+87.92	2+47.40				59.47	S54°16'55"E	203366.9160	613781.2780	203332.1960	613829.5650

NO.	REVISIONS	BY	APR.	DATE

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Dakota COUNTY

DAKOTA COUNTY

ALIGNMENT PLANS AND TABULATIONS
SHEET 1 OF 1

SHEET 6
OF 26

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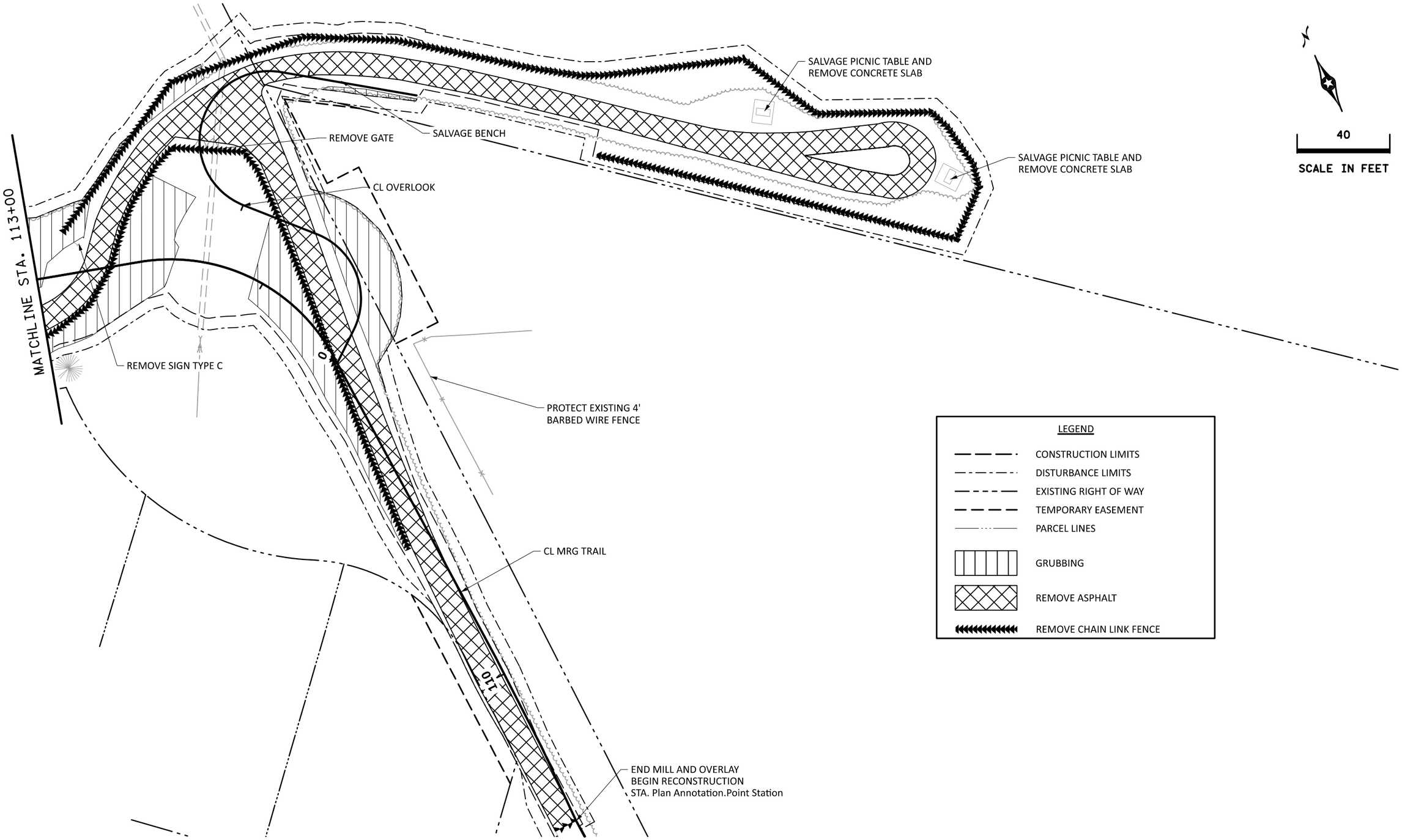

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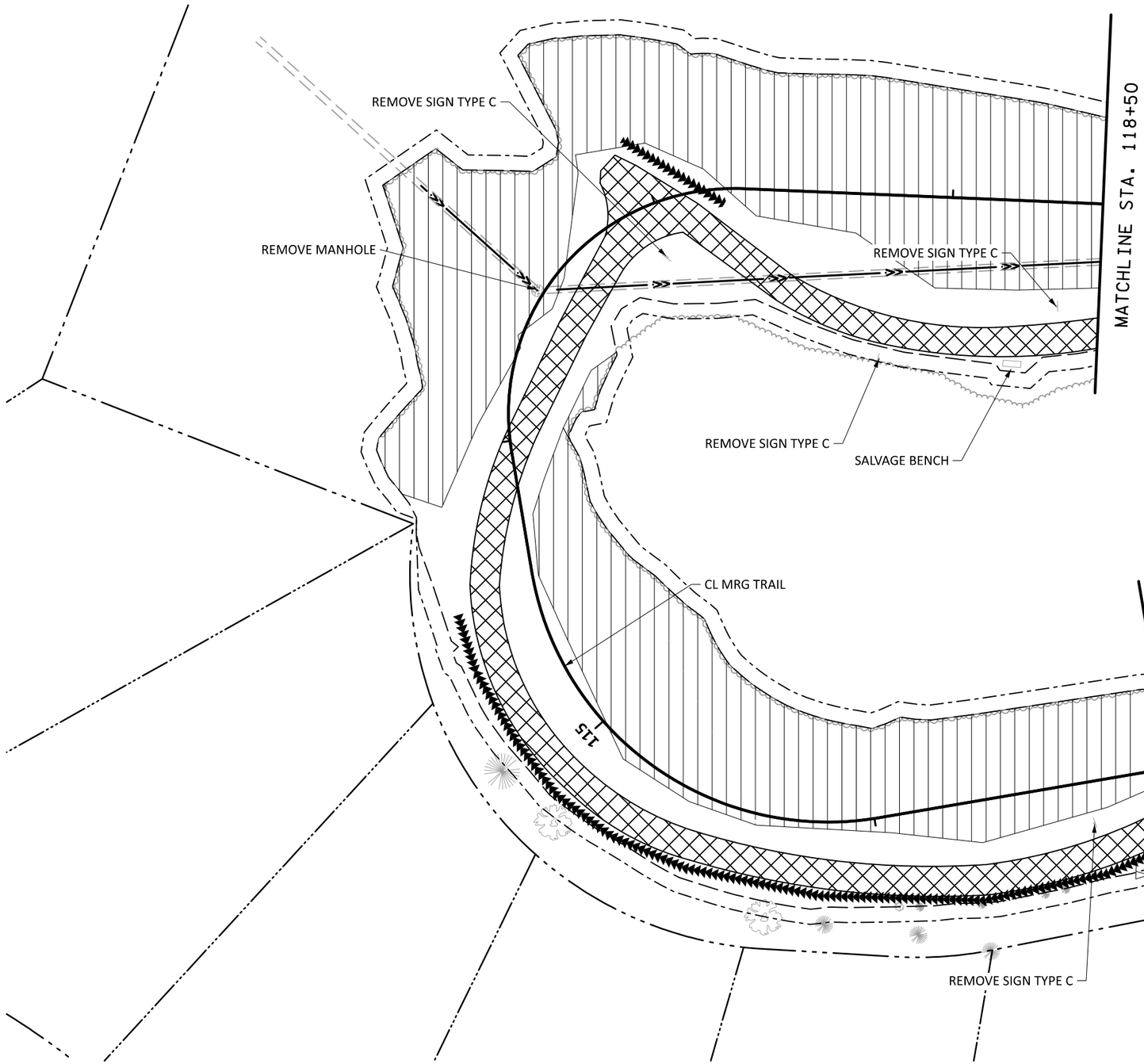
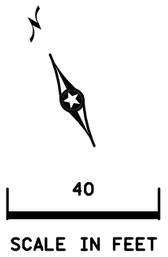
Dakota COUNTY

DAKOTA COUNTY

REMOVAL PLANS
SHEET 1 OF 3

SHEET 7
OF 26





LEGEND

- CONSTRUCTION LIMITS
- DISTURBANCE LIMITS
- EXISTING RIGHT OF WAY
- PARCEL LINES
- GRUBBING
- REMOVE ASPHALT
- REMOVE CHAIN LINK FENCE
- SAWCUT 3" ASPHALT TRAIL
- REMOVE PIPE SEWER / PIPE CULVERT

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Dakota COUNTY

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REMOVAL PLANS
SHEET 2 OF 3

SHEET 8
OF 26

LEGEND

- CONSTRUCTION LIMITS
- DISTURBANCE LIMITS
- EXISTING RIGHT OF WAY
- PARCEL LINES
- GRUBBING
- REMOVE ASPHALT
- REMOVE CHAIN LINK FENCE
- SAWCUT 3" ASPHALT TRAIL
- EXISTING RETAINING WALL
- REMOVE PIPE SEWER / PIPE CULVERT

N

40

SCALE IN FEET

125

END RECONSTRUCTION
BEGIN MILL AND OVERLAY
STA. 124+59.60

MATCHLINE STA. 118+50

120

REMOVE MANHOLE

CL MRG TRAIL

REMOVE MANHOLE

PROTECT EXISTING RETAINING WALL

REMOVE SIGN TYPE C

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DRAWN: CGF | APPROVED: JRH
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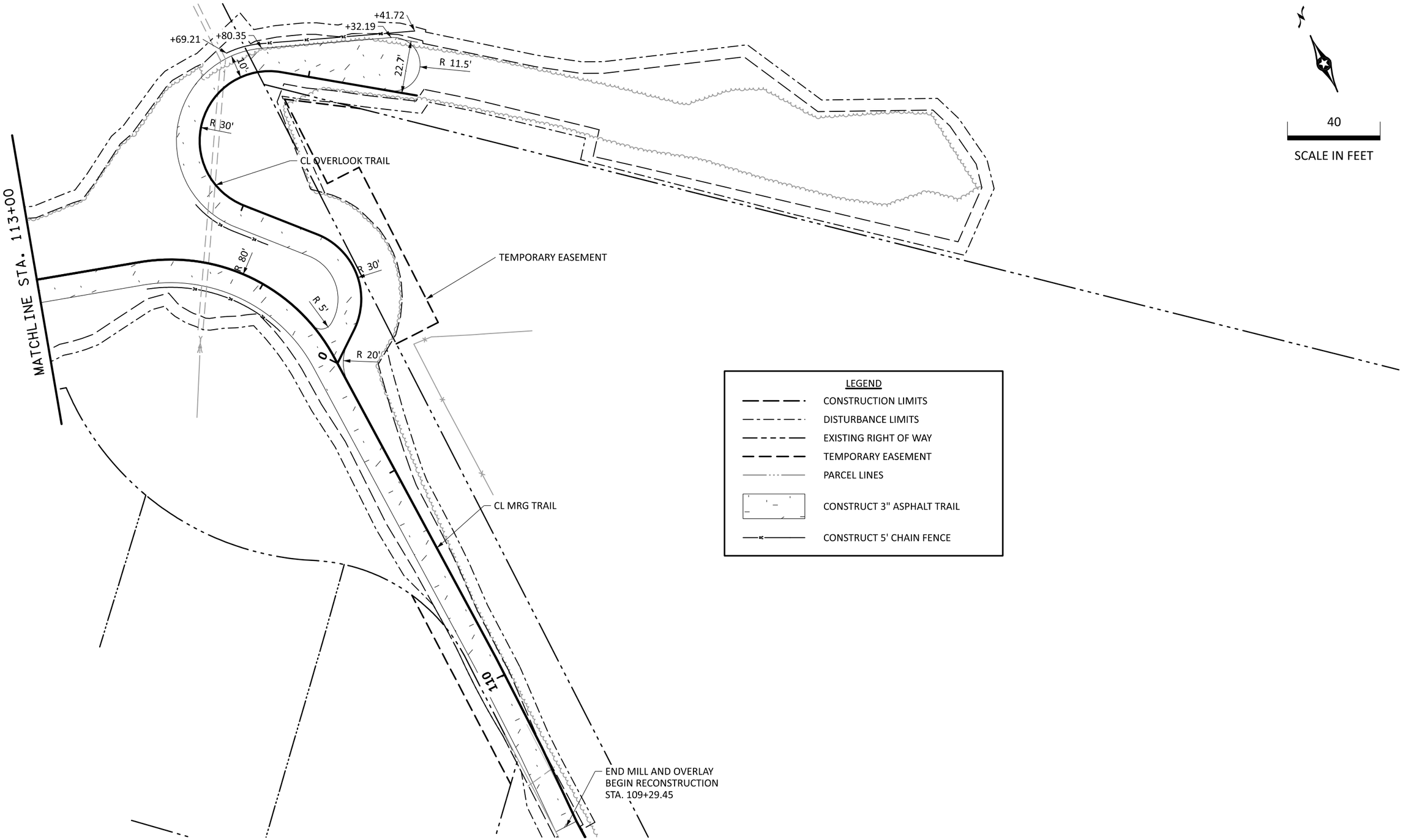
REMOVAL PLANS
SHEET 3 OF 3

SHEET 9
OF 26



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GGF	JRH
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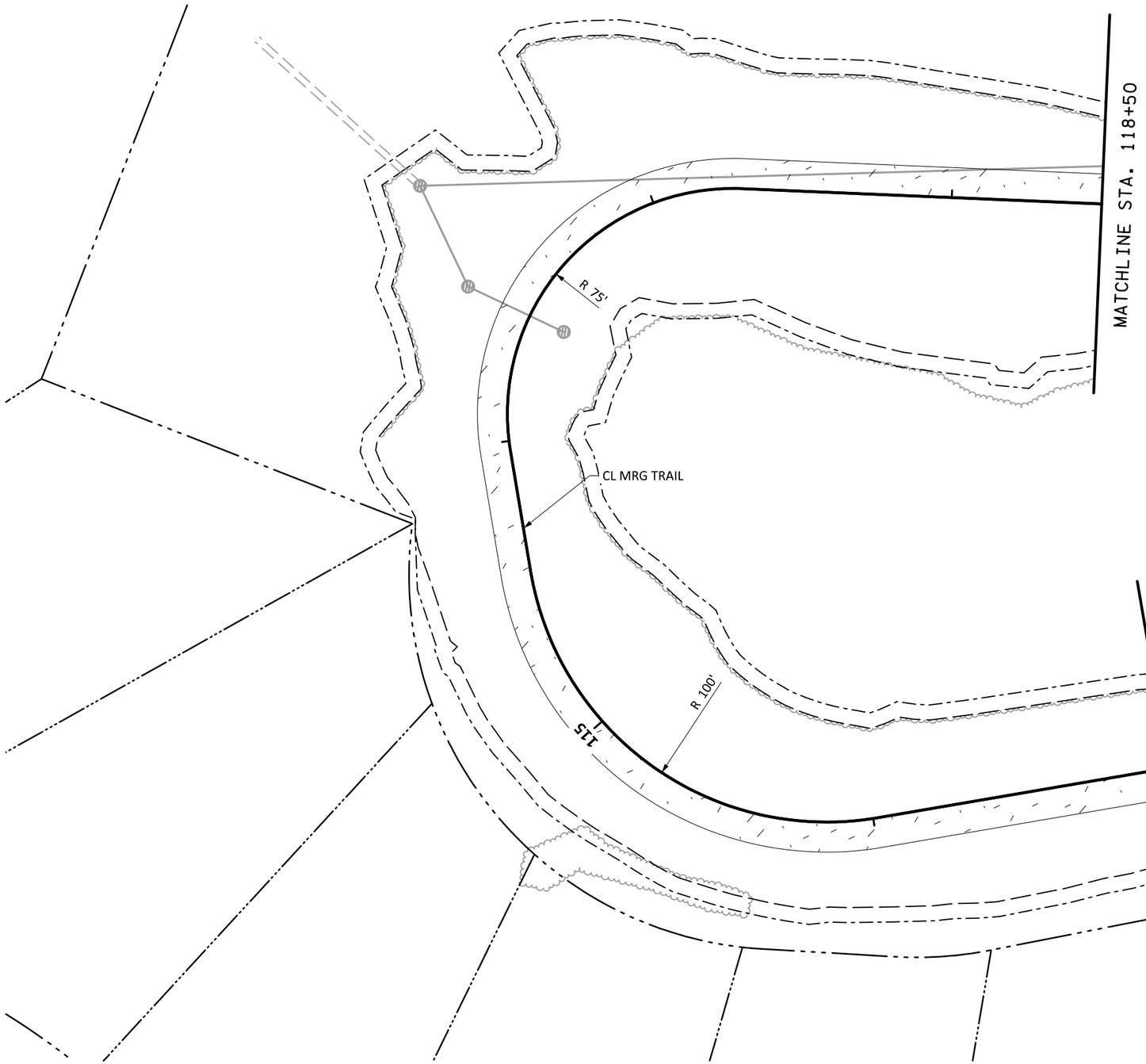
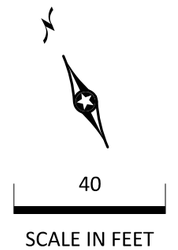
CONSTRUCTION PLANS
SHEET 1 OF 3

SHEET 10
OF 26





LEGEND

- CONSTRUCTION LIMITS
- DISTURBANCE LIMITS
- EXISTING RIGHT OF WAY
- PARCEL LINES
- CONSTRUCT 3" ASPHALT TRAIL

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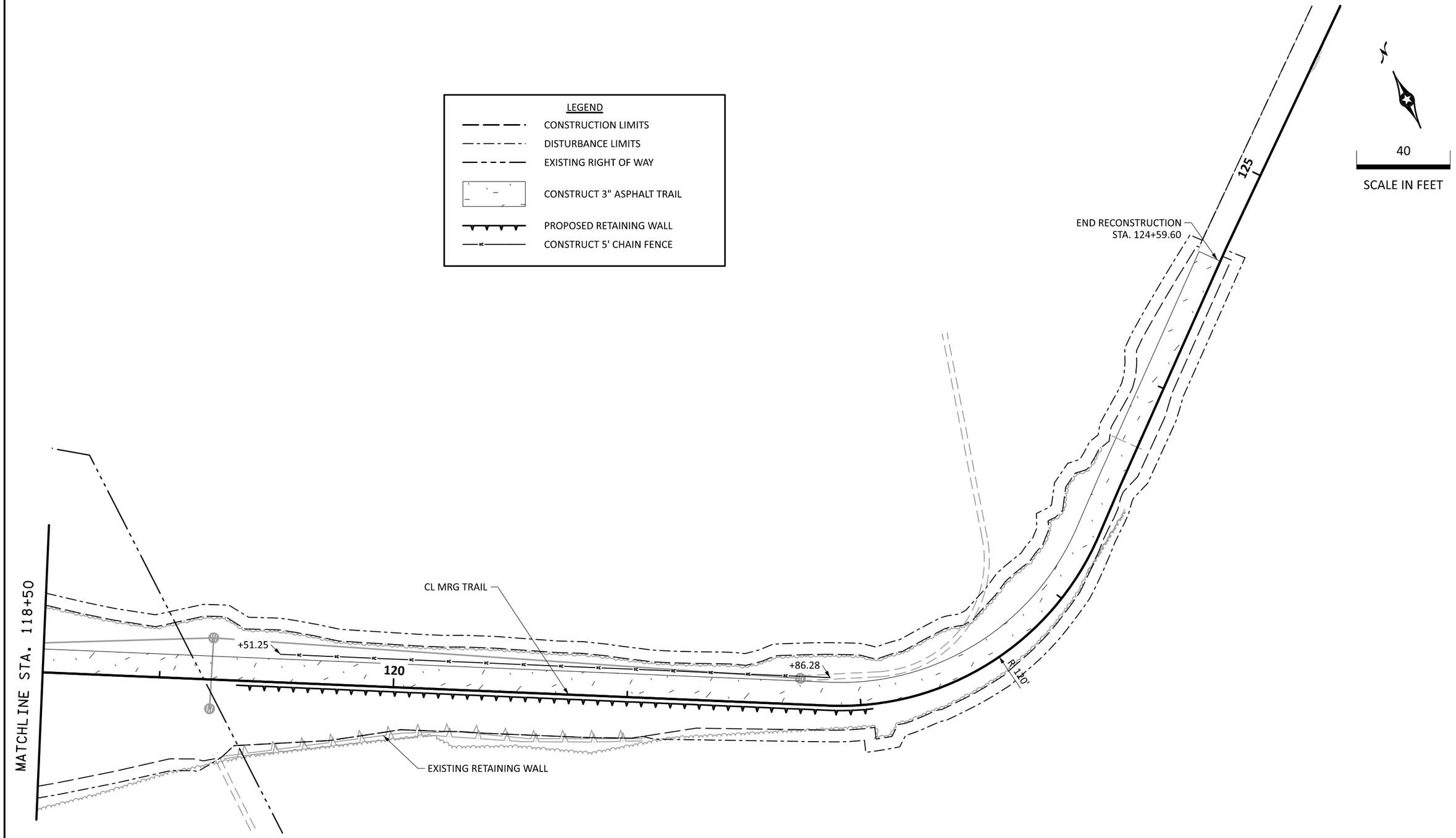
CONSTRUCTION PLANS
SHEET 2 OF 3

SHEET 11
OF 26

LEGEND

- CONSTRUCTION LIMITS
- DISTURBANCE LIMITS
- EXISTING RIGHT OF WAY
- CONSTRUCT 3" ASPHALT TRAIL
- PROPOSED RETAINING WALL
- CONSTRUCT 5' CHAIN FENCE



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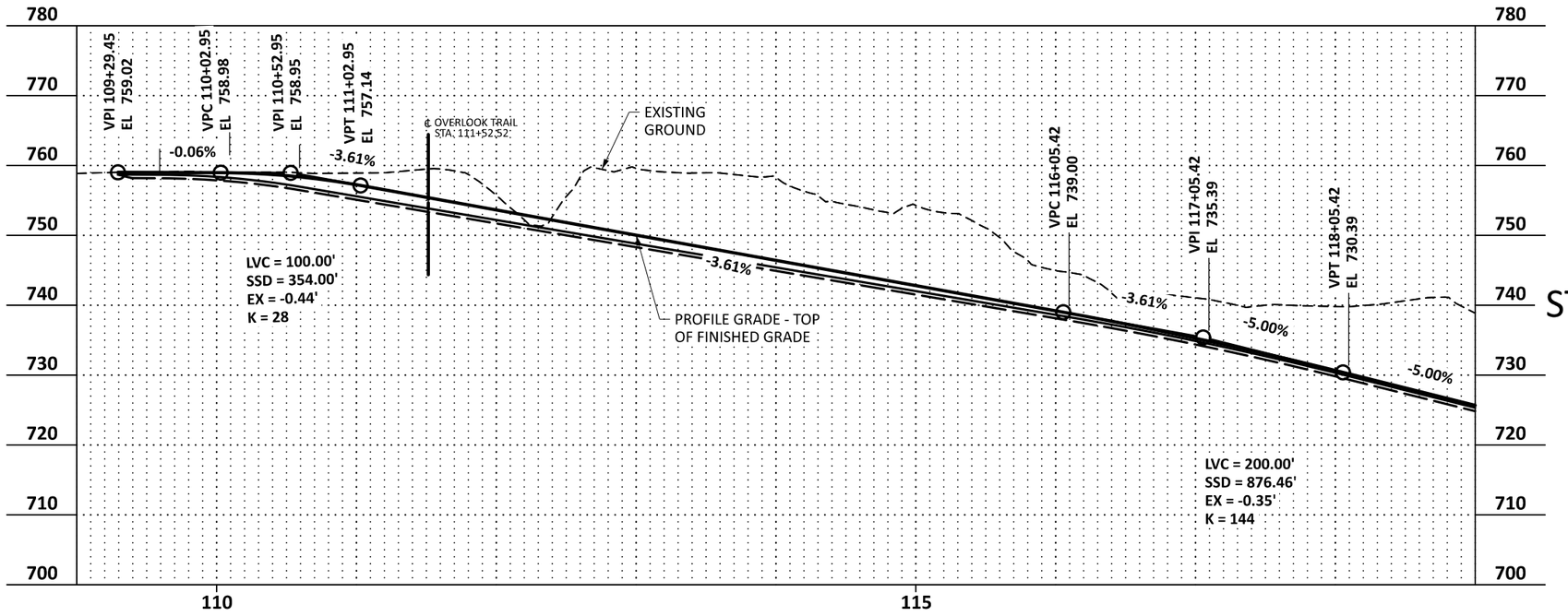
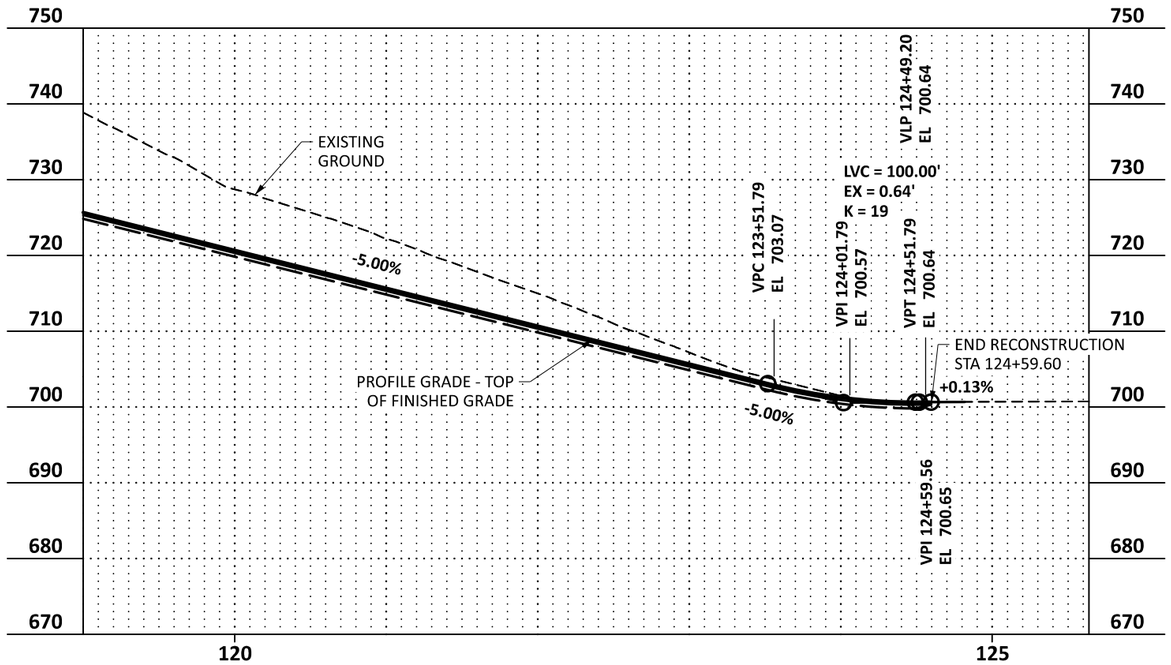
CONSTRUCTION PLANS
SHEET 3 OF 3

SHEET 12
OF 26



MRG TRAIL PROFILE
STATIONS 109+29.49 TO 119+00.00



MRG TRAIL PROFILE
STATIONS 119+00.00 TO 124+59.60

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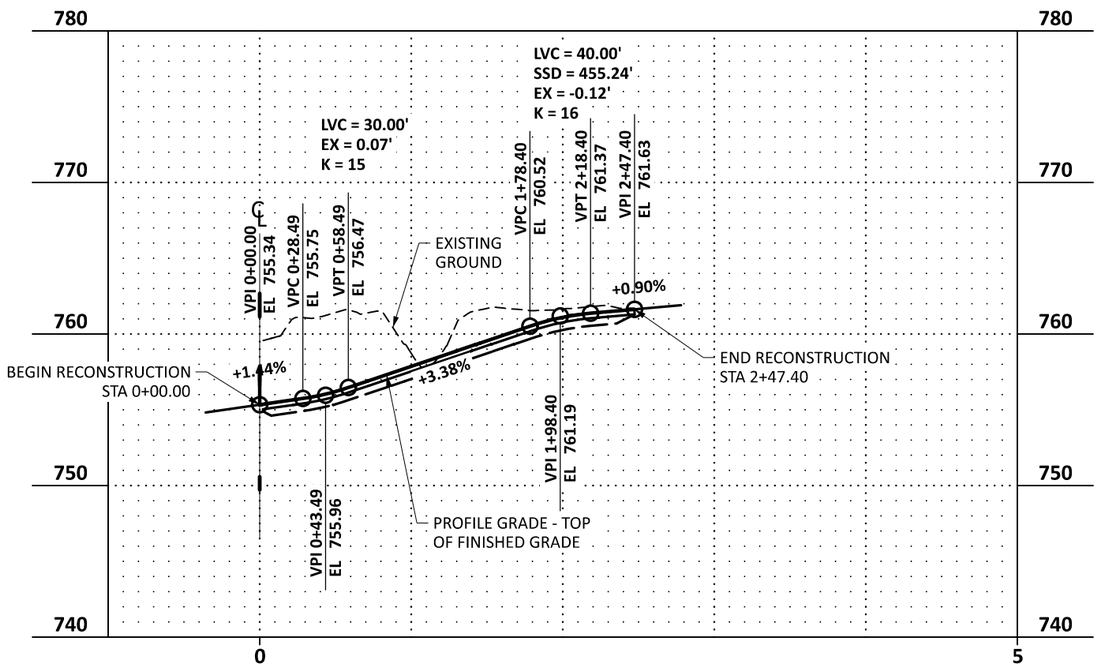
CONSTRUCTION PROFILES
SHEET 1 OF 2

SHEET 13
OF 26



OVERLOOK TRAIL PROFILE
STATIONS 0+00.00 TO 2+47.40

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LIC. NO. 52241

TYPED NAME JORDAN R HOREJSI DATE 2/28/2025

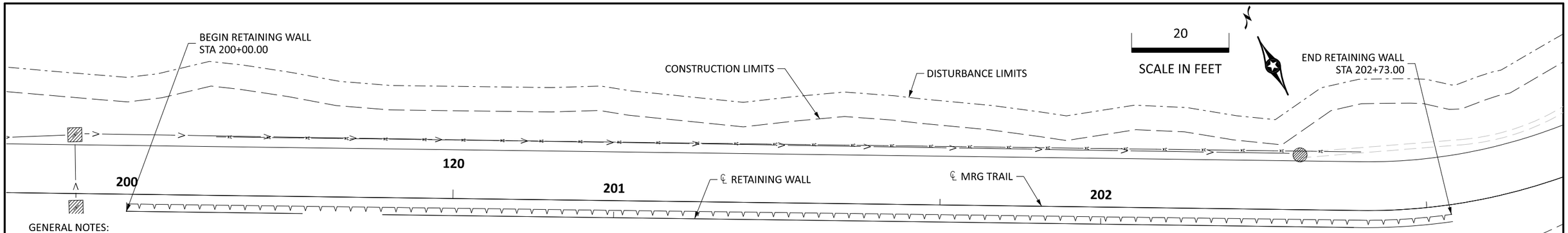
HRGreen
Building Communities. Improving Lives.
COURT INTERNATIONAL BUILDING
2550 UNIVERSITY AVENUE W., SUITE 400N
ST. PAUL, MINNESOTA 55114-1052
P: 651.644.4389 F: 651.644.9446

Dakota COUNTY

DAKOTA COUNTY

CONSTRUCTION PROFILES
SHEET 2 OF 2

SHEET 14
OF 26



GENERAL NOTES:
1. SLOPE SWALE BEHIND WALLS TO END OF WALL.
2. ALL RETAINING WALL MATERIALS INCLUDING, BUT NOT LIMITED TO BLOCK, CAP LEVELING PAD, COARSE AGGREGATE, GEOTEXTILE, DRAINAGE SYSTEM, BACKFILL, AND EXCAVATION SHALL BE CONSIDERED INCIDENTAL TO THE RETAINING WALL CONSTRUCTION.

REFERENCE NOTES:

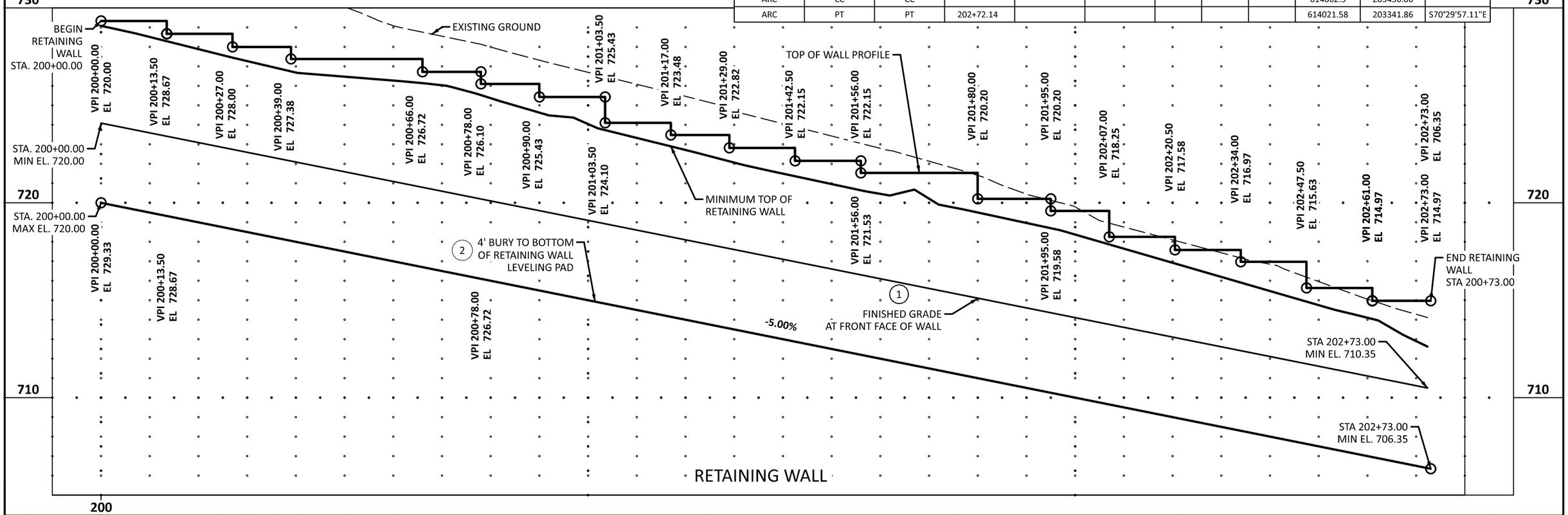
(1) BLOCK SHALL BE BURIED A MINIMUM OF 2 FEET.

(2) BOTTOM OF LEVELING PAD SHALL BE BURIED BELOW LINE SHOWN. LEVELING PAD SHALL BE CONSTRUCTED HORIZONTAL AND LEVEL WITH A MINIMUM STEP TRANSITION OVERLAP OF 24 INCHES.

EXISTING RETAINING WALL

ALIGNMENT TABULATION

ELEMENT	POINT NUMBER	POINT TYPE	STATION	CIRCULAR CURVE DATA DELTA	DEGREE	RADIUS	TANGENT	LENGTH	SPIRAL CURVE DATA THETA	DEGREE	ST	LT	LS	COORDINATES EASTING (X)	NORTHING (Y)	DIRECTION AZIMUTH
ALIGNMENT: MRG TRAIL RETAINING WALL																
TANGENT	START	START	200+00.00											613781.51	203469.87	
TANGENT	PC	PC	202+53.24											614004.32	203349.52	S61°37'27.58"E
ARC	PC	PC	202+53.24											614004.32	203349.52	S61°37'27.58"E
ARC	HPI	HPI	202+62.71	08°52'29.54" LT	46°57'49.51"	122	9.47	18.9						614012.65	203345.02	PI
ARC	CC	CC												614062.3	203456.86	
ARC	PT	PT	202+72.14											614021.58	203341.86	S70°29'57.11"E



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NO.	REVISIONS	BY	APR.	DATE

DESIGNED BAJ | CHECKED KRR
DRAWN GGF | APPROVED JRH
DATE 2/28/2025 | JOB NO. XXXX-XX

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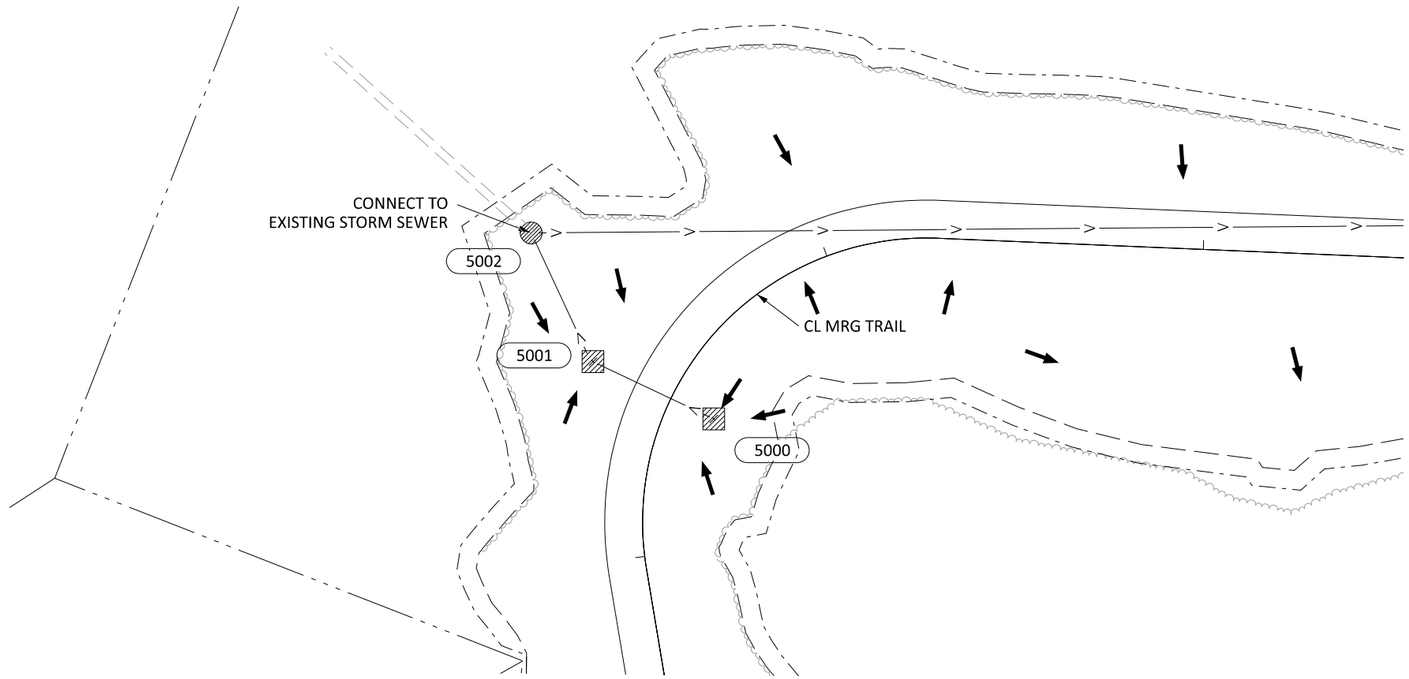
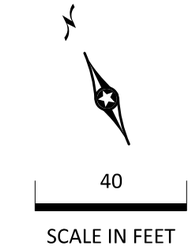
Dakota COUNTY

DAKOTA COUNTY

RETAINING WALL PLAN AND PROFILE
SHEET 1 OF 1

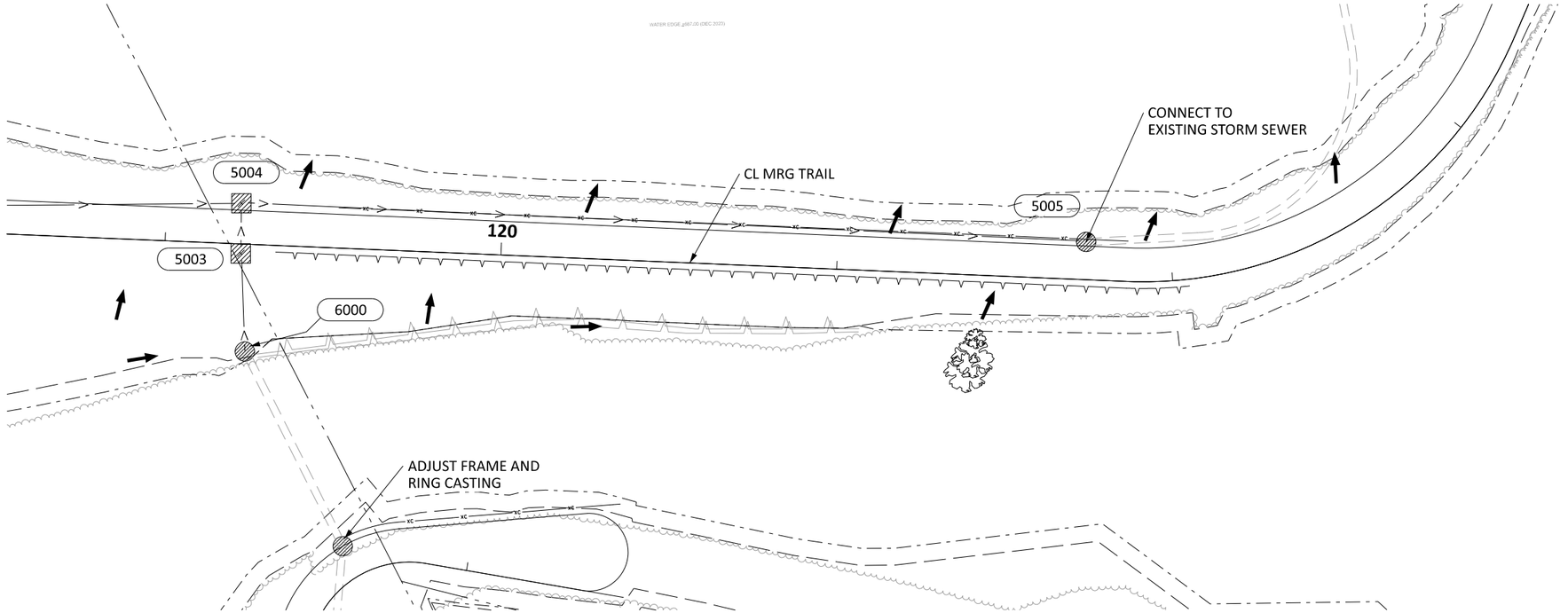
SHEET 15
OF 26





LEGEND

- CONSTRUCTION LIMITS
- DISTURBANCE LIMITS
- EXISTING RIGHT OF WAY
- PIPE SEWER/CULVERT
- MANHOLE
- CATCH BASIN
- XXXX — STRUCTURE NUMBER
- SURFACE FLOW DIRECTION



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LIC. NO. 60006

TYPED NAME CONNER J DUNTEMAN DATE 2/28/2025

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Dakota COUNTY

DAKOTA COUNTY

DRAINAGE PLANS AND PROFILES
SHEET 1 OF 2

SHEET 16
OF 26

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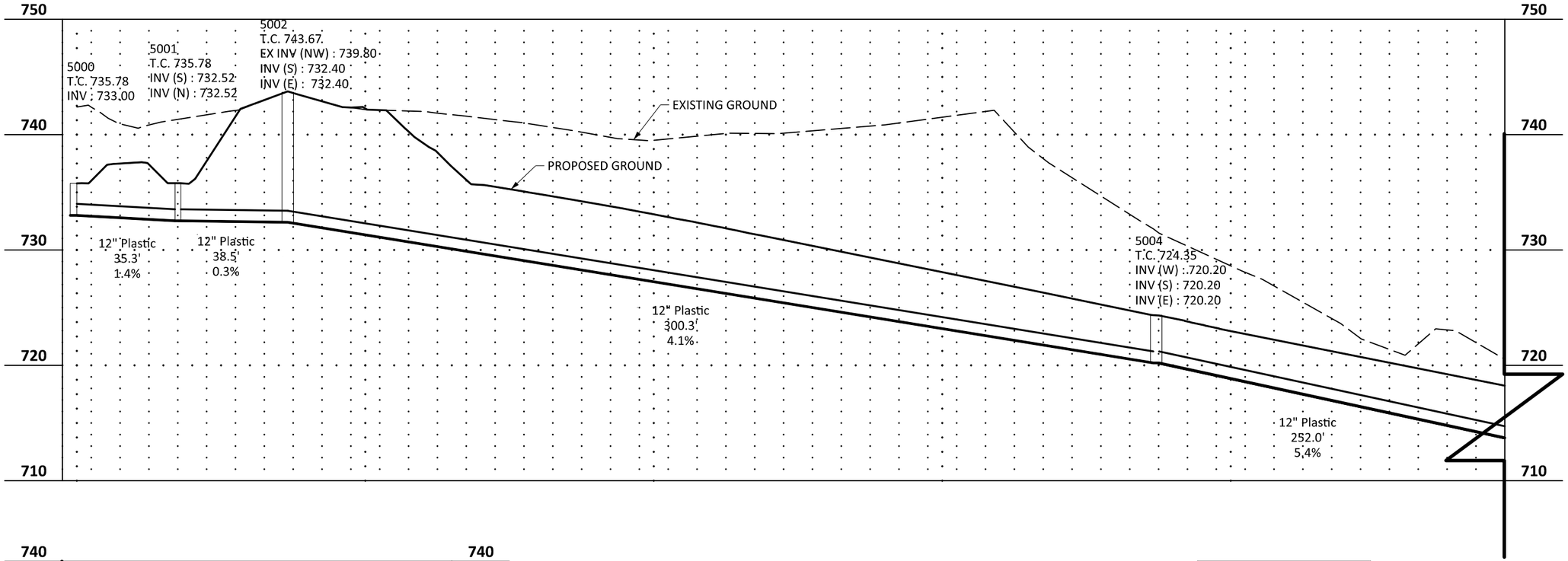

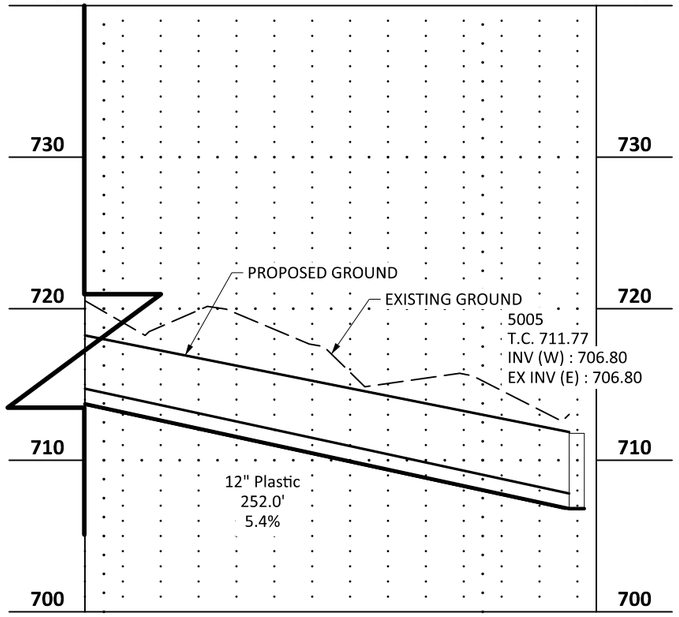

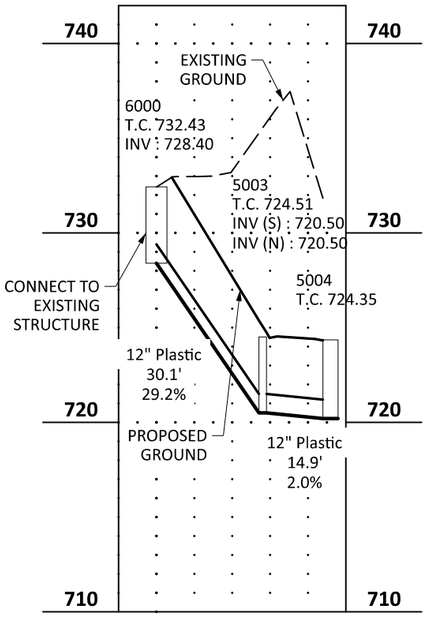

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Dakota COUNTY

DAKOTA COUNTY

DRAINAGE PLANS AND PROFILES
SHEET 2 OF 2

SHEET 17
OF 26

STORM WATER POLLUTION PREVENTION PLAN (SWPPP) NARRATIVE

PROJECT DESCRIPTION/LOCATION

THE MINNESOTA RIVER GREENWAY TRAIL IMPROVEMENT PROJECT IS LOCATED DIRECTLY BETWEEN THE U.S. LOCK AND DAM 2 ON THE MISSISSIPPI RIVER AND EAGLE BLUFF DRIVE IN THE NORTHWESTERN CORNER OF HASTINGS, MN.

THE PLANNED SCOPE OF THE PROJECT INCLUDES:

CLEARING TREES AND FENCE FOR FUTURE TRAIL IMPROVEMENTS, RECONSTRUCTING AND REALIGNING THE EXISTING TRAIL, SLOPE EXCAVATION, PROVIDING EROSION CONTROL MEASURES, TURF ESTABLISHMENT AND PLANTING ACTIVITIES, RELOCATION OF EXISTING STORM SEWER, AND SUPPORTING THE RECRATIONAL FUNCTION OF THE MINNESOTA RIVER GREENWAY TRAIL.

RECEIVING WATERS

RECEIVING WATER	STA. OR R.P.	SPECIAL WATER	IMPAIRED WATER	TROUT	TMDL	INVASIVE
MISSISSIPPI RIVER (A) (B)			AQC, AQL, AQR & MORE		MULTIPLE	

(A)CONSTRUCTION RELATED IMPAIRMENT, (B) NON-CONSTRUCTION RELATED IMPAIRMENT.

THE RECEIVING WATERS LISTED IN THE TABLE ABOVE ARE LOCATED WITHIN ONE MILE (AERIAL RADIUS) OF THE PROJECT LIMITS AND RECEIVE RUNOFF FROM THE PROJECT SITE. THE IMPAIRED WATERS (LISTED IN TABLE ABOVE) ARE IMPAIRED FOR (A) CONSTRUCTION RELATED OR (B) NON-CONSTRUCTION RELATED IMPAIRMENTS. CONSTRUCTION RELATED IMPAIRMENTS MAY REQUIRE ADDITIONAL BMPS AS OUTLINED IN APPENDIX A OF THE NPDES PERMIT.

AREAS OF ENVIRONMENTAL SENSITIVITY (AES) AND INFESTED WATERS

IN ADDITION TO THE LIST OF SPECIAL AND IMPAIRED WATERS THE CONTRACTOR SHALL BE AWARE THAT THERE ARE WETLANDS WITHIN AND NEAR THE PROJECT BOUNDARY.

SOIL TYPES

SOIL TYPES TYPICALLY FOUND ON THIS PROJECT ARE SILTY SANDS AND CLAYEY SANDS.

LONG TERM MAINTENANCE AND OPERATION
PROJECT PERSONNEL AND TRAINING

DAKOTA COUNTY STAFF ARE RESPONSIBLE FOR THE LONG TERM MAINTENANCE AND OPERATION OF THE PERMANENT STORMWATER SYSTEM.

THIS SWPPP WAS PREPARED BY PERSONNEL THAT ARE CERTIFIED IN THE DESIGN OF CONSTRUCTION SWPPPS. INDIVIDUALS WITH SWPPP TRAINING:

BRIDGET OSBORN
HR GREEN, INC
EXPIRATION OF SWPPP 2025

PROVIDE A CERTIFIED EROSION CONTROL SUPERVISOR IN GOOD STANDING WHO IS KNOWLEDGEABLE AND EXPERIENCED IN THE APPLICATION OF EROSION PREVENTION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES. THE EROSION CONTROL SUPERVISOR WILL WORK WITH THE PROJECT ENGINEER TO OVERSEE THE IMPLEMENTATION OF THE SWPPP AND THE INSTALLATION, INSPECTION, AND MAINTENANCE OF THE EROSION PREVENTION AND SEDIMENT CONTROL BMPS BEFORE, DURING AND AFTER CONSTRUCTION UNTIL THE NOTICE OF TERMINATION (NOT) HAS BEEN FILED WITH THE MPCA. PROVIDE PROOF OF CERTIFICATION AT THE PRECONSTRUCTION MEETING. WORK WILL NOT BE ALLOWED TO COMMENCE UNTIL PROOF OF CERTIFICATION HAS BEEN PROVIDED TO THE PROJECT ENGINEER.

PROVIDE AT LEAST ONE CERTIFIED INSTALLER FOR EACH CONTRACTOR OR SUBCONTRACTOR THAT INSTALLS THE PRODUCTS LISTED IN SPECIFICATION SECTION 2573.3.A.2. PROVIDE PROOF OF CERTIFICATION AT THE PRECONSTRUCTION MEETING. WORK WILL NOT BE ALLOWED TO COMMENCE UNTIL PROOF OF CERTIFICATION HAS BEEN PROVIDED TO THE PROJECT ENGINEER.

PROJECT CONTACTS

THE PROJECT ENGINEER AND CONTRACTOR ARE RESPONSIBLE FOR IMPLEMENTATION OF THE SWPPP AND INSTALLATION, INSPECTION, AND MAINTENANCE OF THE EROSION PREVENTION AND SEDIMENT CONTROL BMPS BEFORE, DURING AND AFTER CONSTRUCTION UNTIL THE NOTICE OF TERMINATION HAS BEEN FILED.

ORGANIZATION	CONTACT NAME	PHONE
CITY OF HASTINGS	JOHN CAVEN	651-480-2369
DAKOTA COUNTY	MIKE ADAMS	651-554-6538

MPCA DUTY OFFICER 24 HOUR EMERGENCY NOTIFICATION:
651-649-5451 OR 800-422-0798

CHAIN OF RESPONSIBILITY

DAKOTA COUNTY AND THE CONTRACTOR ARE CO-PERMITEES FOR THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) CONSTRUCTION PERMIT. THE CONTRACTOR IS RESPONSIBLE TO COMPLY WITH ALL ASPECTS OF THE NPDES CONSTRUCTION PERMIT AT ALL TIMES UNTIL THE NOTICE OF TERMINATION (NOT) HAS BEEN FILED WITH THE MPCA. THE CONTRACTOR WILL DEVELOP A CHAIN OF COMMAND WITH ALL OPERATORS ON THE SITE TO ENSURE THAT THE SWPPP WILL BE IMPLEMENTED AND STAY IN EFFECT UNTIL THE CONSTRUCTION PROJECT IS COMPLETE, THE ENTIRE SITE HAS UNDERGONE FINAL STABILIZATION, AND A NOTICE OF TERMINATION (NOT) HAS BEEN SUBMITTED TO THE MPCA.

LOCATION OF SWPPP REQUIREMENTS

THE REQUIRED SWPPP ELEMENTS MAY BE LOCATED IN MANY PLACES WITHIN THE PLAN SET AS WELL AS IN THE SPECIAL PROVISIONS, MNDOT SPEC BOOK (2020 EDITION). THE NOTES AND TABLE BELOW ARE INTENDED TO BE A QUICK REFERENCE FOR THE CONTRACTOR AND PROJECT ENGINEER TO USE IN THE FIELD. THERE MAY BE ADDITIONAL REQUIRED SWPPP ELEMENTS INCLUDED ON THE PROJECT THAT ARE NOT LISTED ON THIS SHEET.

LOCATION OF SWPPP REQUIREMENTS IN PROJECT PLAN

DESCRIPTION	LOCATION
TEMPORARY EROSION CONTROL MEASURES	SHEETS NO. 21 - 23
PERMANENT EROSION CONTROL MEASURES	SHEETS NO. 21 - 23
DIRECTION OF FLOW	SHEETS NO. 21 - 23
FINAL STABILIZATION	SHEETS NO. 24 - 26
SOILS AND CONSTRUCTION NOTES	SHEETS NO. 24 - 26
DRAINAGE STRUCTURES	SHEETS NO. 24 - 26
DRAINAGE TABULATION	SHEETS NO. 24 - 26
STORM SEWER PROFILE SHEETS	SHEETS NO. 24 - 26
STORM SEWER TABULATION	SHEETS NO. 24 - 26
EROSION AND SEDIMENT CONTROL DETAILS	SHEETS NO.
EROSION CONTROL TABULATION	SHEET NO.
TURF ESTABLISHMENT TABULATION	SHEET NO.
SITE MAP	SHEET NO. 1

SITE INSPECTION AND MAINTENANCE

INSPECT THE ENTIRE CONSTRUCTION SITE A MINIMUM OF ONCE EVERY SEVEN DAYS DURING ACTIVE CONSTRUCTION AND WITHIN 24 HOURS AFTER A RAINFALL EVENT GREATER THAN 0.5 INCHES IN 24 HOURS. INSPECT ALL TEMPORARY AND PERMANENT WATER QUALITY MANAGEMENT, EROSION PREVENTION AND SEDIMENT CONTROL BMPS UNTIL THE SITE HAS UNDERGONE FINAL STABILIZATION AND THE NOT HAS BEEN SUBMITTED. INSPECT SURFACE WATER INCLUDING DRAINAGE DITCHES FOR SIGNS OF EROSION AND SEDIMENT DEPOSITION. INSPECT CONSTRUCTION SITE VEHICLE EXIT LOCATIONS FOR EVIDENCE OF TRACKING ONTO PAVED SURFACES. INSPECT SURROUNDING PROPERTIES FOR EVIDENCE OF OFF SITE SEDIMENT ACCUMULATION. INSPECT INFILTRATION AREAS FOR SIGNS OF SEDIMENT DEPOSITION AND COMPACTION (TO ENSURE THAT EQUIPMENT IS NOT BEING DRIVEN ACROSS THE AREA).

RECORD ALL INSPECTIONS AND MAINTENANCE ACTIVITIES IN WRITING WITHIN 24 HOURS. SUBMIT INSPECTION REPORTS IN A FORMAT THAT IS ACCEPTABLE TO THE PROJECT ENGINEER. INCLUDE THE FOLLOWING IN THE RECORDS OF EACH INSPECTION AND MAINTENANCE ACTIVITY:
A. DATE AND TIME OF INSPECTIONS
B. NAME OF PERSONS CONDUCTING INSPECTIONS
C. FINDINGS OF INSPECTIONS, INCLUDING RECOMMENDATIONS FOR CORRECTIVE ACTIONS
D. CORRECTIVE ACTIONS TAKEN, INCLUDING DATES, TIMES, AND PARTY COMPLETING MAINTENANCE ACTIVITIES
E. DATE AND AMOUNT OF ALL RAINFALL EVENTS GREATER THAN 0.5 INCH IN 24 HOURS
F. DOCUMENTS AND CHANGES MADE TO THE SWPPP

REPLACE, REPAIR OR SUPPLEMENT ALL NONFUNCTIONAL BMPS BY THE END OF THE NEXT BUSINESS DAY FOLLOWING DISCOVERY UNLESS LISTED DIFFERENTLY BELOW:
A. REPAIR, REPLACE, OR SUPPLEMENT PERIMETER CONTROL DEVICES WHEN IT BECOMES NONFUNCTIONAL OR SEDIMENT REACHES 1/2 THE HEIGHT OF THE DEVICE. COMPLETE REPAIRS BY THE END OF THE NEXT BUSINESS DAY FOLLOWING DISCOVERY.
B. REPAIR OR REPLACE INLET PROTECTION DEVICES WHEN THEY BECOME NONFUNCTIONAL OR SEDIMENT REACHES 1/2 THE HEIGHT AND/OR DEPTH OF THE DEVICE.
C. DRAIN AND REMOVE SEDIMENT FROM TEMPORARY AND PERMANENT SEDIMENT BASINS ONCE THE SEDIMENT HAS REACHED 1/2 THE STORAGE VOLUME. COMPLETE WORK WITHIN 72 HOURS OF DISCOVERY.
D. REMOVE ALL DELTAS AND SEDIMENT DEPOSITED IN SURFACE WATERS INCLUDING DRAINAGE WAYS, CATCH BASINS, AND OTHER DRAINAGE SYSTEMS. RESTABILIZE ANY AREAS THAT ARE DISTURBED BY SEDIMENT REMOVAL OPERATIONS. SEDIMENT REMOVAL AND STABILIZATION MUST BE COMPLETED WITHIN 7 DAYS OF DISCOVERY. PREPARE AND SUBMIT A SITE MANAGEMENT PLAN FOR WORKING IN SURFACE WATERS. CONTACT ALL APPROPRIATE AUTHORITIES PRIOR TO WORKING IN SURFACE WATERS.
E. REMOVE TRACKED SEDIMENT FROM PAVED SURFACES BOTH ON AND OFF SITE WITHIN 24 HOURS OF DISCOVERY. STREET SWEEPING IS REQUIRED 3 TIMES PER WEEK DURING PAVEMENT CONSTRUCTION PERIODS. STREET SWEEPING MAY HAVE TO OCCUR MORE OFTEN TO MINIMIZE OFF SITE IMPACTS. LIGHTLY WET THE PAVEMENT PRIOR TO SWEEPING.
F. MAINTAIN ALL BMPS UNTIL WORK HAS BEEN COMPLETED, SITE HAS GONE UNDER FINAL STABILIZATION, AND THE NOTICE OF TERMINATION (NOT) HAS BEEN SUBMITTED TO THE MPCA.

LAND FEATURE CHANGES

TOTAL DISTURBED AREA	3.89 ACRES
TOTAL EXISTING IMPERVIOUS SURFACE AREA	1.85 ACRES
TOTAL PROPOSED IMPERVIOUS SURFACE AREA	1.76 ACRES
TOTAL PROPOSED NET CHANGE IN IMPERVIOUS SURFACE AREA	-0.09 ACRES

ENVIRONMENTAL REVIEW

THERE ARE NO STORMWATER MITIGATION MEASURES REQUIRED AS A RESULT OF AN ENVIRONMENTAL, ARCHAEOLOGICAL OR AGENCY REVIEW. ALL MITIGATION MEASURES HAVE BEEN ADDRESSED IN THIS PLAN SET OR THE SPECIAL PROVISIONS.

THIS PROJECT IS LOCATED IN A WELL HEAD PROTECTION AREA.

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Dakota COUNTY

DAKOTA COUNTY

STORM WATER POLLUTION PREVENTION PLAN
SHEET 1 OF 1

SHEET 18
OF 26

STORM WATER POLLUTION PREVENTION PLAN (SWPPP) NARRATIVE (CONTINUED)

STABILIZATION TIME FRAMES

AREA	TIME FRAME	NOTES
LAST 200 LINEAL FEET OF DRAINAGE DITCH OR SWALE	WITHIN 24 HOURS OF CONNECTION TO SURFACE WATER OR PROPERTY EDGE	1, 2, 3
REMAINING PORTIONS OF DRAINAGE DITCH OR SWALE	7 DAYS	1, 3
PIPE AND CULVERT OUTLETS	24 HOURS	
EXPOSED SOILS AND STOCKPILES	7 DAYS	1
WITHIN 200 FEET OF A PUBLIC WATER	24 HOURS	7

1. INITIATE STABILIZATION IMMEDIATELY WHEN CONSTRUCTION HAS TEMPORARILY OR PERMANENTLY CEASED ON ANY PORTION OF THE SITE. COMPLETE STABILIZATION WITHIN THE TIME FRAME LISTED. IN MANY INSTANCES THIS WILL REQUIRE STABILIZATION TO OCCUR MORE THAN ONCE DURING THE COURSE OF THE PROJECT. TEMPORARY SOIL STOCKPILES WITHOUT SIGNIFICANT CLAY OR SILT AND STOCKPILED AND CONSTRUCTED ROAD BASE ARE EXEMPT FROM THE STABILIZATION REQUIREMENT.

2. STABILIZE WETTED PERIMETER OF DITCH (I.E. WHERE THE DITCH GETS WET).

3. APPLICATION OF MULCH, HYDROMULCH, TACKIFIER AND POLYACRYLAMIDE ARE NOT ACCEPTABLE STABILIZATION METHODS IN THESE AREAS.

4. STABILIZE ALL AREAS OF THE SITE PRIOR TO THE ONSET OF WINTER. ANY WORK STILL BEING PERFORMED WILL BE SNOW MULCHED, SEEDED, AND BLANKETED WITHIN THE TIME FRAMES IN THE NPDES PERMIT.

5. TOPSOIL BERMS MUST BE STABILIZED IN ORDER TO BE CONSIDERED PERIMETER CONTROL BMPS. USE RAPID STABILIZATION METHOD 2, 3, OR 4 AS DIRECTED BY THE ENGINEER. THE SEED MIX USED IN THE RAPID STABILIZATION MAY BE SUBSTITUTED AS FOLLOWS:
   A. SINGLE YEAR CONSTRUCTION BETWEEN MAY 1 - AUGUST 1, SEED WITH SEED MIXTURE 21-111
   B. SINGLE YEAR CONSTRUCTION BETWEEN AUGUST 1 AND OCTOBER 31, SEED WITH SEED MIXTURE 21-112
   C. MULTI YEAR CONSTRUCTION 22-111

6. KEEP DITCHES AND EXPOSED SOILS IN AN EVEN ROUGH GRADED CONDITION IN ORDER TO BE ABLE TO APPLY EROSION CONTROL MULCHES, HYDROMULCHES AND BLANKETS.

7. SEE WATER RESOURCES NOTES FOR A LIST OF PUBLIC WATER EXCLUSION DATES. TWENTY FOUR HOUR STABILIZATION REQUIREMENT ONLY APPLIES DURING THE EXCLUSION DATES.

GENERAL SWPPP NOTES FOR CONSTRUCTION ACTIVITY

1. AMEND THE SWPPP AND DOCUMENT ANY AND ALL CHANGES TO THE SWPPP AND ASSOCIATED PLAN SHEETS IN A TIMELY MANNER. STORE THE SWPPP AND ALL AMENDMENTS ON SITE AT ALL TIMES.

2. PREPARE AND SUBMIT A SITE MANAGEMENT PLAN FOR THE ENGINEER'S ACCEPTANCE FOR CONCRETE MANAGEMENT, CONCRETE SLURRY APPLICATION AREAS, WORK IN AND NEAR AREAS OF ENVIRONMENTAL SENSITIVITY, AREAS IDENTIFIED IN THE PLANS AS "SITE MANAGEMENT PLAN AREA", ANY WORK THAT WILL REQUIRE DEWATERING, AND AS REQUESTED BY THE ENGINEER. SUBMIT ALL SITE MANAGEMENT PLANS TO THE ENGINEER IN WRITING. ALLOW A MINIMUM OF 7 DAYS FOR MNDOT TO REVIEW AND ACCEPT SITE MANAGEMENT PLAN SUBMITTALS. WORK WILL NOT BE ALLOWED TO COMMENCE IF A SITE MANAGEMENT PLAN IS REQUIRED UNTIL ACCEPTANCE HAS BEEN GRANTED BY THE ENGINEER. THERE WILL BE NO EXTRA TIME ADDED TO THE CONTRACT DUE TO THE UNTIMELY SUBMITTAL.

3. IT IS THE DESIGNER'S INTENT THAT THE CONTRACTOR BUILD PONDS AND PLACE EROSION CONTROL BMPS BEFORE PUTTING THEM INTO ACTIVE SERVICE TO THE MAXIMUM EXTENT PRACTICABLE.

4. BURNING OF ANY MATERIAL IS NOT ALLOWED WITHIN PROJECT BOUNDARY.

5. DO NOT DISTURB AREAS OUTSIDE OF THE CONSTRUCTION LIMITS. DELINEATE AREAS NOT TO BE DISTURBED PRIOR TO STARTING GROUND DISTURBING ACTIVITIES. IF IT BECOMES NECESSARY TO DISTURB AREAS OUTSIDE OF THE CONSTRUCTION LIMITS OBTAIN WRITTEN PERMISSION FROM THE PROJECT ENGINEER PRIOR TO PROCEEDING. PRESERVE ALL NATURAL BUFFERS SHOWN ON THE PLANS.

6. ROUTE STORMWATER AROUND UNSTABILIZED AREAS OF THE SITE WHENEVER FEASIBLE. PROVIDE EROSION CONTROL AND VELOCITY DISSIPATION DEVICES AS NEEDED TO KEEP CHANNELS FROM ERODING AND TO PREVENT NUISANCE CONDITIONS AT THE OUTLET.

7. DIRECT DISCHARGES FROM BMPS TO VEGETATED AREAS WHENEVER FEASIBLE. PROVIDE VELOCITY DISSIPATION DEVICES AS NEEDED TO PREVENT EROSION.

8. THE EROSION PREVENTION AND SEDIMENT CONTROL BMPS SHALL BE PLACED AS NECESSARY TO MINIMIZE EROSION FROM DISTURBED SURFACES AND TO CAPTURE SEDIMENT ON SITE. ALL EROSION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO COMMENCEMENT OF ANY REMOVAL WORK AND/OR GROUND DISTURBING ACTIVITIES COMMENCE.

9. ESTABLISH SEDIMENT CONTROL DEVICES ON ALL DOWN GRADIENT PERIMETERS AND UPGRADIENT OF ANY BUFFER ZONES BEFORE ANY UP GRADIENT LAND DISTURBING ACTIVITIES BEGIN. MAINTAIN SEDIMENT CONTROL DEVICES UNTIL CONSTRUCTION IS COMPLETE AND THE SITE IS STABILIZED.

10. LOCATE PERIMETER CONTROL ON THE CONTOUR TO CAPTURE OVERLAND, LOW- VELOCITY SHEET FLOWS DOWN GRADIENT OF ALL EXPOSED SOILS AND PRIOR TO DISCHARGING TO SURFACE WATERS. PLACE J-HOOKS AT A MAXIMUM OF 100 FOOT INTERVALS.

11. PROVIDE PERIMETER CONTROL AROUND ALL STOCKPILES. PLACE BMP A MINIMUM 5 FEET FROM THE TOE OF SLOPE WHERE FEASIBLE. DO NOT PLACE STOCKPILES IN NATURAL BUFFER AREAS, SURFACE WATERS OR STORMWATER CONVEYANCES.

12. FLOATING SILT CURTAIN IS ALLOWED AS PERIMETER CONTROL FOR IN WATER WORK ONLY. PLACE THE FLOATING SILT CURTAIN AS CLOSE TO SHORE AS POSSIBLE. PLACE PERIMETER CONTROL BMP ON LAND IMMEDIATELY AFTER THE IN WATER WORK IS COMPLETED.

13. DITCH CHECKS WILL BE PLACED AS INDICATED ON THE PLANS DURING ALL PHASES OF CONSTRUCTION.

14. PROTECT STORM SEWER INLETS AT ALL TIMES WITH THE APPROPRIATE INLET PROTECTION FOR EACH SPECIFIC PHASE OF CONSTRUCTION. PROVIDE INLET PROTECTION DEVICES WITH EMERGENCY OVERFLOW CAPABILITIES. SILT FENCE PLACED IN THE INLET GRATE IS NOT AN ACCEPTABLE INLET PROTECTION BMP FOR GRADING OPERATIONS. SILT FENCE PLACED IN THE GRATE IS ONLY ALLOWED FOR SHORT INTERVALS DURING MILLING OR PAVING OPERATIONS. INLET PROTECTION DEVICES MAY NEED TO BE PLACED MULTIPLE TIMES IN THE SAME LOCATION OVER THE LIFE OF THE CONTRACT. INLET PROTECTION DEVICES WILL BE PAID FOR ONCE PER INLET REGARDLESS OF THE NUMBER OF TIMES THE BMP IS PLACED. KEEP ALL STORM SEWER INLET PROTECTION DEVICES IN GOOD FUNCTIONAL CONDITION AT ALL TIMES. REPLACE INLET PROTECTION DEVICE WITH A SUITABLE ALTERNATIVE IF THE PROJECT ENGINEER DEEMS AN INLET PROTECTION DEVICE TO BE NONFUNCTIONAL, IN POOR CONDITION, INEFFECTIVE, OR NOT APPROPRIATE FOR THE CURRENT CONSTRUCTION ACTIVITIES. THERE WILL BE NO COST TO MNDOT FOR REPLACEMENT OF INLET PROTECTION DEVICES.

15. PLACE CONSTRUCTION EXITS, AS NECESSARY, TO PREVENT TRACKING OF SEDIMENT ONTO PAVED SURFACES BOTH ON AND OFF THE PROJECT SITE. PROVIDE CONSTRUCTION EXITS OF SUFFICIENT SIZE TO PREVENT TRACK OUT. MAINTAIN CONSTRUCTION EXITS WHEN EVIDENCE OF TRACKING IS DISCOVERED. REGULAR STREET SWEEPING IS NOT AN ACCEPTABLE ALTERNATIVE TO PROPER CONSTRUCTION EXIT INSTALLATION AND MAINTENANCE.

16. DISCHARGE TURBID OR SEDIMENT LADEN WATER TO TEMPORARY SEDIMENT BASINS WHENEVER FEASIBLE. IN THE EVENT THAT IT IS NOT FEASIBLE TO DISCHARGE THE SEDIMENT LADEN WATER TO A TEMPORARY SEDIMENT BASIN, THE WATER MUST BE TREATED SO THAT IT DOES NOT CAUSE A NUISANCE CONDITION IN THE RECEIVING WATERS OR TO DOWNSTREAM LANDOWNERS. CLEAN OUT ALL PERMANENT STORMWATER BASINS REGARDLESS OF WHETHER USED AS TEMPORARY SEDIMENT BASINS OR TEMPORARY SEDIMENT TRAPS TO THE DESIGN CAPACITY AFTER ALL UPGRADIENT LAND DISTURBING ACTIVITY IS COMPLETED.

17. PROVIDE SCOUR PROTECTION AT ANY OUTFALL OF DEWATERING ACTIVITIES.

18. PROVIDE STABILIZATION IN ANY TRENCHES CUT FOR DEWATERING OR SITE DRAINING PURPOSES.

19. REMOVE SEDIMENT FROM STORMWATER SYSTEM AT THE END OF PROJECT.

20. PRESERVE A MINIMUM OF 50 FOOT NATURAL BUFFER OR (IF BUFFER IS INFEASIBLE) PROVIDE REDUNDANT SEDIMENT CONTROLS WHEN A SURFACE WATER IS LOCATED WITHIN 50 FEET OF LAND DISTURBANCE AND STORMWATER FLOWS TO THE SURFACE WATER.

POLLUTION PREVENTION

1. PROVIDE A SPILL KIT AT EACH WORK LOCATION ON THE SITE.

2. STORE ALL BUILDING MATERIALS THAT HAVE THE POTENTIAL TO LEACH POLLUTANTS, PESTICIDES, HERBICIDES, INSECTICIDES, FERTILIZERS, TREATMENT CHEMICALS, AND LANDSCAPE MATERIALS UNDER COVER AND WITH SECONDARY CONTAINMENT.

3. PROVIDE A SECURE STORAGE AREA WITH RESTRICTED ACCESS FOR ALL HAZARDOUS MATERIALS AND TOXIC WASTE. RETURN ALL HAZARDOUS MATERIALS AND TOXIC WASTE TO THE DESIGNATED STORAGE AREA AT THE END OF THE BUSINESS DAY UNLESS INFEASIBLE. STORE ALL HAZARDOUS MATERIALS AND TOXIC WASTE (INCLUDING BUT NOT LIMITED TO OIL, DIESEL FUEL, GASOLINE, HYDRAULIC FLUIDS, PAINT, PETROLEUM BASED PRODUCTS, WOOD PRESERVATIVES, ADDITIVES, CURING COMPOUNDS, AND ACIDS) IN SEALED CONTAINERS WITH SECONDARY CONTAINMENT. CLEAN UP SPILLS IMMEDIATELY.

4. STORE, COLLECT AND DISPOSE OF ALL SOLID WASTE.

5. POSITION ALL PORTABLE TOILETS SO THAT THEY ARE SECURE AND CANNOT BE TIPPED OR KNOCKED OVER. PROPERLY DISPOSE OF ALL SANITARY WASTE.

6. FUEL AND MAINTAIN VEHICLES IN A DESIGNATED CONTAINED AREA WHENEVER FEASIBLE. USE DRIP PANS OR ABSORBENT MATERIALS TO PREVENT SPILLS OR LEAKED CHEMICALS FROM DISCHARGING TO SURFACE WATER OR STORMWATER CONVEYANCES. PROVIDE A SPILL KIT AT EACH LOCATION THAT VEHICLES AND EQUIPMENT ARE FUELED OR MAINTAINED AT.

7. LIMIT VEHICLE AND EQUIPMENT WASHING TO A DEFINED AREA OF THE SITE. CONTAIN RUNOFF FROM THE WASHING AREA TO A TEMPORARY SEDIMENT BASIN OR OTHER EFFECTIVE CONTROL. PROPERLY DISPOSE OF ALL WASTE GENERATED BY VEHICLE AND EQUIPMENT WASHING. ENGINE DEGREASING IS NOT ALLOWED ON THE SITE.

8. PROVIDE EFFECTIVE CONTAINMENT FOR ALL LIQUID AND SOLID WASTES GENERATED BY WASHOUT OF CONCRETE, STUCCO, PAINT, FORM RELEASE OILS, CURING COMPOUNDS AND OTHER CONSTRUCTION MATERIALS. LIQUID AND SOLID WASHOUT WASTES MUST NOT CONTACT THE GROUND. DESIGN THE CONTAINMENT SO THAT IT DOES NOT RESULT IN RUNOFF FROM THE WASHOUT OPERATIONS OR CONTAINMENT AREA.

9. CREATE AND FOLLOW A WRITTEN DISPOSAL PLAN FOR ALL WASTE MATERIALS. INCLUDE IN THE PLAN HOW THE MATERIAL WILL BE DISPOSED OF AND THE LOCATION OF THE DISPOSAL SITE. SUBMIT PLAN TO THE ENGINEER.

10. USE METHODS AND OPERATIONAL PROCEDURES THAT PREVENT DISCHARGE OR PLACEMENT OF BITUMINOUS GRINDINGS, CUTTINGS, MILLINGS, AND OTHER BITUMINOUS WASTES FROM AREAS OF EXISTING OR FUTURE VEGETATED SOILS AND FROM ALL WATER CONVEYANCE SYSTEMS, INCLUDING INLETS, DITCHES AND CURB FLOW LINES.

11. USE METHODS AND OPERATIONAL PROCEDURES THAT PREVENT CONCRETE DUST, PARTICLES, CONCRETE WASH OUT, AND OTHER CONCRETE WASTES FROM LEAVING RIGHT OF WAY, DEPOSITING IN EXISTING OR FUTURE VEGETATED AREAS, AND FROM ENTERING STORMWATER CONVEYANCE SYSTEMS, INCLUDING INLETS, DITCHES AND CURB FLOW LINES. USE METHODS AND OPERATIONAL PROCEDURES THAT PREVENT SAW CUT SLURRY AND PLANING WASTE FROM LEAVING MNDOT RIGHT OF WAY AND FROM ENTERING STORMWATER CONVEYANCE SYSTEMS INCLUDING DITCHES AND CULVERTS.

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Dakota COUNTY

DAKOTA COUNTY

STORM WATER POLLUTION PREVENTION PLAN
SHEET 2 OF 3

SHEET 19
OF 26

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STORM WATER POLLUTION PREVENTION PLAN (SWPPP) NARRATIVE (CONTINUED)

WATER RESOURCES NOTES

THESE NOTES ALONG WITH THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) NARRATIVE ARE INTENDED TO GIVE INFORMATION ON CRITICAL DRAINAGE FEATURES, NATURAL RESOURCES AND CONTRACTOR OPERATIONS THAT MAY IMPACT DRAINAGE AND NATURAL RESOURCES.

1. THE SIZE AND ELEVATION OF CULVERTS, STORM SEWER PIPES, CATCH BASINS, PONDS, INFILTRATION/FILTRATION BASINS, PERMEABLE DITCH BLOCKS AND OVERFLOW DEVICES HAVE BEEN SPECIFICALLY DESIGNED TO CONFORM TO MNDOT DESIGN STANDARDS, MINNESOTA POLLUTION CONTROL AGENCY (MPCA) AND WATERSHED DISTRICT PERMIT REQUIREMENTS. CHANGING THESE ITEMS OR THE DIRECTION OF FLOW FROM WHAT IS SHOWN ON THE PLANS MAY CAUSE PROBLEMS OFF THE PROJECT AND COULD MEAN THE PROJECT IS OUT OF COMPLIANCE WITH APPROVED DRAINAGE PERMITS. ANY CHANGES TO THE SIZE, ELEVATION OR DIRECTION OF FLOW OF THE DRAINAGE SYSTEM MUST BE APPROVED BY THE METRO WATER RESOURCES DESIGNER.

2. SUBSOIL ALL DISTURBED GREEN SPACES EXCEPT AS LISTED IN 2574.3A.2.

3. PERFORM POST INSTALLATION MANDREL TESTING OF ALL PLASTIC PIPE.

4. ANY SUBSURFACE DRAINAGE TILES DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED, REPLACED OR REROUTED, AND CONNECTED TO THE EXISTING TILE OR DRAINAGE SYSTEM TO ENSURE THAT EXISTING UPLAND DRAINAGE IS PERPETUATED. THIS SHOULD BE DONE TO THE APPROVAL AND SATISFACTION OF THE ENGINEER.

5. THE FOLLOWING WATER RELATED PERMITS APPLY TO THIS PROJECT:

AGENCY	TYPE OF PERMIT
MINNESOTA POLLUTION CONTROL AGENCY (MPCA)	NPDES CONSTRUCTION PERMIT

REVIEW ALL PERMITS FOR ANY SPECIAL CONDITIONS THAT WILL AFFECT CONSTRUCTION OF THE PROJECT.
NO PERMANENT STORMWATER MANAGEMENT SYSTEMS ARE REQUIRED FOR THIS PROJECT. PART III.D. OF THE NPDES PERMIT INDICATES PROJECTS THAT INCREASE IMPERVIOUS SURFACES LESS THAN ONE (1) TOTAL ACRE DO NOT NEED TO RETAIN ANY WATER QUALITY VOLUME ON SITE.

TEMPORARY DEWATERING ACTIVITIES MAY BE REQUIRED FOR ROADWAY CONSTRUCTION AND UTILITY WORK. THEREFORE IT IS POSSIBLE THAT A PERMIT FOR THE TEMPORARY APPROPRIATION OF WATERS OF THE STATE, NON-IRRIGATION FROM MNDNR WILL BE REQUIRED FOR THIS PROJECT. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING THIS PERMIT PRIOR TO COMMENCING DEWATERING ACTIVITIES. ALL TEMPORARY DEWATERING SHALL BE DISCHARGED TO AN APPROVED LOCATION FOR TREATMENT PRIOR TO DISCHARGE TO THE RECEIVING WATER. SUBMIT A SITE MANAGEMENT PLAN TO THE ENGINEER FOR APPROVAL PRIOR TO COMMENCING WORK.

6. THE FOLLOWING TYPES OF WATERS HAVE WORK IN WATER EXCLUSIONS. NO WORK IN THE WATER IS ALLOWED DURING THE EXCLUSION DATES. SEE DNR PERMIT FOR WHICH WATERBODIES THIS APPLIES TO.

WATERBODY	EXCLUSION DATES
LAKES	APRIL 1 - JUNE 30
NON-TROUT STREAMS	APRIL 1 - JUNE 30
TROUT STREAMS	SEPTEMBER 15 - MAY 15
TROUT STREAMS IN LAKE SUPERIOR WATERSHED (1)	SEPTEMBER 15 - JUNE 30

(1) INCLUDES ST. LOUIS, CLOQUET, NEMADJI AND NORTH SHORE WATERSHEDS.

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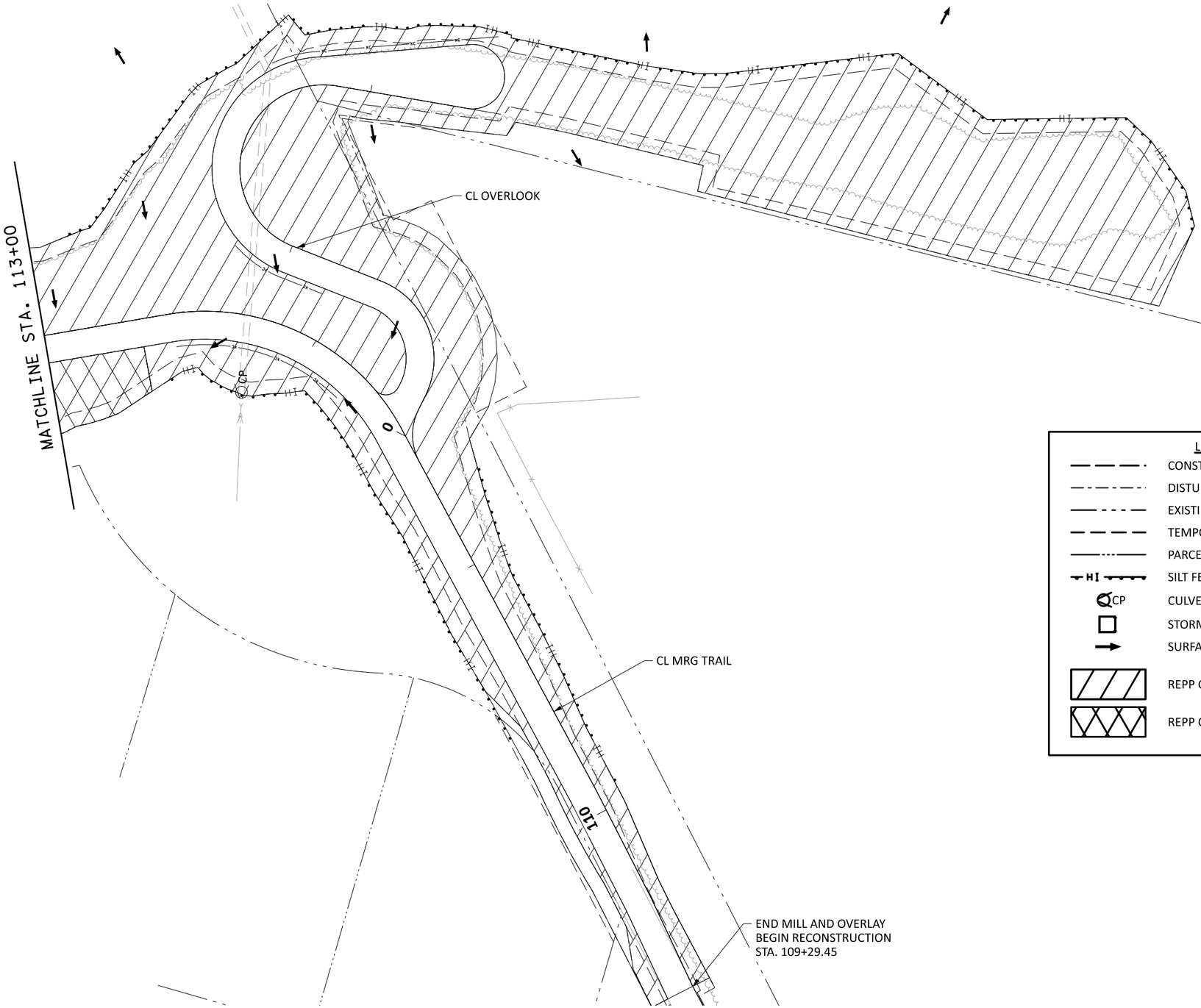
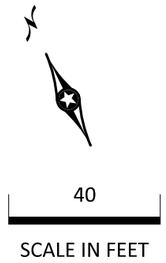
Dakota COUNTY

DAKOTA COUNTY

STORM WATER POLLUTION PREVENTION PLAN
SHEET 3 OF 3

SHEET 20
OF 26





LEGEND

- CONSTRUCTION LIMITS
- DISTURBANCE LIMITS
- EXISTING RIGHT OF WAY
- TEMPORARY EASEMENT
- PARCEL LINES
- HI — SILT FENCE; TYPE HI
- CP — CULVERT END CONTROL
- STORM DRAIN INLET PROTECTION
- SURFACE FLOW DIRECTION
- REPP CAT. 20
- REPP CAT. 30

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DAKOTA COUNTY

EROSION CONTROL PLANS
SHEET 1 OF 3

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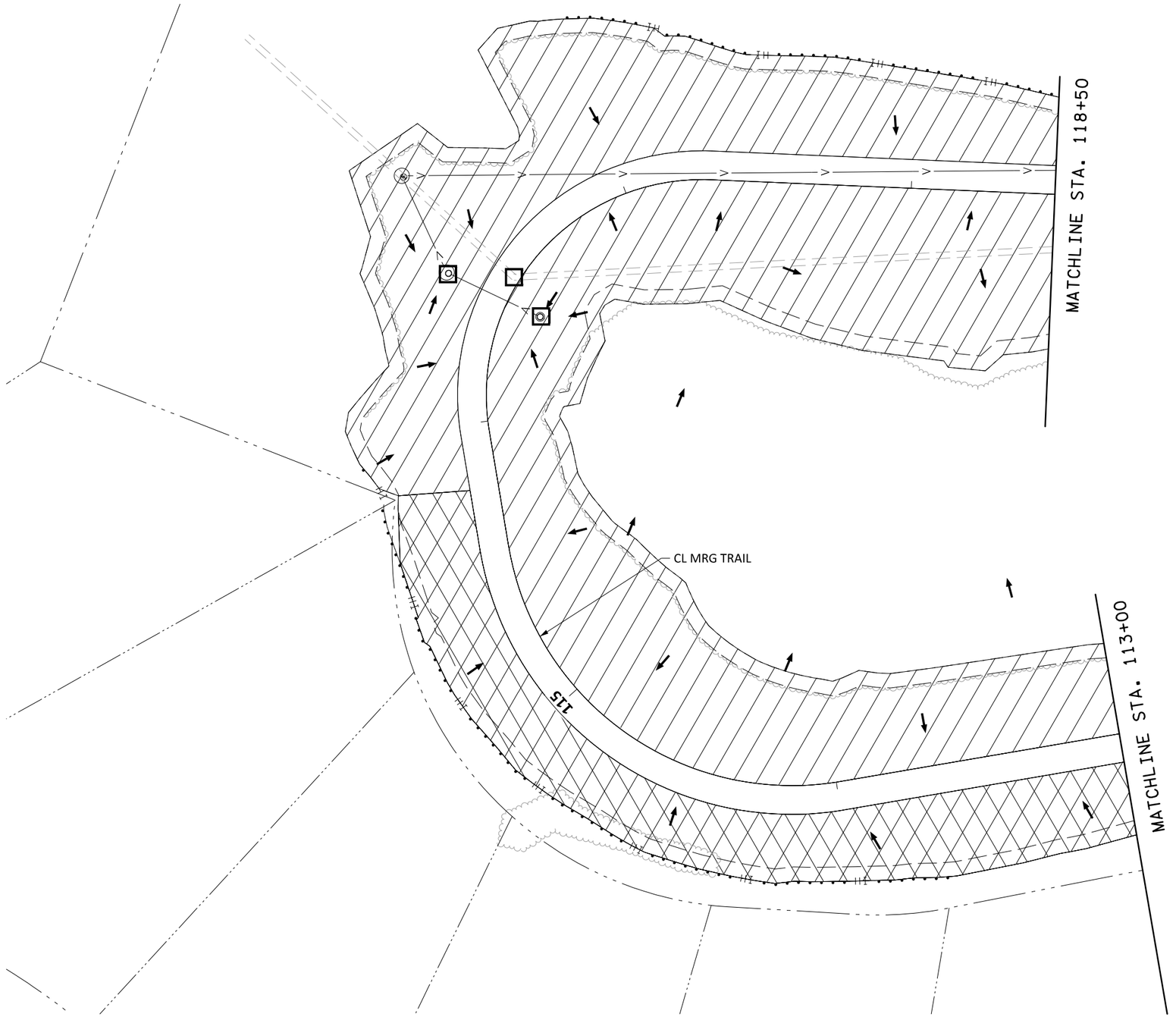

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Dakota COUNTY

DAKOTA COUNTY

EROSION CONTROL PLANS
SHEET 2 OF 3

SHEET 22
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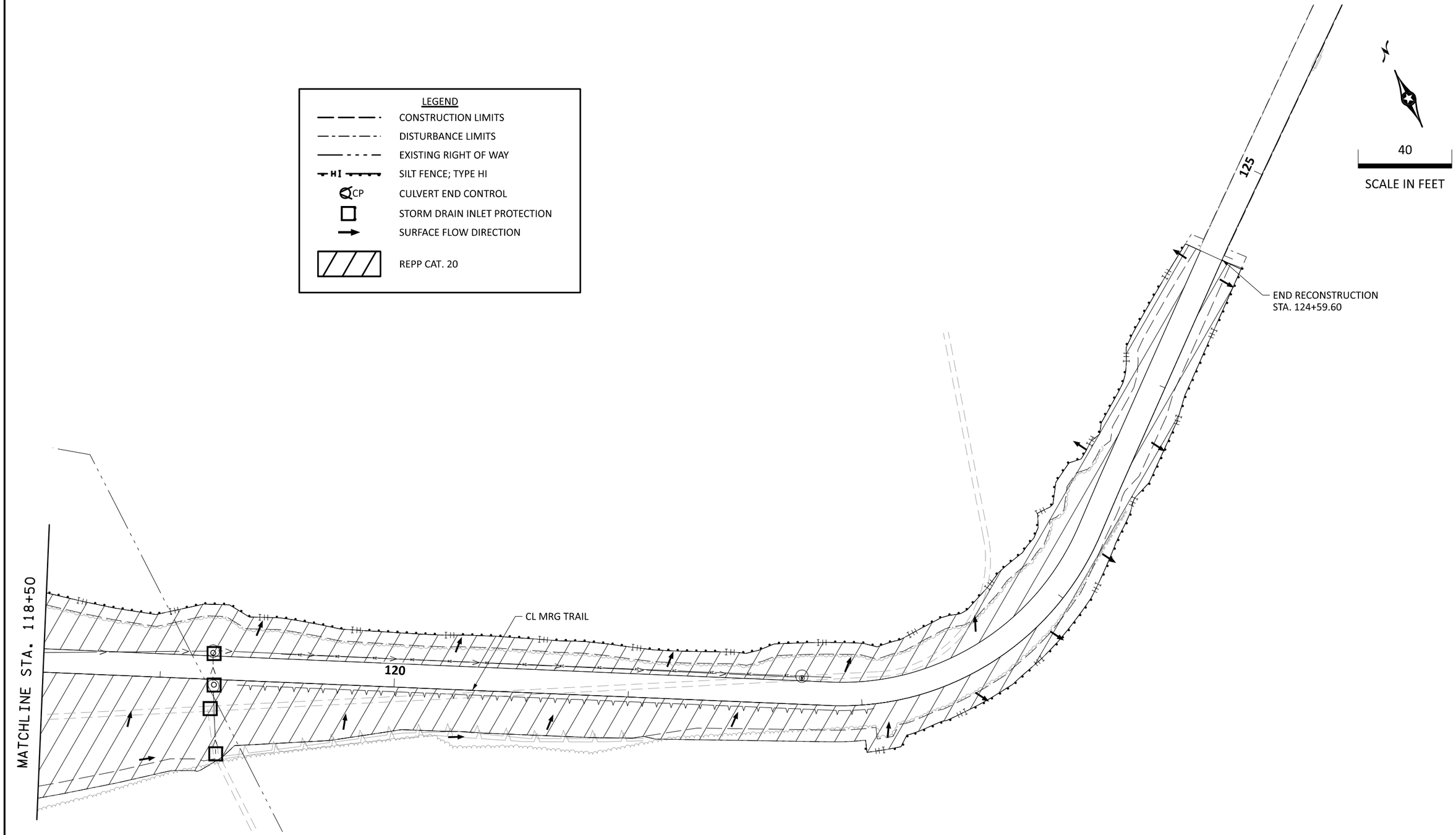

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DAKOTA COUNTY

EROSION CONTROL PLANS
SHEET 3 OF 3

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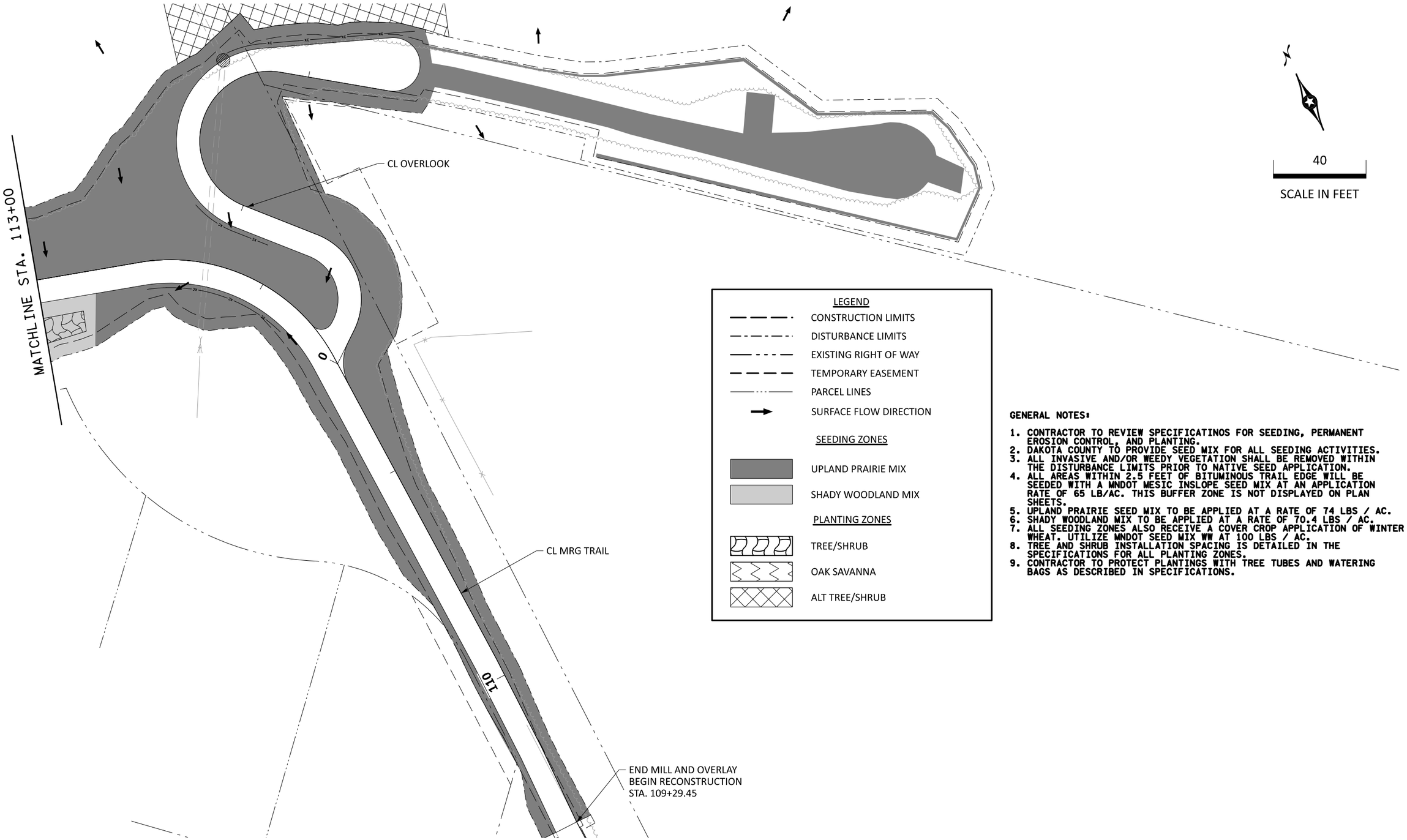

GENERAL NOTES:

1. CONTRACTOR TO REVIEW SPECIFICATINOS FOR SEEDING, PERMANENT EROSION CONTROL, AND PLANTING.
2. DAKOTA COUNTY TO PROVIDE SEED MIX FOR ALL SEEDING ACTIVITIES.
3. ALL INVASIVE AND/OR WEEDY VEGETATION SHALL BE REMOVED WITHIN THE DISTURBANCE LIMITS PRIOR TO NATIVE SEED APPLICATION.
4. ALL AREAS WITHIN 2.5 FEET OF BITUMINOUS TRAIL EDGE WILL BE SEEDED WITH A MNDOT MESIC INSLOPE SEED MIX AT AN APPLICATION RATE OF 65 LB/AC. THIS BUFFER ZONE IS NOT DISPLAYED ON PLAN SHEETS.
5. UPLAND PRAIRIE SEED MIX TO BE APPLIED AT A RATE OF 74 LBS / AC.
6. SHADY WOODLAND MIX TO BE APPLIED AT A RATE OF 70.4 LBS / AC.
7. ALL SEEDING ZONES ALSO RECEIVE A COVER CROP APPLICATION OF WINTER WHEAT. UTILIZE MNDOT SEED MIX WW AT 100 LBS / AC.
8. TREE AND SHRUB INSTALLATION SPACING IS DETAILED IN THE SPECIFICATIONS FOR ALL PLANTING ZONES.
9. CONTRACTOR TO PROTECT PLANTINGS WITH TREE TUBES AND WATERING BAGS AS DESCRIBED IN SPECIFICATIONS.

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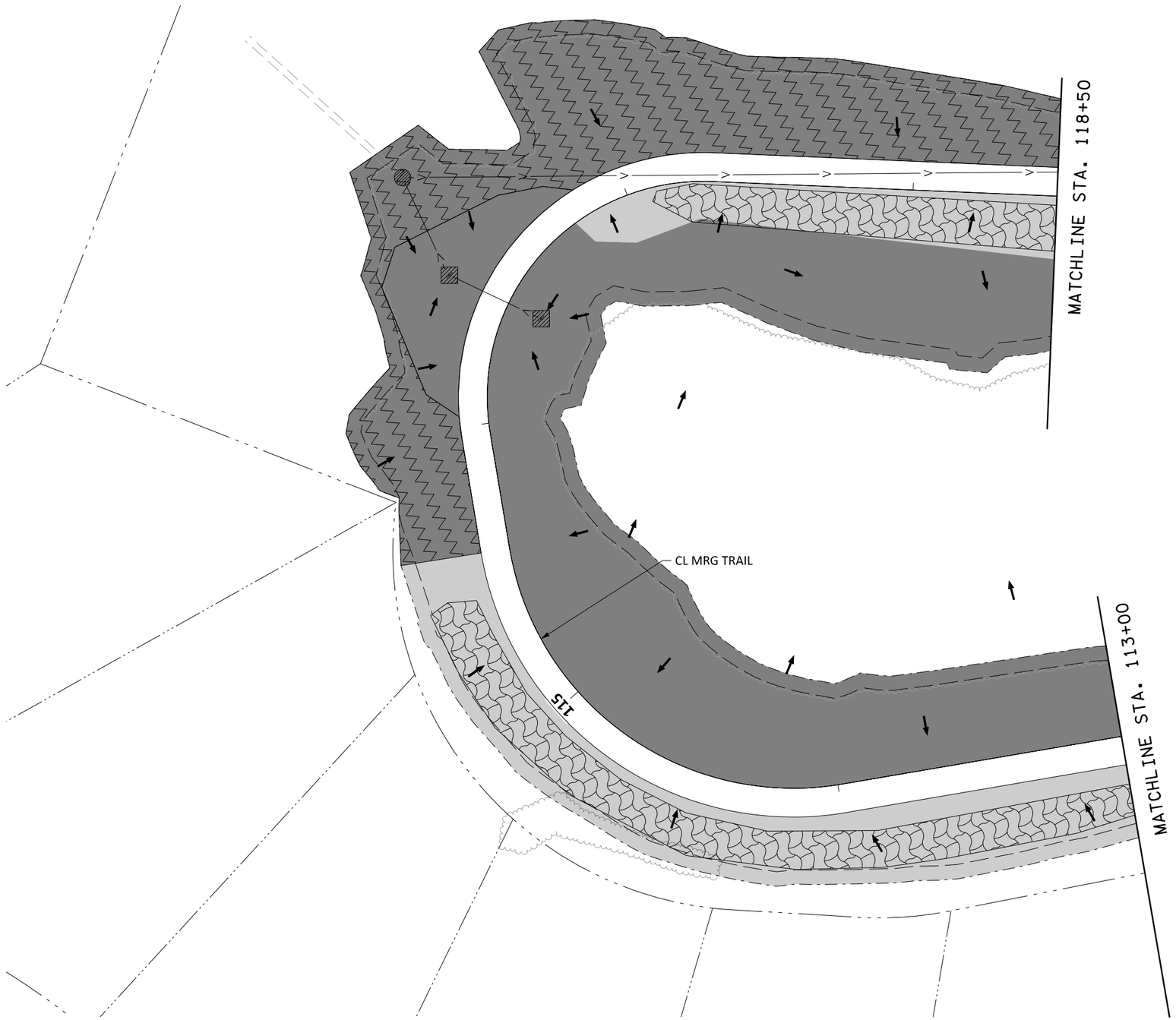
TURF ESTABLISHMENT PLANS
SHEET 1 OF 3

SHEET 24
OF 26



LEGEND

- CONSTRUCTION LIMITS
- DISTURBANCE LIMITS
- EXISTING RIGHT OF WAY
- PARCEL LINES
- SURFACE FLOW DIRECTION

SEEDING ZONES

- UPLAND PRAIRIE MIX
- SHADY WOODLAND MIX

PLANTING ZONES

- TREE/SHRUB
- OAK SAVANNA
- ALT TREE/SHRUB

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TURF ESTABLISHMENT PLANS
SHEET 2 OF 3

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LEGEND

- CONSTRUCTION LIMITS
- DISTURBANCE LIMITS
- EXISTING RIGHT OF WAY
- SURFACE FLOW DIRECTION

SEEDING ZONES

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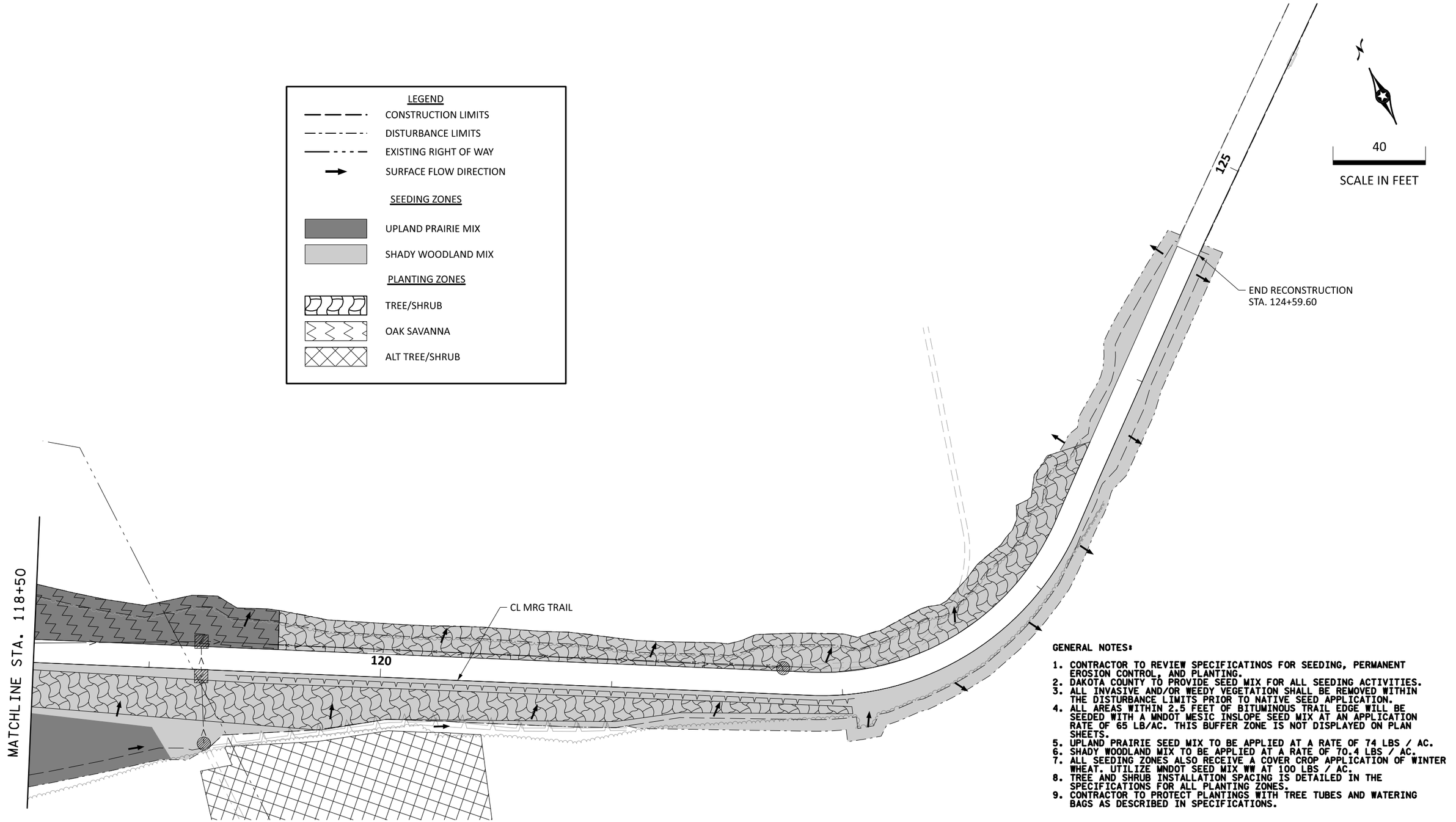
- SHADY WOODLAND MIX

PLANTING ZONES

- TREE/SHRUB
- OAK SAVANNA
- ALT TREE/SHRUB



GENERAL NOTES:

1. CONTRACTOR TO REVIEW SPECIFICATINOS FOR SEEDING, PERMANENT EROSION CONTROL, AND PLANTING.
2. DAKOTA COUNTY TO PROVIDE SEED MIX FOR ALL SEEDING ACTIVITIES.
3. ALL INVASIVE AND/OR WEEDY VEGETATION SHALL BE REMOVED WITHIN THE DISTURBANCE LIMITS PRIOR TO NATIVE SEED APPLICATION.
4. ALL AREAS WITHIN 2.5 FEET OF BITUMINOUS TRAIL EDGE WILL BE SEEDED WITH A MNDOT MESIC INSLOPE SEED MIX AT AN APPLICATION RATE OF 65 LB/AC. THIS BUFFER ZONE IS NOT DISPLAYED ON PLAN SHEETS.
5. UPLAND PRAIRIE SEED MIX TO BE APPLIED AT A RATE OF 74 LBS / AC.
6. SHADY WOODLAND MIX TO BE APPLIED AT A RATE OF 70.4 LBS / AC.
7. ALL SEEDING ZONES ALSO RECEIVE A COVER CROP APPLICATION OF WINTER WHEAT. UTILIZE MNDOT SEED MIX WW AT 100 LBS / AC.
8. TREE AND SHRUB INSTALLATION SPACING IS DETAILED IN THE SPECIFICATIONS FOR ALL PLANTING ZONES.
9. CONTRACTOR TO PROTECT PLANTINGS WITH TREE TUBES AND WATERING BAGS AS DESCRIBED IN SPECIFICATIONS.

NO.	REVISIONS	BY	APR.	DATE

DESIGNED BAJ | CHECKED KRR
DRAWN CGF | APPROVED CBB
DATE 2/28/2025 | JOB NO. XXXX-XX

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.

NOT FOR CONSTRUCTION

LIC. NO. 52241

TYPED NAME JORDAN R HOREJSI DATE 2/28/2025

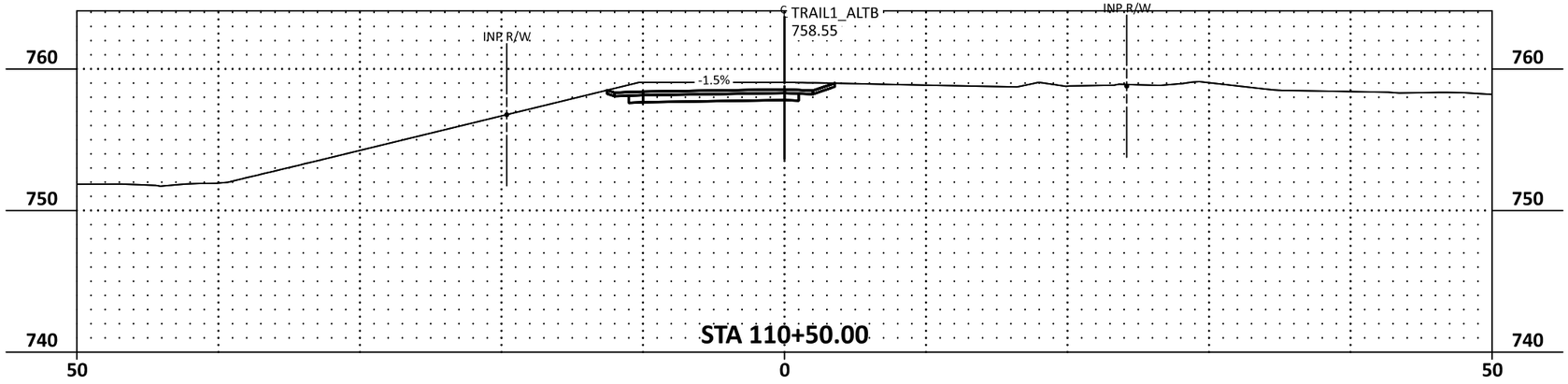
HRGreen
Building Communities. Improving Lives.
COURT INTERNATIONAL BUILDING
2550 UNIVERSITY AVENUE W., SUITE 400N
ST. PAUL, MINNESOTA 55114-1052
P: 651.644.4389 F: 651.644.9446

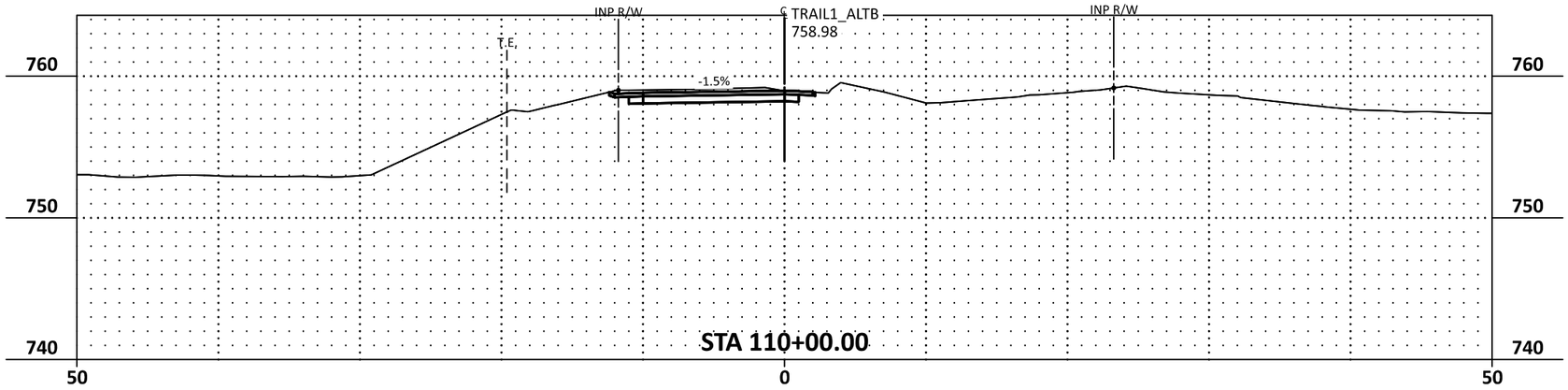
Dakota COUNTY

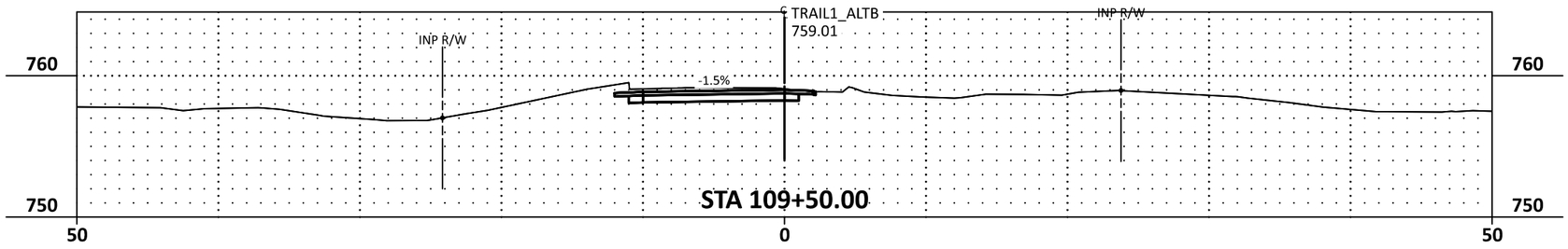
DAKOTA COUNTY

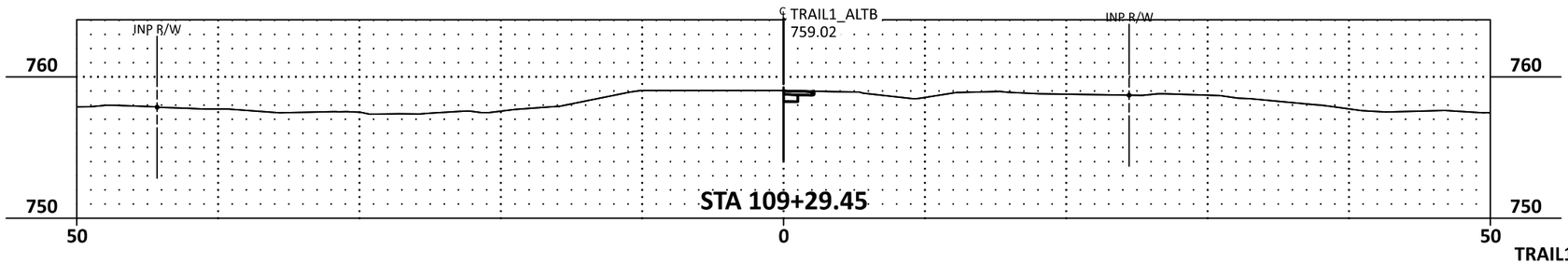
TURF ESTABLISHMENT PLANS
SHEET 3 OF 3

SHEET 26
OF 26









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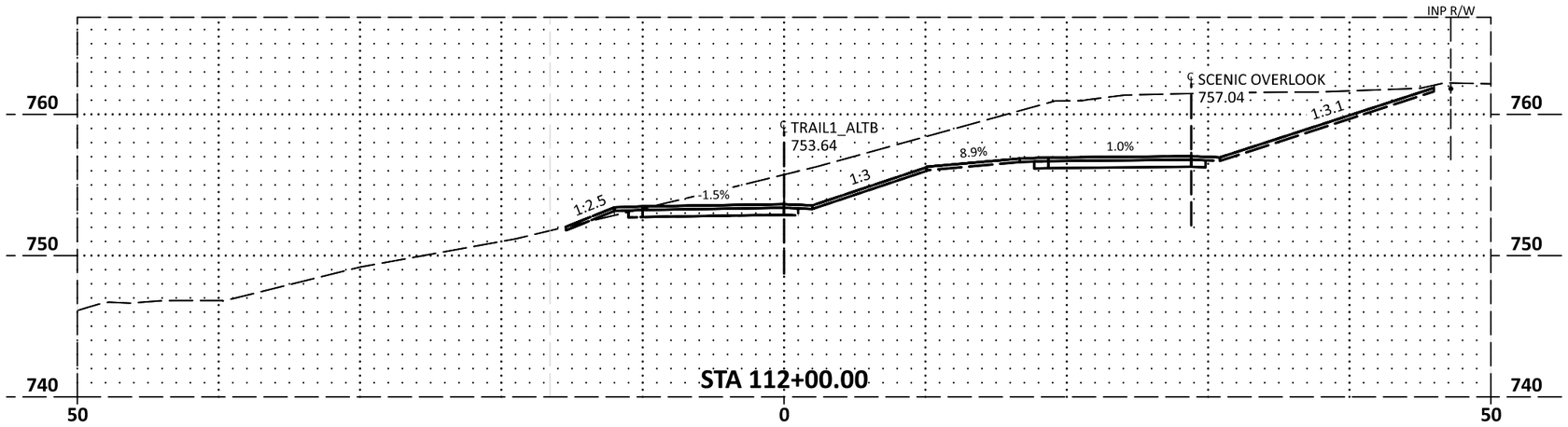
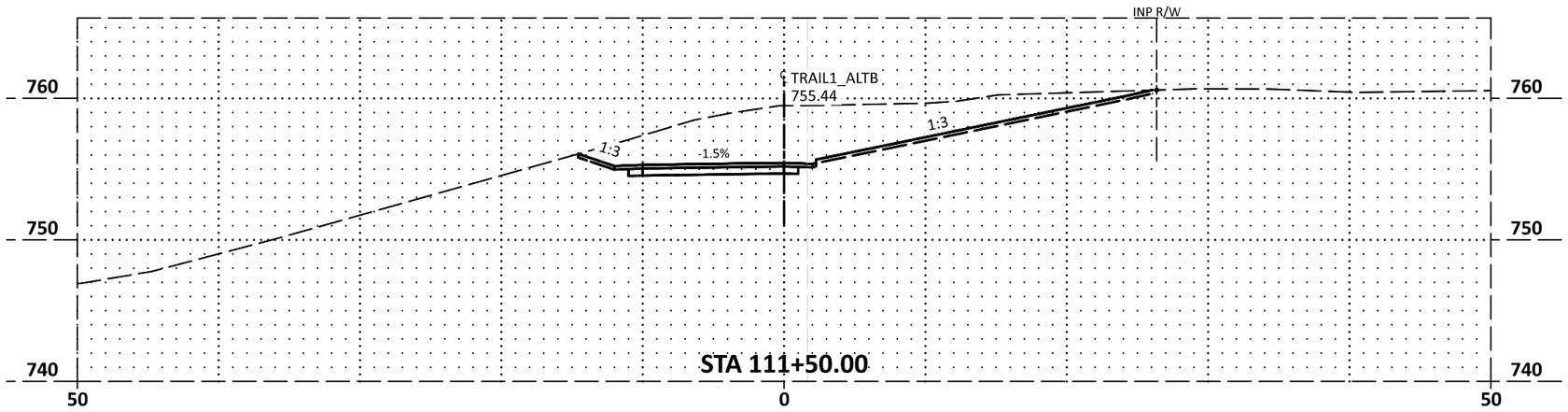
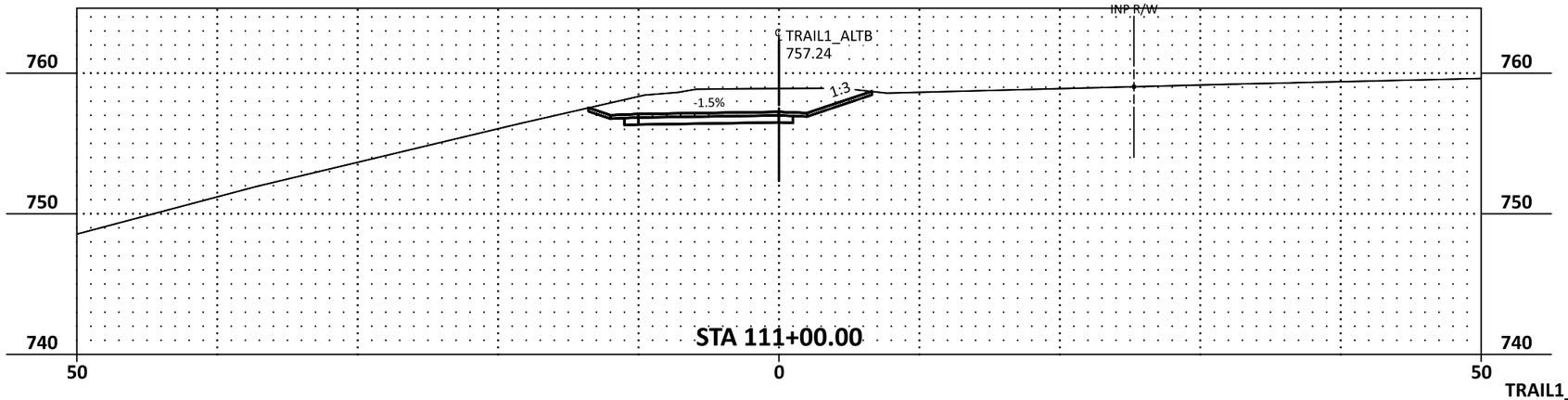
NOT FOR CONSTRUCTION | DAKOTA COUNTY | MRG TRAIL | SHEET NO. 1 OF 22 SHEETS







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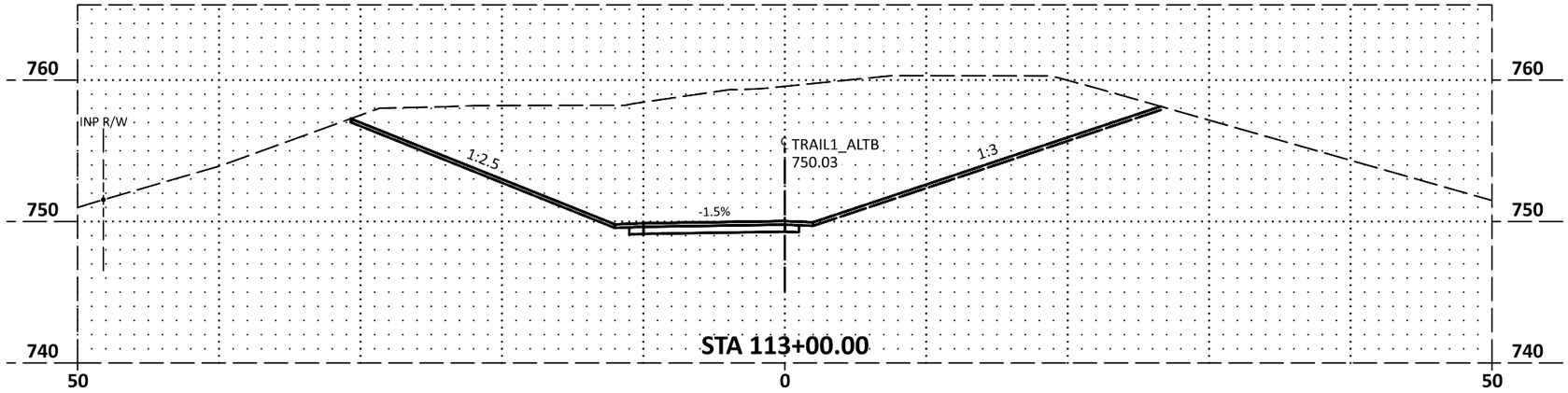
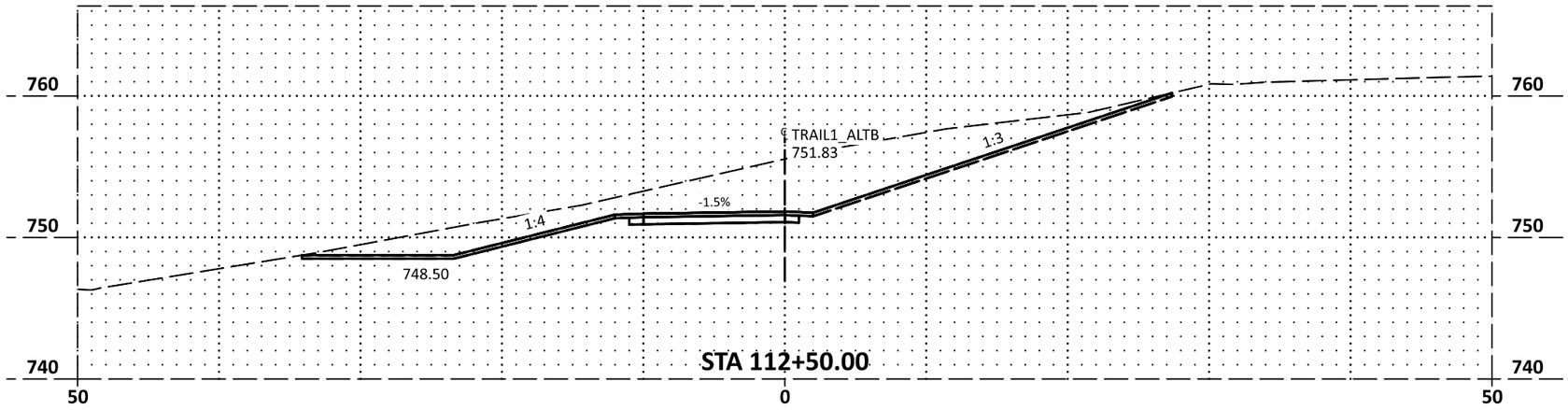
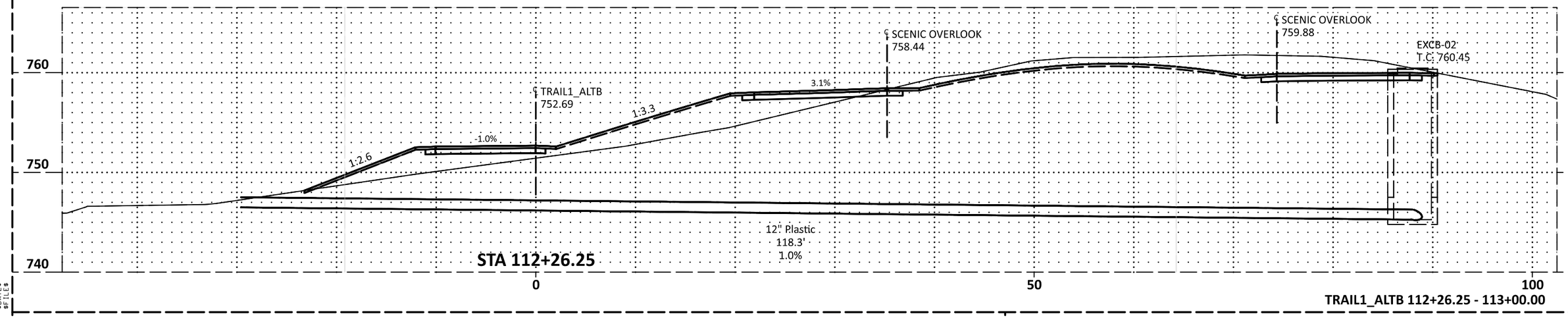
NOT FOR CONSTRUCTION | DAKOTA COUNTY | MRC TRAIL | SHEET NO. 2 OF 22 SHEETS







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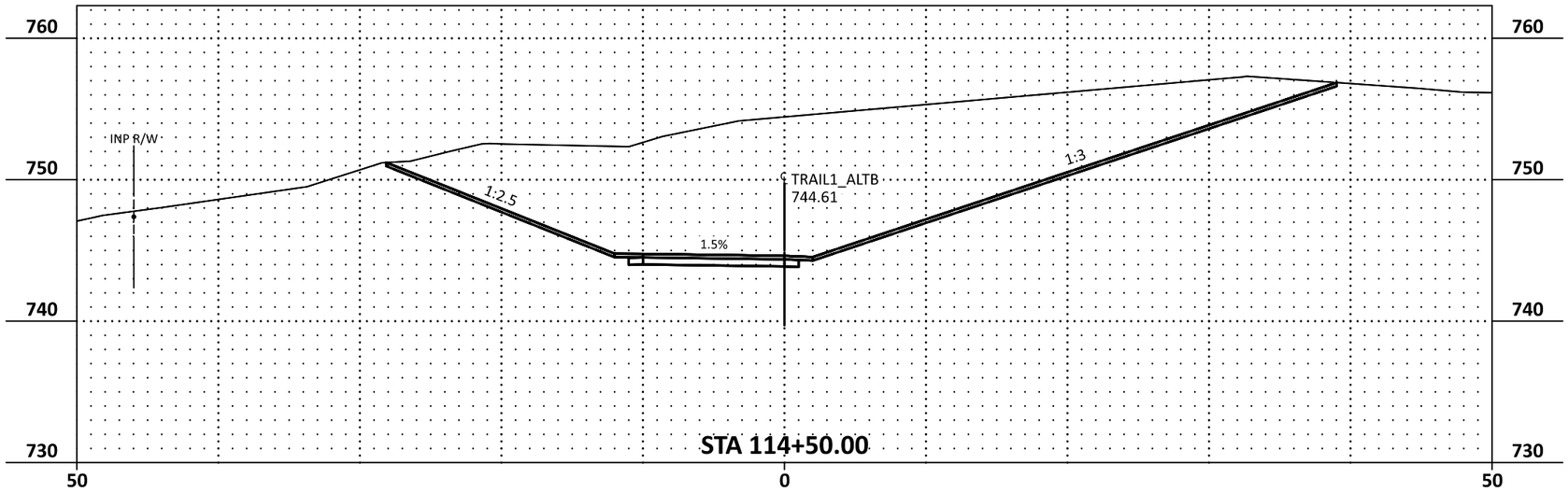
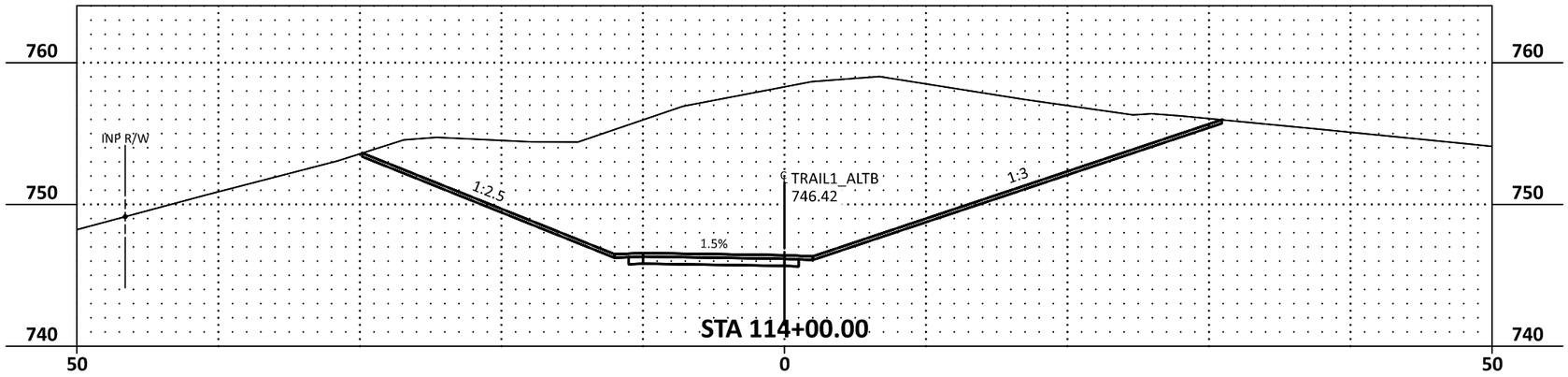
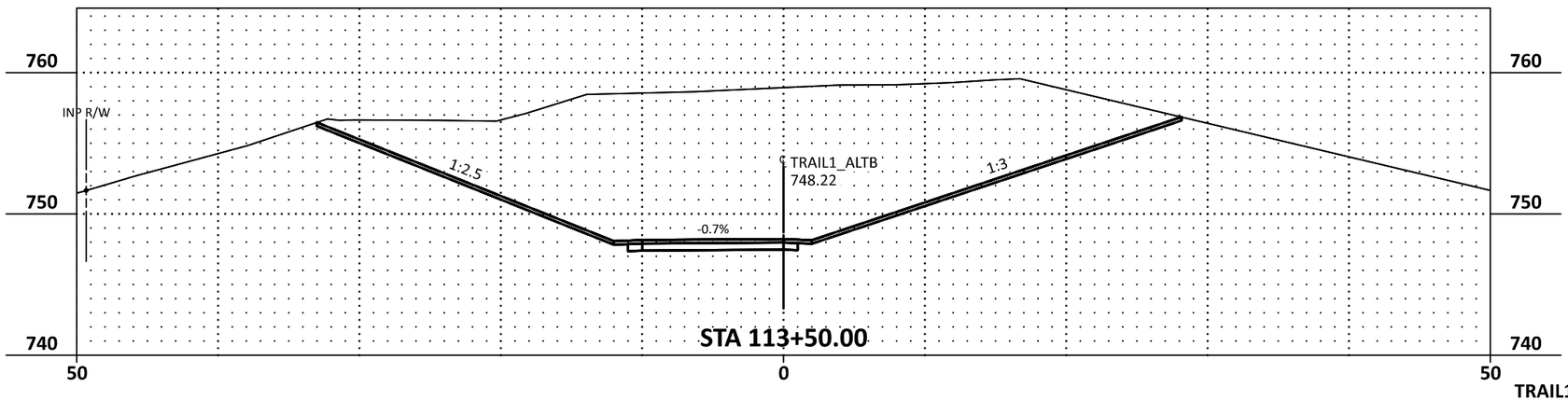
NOT FOR CONSTRUCTION | DAKOTA COUNTY | MRC TRAIL | SHEET NO. 3 OF 22 SHEETS







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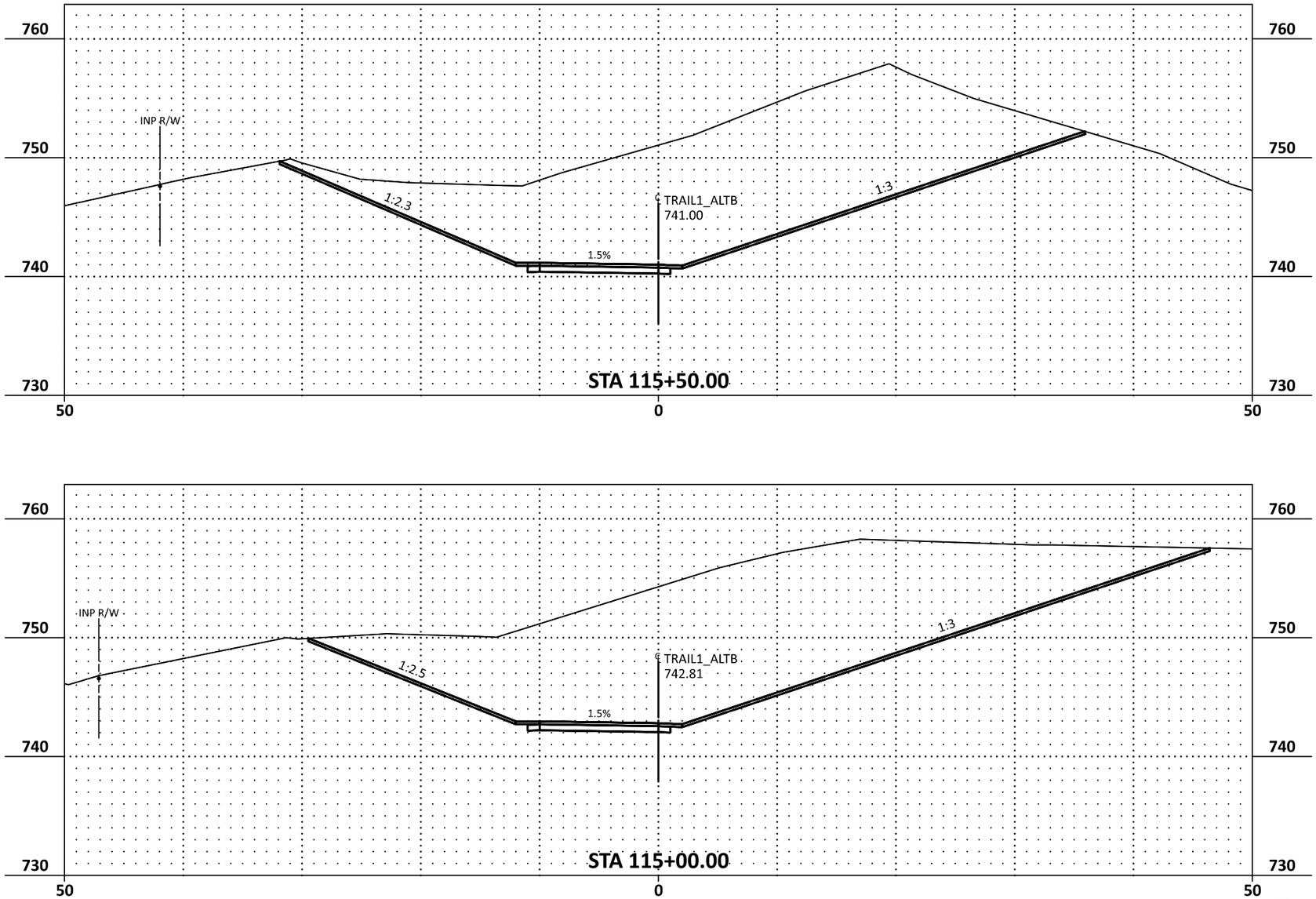
NOT FOR CONSTRUCTION | DAKOTA COUNTY | MRG TRAIL | SHEET NO. 4 OF 22 SHEETS



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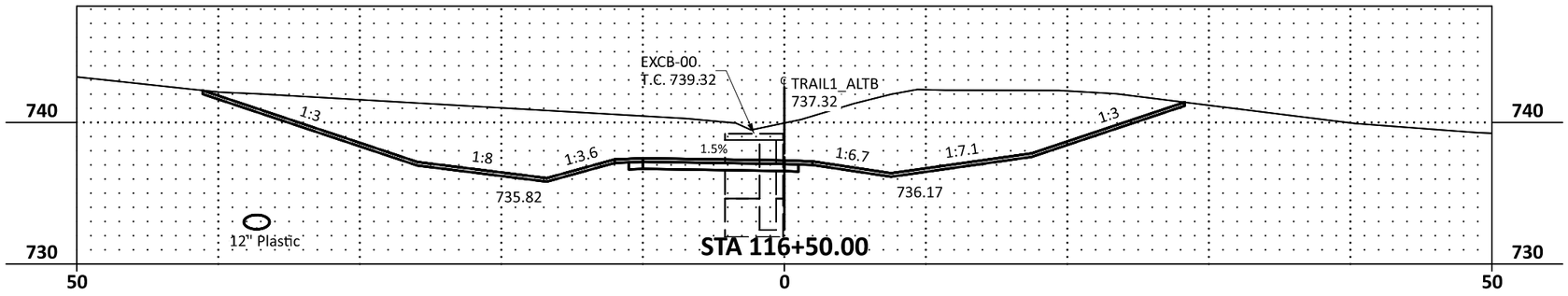

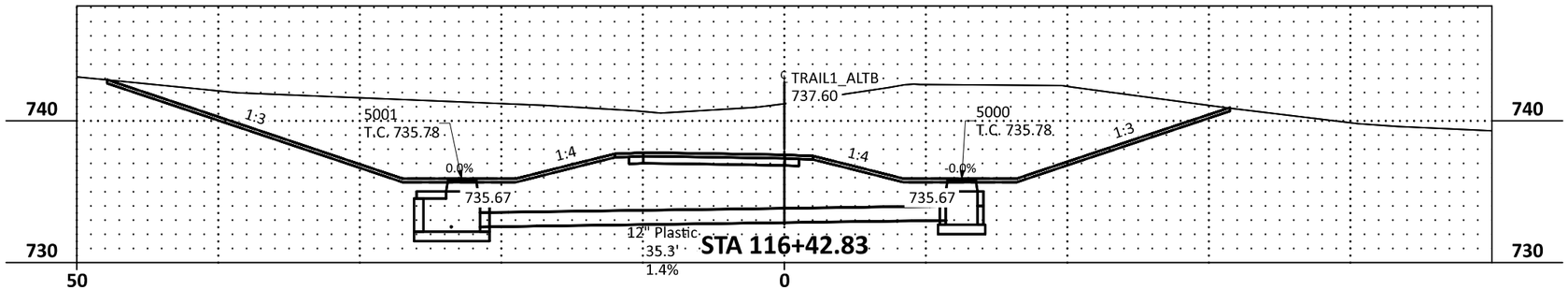

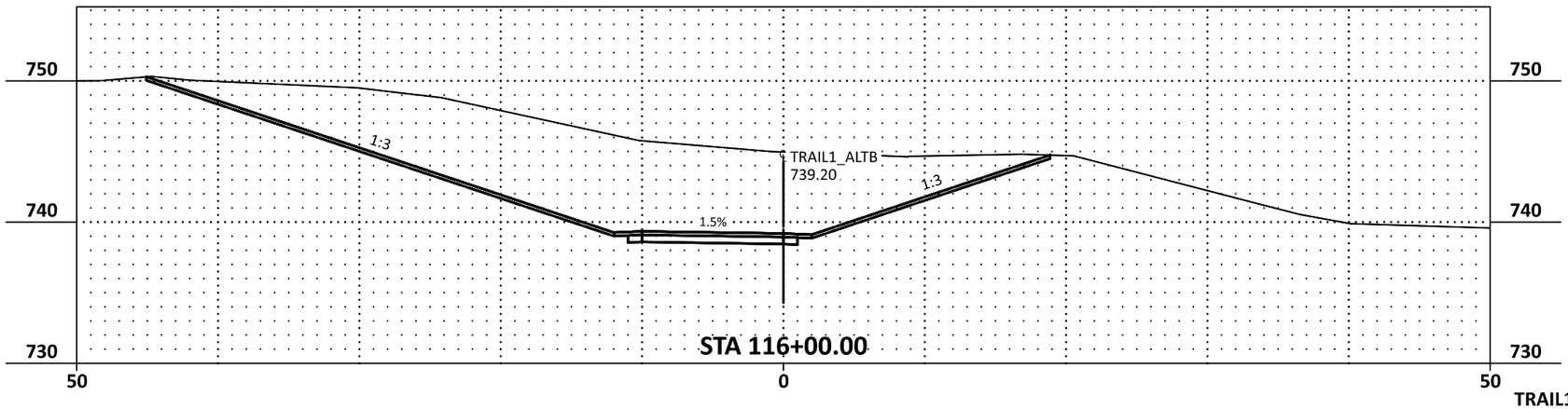

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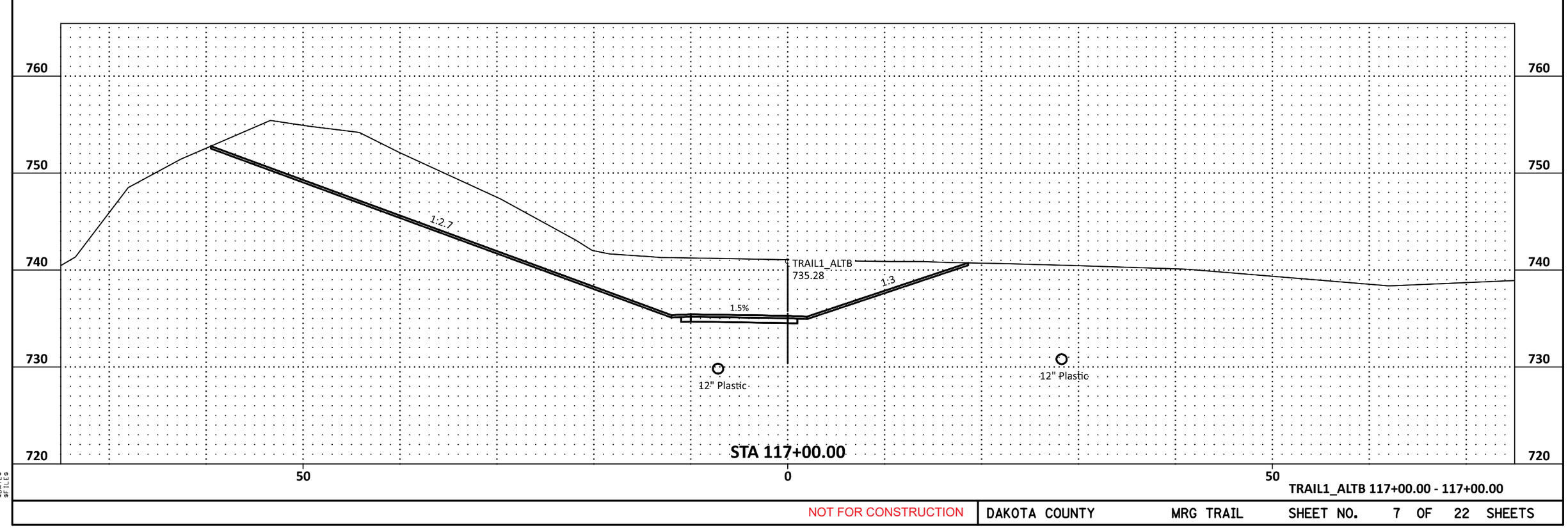
NOT FOR CONSTRUCTION | DAKOTA COUNTY | MRG TRAIL | SHEET NO. 6 OF 22 SHEETS



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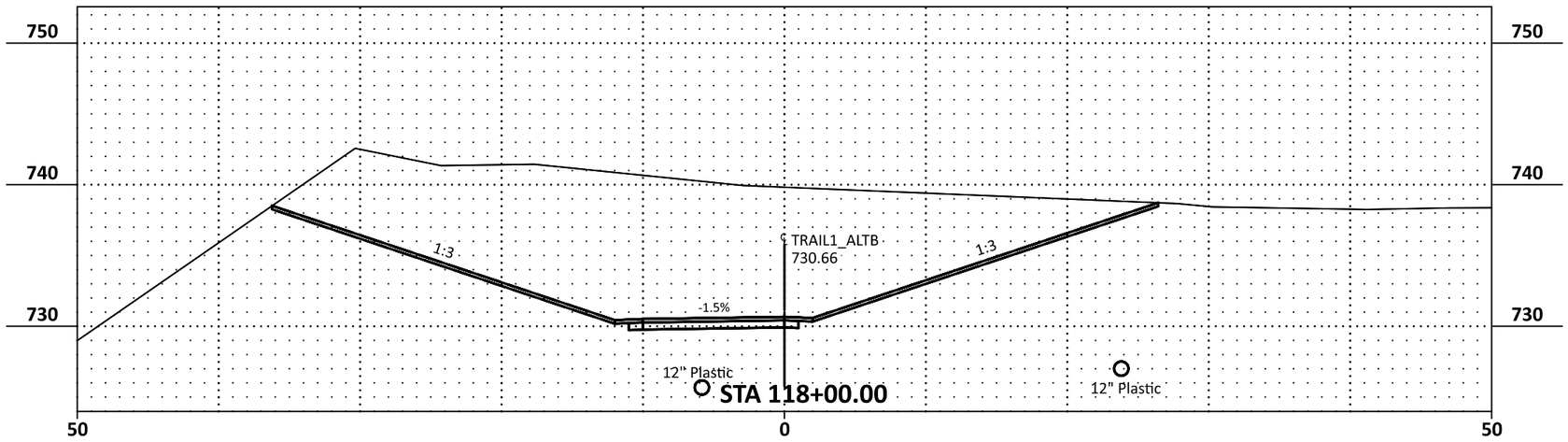
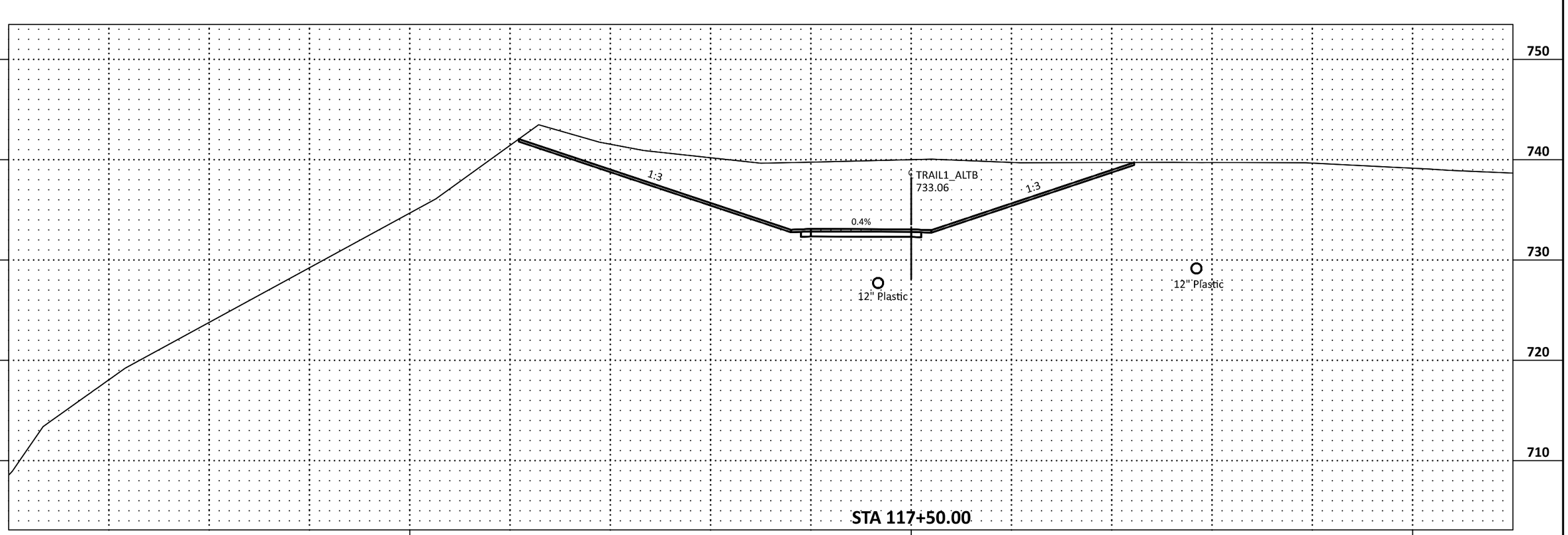
NOT FOR CONSTRUCTION | DAKOTA COUNTY | MRG TRAIL | SHEET NO. 7 OF 22 SHEETS





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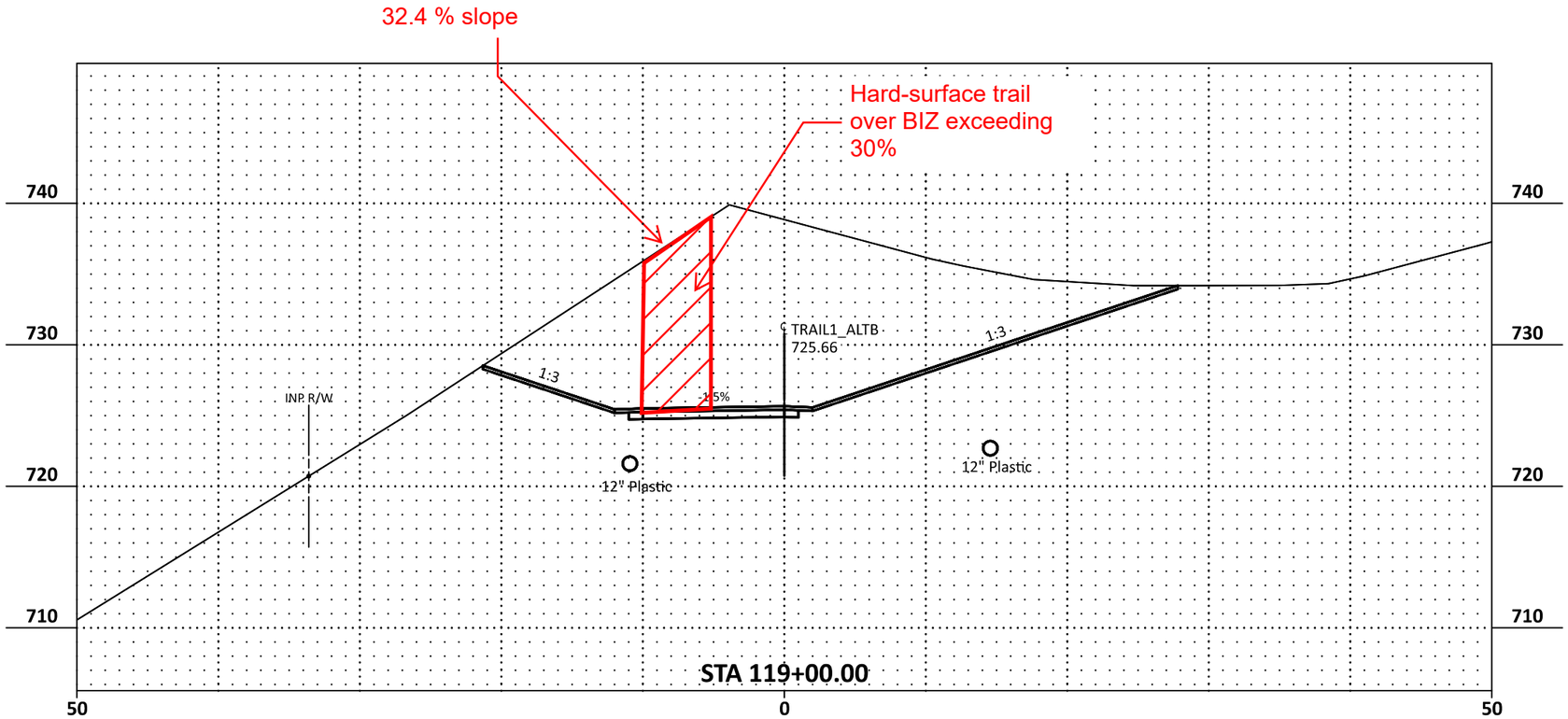
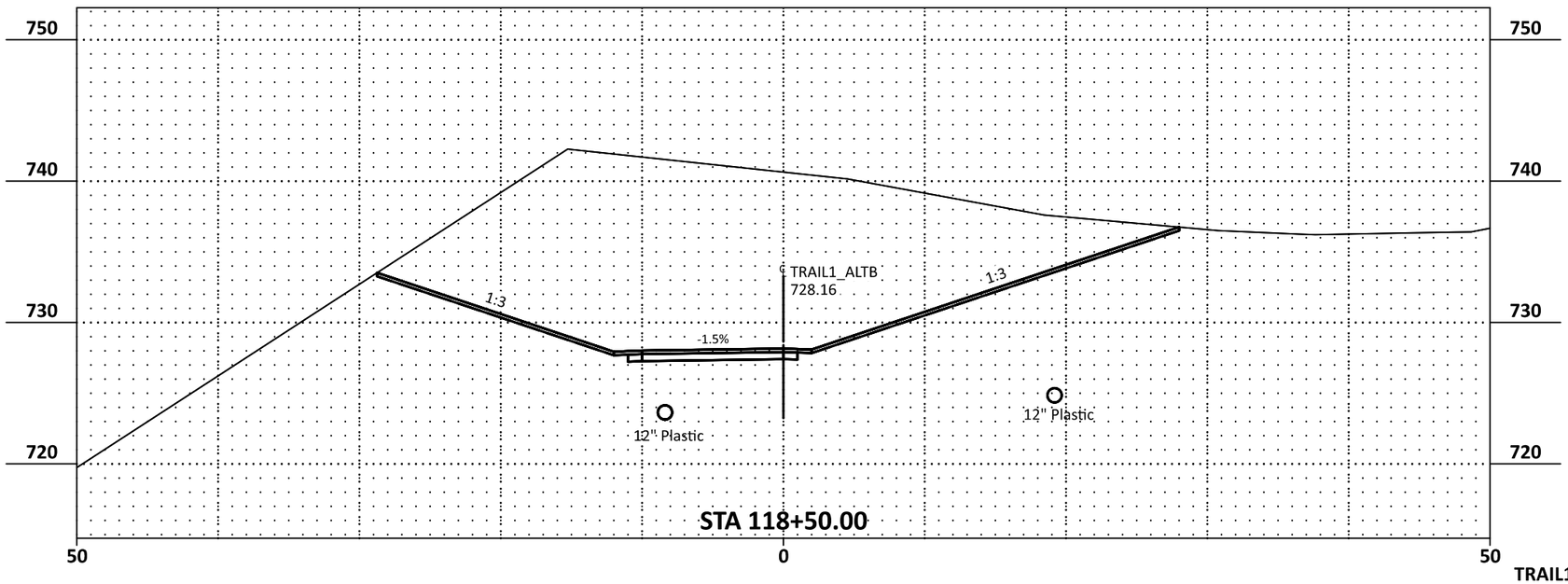
$FILE$

NOT FOR CONSTRUCTION | DAKOTA COUNTY | MRG TRAIL | SHEET NO. 8 OF 22 SHEETS





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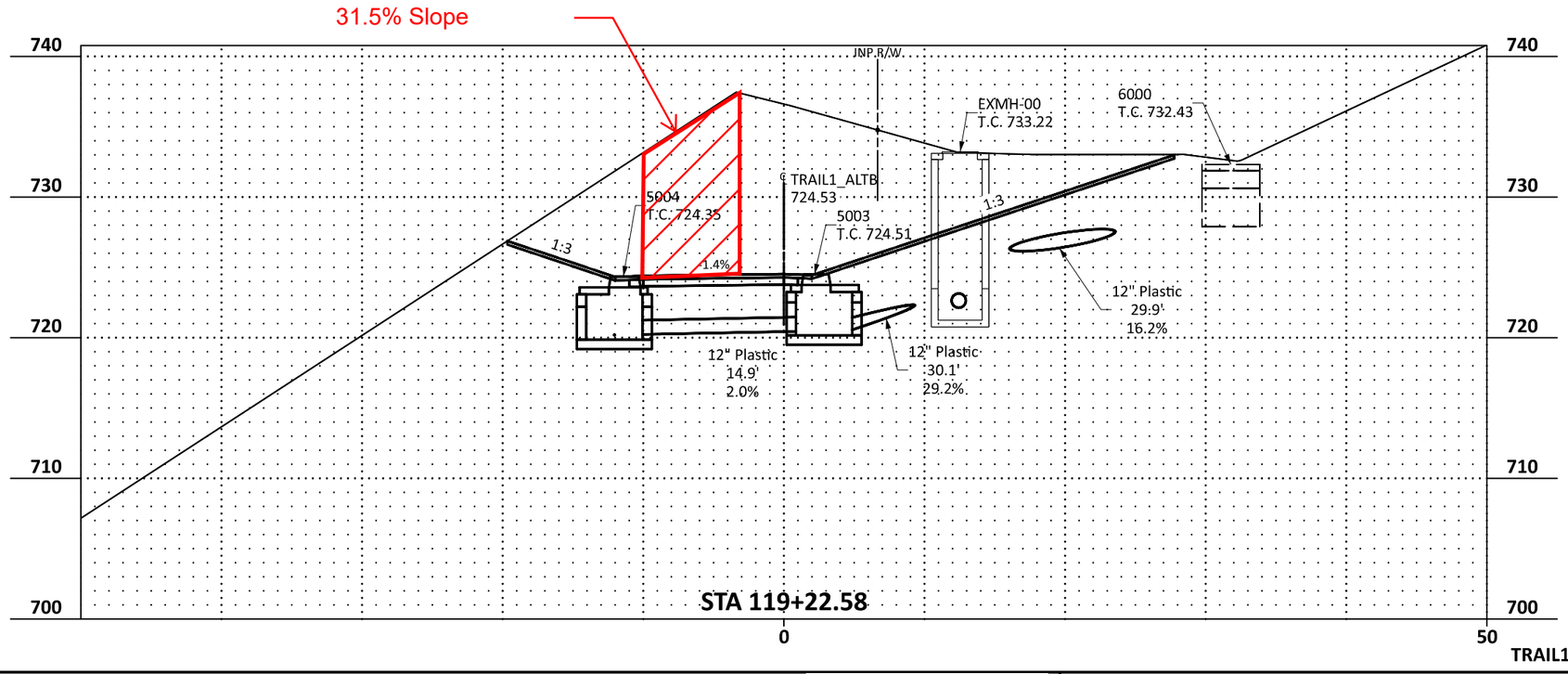
NOT FOR CONSTRUCTION | DAKOTA COUNTY | MRG TRAIL | SHEET NO. 9 OF 22 SHEETS



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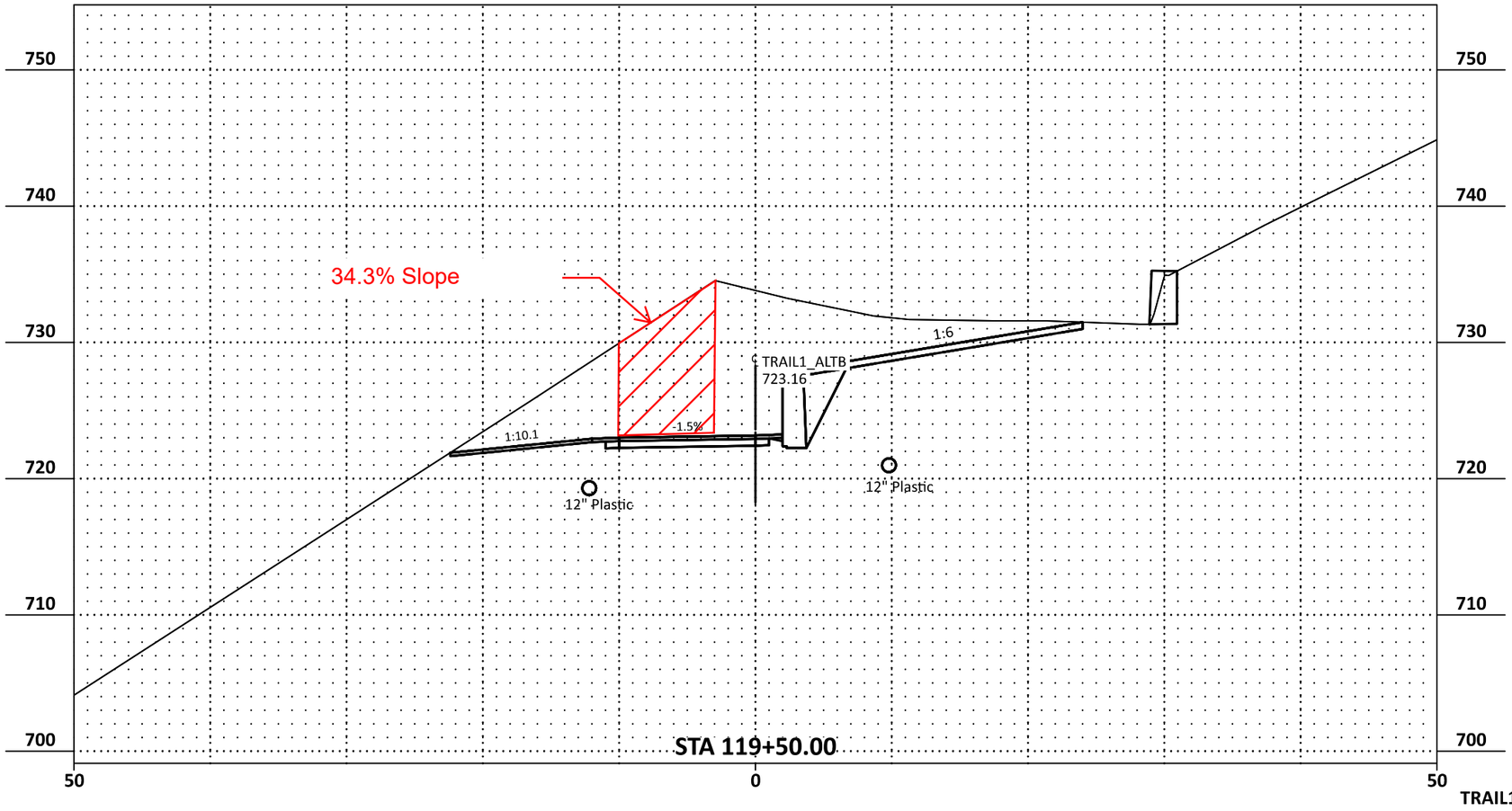

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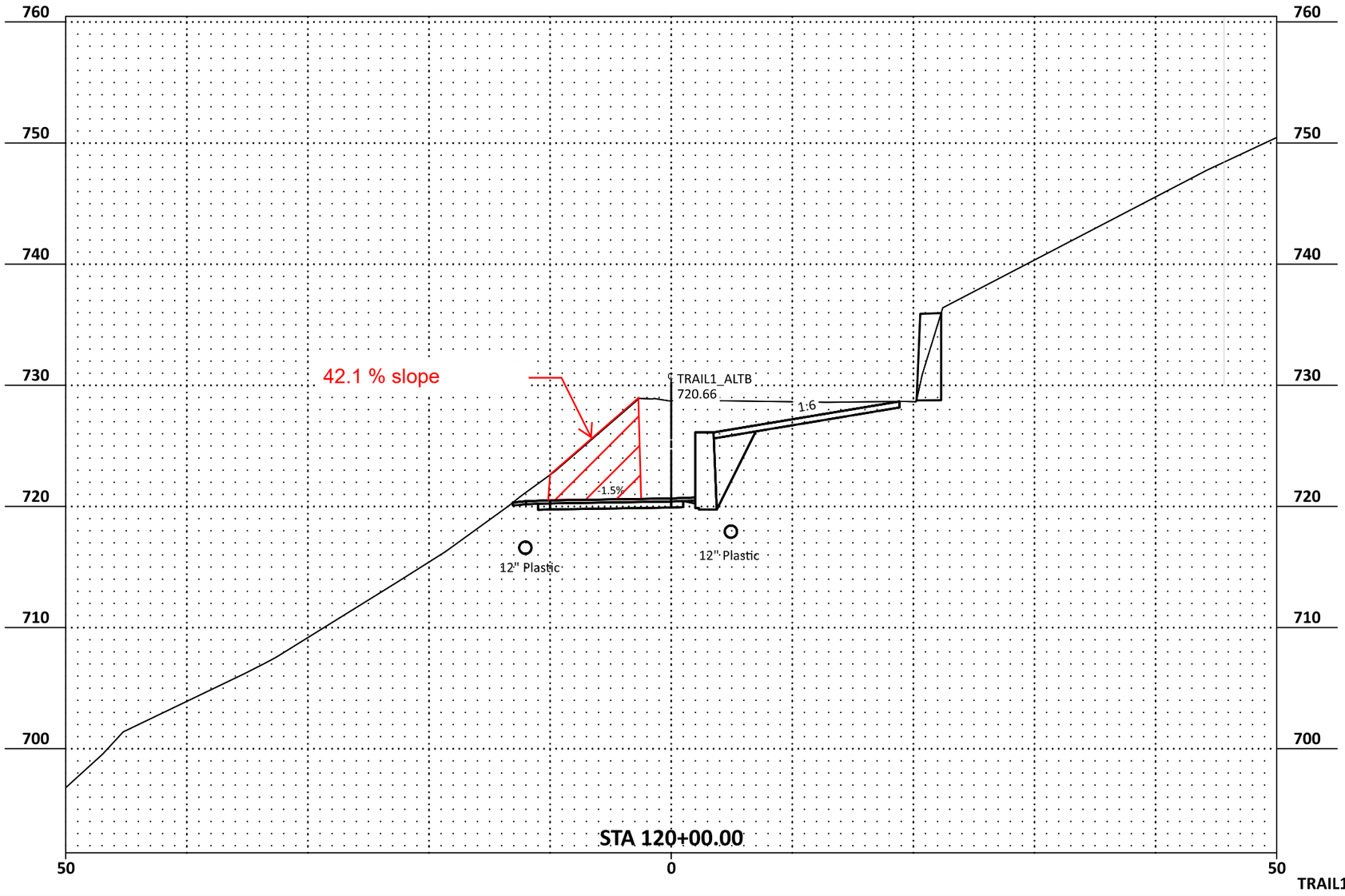

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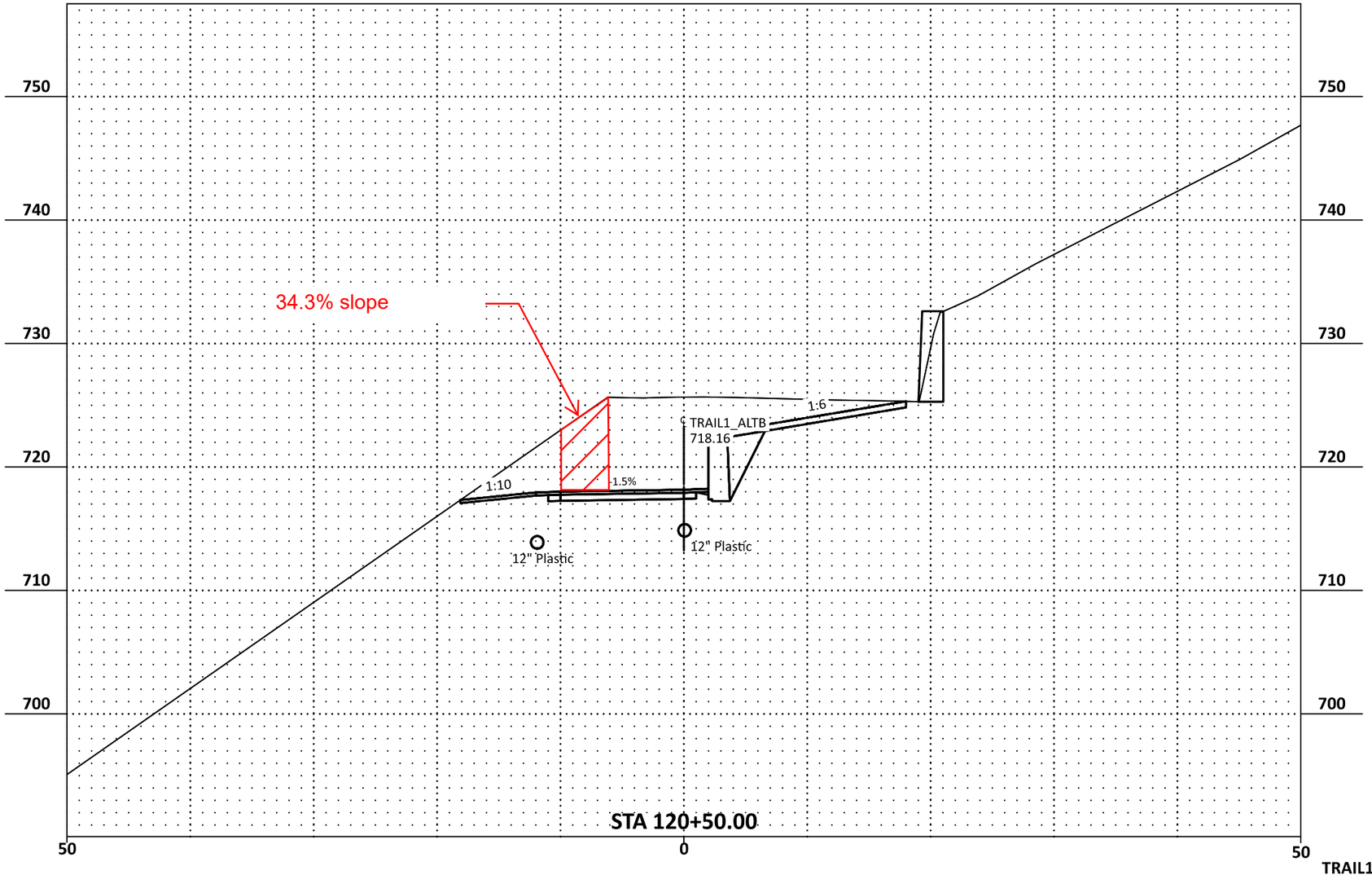

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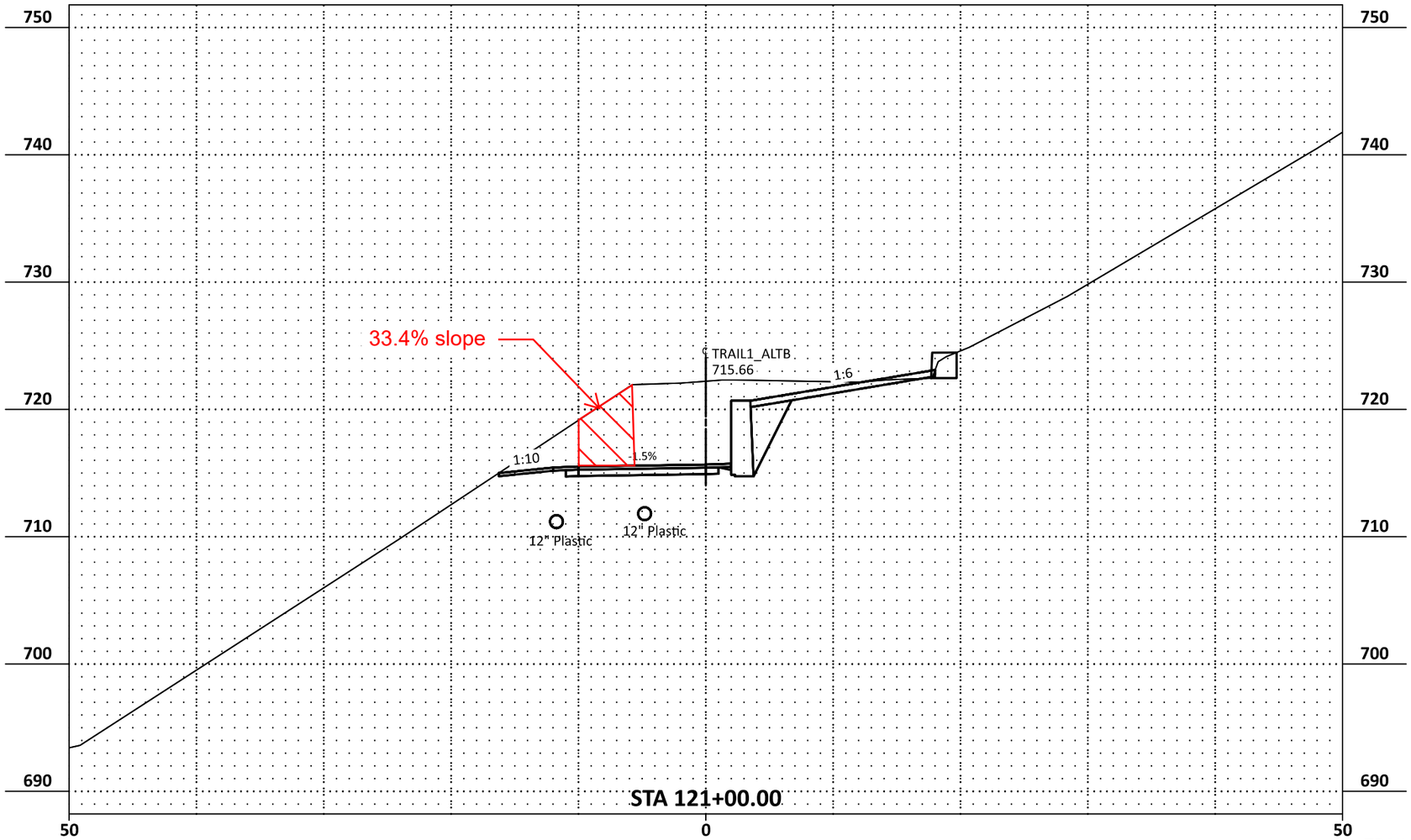
NOT FOR CONSTRUCTION | DAKOTA COUNTY | MRG TRAIL | SHEET NO. 13 OF 22 SHEETS



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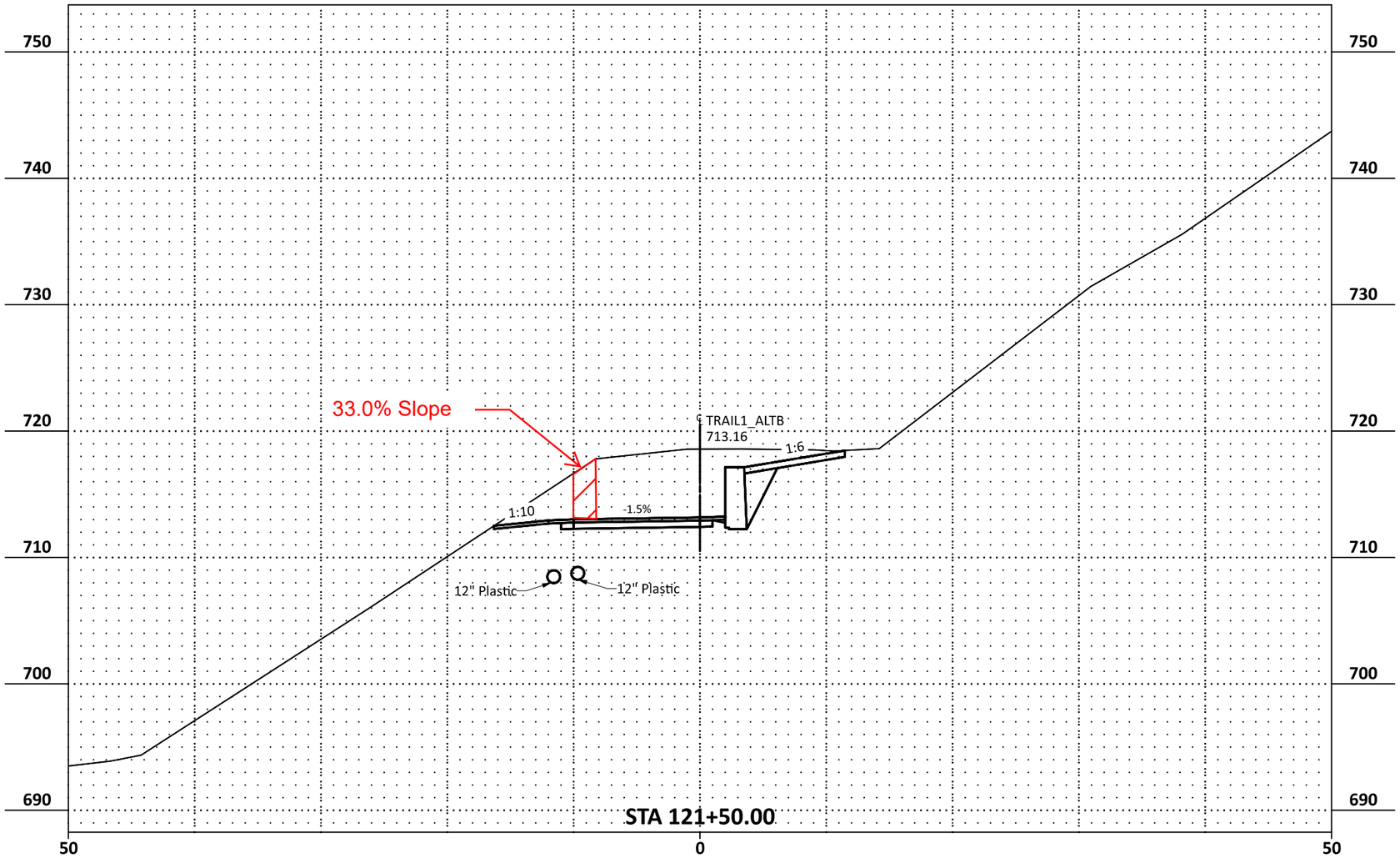

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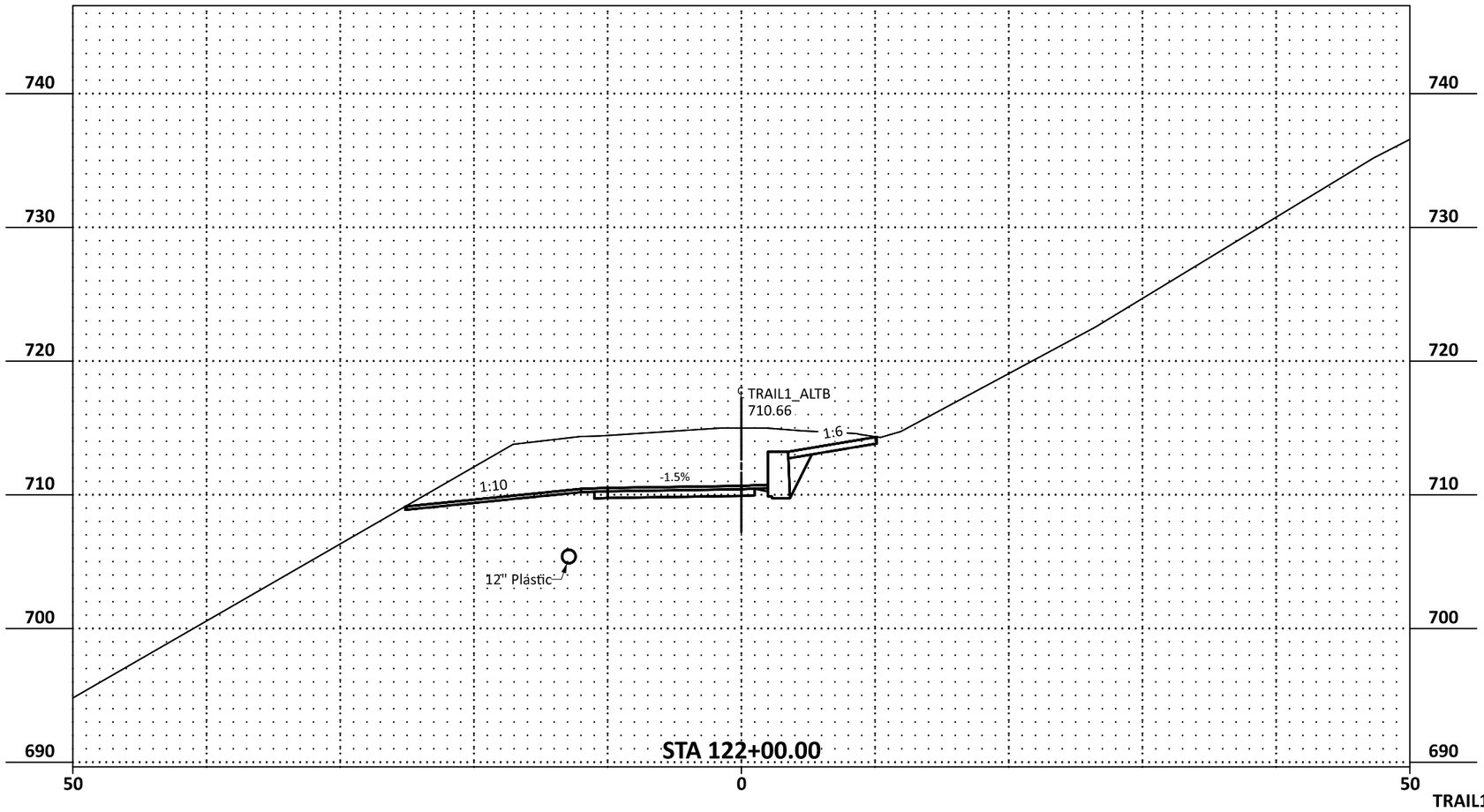
NOT FOR CONSTRUCTION | DAKOTA COUNTY | MRG TRAIL | SHEET NO. 15 OF 22 SHEETS



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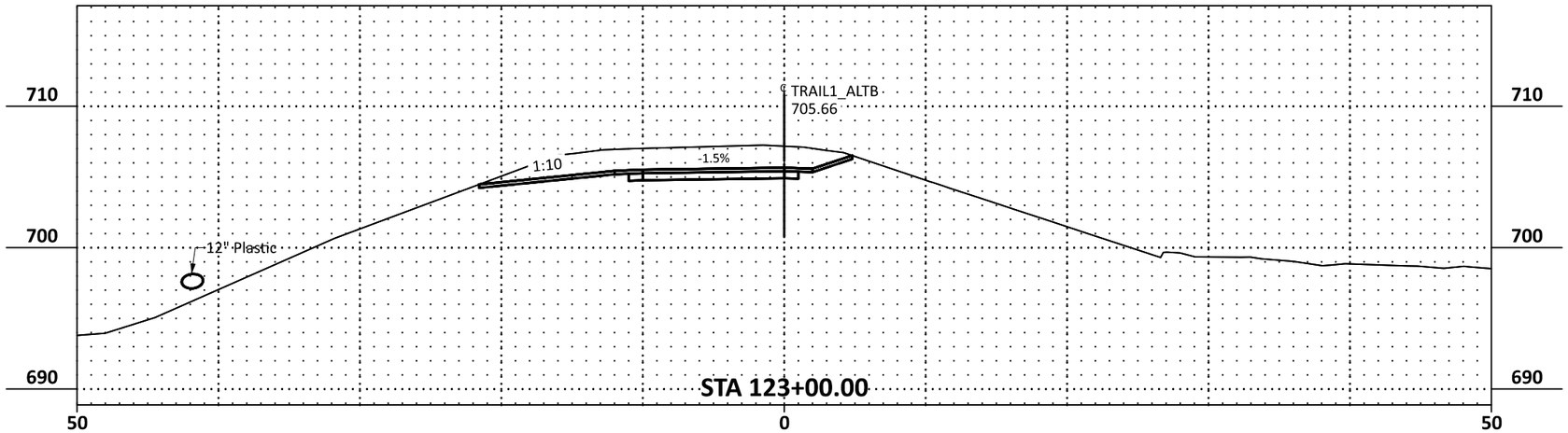

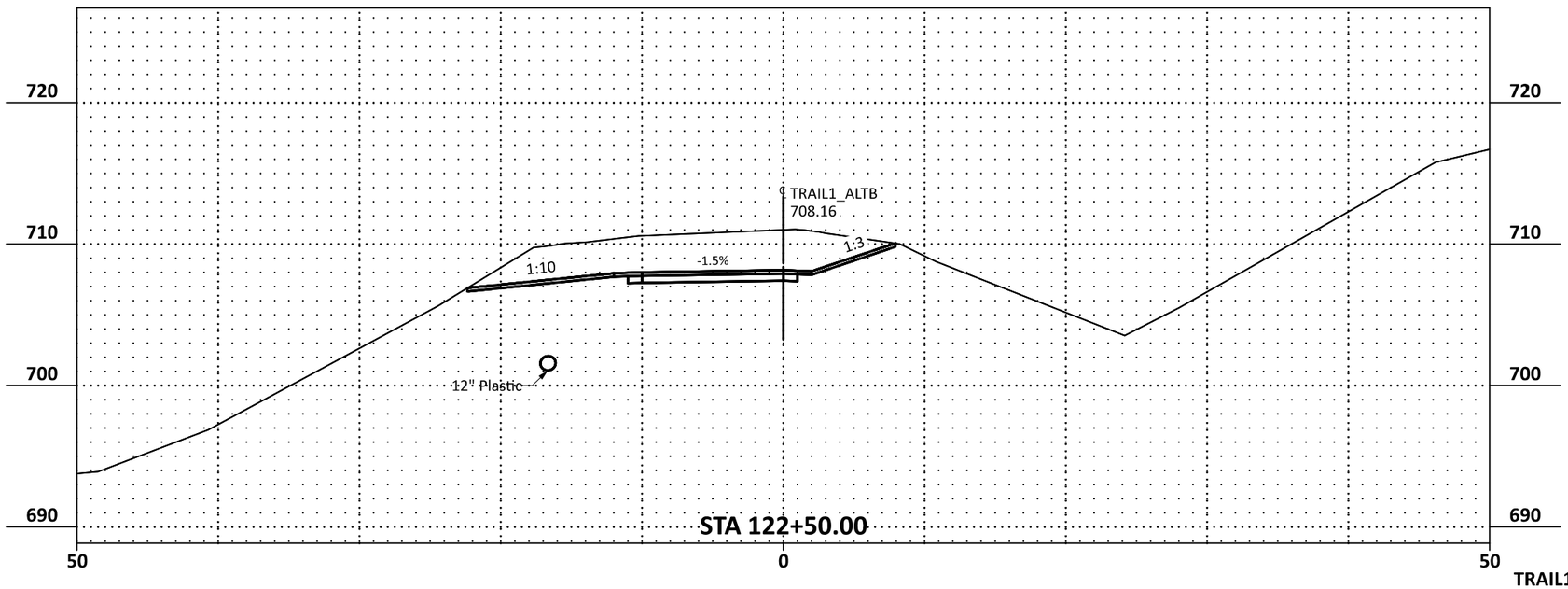

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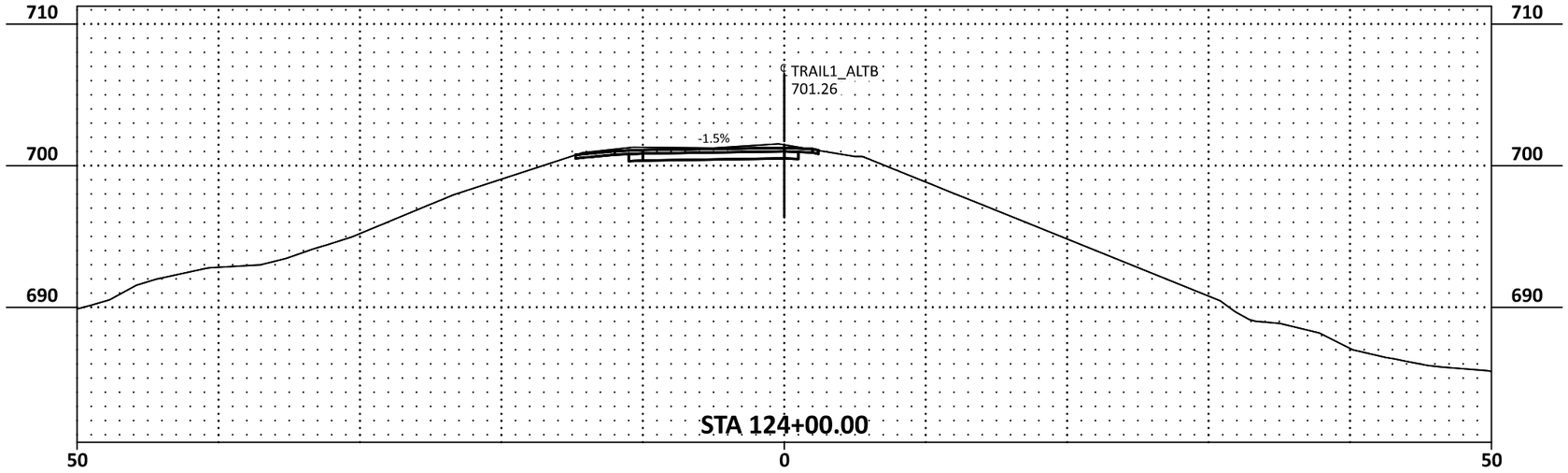

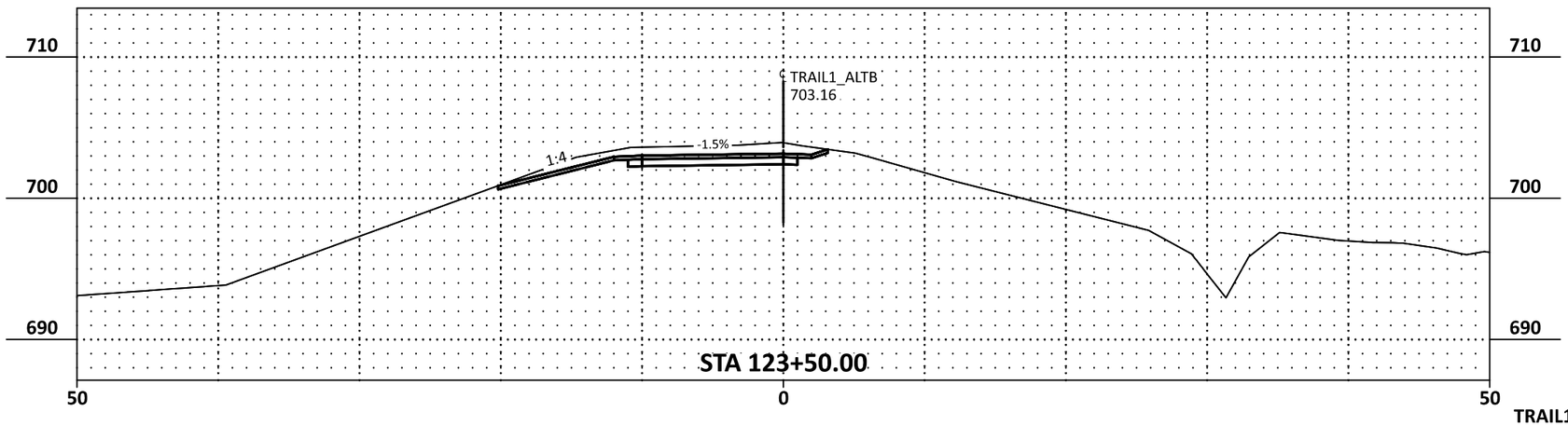

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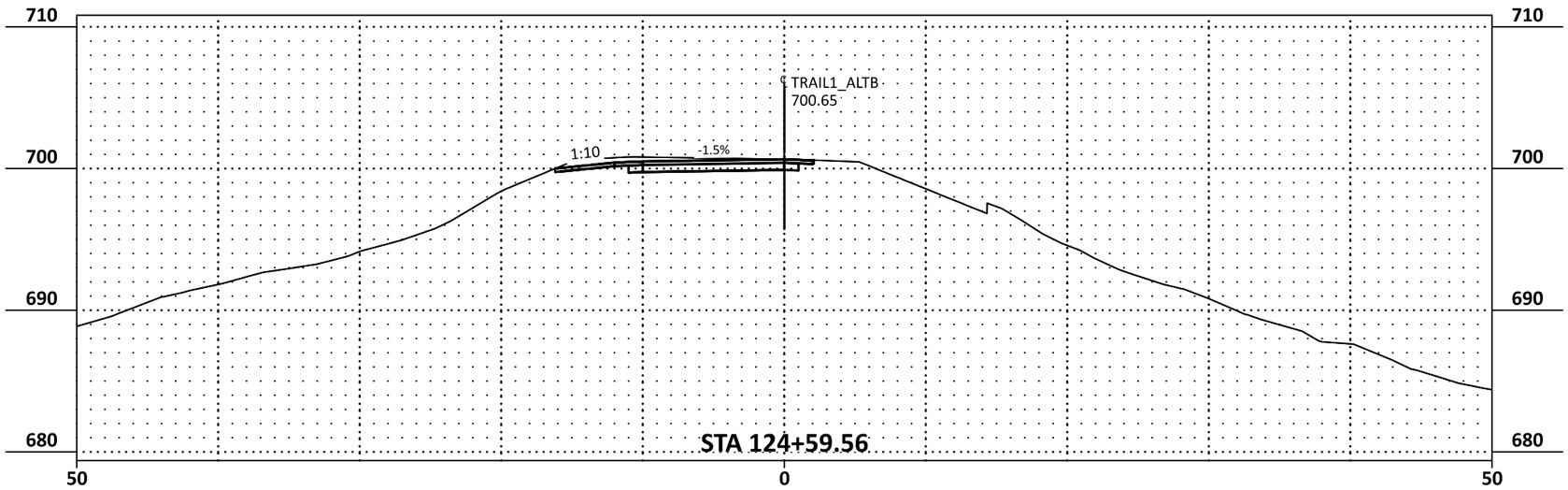
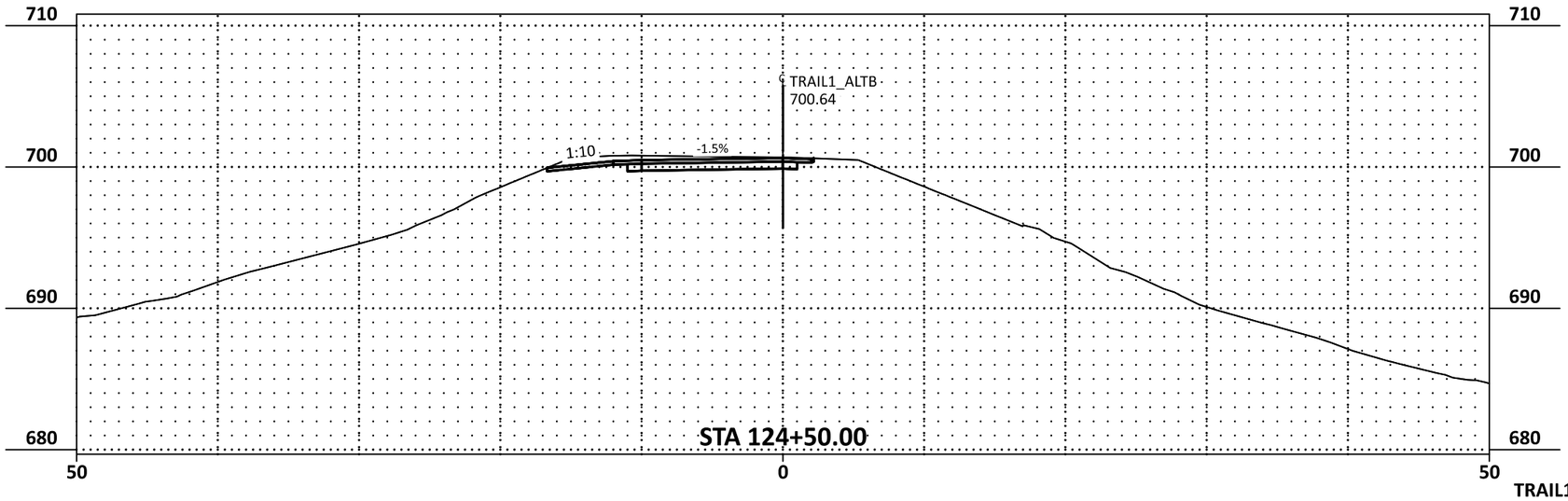
NOT FOR CONSTRUCTION | DAKOTA COUNTY | MRG TRAIL | SHEET NO. 18 OF 22 SHEETS





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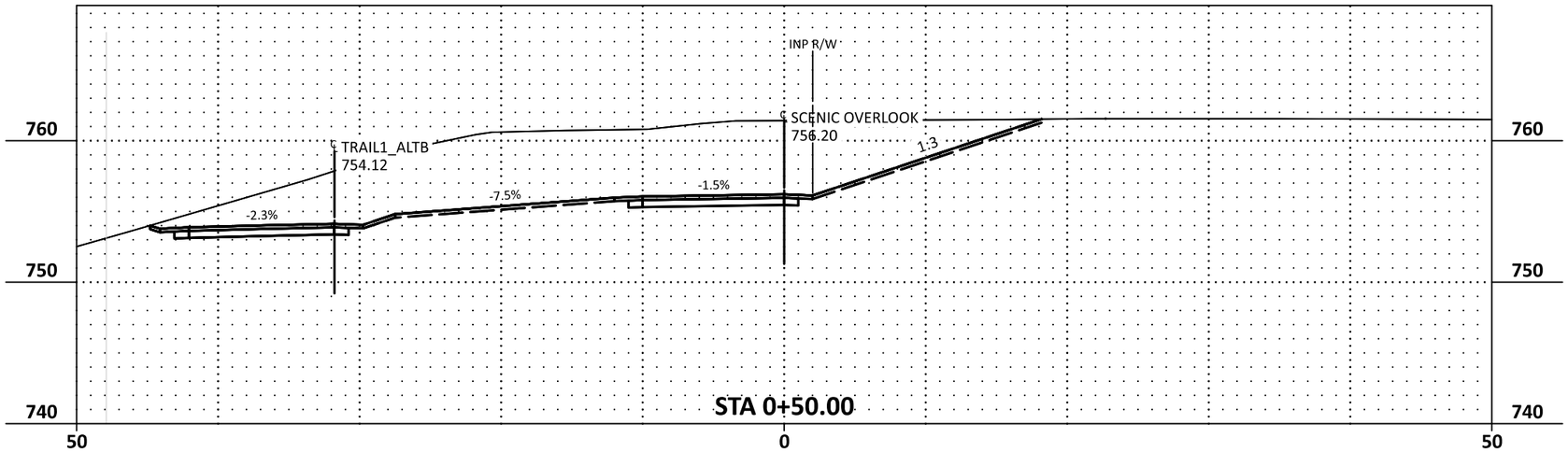

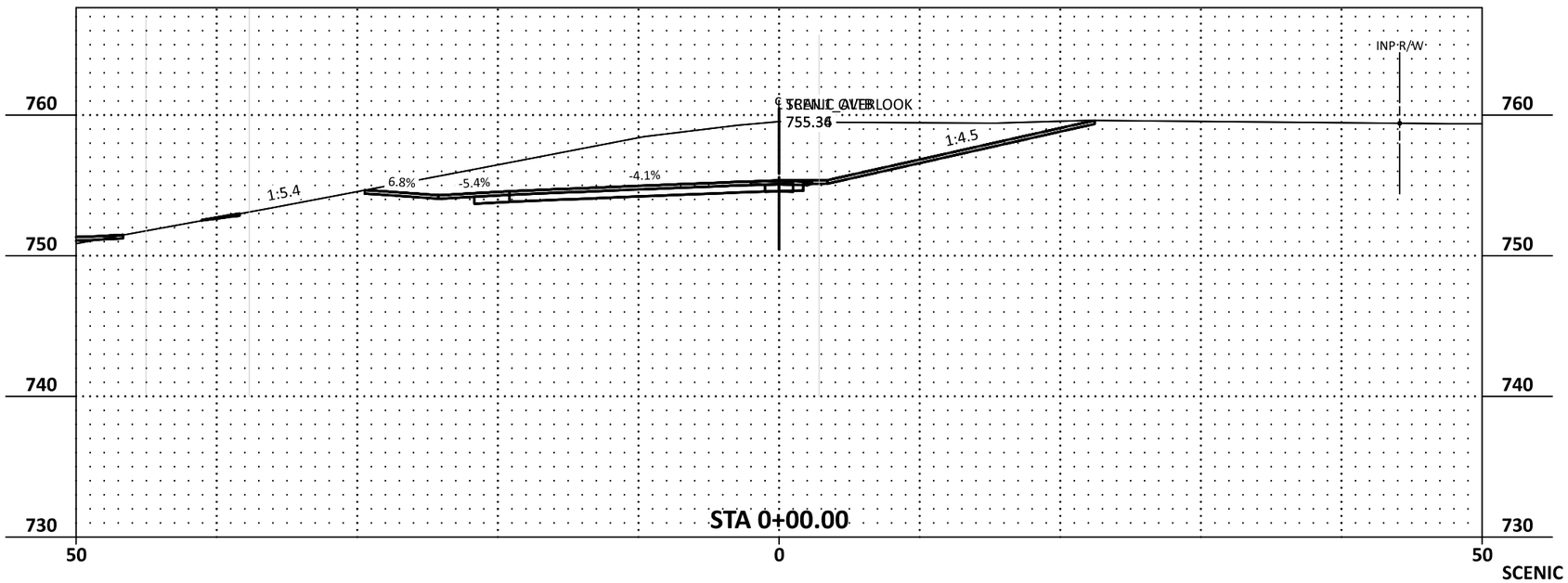

SCENIC OVERLOOK 0+00.00 - 0+50.00

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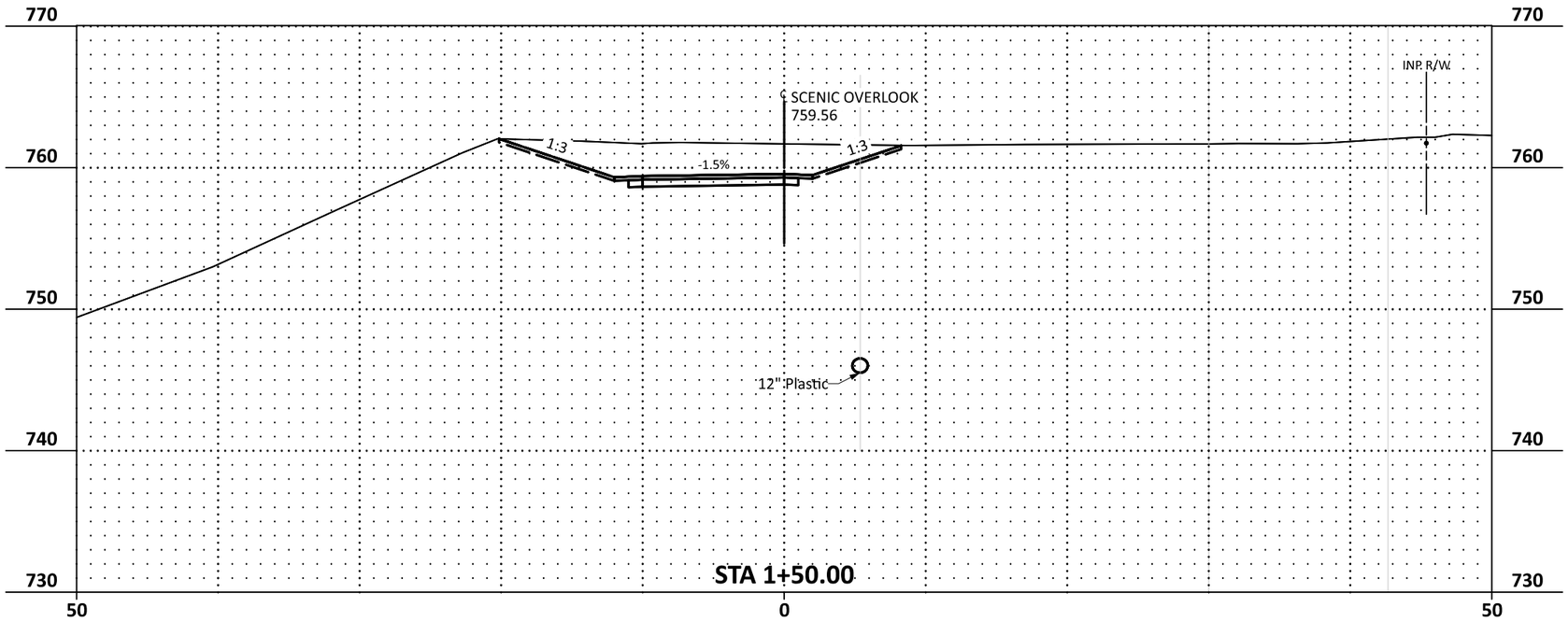
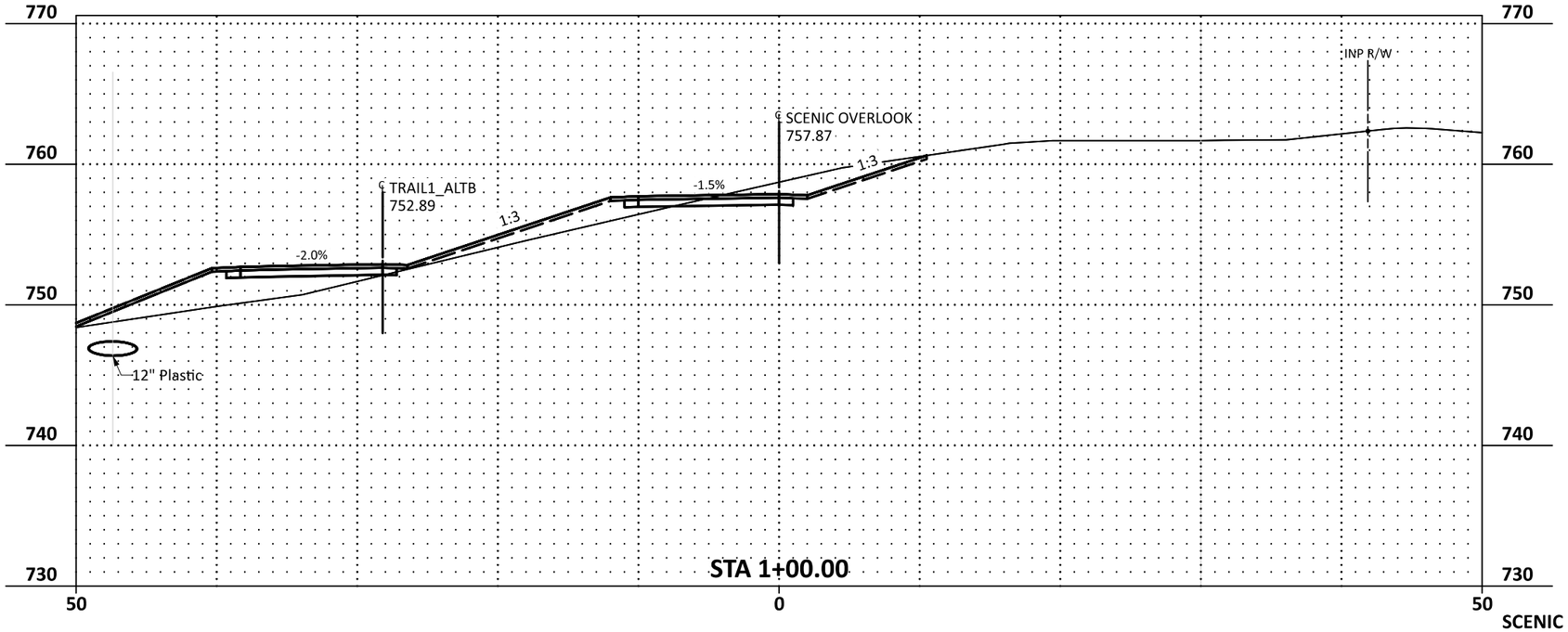
NOT FOR CONSTRUCTION | DAKOTA COUNTY | MRG TRAIL | SHEET NO. 20 OF 22 SHEETS





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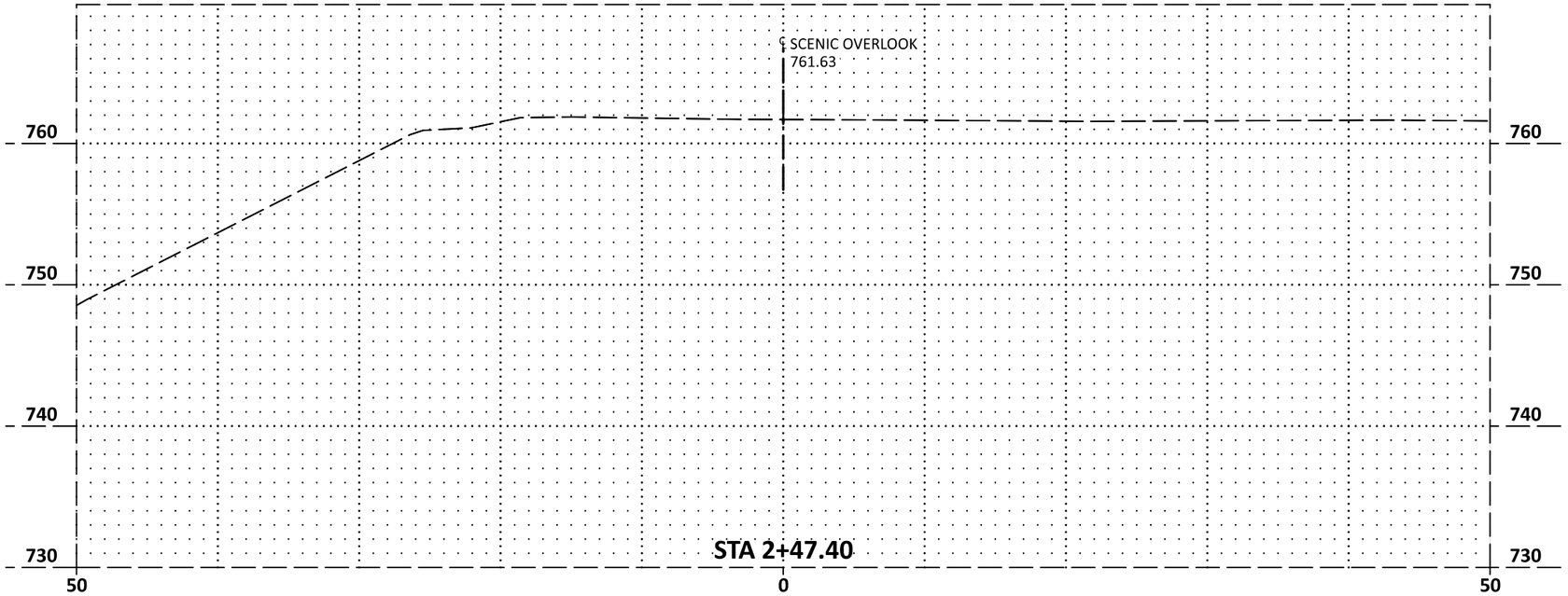

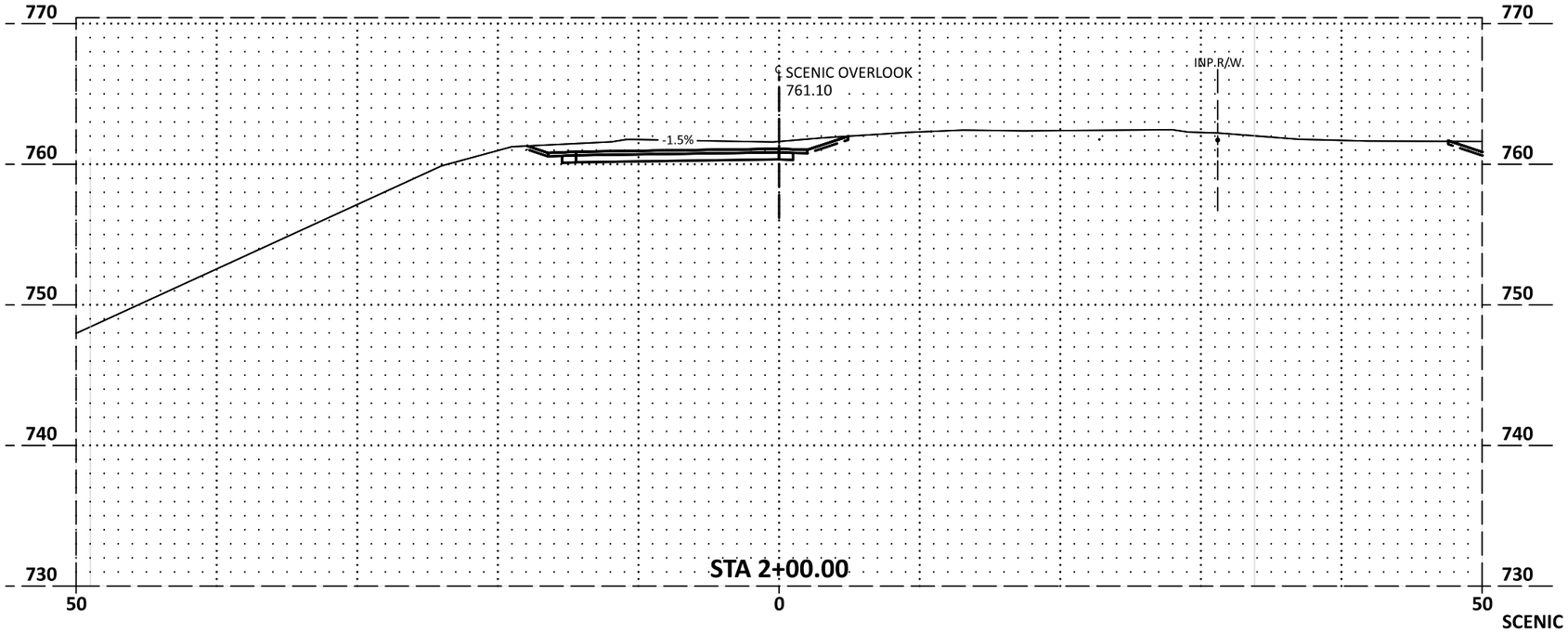

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$TIME$
$DATE$
$FILE$

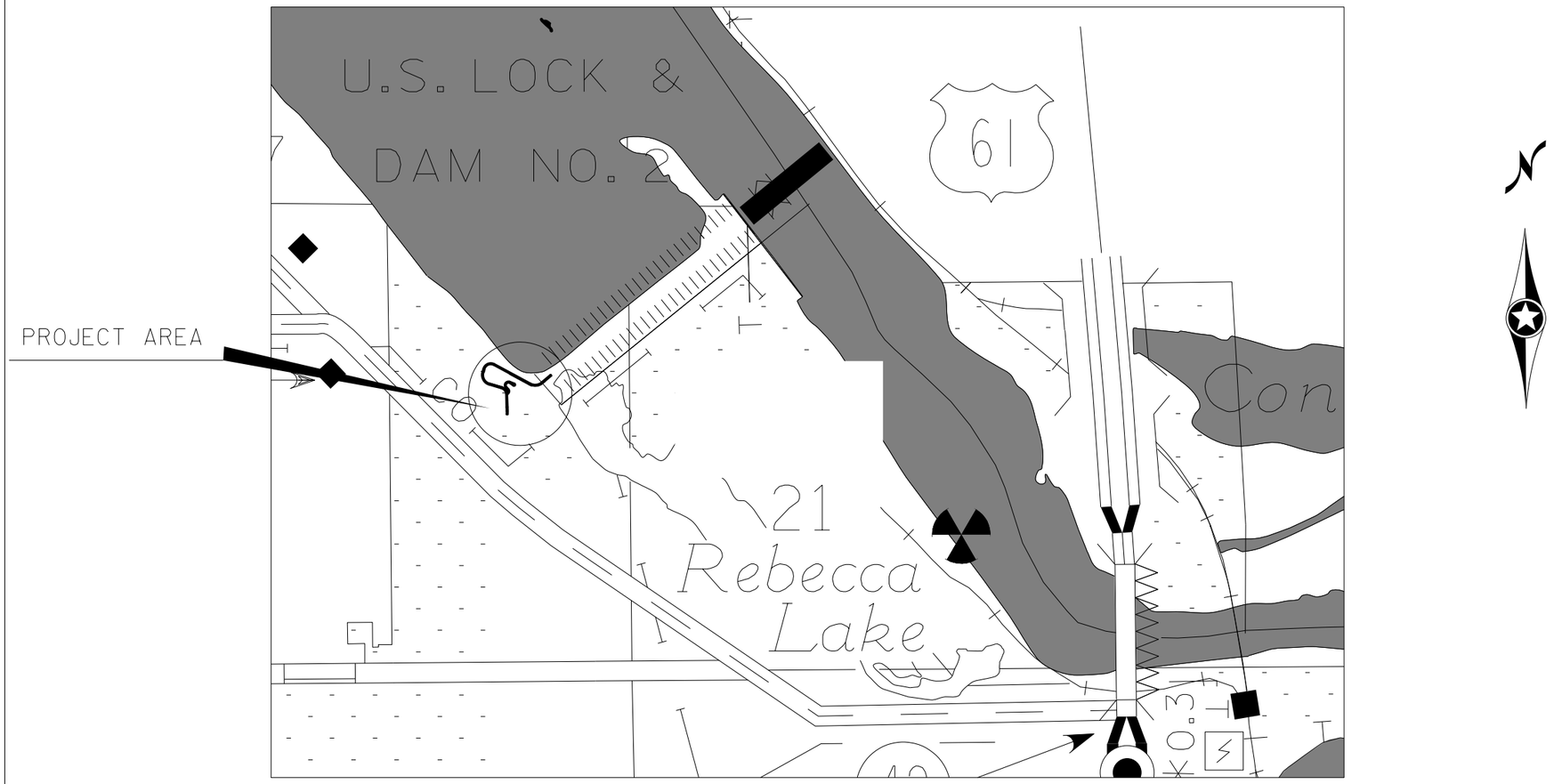
NOT FOR CONSTRUCTION | DAKOTA COUNTY | MRG TRAIL | SHEET NO. ?? OF ?? SHEETS

EXHIBIT A5

DAKOTA COUNTY

CONSTRUCTION PLAN FOR TREE CLEARING AND FENCE REMOVAL

LOCATED ON MINNESOTA RIVER GREENWAY TRAIL 0.3 MILES NORTH WEST OF COUNTY RD 42 AND PLEASANT DR



SCALES

INDEX MAP 1500'

PLAN 40

PROJECT LOCATION

COUNTY : DAKOTA

PLAN REVISIONS		
DATE	SHEET NO.	APPROVED BY

GOVERNING SPECIFICATIONS

THE 2020 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" SHALL GOVERN.

INDEX

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	CONSTRUCTION NOTES & ESTIMATED QUANTITIES
3-5	REMOVAL PLANS
6	SWPPP PLANS & WATER RESOURCES NOTES

THIS PLAN CONTAINS 6 SHEETS

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

PRINT NAME: JORDAN R HOREJSI LICENSE # 52241

SIGNATURE: PRELIMINARY DATE: 1/16/2025

DESIGN SQUAD GABRIEL FROMM, BRETT JOHNSON
KENDAL RUSTEN

HRGreen
COURT INTERNATIONAL BUILDING
2550 UNIVERSITY AVENUE W., SUITE 400N
ST. PAUL, MINNESOTA 55114-2015
P: 651.644.4389 F: 713.965.0044

APPROVED _____ 20____
CITY OF -

APPROVED _____ 20____
DAKOTA COUNTY ENGINEER

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CONSTRUCTION NOTES:

PERPETUATE DRAINAGE ON ALL AREAS DISTURBED BY CONSTRUCTION (INCIDENTAL).

ALL MATERIAL NOT UTILIZED ON THIS PROJECT SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND DISPOSED OF OFF THE R/W IN ACCORDANCE WITH SPEC 2104.

SURVEYS AND RIGHT OF WAY

THE CONTRACTOR SHALL PRESERVE ALL LAND, AND PROPERTY CORNERS, VERTICAL AND HORIZONTAL CONTROLS, AND RIGHT OF WAY MONUMENTS.

FENCE REMOVAL

THE CONTRACTOR SHALL REMOVE EXISTING 5' CHAIN FENCE ONLY AS NECESSARY TO PERFORM CLEARING OPERATIONS. EXISTING POSTS SHALL REMAIN IN PLACE AND BE USED FOR TEMPORARY FENCE INSTALLATION

TEMPORARY FENCE SHALL EITHER BE EXSISTING FENCE THAT IS SALVAGED AND INSTALLED BY REATTATCHING CHAIN LINK TO EXISTING POSTS OR BE ORANGE CONSTRUCTION FENCING THAT IS ATTATCHED TO EXISTING POSTS AND TO REMAIN IN PLACE UNTIL CONSTRUCTION ACTIVITIES IN THE FALL OF 2025. TEMPORARY FENCE INCLUDES HARDWARE FOR ATTATCHING TO EXISTING POSTS, CONNECTING FENCE SECTIONS TOGETHER, AND REINFORCEMENT POSTS AS DIRECTED BY THE ENGINEER

REMOVED CHAIN FENCE SHALL BE REPLACED BY TEMPORARY FENCE IN ACCORDANCE WITH MNDOT SPEC 2572

CLEARING

THE CONTRACTOR SHALL PERFORM CLEARING WHERE INDICATED IN THE REMOVAL PLANS. GRUBBING AND ROOT CUTTING WILL BE PERFORMED AT A LATER DATE BY OTHERS.

ALL CLEARED TREES AND DEBRIS MUST BE MOVED SO THAT NO TREE CLEARING MATERIALS ARE WITHIN 5' OF EXISTING TRAIL EDGE

TRAFFIC CONTROL

THE CONTRACTOR SHALL CLOSE THE TRAIL DURING CLEARING OPERATIONS IN ACCORDANCE WITH MNDOT SPEC 2563 S-271. PLACE ADVANCED WARNING SIGNS 3 DAYS PRIOR TO CLEARING ACTIVITIES.

TEMPORARY TURF ESTABLISHMENT

ALL AREAS DISTURBED BY CONSTRUCTION WILL REQUIRE TURF ESTABLISHMENT.

ALL AREAS DISTURBED BY THE CONTRACTOR'S EQUIPMENT MUST BE RESTORED AS INDICATED ABOVE, OR AS DIRECTED BY THE OWNER AT THE CONTRACTOR'S EXPENSE.

UTILITIES

THE SUBSURFACE UTILITY INFORMATION IN THE PLAN IS UTILITY QUALITY LEVEL D. THIS UTILITY QUALITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF CI/ASCE 38-22, ENTITLED "STANDARD GUIDELINES FOR INVESTIGATING AND DOCUMENTING EXISTING UTILITIES."

THE FOLLOWING UTILITY OWNERS MAY HAVE EXISTING FACILITIES IN THE AREA OF CONSTRUCTION. THESE UTILITIES WILL NOT BE AFFECTED BY WORK UNDER THIS CONTRACT:

THE CONTRACTOR IS HEARBY REMINDED OF THEIR RESPONSIBILITIES UNDER STATE LAW TO CONTACT ALL UTILITIES THAT MAY HAVE FACILITIES IN THE AREA. THE CONTACT MUST BE MADE THROUGH GOPHER STATE-ONE-CALL.

ITEM NUMBER	ITEM DESCRIPTION	NOTES	UNIT	TOTAL ESTIMATED QUANTITY
2021.501	MOBILIZATION		LUMP SUM	1
2101.502	CLEARING	(P)	TREE	7
2101.505	CLEARING	(P)	ACRE	0.8
2104.503	REMOVE CHAIN LINK FENCE		LIN FT	861
2563.601	TRAFFIC CONTROL		LUMP SUM	1
2572.503	TEMPORARY FENCE		LIN FT	861
2573.503	SILT FENCE; TYPE HI		LIN FT	2019
2573.502	CULVERT END CONTROLS		EACH	1

(P) DENOTES PLAN QUANTITY ITEM

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NO.	REVISIONS	BY	APR.	DATE

DESIGNED	CHECKED
XXX	XXX
DRAWN	APPROVED
XXX	MRN
DATE	JOB NO.
1/16/2025	XXXX-XX

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.

PRELIMINARY NOT FOR CONSTRUCTION

LIC. NO. 52241

TYPED NAME JORDAN R HOREJSI DATE 1/16/2025

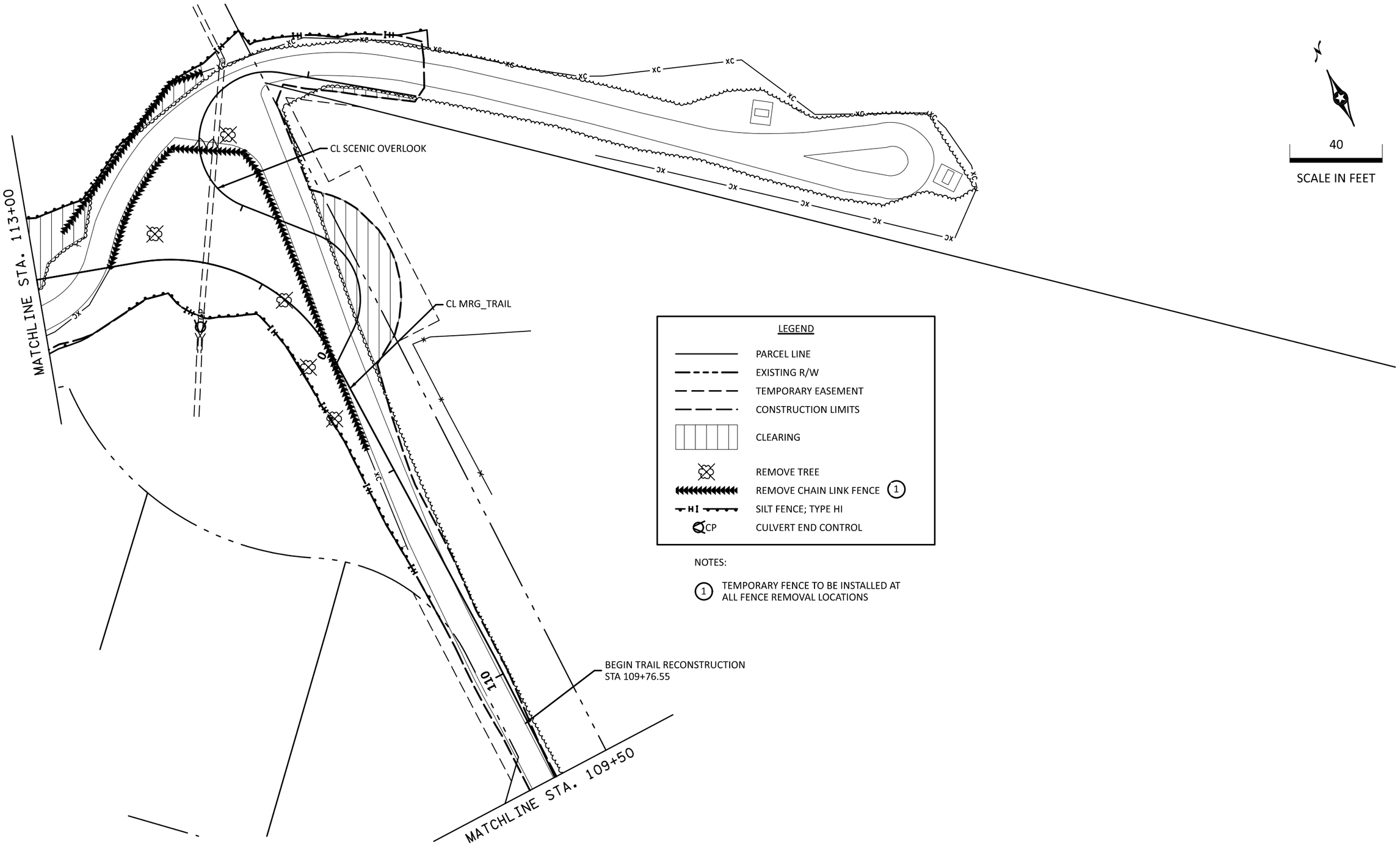
HRGreen
Building Communities. Improving Lives.
COURT INTERNATIONAL BUILDING
2550 UNIVERSITY AVENUE W., SUITE 400N
ST. PAUL, MINNESOTA 55114-1052
P: 651.644.4389 F: 651.644.9446

Dakota COUNTY

DAKOTA COUNTY

CONSTRUCTION NOTES AND ESTIMATED QUANTITIES
SHEET 1 OF 1

SHEET 2
OF 6



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NO.	REVISIONS	BY	APR.	DATE

DESIGNED	CHECKED
XXX	XXX
DRAWN	APPROVED
XXX	MRM
DATE	JOB NO.
1/16/2025	XXXX-XX

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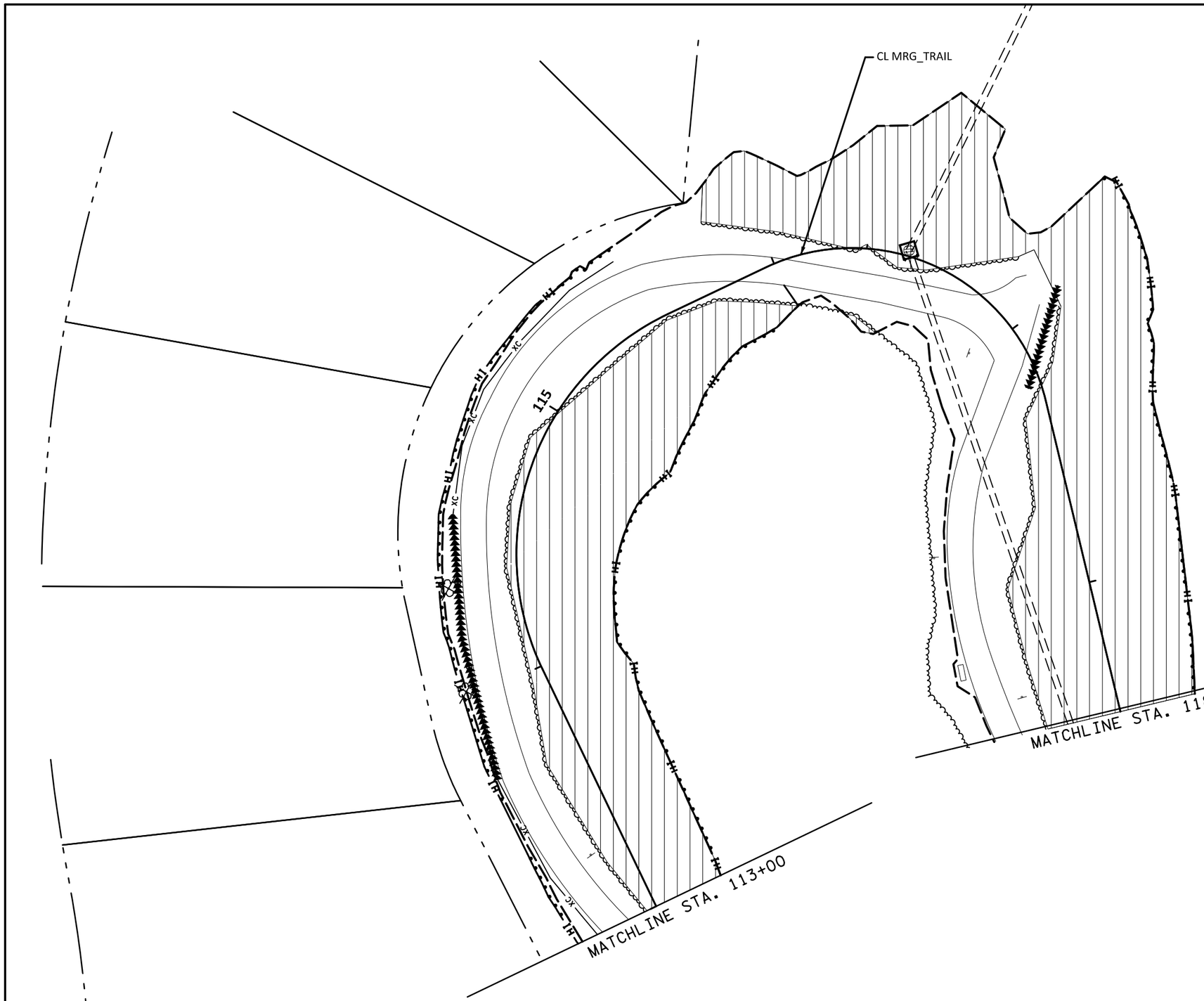
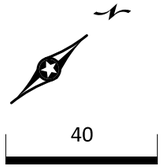
Dakota COUNTY

DAKOTA COUNTY

REMOVAL PLANS
SHEET 1 OF 3

SHEET 3
OF 6





LEGEND

- PARCEL LINE
- EXISTING R/W
- CONSTRUCTION LIMITS
- CLEARING
- REMOVE TREE
- REMOVE CHAIN LINK FENCE (1)
- HI SILT FENCE; TYPE HI
- STORM DRAIN INLET PROTECTION

NOTES:

(1) TEMPORARY FENCE TO BE INSTALLED AT ALL FENCE REMOVAL LOCATIONS

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DESIGNED	CHECKED
XXX	XXX
DRAWN	APPROVED
XXX	MRM
DATE	JOB NO.
1/16/2025	XXXX-XX

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Dakota COUNTY

DAKOTA COUNTY

REMOVAL PLANS
SHEET 2 OF 3

SHEET 4
OF 6

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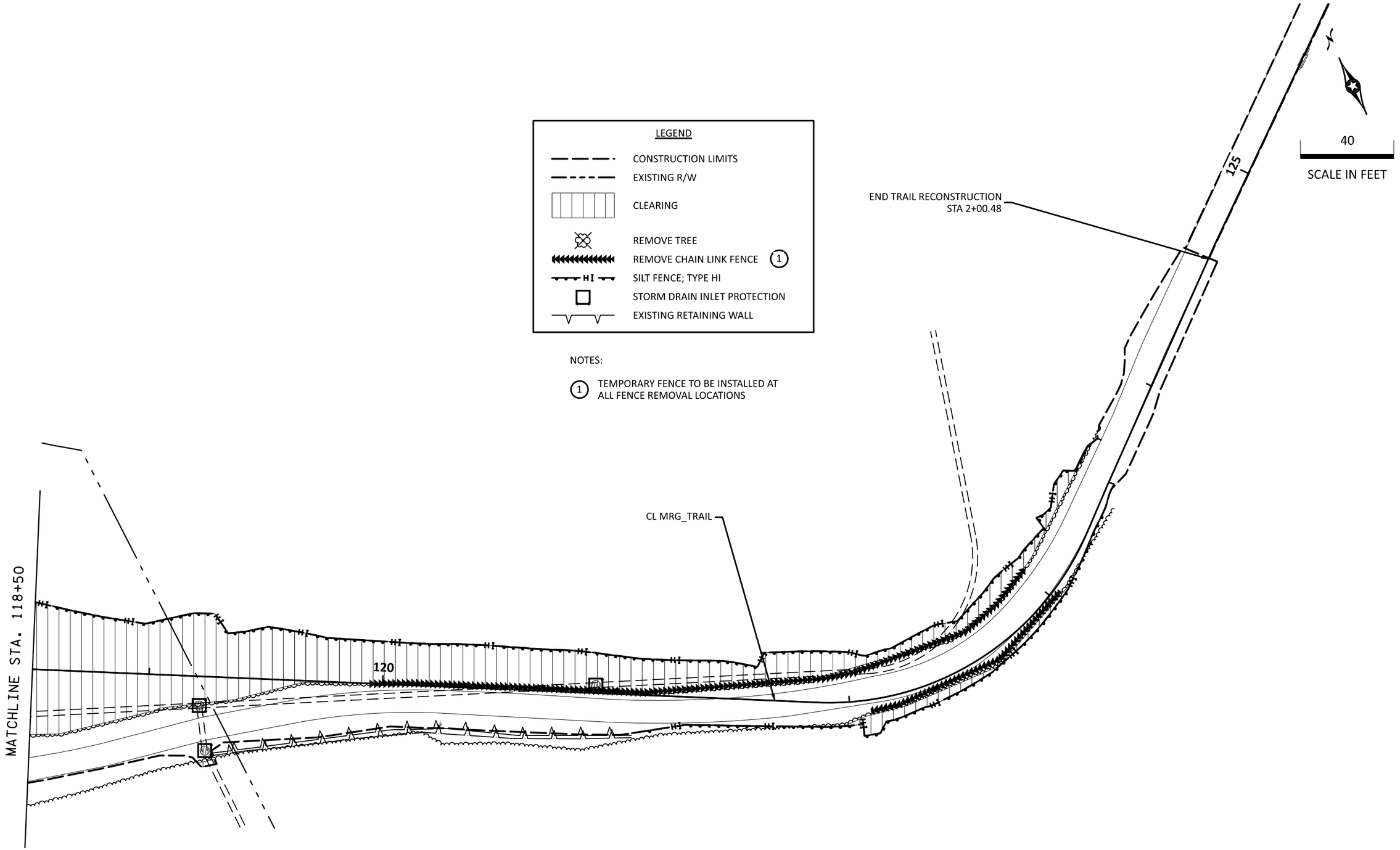
LEGEND

- CONSTRUCTION LIMITS
- EXISTING R/W
- CLEARING
- REMOVE TREE
- REMOVE CHAIN LINK FENCE (1)
- SILT FENCE; TYPE HI
- STORM DRAIN INLET PROTECTION
- EXISTING RETAINING WALL

NOTES:

(1) TEMPORARY FENCE TO BE INSTALLED AT ALL FENCE REMOVAL LOCATIONS



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DESIGNED	CHECKED
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DRAWN	APPROVED
XXX	MRN
DATE	JOB NO.
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Dakota COUNTY

DAKOTA COUNTY

REMOVAL PLANS
SHEET 3 OF 3

SHEET 5
OF 6

STORM WATER POLLUTION PREVENTION PLAN (SWPPP) NARRATIVE

PROJECT DESCRIPTION/LOCATION

THE MINNESOTA RIVER GREENWAY TRAIL IMPROVEMENT PROJECT IS LOCATED DIRECTLY BETWEEN THE U.S. LOCK AND DAM 2 ON THE MISSISSIPPI RIVER AND EAGLE BLUFF DRIVE IN THE NORTHWESTERN CORNER OF HASTINGS, MN.

THE PLANNED SCOPE OF THE PROJECT INCLUDES:

CLEARING TREES AND FENCE FOR FUTURE TRAIL IMPROVEMENTS, AS WELL AS PROVIDING EROSION CONTROL MEASURES.

RECEIVING WATERS

RECEIVING WATER	STA. OR R.P.	SPECIAL WATER	IMPAIRED WATER	TROUT	TMDL	INVASIVE
MISSISSIPPI RIVER (A) (B)			AQC, AQL, AQR & MORE		MULTIPLE	

(A)CONSTRUCTION RELATED IMPAIRMENT, (B) NON-CONSTRUCTION RELATED IMPAIRMENT.

THE RECEIVING WATERS LISTED IN THE TABLE ABOVE ARE LOCATED WITHIN ONE MILE (AERIAL RADIUS) OF THE PROJECT LIMITS AND RECEIVE RUNOFF FROM THE PROJECT SITE. THE IMPAIRED WATERS (LISTED IN TABLE ABOVE) ARE IMPAIRED FOR (A) CONSTRUCTION RELATED OR (B) NON-CONSTRUCTION RELATED IMPAIRMENTS. CONSTRUCTION RELATED IMPAIRMENTS MAY REQUIRE ADDITIONAL BMPS AS OUTLINED IN APPENDIX A OF THE NPDES PERMIT.

AREAS OF ENVIRONMENTAL SENSITIVITY (AES) AND INFESTED WATERS

IN ADDITION TO THE LIST OF SPECIAL AND IMPAIRED WATERS THE CONTRACTOR SHALL BE AWARE THAT THERE ARE WETLANDS WITHIN AND NEAR THE PROJECT BOUNDARY.

SOIL TYPES

SOIL TYPES TYPICALLY FOUND ON THIS PROJECT ARE SILTY SANDS AND CLAYEY SANDS.

LAND FEATURE CHANGES

TOTAL DISTURBED AREA	0.00 ACRES
TOTAL EXISTING IMPERVIOUS SURFACE AREA	1.32 ACRES
TOTAL PROPOSED IMPERVIOUS SURFACE AREA	1.32 ACRES
TOTAL PROPOSED NET CHANGE IN IMPERVIOUS SURFACE AREA	0.00 ACRES

ENVIRONMENTAL REVIEW

THERE ARE NO STORMWATER MITIGATION MEASURES REQUIRED AS A RESULT OF AN ENVIRONMENTAL, ARCHAEOLOGICAL OR AGENCY REVIEW. ALL MITIGATION MEASURES HAVE BEEN ADDRESSED IN THIS PLAN SET OR THE SPECIAL PROVISIONS.

THIS PROJECT IS LOCATED IN A WELL HEAD PROTECTION AREA.

PROJECT CONTACTS

THE PROJECT ENGINEER AND CONTRACTOR ARE RESPONSIBLE FOR IMPLEMENTATION OF THE SWPPP AND INSTALLATION, INSPECTION, AND MAINTENANCE OF THE EROSION PREVENTION AND SEDIMENT CONTROL BMPS BEFORE, DURING AND AFTER CONSTRUCTION UNTIL THE NOTICE OF TERMINATION HAS BEEN FILED.

ORGANIZATION	CONTACT NAME	PHONE
CITY OF HASTINGS	JOHN CAVEN	651-480-2369
DAKOTA COUNTY	MIKE ADAMS	651-554-6538

MPCA DUTY OFFICER 24 HOUR EMERGENCY NOTIFICATION:
651-649-5451 OR 800-422-0798

SITE MANAGEMENT, INSPECTION, AND MAINTENANCE

ACTIVITIES AS A PART OF THIS CONTRACT ARE LIMITED TO EROSION CONTROL PLACEMENT, FENCE REMOVAL, AND TREE CLEARING.
TREE CLEARING IS DEFINED AS THE REMOVAL OF ALL VEGETATION AT AND ABOVE 6" FROM THE GROUND SURFACE. BECAUSE CLEARING DOES NOT IMPACT THE SOIL ITSELF, NO CONSTRUCTION ACTIVITY MEETS THE DEFINITION OF "LAND DISTURBING".
FORMAL EROSION CONTROL AND STORMWATER MANAGEMENT PRACTICES ARE NOT REQUIRED BEYOND THE ITEMS INCLUDED IN THE PROJECT'S CONTRACT.

TO COMPLY WITH WATERSHED REGULATIONS AND POLICY, CLEARED TREES MUST NOT BE LAID HORIZONTALLY ALONG THE SIDE SLOPES. TREES MUST BE LAID DIRECTLY DOWNHILL, OR AT UP TO A 45 DEGREE ANGLE FROM DIRECTLY DOWNHILL, SO AS TO AVOID OBSTRUCTING, DIVERTING, OR CHANNELING THE NATRUAL PROCESS OF WATER MOVEMENT THROUGH THE LANDSCAPE.

NO ACTIVITY SHALL REMOVE VEGETATION LESS THAN 6" FROM THE GROUND SURFACE OR DISTURB SOILS.
SHOULD SOILS BE DISTURBED BY EQUIPMENT, THE SOILS SHALL BE FORMED BACK TO ITS PRIOR CONDITION AND SEEDED WITH OATS AT 100 LB/AC AND USING BONDED FIBER MATRIX AT 3,500 LB/AC USING MNDOT SPEC 2575 AT NO COST TO THE OWNER.

THE SEDIMENT CONTROL DEVICES SHALL BE PLACED AS IDENTIFIED IN THIS PLANSET AND AS NECESSARY TO MINIMZE EROSION AND CAPTURE SEDIMENT ON SITE. ALL EROSION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO COMMENCEMENT OF ANY REMOVAL WORK. PROTECT STORM SEWER AND CULVERT INLETS AS IDENTIFIED IN THESE PLANS WITH THE APROPPRIATE INLET PROTECTION DEVICE. INLET PROTECTION DEVICES WILL BE PAID FOR ONCE PER INLET REGARDLESS OF THE NUMBER OF TIMES THE BMP IS PLACED. KEEP ALL DEVICES IN GOOD FUNCTIONAL CONDITIONS AT ALL TIMES.

CONTRACTOR SHALL REGULARLY INSPECT, MAINTAIN, AND, IF NECESSARY, CLEAN OR REPLACE ANY BMPS WITH ACCUMULATED DEBRIS OR THAT HAS BEEN DAMAGED.

ALL TREE CLEARING ACTIVITY MUST BE COMPLETED PRIOR TO MARCH 31, 2025.

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NO.	REVISIONS	BY	APR.	DATE

DESIGNED XXX | CHECKED XXX
DRAWN XXX | APPROVED XXX
DATE 1/16/2025 | JOB NO. XXXX-XX

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PRELIMINARY NOT FOR CONSTRUCTION
LIC. NO. _____
TYPED NAME _____ DATE 1/16/2025

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Dakota COUNTY

DAKOTA COUNTY
SWPPP PLANS
SHEET 1 OF 1

SHEET 6
OF 6

EXHIBIT A6

MINNESOTA DEPARTMENT OF TRANSPORTATION

DAKOTA COUNTY

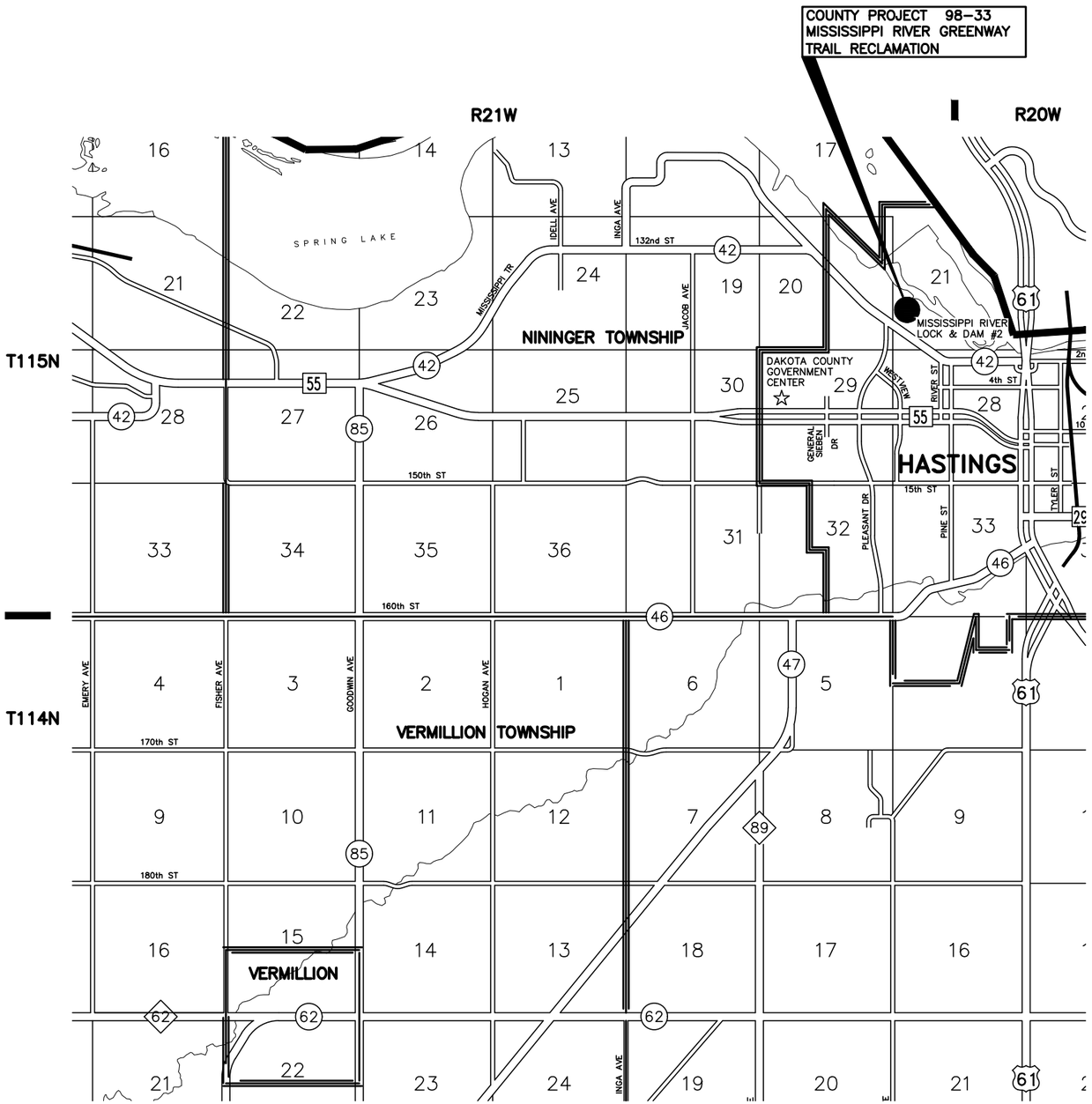
CONSTRUCTION PLAN FOR FULL DEPTH RECLAMATION, BITUMINOUS SURFACING

PLAN SYMBOLS

SECTION LINE
NEW RIGHT OF WAY LINE
RIGHT OF WAY LINE
BUILDING
MONUMENTS
SIGN–EXISTING
SIGN–NEW
BOX CULVERT
CULVERT
GUARDRAIL–PLATE BEAM
GUARD RAIL–CABLE
BARBED WIRE FENCE — BW
CHAIN LINK FENCE — CL
WOOD FENCE — WD
WOVEN WIRE FENCE — WW
HEDGE
WOODS

UTILITY SYMBOLS

POWER POLE
LIGHT POLE
GUY WIRE
UTILITY PEDESTAL
MANHOLE
CATCH BASIN
FIRE HYDRANT
GATE VALVE
OVERHEAD ELECTRIC CABLE — ELEC–OH
BURIED ELECTRIC CABLE — ELEC
CABLE TV — CATV
BURIED TELEPHONE CABLE — T–BUR
GAS LINE — G
SEWER (SANITARY) — SAN
SEWER (STORM)
WATER MAIN



CONSTRUCTION–PLAN 0 50 100

INDEX MAP– 0 2640 5280

SCALES IN FEET

GOVERNING SPECIFICATIONS

THE 2020 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" SHALL GOVERN.

ALL APPLICABLE FEDERAL, STATE AND LOCAL LAWS AND ORDINANCES WILL BE COMPLIED WITHIN THE CONSTRUCTION OF THIS PROJECT.

INDEX

SHEET NO.	1	TITLE SHEET & INDEX MAP
SHEET NO.	2	ESTIMATED QUANTITIES & DETAILS
SHEET NO.	3–4	CONSTRUCTION PLANS

THIS PLAN CONTAINS 4 SHEETS.

ALL TRAFFIC CONTROL DEVICES AND SIGNING SHALL CONFORM TO THE LATEST EDITION OF THE MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, INCLUDING THE LATEST EDITION OF THE "FIELD MANUAL FOR TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS."

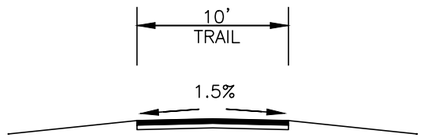
I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

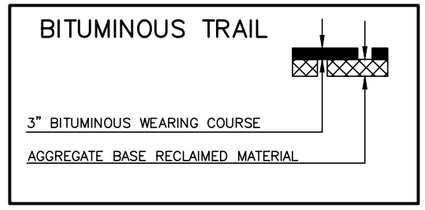
DATE_____ LIC. NO. 47581 _____
DESIGN ENGINEER

APPROVED _____ _____
DAKOTA COUNTY ENGINEER

ESTIMATED QUANTITIES				
NOTES	SPEC. NO.	ITEM	UNIT	98-33 HASTINGS DAM TRAIL MILL & OVERLAY
	2215.504	FULL DEPTH RECLAMATION	SQ. YD.	5562
	2360.509	TYPE SP 9.5 WEARING COURSE MIX (2,B)	TON	943
	2575.501	TURF ESTABLISHMENT	LUMP SUM	1

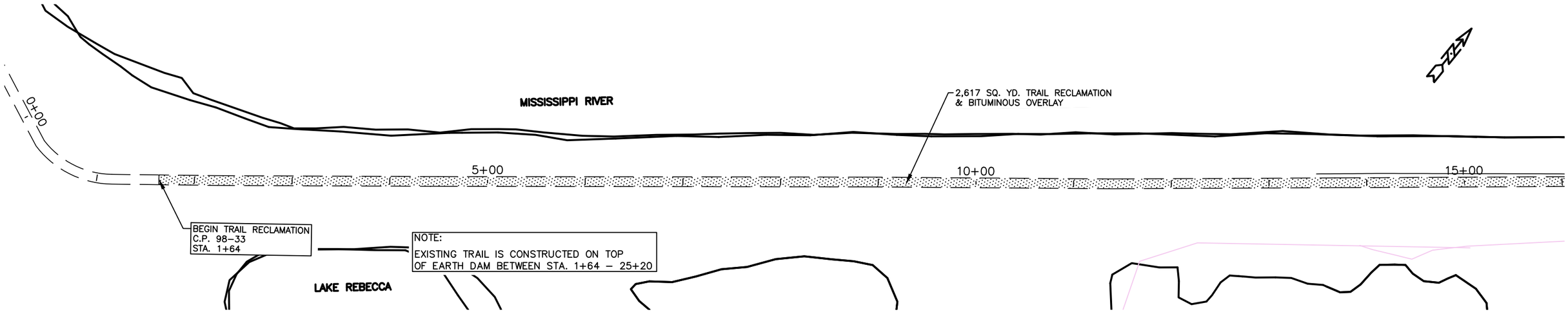
TYPICAL SECTION

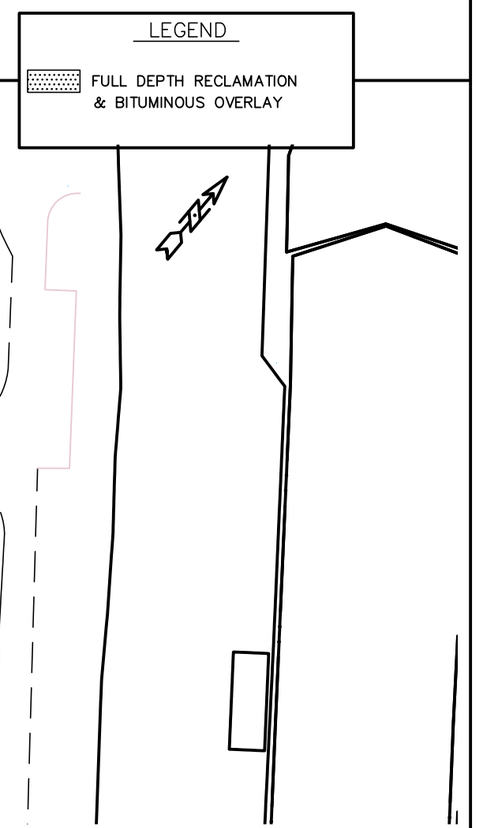




BASIS FOR ESTIMATED QUANTITIES

BITUMINOUS MIXTURE:
WEARING COURSE MIXTURE– 113 LBS. /(SY*IN)





CONSTRUCTION PLAN

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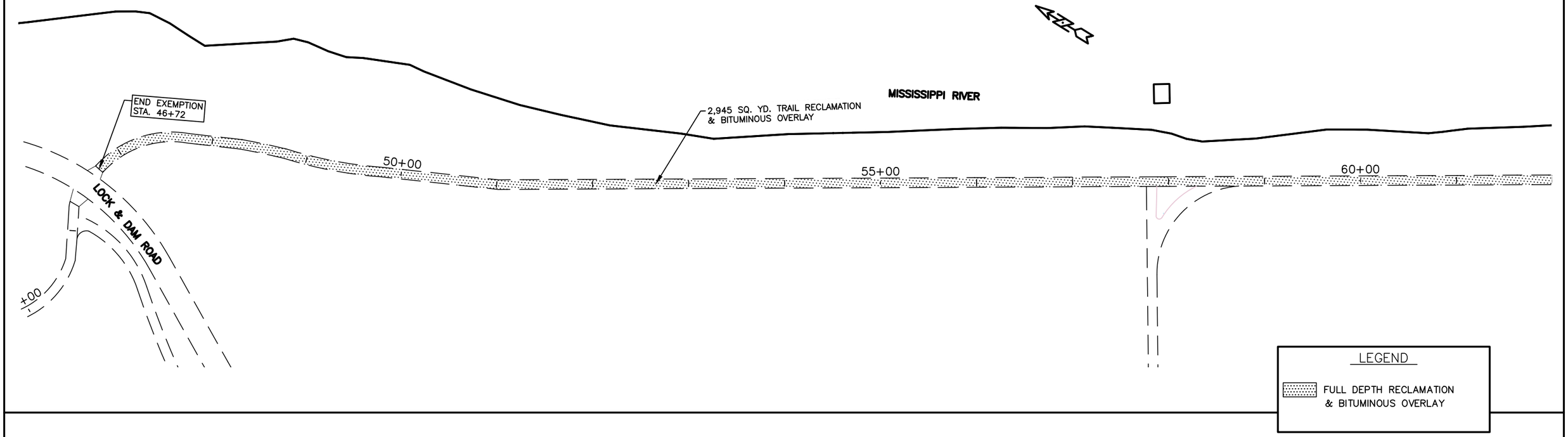
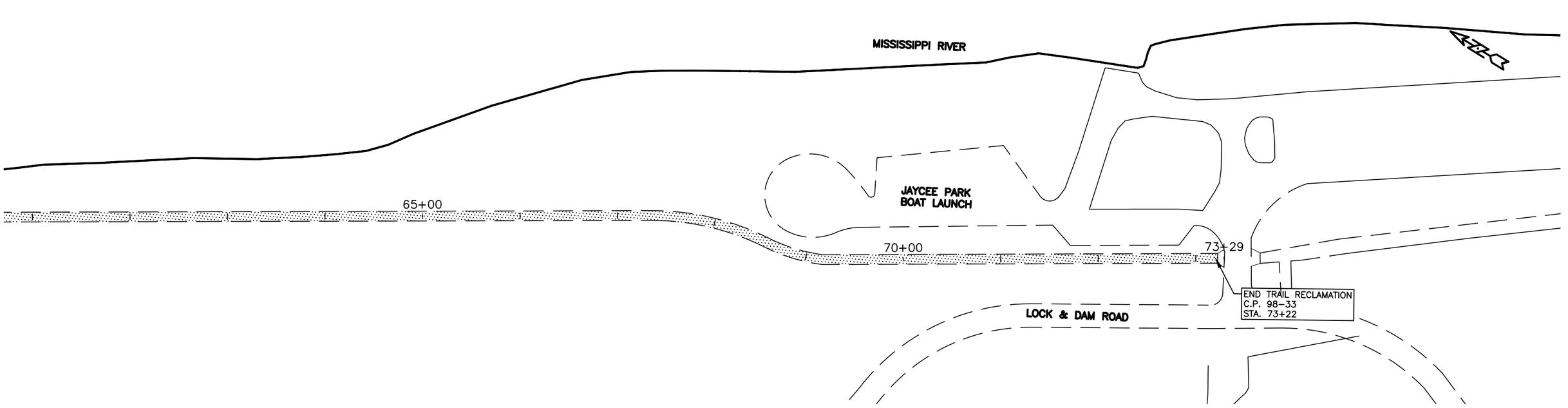
CERTIFIED BY _____ LIC. NO. 47581 _____

DAKOTA COUNTY, MN. PROJECT NO. 98-33 MISSISSIPPI RIVER GREENWAY SHEET 3 OF 4 SHEETS





CONSTRUCTION PLAN

0 50 100

CERTIFIED BY _____ LIC. NO. 47581 _____

DAKOTA COUNTY, MN. PROJECT NO. 98-33 MISSISSIPPI RIVER GREENWAY SHEET 4 OF 4 SHEETS

Exhibit A7

MEMO

To:	Justin Fortney, City Planner
From:	Jordan Horejsi, P.E.
Subject:	Engineer's Statement Regarding Retaining Walls
Project Number:	2202947
Date:	May 28, 2025

The MRCCA Land Alteration Permit Application requires the following:

For retaining walls and rip rap exceeding these design standards, submit design drawings and a statement by a professional engineer testifying that a larger structure is needed to correct the erosion problem.

Please see the Statement from Jordan Horejsi, P.E. (52241) below:

The proposed retaining wall is a maximum of 7 feet in height. This larger structure will limit the grading required for the MRG improvements, preserve the existing retaining wall, and allow for ADA compliant trail to be constructed. See Sheet 15 in the Exhibit A4 100% Plans.

The change in trail elevation is 8 feet in the lower tangent portion of the trail and affected the alignment of the trail adjacent to the existing retaining wall. Keeping the trail on the same alignment with the lowered elevation would require removal of the existing wall and then construction of a 20-foot-tall retaining wall in its same location.

By shifting the trail away from the existing retaining wall, the proposed wall can be constructed in front (north) of the existing retaining wall. The new wall will be 7 feet at its tallest point, giving a tiered wall aesthetic with approximately 15 feet of vegetation between the walls. Reconstructing a 20-foot-tall high wall would have had significant impact to the cost of the project and would have had impacts to vegetation behind the wall for grading and construction.

The height of the new wall is necessitated by the offset from the existing retaining wall and the elevation of the proposed trail. To keep separation between the existing and proposed retaining wall greater than 10 feet and to keep the slope between the walls at 1:6 or flatter, the wall height is 7 feet for portions of the wall. Slopes steeper than 1:6 between the walls are not desired in order to mitigate erosion and provide support for the existing wall foundation. Reducing the proposed wall height would require raising the trail profile which would push the longitudinal slope above 5% or would require pushing the alignment of the trail farther from the existing wall which has large impacts. Moving the trail even farther from the existing retaining wall would increase tree removal, increase the land alteration footprint and put more hard surface trail on the existing greater than 30% slope. The proposed alignment, trail elevation, wall alignment, and slope between the walls balances the constraints due to the surrounding topography and keeps the wall height as close to the maximum 5 feet height as possible.

Additionally, the trail alignment benefits from shifting away from the existing alignment by providing space for a compliant horizontal curve without pushing the higher segment of the trail into private property and impacting the existing water quality basin.

Jordan Horejsi, P.E.

EXHIBIT B1

Previous Submittal Sent
January 2025

Mississippi River Corridor Critical Area (MRCCA) – Vegetation Clearing Permit Application

Directions. Within the MRCCA, all intensive vegetation clearing in Primary Conservation Areas (PCAs) requires a vegetation clearing permit and restoration plan. A complete permit application is needed to evaluate compliance with the city of Hastings' vegetation clearing standards. Please review the Property Owner Guidance for Vegetation Clearing Permits before completing this application.

Applicant Information

Property Owner: Dakota County; Mike Adams, Greenways Senior Project Manager	Contractor/Agent: Ted McCaslin (HR Green)
Mailing Address: 14955 Galaxie Ave; Apple Valley, MN 55124	Mailing Address: 2550 University Ave. Suite 400N, St. Paul, MN, 55104
Phone: 651-5546538	Phone: 651-659-7708
Email: Mike.Adams@co.dakota.mn.us	Email: tmccaslin@hrgreen.com

Site information

Site Address: N/A
Parcel #: 196390000030, 190200077011, 196390002170, 196390002160, 196390002150, 196390002140, 196390002130, 196390002120, 196390002110, 196390002100

1. Identify the Primary Conservation Areas (PCAs) in which intensive vegetation clearing is proposed. View the DNR's online PCA mapper to determine if your proposed clearing activity will occur in any of these PCAs (check all that apply). If none, do not complete this application.

   ☒ Shore impact zone
   ☒ Areas within 50 feet of a wetland or natural drainage route
   ☒ Bluff impact zone
   ☒ Areas containing native plant communities
   ☒ Significant existing vegetative stands

2. Identify the purpose(s) of the proposed intensive vegetation clearing (check all that apply):

   ☐ Clearing of vegetation that is dead, diseased, dying, or hazardous
   ☐ Clearing to prevent the spread of diseases or insect pests
   ☐ Clearing to remove invasive non-native species
   ☐ Clearing to prepare for restoration and erosion control management activities consistent with a plan approved by the City of Hastings.
   ☒ The minimum clearing necessary for development allowed with a building permit or allowed as an exemption under Section 12 of Chapter section 152A, of the city of Hastings.

Note: All other intensive vegetation clearing within PCAs is prohibited.

3. Explain how the proposed clearing is the minimum necessary and designed to blend with the natural terrain and minimize visual impacts to public river corridor views and other scenic views. If the clearing is required for development allowed with a permit, also explain how the project was located to minimize the removal or disturbance of natural vegetation: Click or tap here to enter text.

   The proposed tree clearing and grading will accommodate Americans with Disabilities Act (ADA) – compliant improvements to a reconstructed segment of the Mississippi River Greenway trail (MRG), improve trail safety and maintenance, and improve overall native vegetative cover within the project area.

   The project includes improvements to 7,794 linear feet of the MRG. The improvements include pavement rehabilitations through mill and overall or full depth reclamation construction within the existing trail alignment and width. However, reconstruction and vegetative clearing will occur along 1,621 linear feet of the existing trail, the reconstruction area, including areas within the Bluff Impact Zone.

   Overall, the reconstruction area will disturb 2.35 acres of vegetation, mostly through excavation to lessen the trail slope to the MRG alignment on top of the dam at Lock and Dam #2. The reconstruction area construction will result in the reduction in the overall trail length by 317 feet through alignment changes and demolition trail in a little-used overlook area. The overlook trail paved area will be converted to native vegetation.

   The project minimizes the disturbance area while meeting project goals. An existing retaining wall will remain in place and a separate retaining wall below it will limit excavation required in the area adjacent to the existing trail. Additionally, protective wildlife-passable fence will be used to protect trail users from steep drop-off at the trail's edge as opposed to grading adjacent slopes.

   Visual impacts to the river corridor will be minimized through minimizing tree clearing below the bluff line. Project excavation will reduce the overall profile and limit views from the river of clearing.

4. Describe (and attach photo of) the vegetation being removed (ground cover, understory, tree), and names of plants, if known:

   Vegetation being removed includes maintained grass adjacent to the existing trail; planted spruce, pine and oak trees; naturalized woody vegetation including eastern red cedar, Siberian elm, riverbank grape, and common buckthorn; planted switchgrass and smooth brome in unmaintained grassy areas; and small areas of native vegetation including silver maple, red oak, bur oak and basswood. See attached photos.

5. Explain how vegetation removal activities will be conducted or phased in order to expose the smallest area of soil to erosion for the least possible time:

   The initial project action is to cut trees prior to April 1, 2025 to limit potential impacts to protected bats and maintain a project a construction schedule during the bat presence season (roughly April 1 – October 31). The initial tree clearing will cut trees, but no grubbing of roots ground disturbance will occur outside of equipment movement. Any disturbance will be stabilized

by temporary turf establishment and placement of wood chips on disturbed areas. While not required for tree cutting, silt fence and storm drain inlet protection will occur prior to the tree clearing. See attached removal plans. A more detailed stormwater pollution prevention plan and vegetation restoration will occur as part of the final design of the project.

6. Identify the restoration priority areas on your property (check all that apply and show on submitted aerial photo or site plan):

   ☐ Areas with soils showing signs of erosion, especially on or near the top and bottom of steep slopes and bluffs
   ☐ Shoreline areas within 25 of the water with no natural vegetation, degraded vegetation, or planted with turf grass.
   ☐ Areas on steep slopes and bluffs that are visible from the river with no natural vegetation, degraded vegetation, or planted with turf grass.
   ☒ None of the above exist. The following restoration opportunity area is proposed instead: **See restoration plan details below.**

Restoration Plan Performance Standards. All activities requiring a vegetation clearing permit require a planting plan that must meet the following standards:

- Restored vegetation is planted in one or more of the restoration priority areas or opportunity areas identified under #6.
- Restored vegetation provides suitable habitat, and effective soil stability, runoff retention, and infiltration capability to address concerns specific to the priority or opportunity area.
- If any highly erodible soils are disturbed during removal and/or restoration, they are stabilized by deep-rooted vegetation with a high stem density.
- The area (sq. ft.) of the restored vegetation is similar to that removed to the greatest extent practicable.
- For **restoration of removed native plant communities** (identified under #1), restored vegetation must also provide biological and ecological function equivalent to the removed native plant communities. Vegetation species, composition, density, and diversity must be guided by nearby patches of native plant communities. The area (sq. ft.) of the restored vegetation should be equivalent to that removed.

Submittal Requirements. Submit all of the following along with this application form:

☒ An aerial photo and/or site plan showing:
   ✓ Property boundaries
   ✓ Location and label of existing PCAs identified under #1
   ✓ The location and area (sq. ft.) of the vegetation proposed to be cleared within identified PCAs
   ✓ Location and area (sq. ft.) of the restored vegetation in the priority areas identified under #6

See attached

☒ Photos of the vegetation proposed for removal.

See attached

☒ A planting plan(s) for the identified restoration priority area(s) showing the location, type (ground cover, understory, tree), and name of proposed plants. A plant list with codes referencing plants shown on the plan is suggested for complex plans. Property owners may complete their own planting plan, provided the submitted plan meets the relevant performance standards. If the plan

does not meet the standards, a qualified landscape professional recognized by the city of Hastings will be needed.

A restoration and planting plan will be developed as the project advances to final design. While the precise location, soil preparation, seeding rates, and tree and shrub mixes are still in development some details consistent with Dakota County's Greenway Design Guidelines and Natural Resources Management Plan are known and will be implemented to ensure the project meets the restoration plan performance standards described in this application.

At a minimum:

- **Disturbed soils will be stabilized and prepared for native seed and planting restoration.**
- **Restoration areas will provide suitable habitat, runoff retention, and infiltration capacity.**
- **The area of restored native vegetation will exceed the area of disturbed vegetation. This will be accomplished from native vegetation restoration over approximately x feet/acres of demolition of the existing overlook trail loop and overall shortening of the MRG trail in the remaining reconstruction area.**
- **Disturbed areas will be reseeded with a two-foot wide buffer of a low-grow fescue mix on both sides of the new trail alignment. Other areas will be stabilized with temporary seeding as appropriate and permanently seeded with an upland prairie mix or shady woodland mix.**
- **Restored tree and shrub areas will be planted using the following native species. Many of which were observed within clear areas and nearby in more robust native forest areas.**

Canopy Trees & Understory Trees	
Quercus alba	White oak
Quercus macrocarpa	Bur oak
Quercus rubra	Northern red oak
Ulmus americana	American elm
Understory Trees	
Ostrya virginiana	Ironwood
Prunus serotina	Black cherry
Tilia americana	Basswood
Shrubs	
Amelanchier interior	Juneberry
Amelanchier laevis	Allegheny serviceberry
Cornus alternifolia	Pagoda dogwood
Cornus racemosa	Gray dogwood
Corylus americana	American hazelnut
Diervilla lonicera	Bush honeysuckle
Prunus virginiana	Chokecherry
Rosa arkansana	Prairie rose
Rosa blanda	Smooth wild rose
Sambucus racemosa	Red-berried Elder
Symphoricarpos alba	Snowberry
Viburnum lentago	Nannyberry

For **large, complex projects**, also provide: ***These items to be provided with final design submittal***

☒ Planting plan completed by a qualified person as defined by the city of Hastings

☒ Scaled plans, surveys, and drawings.

☒ A three-year maintenance plan that includes provisions for controlling invasive species and plant replacement.

For **restoration of native plant communities**, also provide:

☒ Identification of the type and location of nearby native plant communities used to guide restoration.

Nearby plant communities are generalized into four plant communities:

- **Maintained turfgrass comprised of fescues, bluegrass, and common lawn weeds.**
- **Open unmaintained grassland comprised of smooth brome, native switchgrass (likely planted after the existing trail construction), and interspersed with young cedar and other adventive woody species and several planted oak and evergreen species.**
- **Native woods primarily located below the bluff line and adjacent to the Mississippi River comprised of oak species (red, white, and bur observed), basswood, ironwood, native elms**
- **Disturbed woods primarily located inside of the trails hairpin turn and above the bluff line comprised of mostly of Siberian elm, buckthorn and cedar but with interspersed native red oak, bur oak, basswood, and ironwood. Disturbed woods are mainly in current forested areas shown as disturbed and treeless in this 1957 aerial photo comparison.**

1957 Aerial Imagery with forested area outlined

1957 Historic Forested area shown on current aerial imagery

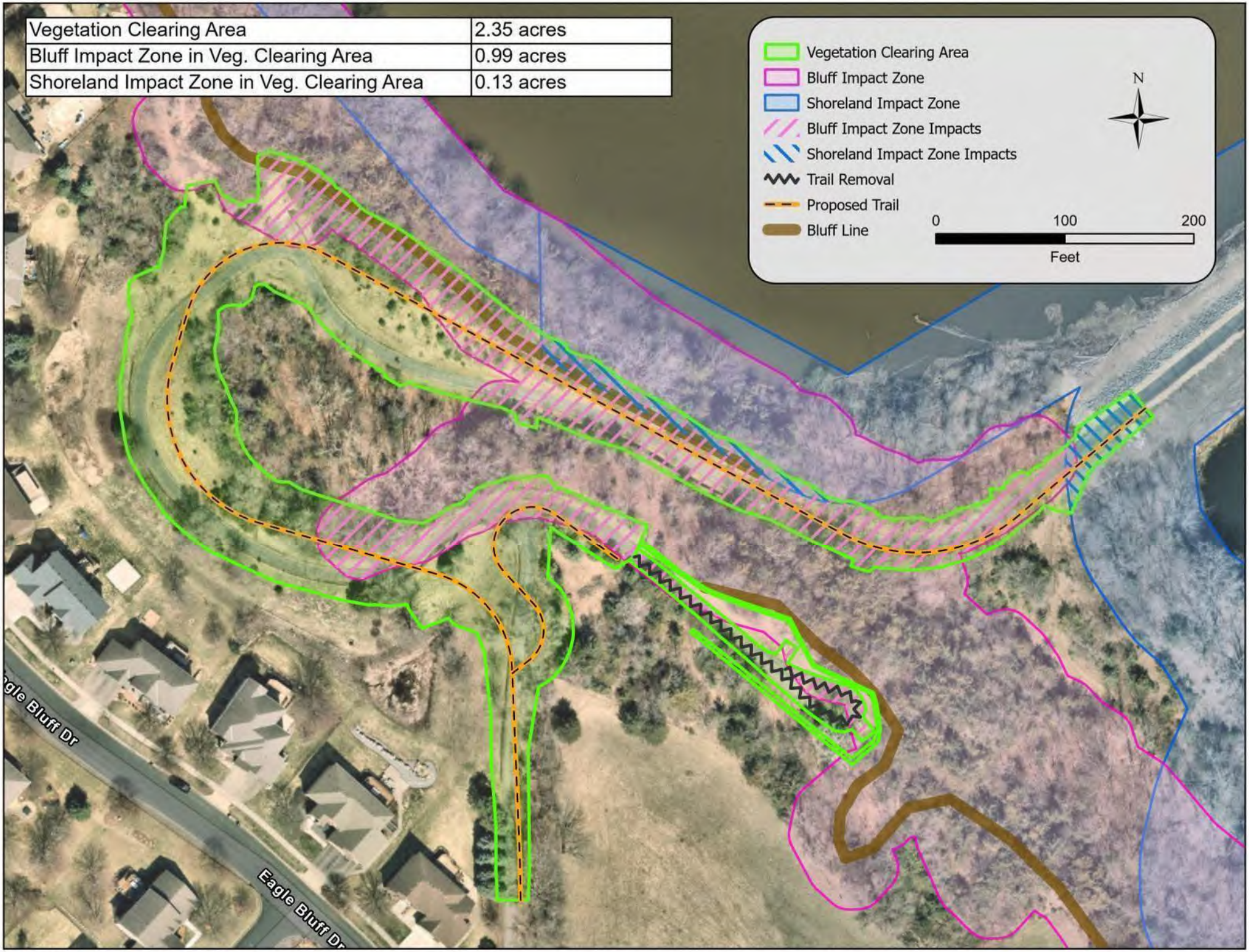
Signatures

I certify that the information contained in this application is true and correct to the best of my knowledge. I grant the city of Hastings officials permission to enter the subject property for inspection of the vegetation removal and restoration sites during normal business hours until three years from the date of the certificate of completion. This is to insure adherence to the maintenance conditions of the permit. I understand failure to conform to approved plans and conditions or to comply with lawful directives to abate violations arising from work undertaken contrary to this permit may be cause for future enforcement actions to remedy said violations.

Property owner signature: _____ Date: Click or tap to enter a date.

Contractor signature (if applicable): _____ Date: Click or tap to enter a date.

Project Area	Work Type	Area of Imact
CSAH 42 to Reconstruction Area	Mill and Overlay	0.50 acres
Trail Reconstruction Area	Reconstruction, Realignment and Old Trail Removal	2.35 acres
Dam	Full Depth Reclamation	1.20 acres
River Flats Park	Full Depth Reclamation	0.79 acres


Vegetation Clearing Area 2.35 acres
Bluff Impact Zone in Veg. Clearing Area 0.99 acres
Shoreland Impact Zone in Veg. Clearing Area 0.13 acres
Vegetation Clearing Area
Bluff Impact Zone
Shoreland Impact Zone
Bluff Impact Zone Impacts
Shoreland Impact Zone Impacts
Trail Removal
Proposed Trail
Bluff Line
N
0
100
200
Feet
Eagle Bluff Dr
Eagle Bluff Dr

MRG Trail – Vegetation Clearing Photos

Photo 1- South facing, trees adjacent to existing trail and fence in western extent of existing trail

Photo 2- East facing, narrow teardrop shape of vegetation to be removed with trail demolition in existing lookout loop

MRG Trail – Vegetation Clearing Photos

Photo 3- East facing, vegetation located north of existing trail along steep portion. Narrow band of vegetation to be cleared on north (left) side of fence.

Photo 4- North facing, Smooth sumac vegetation located north of fence and trail near intersection to overlook

MRG Trail – Vegetation Clearing Photos

Photo 5- West facing, cedar dominant woody vegetation located north of trail before hairpin turn

Photo 6- East facing, existing trail and woody vegetation located north of trail. Retaining wall to remain.

MRG Trail – Vegetation Clearing Photos

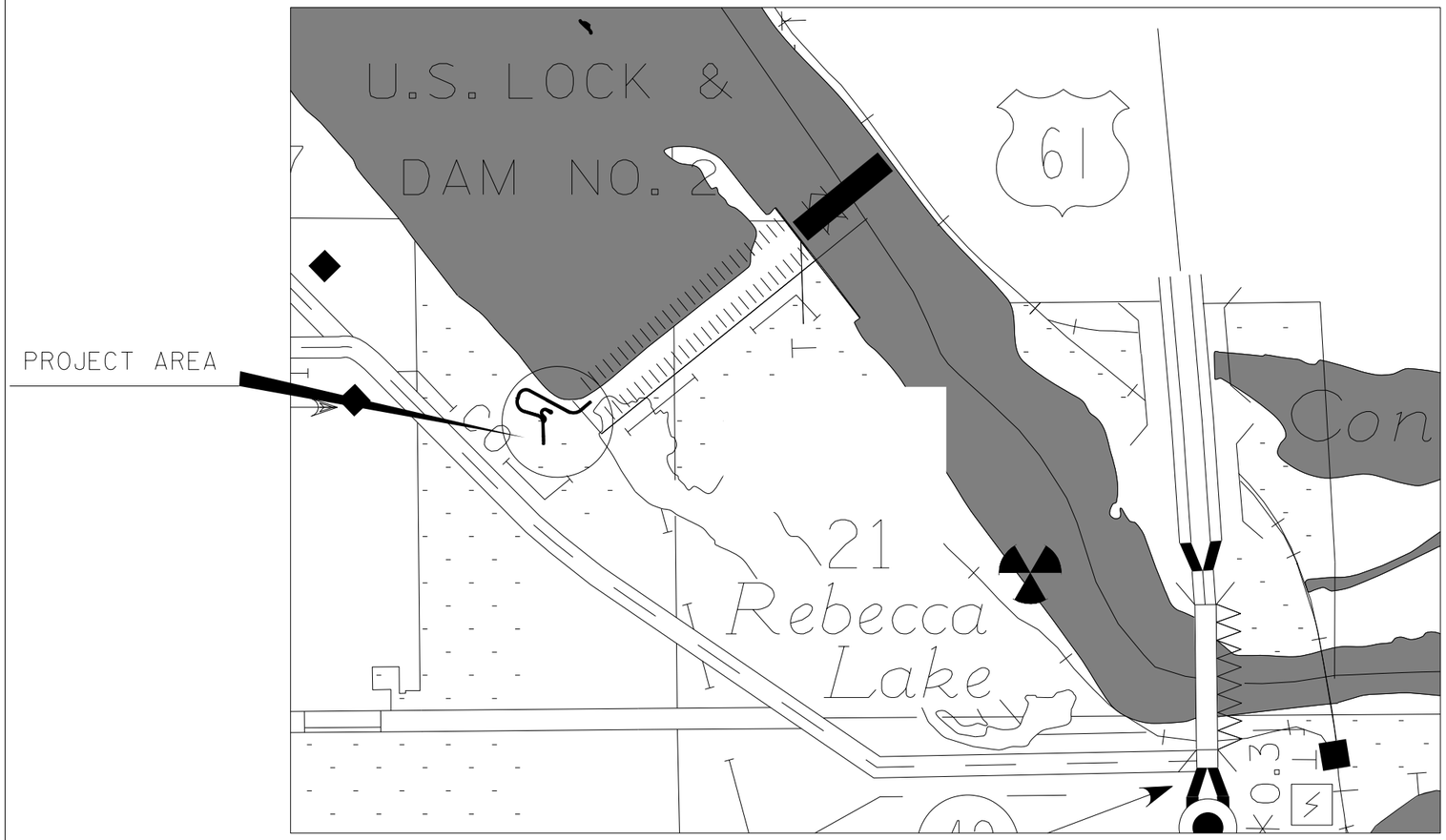
Photo 7- South facing, grass and small woody vegetation located west of existing trail with development in background

Photo 8- West facing from drone, existing trail and surrounding vegetation

DAKOTA COUNTY

CONSTRUCTION PLAN FOR TREE CLEARING AND FENCE REMOVAL

LOCATED ON MINNESOTA RIVER GREENWAY TRAIL 0.3 MILES NORTH WEST OF COUNTY RD 42 AND PLEASANT DR



SCALES

INDEX MAP 1500'

PLAN 40

PROJECT LOCATION

COUNTY : DAKOTA

PLAN REVISIONS		
DATE	SHEET NO.	APPROVED BY

GOVERNING SPECIFICATIONS

THE 2020 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION 'STANDARD SPECIFICATIONS FOR CONSTRUCTION' SHALL GOVERN.

INDEX

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	CONSTRUCTION NOTES & ESTIMATED QUANTITIES
3-5	REMOVAL PLANS
6	SWPPP PLANS & WATER RESOURCES NOTES

THIS PLAN CONTAINS 6 SHEETS

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

PRINT NAME: JORDAN R HOREJSI LICENSE # 52241

SIGNATURE: PRELIMINARY DATE: 1/16/2025

DESIGN SQUAD GABRIEL FROMM, BRETT JOHNSON
KENDAL RUSTEN

HRGreen
COURT INTERNATIONAL BUILDING
2550 UNIVERSITY AVENUE W., SUITE 400N
ST. PAUL, MINNESOTA 55114-2015
P: 651.644.4389 F: 713.965.0044

APPROVED _____ 20____
CITY OF -

APPROVED _____ 20____
DAKOTA COUNTY ENGINEER

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CONSTRUCTION NOTES:

PERPETUATE DRAINAGE ON ALL AREAS DISTURBED BY CONSTRUCTION (INCIDENTAL).

ALL MATERIAL NOT UTILIZED ON THIS PROJECT SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND DISPOSED OF OFF THE R/W IN ACCORDANCE WITH SPEC 2104.

SURVEYS AND RIGHT OF WAY

THE CONTRACTOR SHALL PRESERVE ALL LAND, AND PROPERTY CORNERS, VERTICAL AND HORIZONTAL CONTROLS, AND RIGHT OF WAY MONUMENTS.

FENCE REMOVAL

THE CONTRACTOR SHALL REMOVE EXISTING 5' CHAIN FENCE ONLY AS NECESSARY TO PERFORM CLEARING OPERATIONS. EXISTING POSTS SHALL REMAIN IN PLACE AND BE USED FOR TEMPORARY FENCE INSTALLATION

TEMPORARY FENCE SHALL EITHER BE EXSISTING FENCE THAT IS SALVAGED AND INSTALLED BY REATTATCHING CHAIN LINK TO EXISTING POSTS OR BE ORANGE CONSTRUCTION FENCING THAT IS ATTATCHED TO EXISTING POSTS AND TO REMAIN IN PLACE UNTIL CONSTRUCTION ACTIVITIES IN THE FALL OF 2025. TEMPORARY FENCE INCLUDES HARDWARE FOR ATTATCHING TO EXISTING POSTS, CONNECTING FENCE SECTIONS TOGETHER, AND REINFORCEMENT POSTS AS DIRECTED BY THE ENGINEER

REMOVED CHAIN FENCE SHALL BE REPLACED BY TEMPORARY FENCE IN ACCORDANCE WITH MNDOT SPEC 2572

CLEARING

THE CONTRACTOR SHALL PERFORM CLEARING WHERE INDICATED IN THE REMOVAL PLANS. GRUBBING AND ROOT CUTTING WILL BE PERFORMED AT A LATER DATE BY OTHERS.

ALL CLEARED TREES AND DEBRIS MUST BE MOVED SO THAT NO TREE CLEARING MATERIALS ARE WITHIN 5' OF EXISTING TRAIL EDGE

TRAFFIC CONTROL

THE CONTRACTOR SHALL CLOSE THE TRAIL DURING CLEARING OPERATIONS IN ACCORDANCE WITH MNDOT SPEC 2563 S-271. PLACE ADVANCED WARNING SIGNS 3 DAYS PRIOR TO CLEARING ACTIVITIES.

TEMPORARY TURF ESTABLISHMENT

ALL AREAS DISTURBED BY CONSTRUCTION WILL REQUIRE TURF ESTABLISHMENT.

ALL AREAS DISTURBED BY THE CONTRACTOR'S EQUIPMENT MUST BE RESTORED AS INDICATED ABOVE, OR AS DIRECTED BY THE OWNER AT THE CONTRACTOR'S EXPENSE.

UTILITIES

THE SUBSURFACE UTILITY INFORMATION IN THE PLAN IS UTILITY QUALITY LEVEL D. THIS UTILITY QUALITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF CI/ASCE 38-22, ENTITLED "STANDARD GUIDELINES FOR INVESTIGATING AND DOCUMENTING EXISTING UTILITIES."

THE FOLLOWING UTILITY OWNERS MAY HAVE EXISTING FACILITIES IN THE AREA OF CONSTRUCTION. THESE UTILITIES WILL NOT BE AFFECTED BY WORK UNDER THIS CONTRACT:

THE CONTRACTOR IS HEARBY REMINDED OF THEIR RESPONSIBILITIES UNDER STATE LAW TO CONTACT ALL UTILITIES THAT MAY HAVE FACILITIES IN THE AREA. THE CONTACT MUST BE MADE THROUGH GOPHER STATE-ONE-CALL.

ITEM NUMBER	ITEM DESCRIPTION	NOTES	UNIT	TOTAL ESTIMATED QUANTITY
2021.501	MOBILIZATION		LUMP SUM	1
2101.502	CLEARING	(P)	TREE	7
2101.505	CLEARING	(P)	ACRE	0.8
2104.503	REMOVE CHAIN LINK FENCE		LIN FT	861
2563.601	TRAFFIC CONTROL		LUMP SUM	1
2572.503	TEMPORARY FENCE		LIN FT	861
2573.503	SILT FENCE; TYPE HI		LIN FT	2019
2573.502	CULVERT END CONTROLS		EACH	1

(P) DENOTES PLAN QUANTITY ITEM

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Last Saved: 1/16/2025

NO.	REVISIONS	BY	APR.	DATE

DESIGNED XXX | CHECKED XXX
DRAWN XXX | APPROVED MRN
DATE 1/16/2025 | JOB NO. XXXX-XX

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.
PRELIMINARY NOT FOR CONSTRUCTION
TYPED NAME JORDAN R HOREJSI LIC. NO. 52241 DATE 1/16/2025

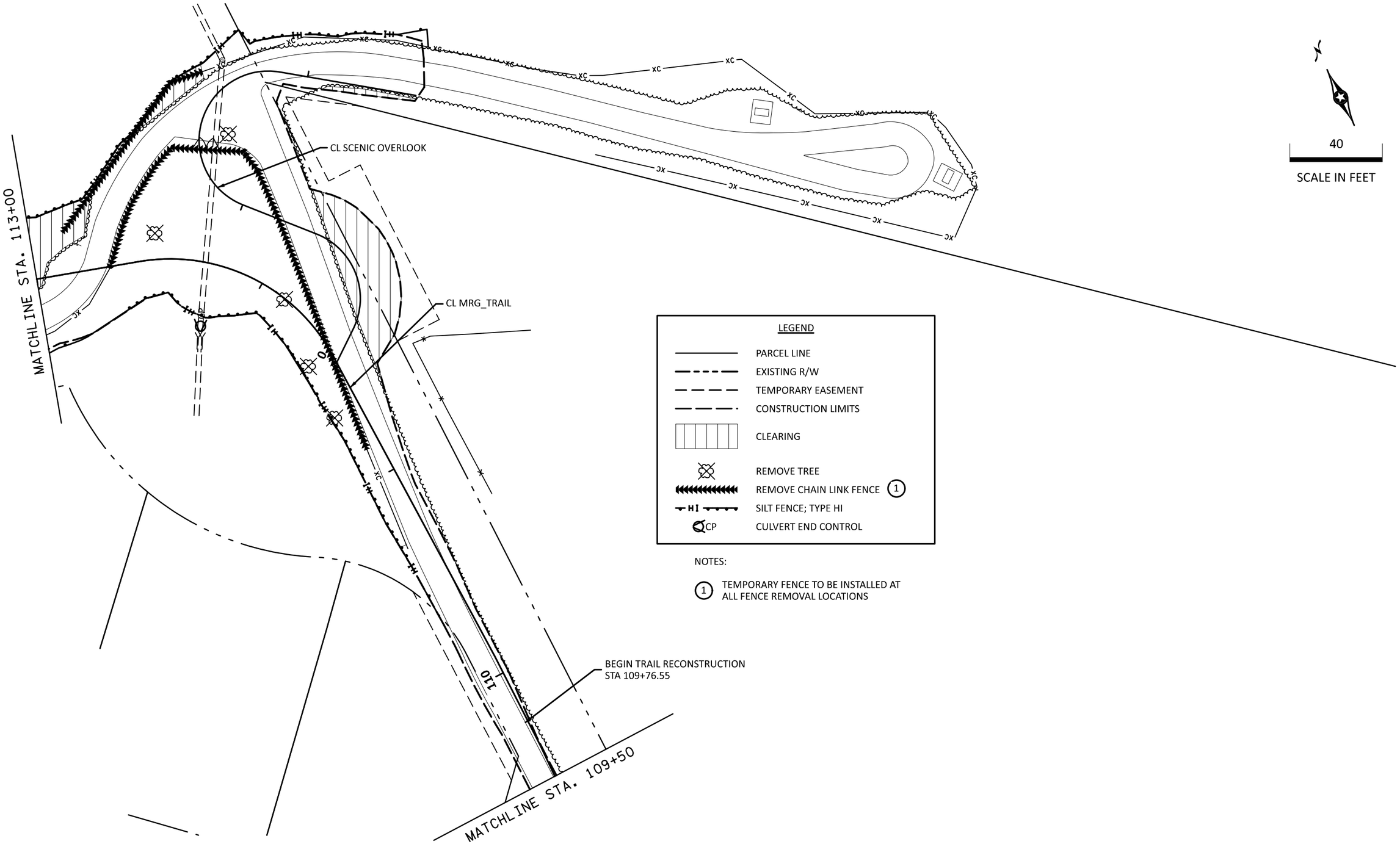
HRGreen
Building Communities. Improving Lives.
COURT INTERNATIONAL BUILDING
2550 UNIVERSITY AVENUE W., SUITE 400N
ST. PAUL, MINNESOTA 55114-1052
P: 651.644.4389 F: 651.644.9446

Dakota COUNTY

DAKOTA COUNTY

CONSTRUCTION NOTES AND ESTIMATED QUANTITIES
SHEET 1 OF 1

SHEET 2
OF 6



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NO.	REVISIONS	BY	APR.	DATE

DESIGNED: XXX | CHECKED: XXX
DRAWN: XXX | APPROVED: MRN
DATE: 1/16/2025 | JOB NO.: XXXX-XX

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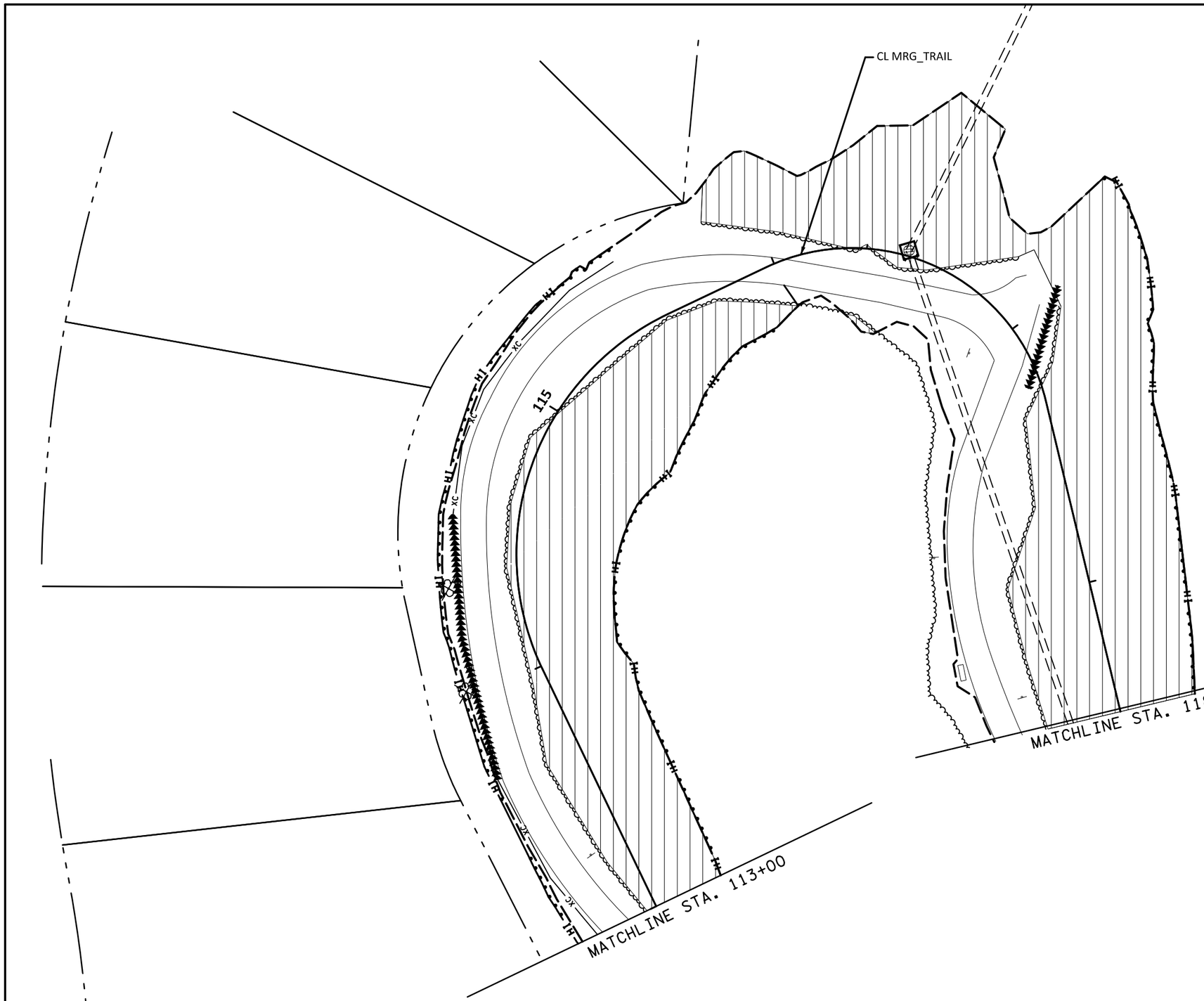
Dakota COUNTY

DAKOTA COUNTY

REMOVAL PLANS
SHEET 1 OF 3

SHEET 3
OF 6



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SCALE IN FEET

LEGEND

- PARCEL LINE
- EXISTING R/W
- CONSTRUCTION LIMITS
- CLEARING
- REMOVE TREE
- REMOVE CHAIN LINK FENCE (1)
- SILT FENCE; TYPE HI
- STORM DRAIN INLET PROTECTION

NOTES:

(1) TEMPORARY FENCE TO BE INSTALLED AT ALL FENCE REMOVAL LOCATIONS

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NO.	REVISIONS	BY	APR.	DATE

DESIGNED	CHECKED
XXX	XXX
DRAWN	APPROVED
XXX	MRM
DATE	JOB NO.
1/16/2025	XXXX-XX

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TYPED NAME JORDAN R HOREJSI DATE 1/16/2025

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Dakota COUNTY

DAKOTA COUNTY

REMOVAL PLANS
SHEET 2 OF 3

SHEET 4
OF 6

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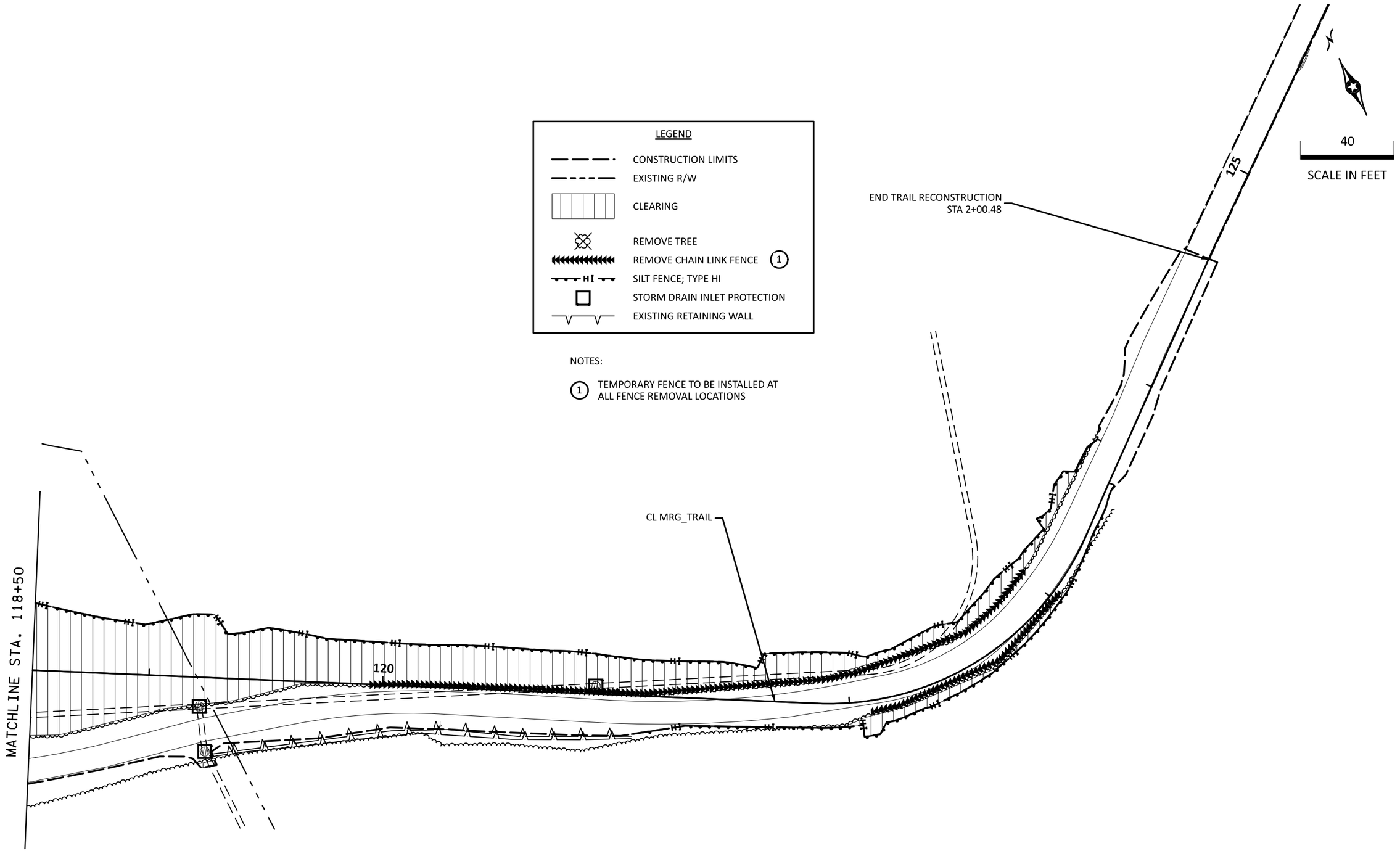
LEGEND

- CONSTRUCTION LIMITS
- EXISTING R/W
- CLEARING
- REMOVE TREE
- REMOVE CHAIN LINK FENCE (1)
- SILT FENCE; TYPE HI
- STORM DRAIN INLET PROTECTION
- EXISTING RETAINING WALL

NOTES:

(1) TEMPORARY FENCE TO BE INSTALLED AT ALL FENCE REMOVAL LOCATIONS



NO.	REVISIONS	BY	APR.	DATE

DESIGNED: XXX | CHECKED: XXX
DRAWN: XXX | APPROVED: MRM
DATE: 1/16/2025 | JOB NO.: XXXX-XX

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Dakota COUNTY

DAKOTA COUNTY

REMOVAL PLANS
SHEET 3 OF 3

SHEET 5
OF 6

STORM WATER POLLUTION PREVENTION PLAN (SWPPP) NARRATIVE

PROJECT DESCRIPTION/LOCATION

THE MINNESOTA RIVER GREENWAY TRAIL IMPROVEMENT PROJECT IS LOCATED DIRECTLY BETWEEN THE U.S. LOCK AND DAM 2 ON THE MISSISSIPPI RIVER AND EAGLE BLUFF DRIVE IN THE NORTHWESTERN CORNER OF HASTINGS, MN.

THE PLANNED SCOPE OF THE PROJECT INCLUDES:

CLEARING TREES AND FENCE FOR FUTURE TRAIL IMPROVEMENTS, AS WELL AS PROVIDING EROSION CONTROL MEASURES.

RECEIVING WATERS

RECEIVING WATER	STA. OR R.P.	SPECIAL WATER	IMPAIRED WATER	TROUT	TMDL	INVASIVE
MISSISSIPPI RIVER (A) (B)			AQC, AQL, AQR & MORE		MULTIPLE	

(A)CONSTRUCTION RELATED IMPAIRMENT, (B) NON-CONSTRUCTION RELATED IMPAIRMENT.

THE RECEIVING WATERS LISTED IN THE TABLE ABOVE ARE LOCATED WITHIN ONE MILE (AERIAL RADIUS) OF THE PROJECT LIMITS AND RECEIVE RUNOFF FROM THE PROJECT SITE. THE IMPAIRED WATERS (LISTED IN TABLE ABOVE) ARE IMPAIRED FOR (A) CONSTRUCTION RELATED OR (B) NON-CONSTRUCTION RELATED IMPAIRMENTS. CONSTRUCTION RELATED IMPAIRMENTS MAY REQUIRE ADDITIONAL BMPS AS OUTLINED IN APPENDIX A OF THE NPDES PERMIT.

AREAS OF ENVIRONMENTAL SENSITIVITY (AES) AND INFESTED WATERS

IN ADDITION TO THE LIST OF SPECIAL AND IMPAIRED WATERS THE CONTRACTOR SHALL BE AWARE THAT THERE ARE WETLANDS WITHIN AND NEAR THE PROJECT BOUNDARY.

SOIL TYPES

SOIL TYPES TYPICALLY FOUND ON THIS PROJECT ARE SILTY SANDS AND CLAYEY SANDS.

LAND FEATURE CHANGES

TOTAL DISTURBED AREA	0.00 ACRES
TOTAL EXISTING IMPERVIOUS SURFACE AREA	1.32 ACRES
TOTAL PROPOSED IMPERVIOUS SURFACE AREA	1.32 ACRES
TOTAL PROPOSED NET CHANGE IN IMPERVIOUS SURFACE AREA	0.00 ACRES

ENVIRONMENTAL REVIEW

THERE ARE NO STORMWATER MITIGATION MEASURES REQUIRED AS A RESULT OF AN ENVIRONMENTAL, ARCHAEOLOGICAL OR AGENCY REVIEW. ALL MITIGATION MEASURES HAVE BEEN ADDRESSED IN THIS PLAN SET OR THE SPECIAL PROVISIONS.

THIS PROJECT IS LOCATED IN A WELL HEAD PROTECTION AREA.

PROJECT CONTACTS

THE PROJECT ENGINEER AND CONTRACTOR ARE RESPONSIBLE FOR IMPLEMENTATION OF THE SWPPP AND INSTALLATION, INSPECTION, AND MAINTENANCE OF THE EROSION PREVENTION AND SEDIMENT CONTROL BMPS BEFORE, DURING AND AFTER CONSTRUCTION UNTIL THE NOTICE OF TERMINATION HAS BEEN FILED.

ORGANIZATION	CONTACT NAME	PHONE
CITY OF HASTINGS	JOHN CAVEN	651-480-2369
DAKOTA COUNTY	MIKE ADAMS	651-554-6538

MPCA DUTY OFFICER 24 HOUR EMERGENCY NOTIFICATION:
651-649-5451 OR 800-422-0798

SITE MANAGEMENT, INSPECTION, AND MAINTENANCE

ACTIVITIES AS A PART OF THIS CONTRACT ARE LIMITED TO EROSION CONTROL PLACEMENT, FENCE REMOVAL, AND TREE CLEARING.
TREE CLEARING IS DEFINED AS THE REMOVAL OF ALL VEGETATION AT AND ABOVE 6" FROM THE GROUND SURFACE. BECAUSE CLEARING DOES NOT IMPACT THE SOIL ITSELF, NO CONSTRUCTION ACTIVITY MEETS THE DEFINITION OF "LAND DISTURBING".
FORMAL EROSION CONTROL AND STORMWATER MANAGEMENT PRACTICES ARE NOT REQUIRED BEYOND THE ITEMS INCLUDED IN THE PROJECT'S CONTRACT.

TO COMPLY WITH WATERSHED REGULATIONS AND POLICY, CLEARED TREES MUST NOT BE LAID HORIZONTALLY ALONG THE SIDE SLOPES. TREES MUST BE LAID DIRECTLY DOWNHILL, OR AT UP TO A 45 DEGREE ANGLE FROM DIRECTLY DOWNHILL, SO AS TO AVOID OBSTRUCTING, DIVERTING, OR CHANNELING THE NATRUAL PROCESS OF WATER MOVEMENT THROUGH THE LANDSCAPE.

NO ACTIVITY SHALL REMOVE VEGETATION LESS THAN 6" FROM THE GROUND SURFACE OR DISTURB SOILS.
SHOULD SOILS BE DISTURBED BY EQUIPMENT, THE SOILS SHALL BE FORMED BACK TO ITS PRIOR CONDITION AND SEEDED WITH OATS AT 100 LB/AC AND USING BONDED FIBER MATRIX AT 3,500 LB/AC USING MNDOT SPEC 2575 AT NO COST TO THE OWNER.

THE SEDIMENT CONTROL DEVICES SHALL BE PLACED AS IDENTIFIED IN THIS PLANSET AND AS NECESSARY TO MINIMZE EROSION AND CAPTURE SEDIMENT ON SITE. ALL EROSION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO COMMENCEMENT OF ANY REMOVAL WORK. PROTECT STORM SEWER AND CULVERT INLETS AS IDENTIFIED IN THESE PLANS WITH THE APROPPRIATE INLET PROTECTION DEVICE. INLET PROTECTION DEVICES WILL BE PAID FOR ONCE PER INLET REGARDLESS OF THE NUMBER OF TIMES THE BMP IS PLACED. KEEP ALL DEVICES IN GOOD FUNCTIONAL CONDITIONS AT ALL TIMES.

CONTRACTOR SHALL REGULARLY INSPECT, MAINTAIN, AND, IF NECESSARY, CLEAN OR REPLACE ANY BMPS WITH ACCUMULATED DEBRIS OR THAT HAS BEEN DAMAGED.

ALL TREE CLEARING ACTIVITY MUST BE COMPLETED PRIOR TO MARCH 31, 2025.

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NO.	REVISIONS	BY	APR.	DATE

DESIGNED XXX | CHECKED XXX
DRAWN XXX | APPROVED XXX
DATE 1/16/2025 | JOB NO. XXXX-XX

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.
PRELIMINARY NOT FOR CONSTRUCTION
LIC. NO. _____
TYPED NAME _____ DATE 1/16/2025

HRGreen
Building Communities. Improving Lives.
COURT INTERNATIONAL BUILDING
2550 UNIVERSITY AVENUE W., SUITE 400N
ST. PAUL, MINNESOTA 55114-1052
P: 651.644.4389 F: 651.644.9446

Dakota COUNTY

DAKOTA COUNTY
SWPPP PLANS
SHEET 1 OF 1

SHEET 6
OF 6

MEMO

To:	Taylor Huinker
From:	Ted McCaslin, HR Green
Subject:	Response to DNR Concerns on Planting Plan
Date:	11/19/2025

We have reviewed your comments about the proposed design and the impacts to the bluff impact zone and the bluff stability. The following discussion provides additional project context and details about the project design.

1. It is imperative that the vegetative restoration be robust, given the disturbance is proposed to occur within the bluff impact zone and bluff face itself. What is the proposed spacing and density of tree and shrub plantings? Can the entire restoration area include tree and shrub plantings?

Table 1 below shows the spacing and canopy spread of the proposed shrub and tree species. The spacing and canopy spread of the tree and shrub species are intended to provide a healthy canopy screen after moderate growth for the understory trees and shrubs.

Table 1: Preferred Tree and Shrub Plantings

Canopy Trees & understory trees	20 ft spacing	
Quercus	*alba*	White oak – 50 to 80 foot canopy
Quercus	*macrocarpa*	Bur oak – 60 to 90 foot canopy
Quercus	*rubra*	Northern red oak – 50 to 75 foot canopy
*Ulmus**	*americana**	American elm* - 50 to 80 foot canopy
Understory Trees	*10 ft spacing*	
Ostrya	*virginiana*	Ironwood – 15 to 50 foot canopy
Prunus	*serotina*	Black cherry – 30 to 60 foot canopy
Tilia	*americana*	Basswood – 30 to 50 foot canopy
Shrubs	*3-6 ft spacing*	
Amelanchier	*interior*	Juneberry – 4 to 25 foot canopy
Amelanchier	*laevis*	Allegheny serviceberry – 15 to 25 foot canopy
Cornus	*alternifolia*	Pagoda dogwood – 15 to 25 foot canopy
Cornus	*racemosa*	Gray dogwood – 8 to 15 foot canopy
Corylus	*americana*	American hazelnut – 10 to 15 foot canopy
Diervilla	*lonicera*	Bush honeysuckle – 10 to 15 foot canopy
Prunus	*virginiana*	Chokecherry – 15 to 20 foot canopy
Rosa	*arkansana*	Prairie rose – 12 to 18 foot canopy
Rosa	*blanda*	Smooth wild rose – 2 to 6 foot canopy
Sambucus	*racemosa*	Red-berried Elder – 6 to 15 foot canopy
Symphoricarpos *Viburnum*	*alba* *lentago*	Snowberry Nannyberry – 6 to 12 foot canopy

The planting plan, shown in Figure 1, provides the areas of oak savannah, trees and shrubs, and prairie planting mix. Areas of oak savannah and tree/shrub species are predominantly shown in the bluff impact zone, between the existing and proposed retaining walls, and in front of the existing housing development.

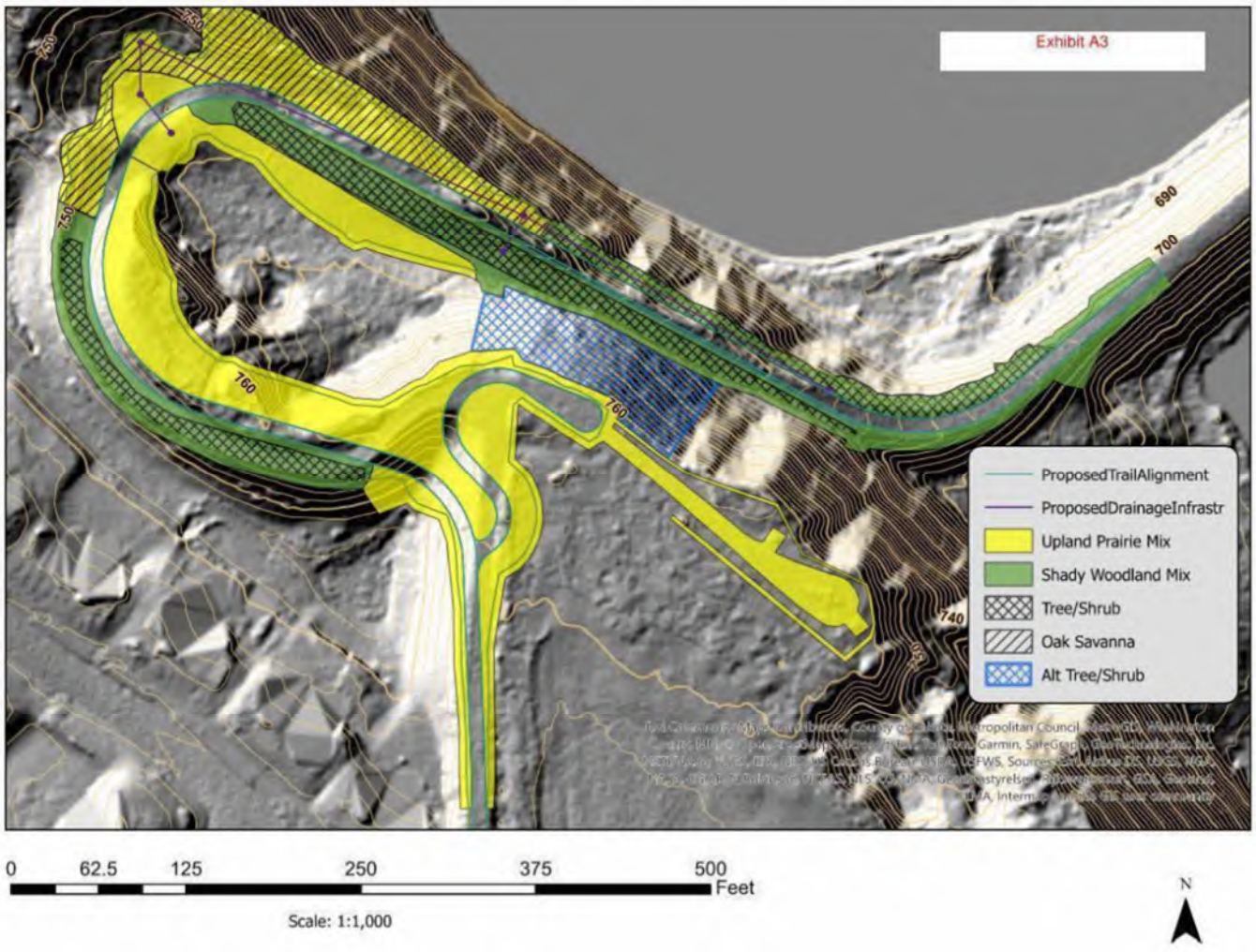


Figure 1: Proposed planting plan (Exhibit A3 in Application)

There are some proposed open prairie areas that consider the ecological history of the area, but they are not within the bluff impact zone and are in areas that have existing low growing switchgrass, prickly ash, and cedars. Figure 2 below shows the existing vegetative communities and Figure 3 shows the planting plan overlaid with the existing vegetative communities to show how the areas complement each other.

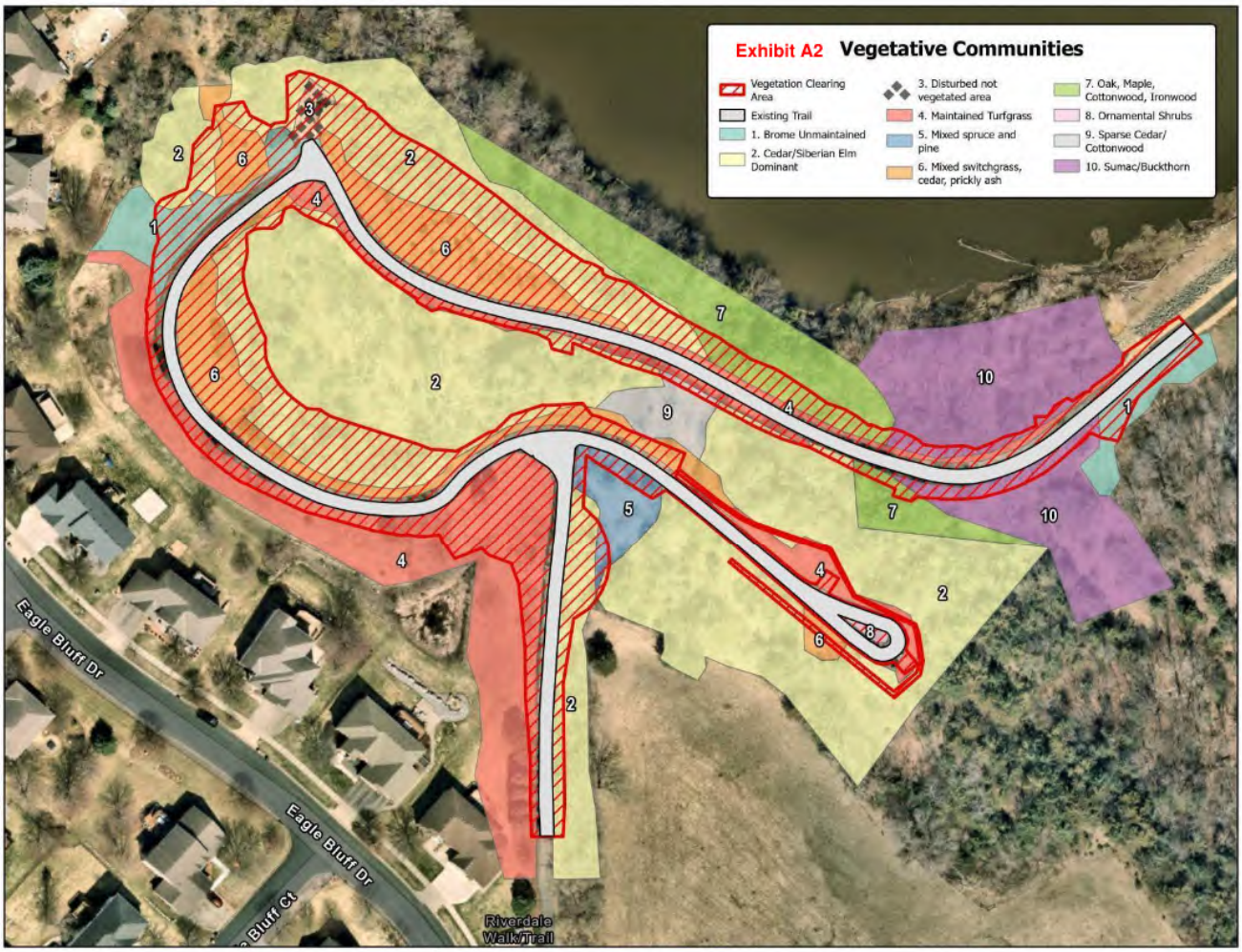


Figure 2: Existing Vegetative Communities adjacent to MRG Trail (Exhibit A2 in Application)

The remaining forested area inside the bend will not be impacted. Additionally, approximately half of the proposed oak savannah area in Figure 1 is currently low growing switchgrass, prickly ash, and cedar (Veg. Community 6). The remaining area is within Siberian elm/cedar dominant Veg. Community 2 that does not extend beyond the bluffline.

Figure 3 combines Figures 1 & 2 to show the planting plan over existing vegetative communities, proposed vegetative communities, and proposed trail alignment.

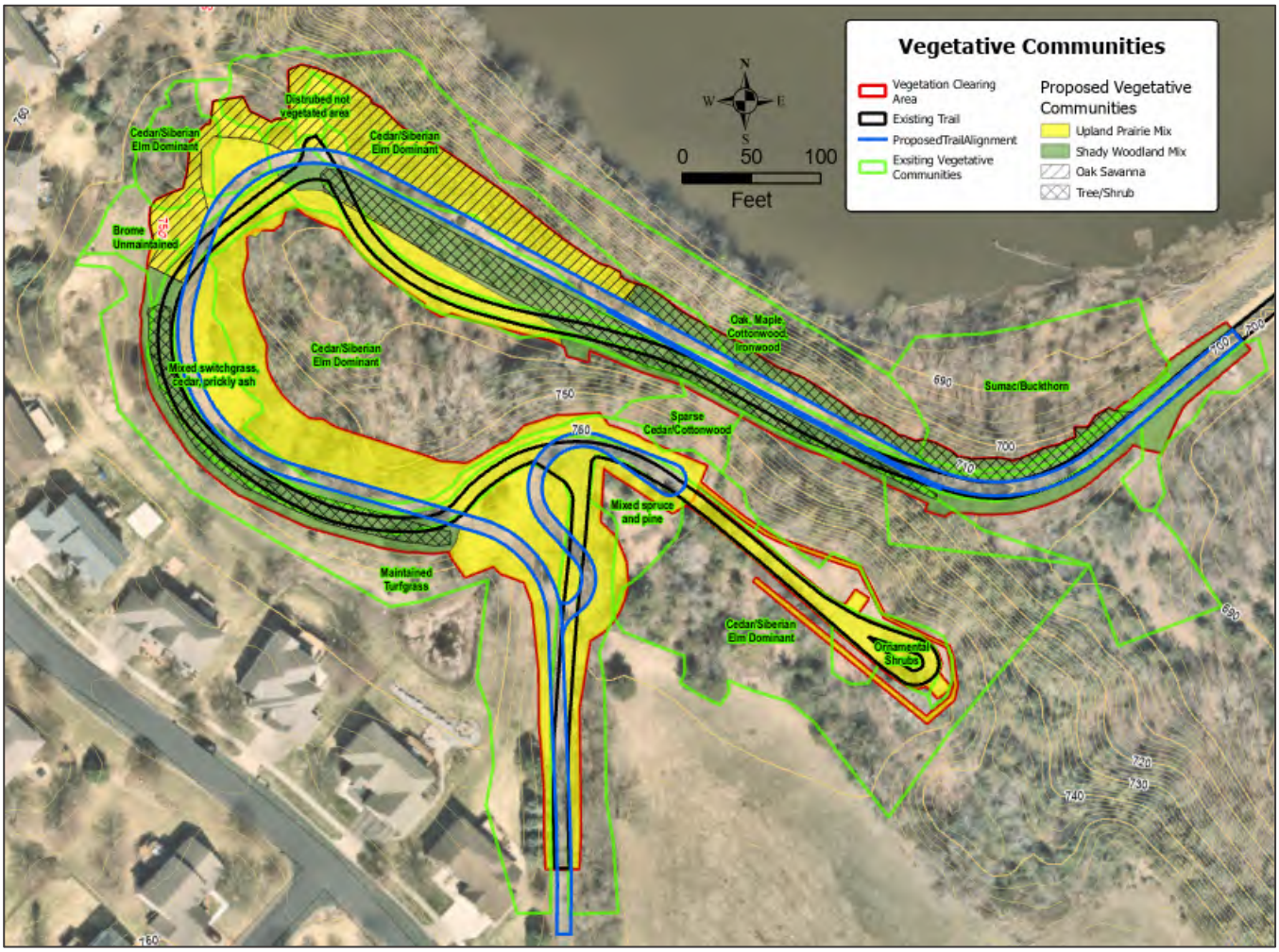


Figure 3: Combined Figure 1 & 2 to show proposed vegetative communities over existing

More details about the proposed planting plan are below and provides context for the species and spacings selected for the MRG trail project.

All coverage areas will be planted with deep rooted native prairie vegetation. This will provide the ground layer with a robust layer of fibrous roots for denser tree planting areas. The prairie planting areas will include greater areal cover (fewer bare spots) and grow more quickly than dense woody vegetation.

Spacing: **Oak savannah** areas will be planted at 50-foot intervals. Oak species will be *Quercus macrocarpa, Q. rubra,* and *Q. alba.* **Tree/shrub** areas will be planted at 20-foot intervals for canopy trees, 10-foot intervals for understory trees, and 3-6-foot intervals for shrubs. See Table 1 below.

Similar to the Shady Woodland Mix and Upland Prairie are also designed to establish prairie vegetation along with tree and shrub interplantings that will eventually establish towards a target native plant community of Southern Mesic Savanna (UPs24), with a transition towards Southern Dry-Mesic Oak Woodland (FDs37) as the topography selects for more forested areas. The Tree and Shrub plantings are meant to be a compatible starting point for all three plant communities (MHs38, UPs24, and FDs37), which will diverge in time based on initial planting density, local conditions, and management that will select for a gradient of canopy cover depending on aspect, moisture levels, and adjacency to intact forest.

With management, it expected that all planting areas have some native tree cover replacing an existing vegetation within in the bluff is largely Siberian elm-eastern red cedar dominant woodland or switchgrass dominant areas with some woody vegetation (Vegetative Community numbers 2 and 6, respectively in Figure 1 below and Exhibit A2 in the MRCCA application). The switchgrass areas are likely from seeding for the existing trail installation approximately 25 years ago.

The result will be greater native forest and more diverse native tree cover within a historically disturbed area. 1927 aerial photography shows oak savanna and forested areas immediately adjacent to a side channel present prior to dam construction and straight row crops on likely flat areas where the upper bluff area is currently. The area appears to have been a haul road/sediment deposit area for dam construction and operation and a mature Siberian elm dominant forest is present adjacent to the existing trail.

An additional benefit includes the elimination of the overlook loop will remove pavement and covert existing paved area into native vegetation. Overall, the project will have a reduction in impervious area from 1.85 acres to 1.76 acres

2. Has a qualified individual, such as an engineer, evaluated the proposed disturbance to the bluff and determined whether it will impact the bluff's stability?

Yes, I have evaluated the proposed disturbance to the bluff and determined its stability is not adversely impacted with proposed design changes and construction work. The excavation required to lower the trail profile and meet ADA slope standards is within standard earthwork construction activities. Figure 4 shows the segment of trail that has the most excavation and trail alignment impact on the bluff.

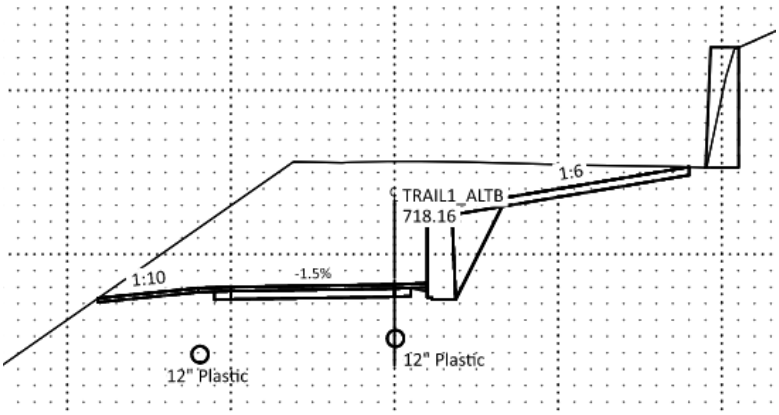


Figure 4: Cross section of MRG Trail

The 1:10 slope used to tie into the existing bluff was used to mitigate runoff erosion and allow plantings to establish more effectively and stabilized the new trail forslope. On the right side, a proposed retaining wall is proposed to avoid removing the existing retaining wall and reconstructing a singular 20-foot wall. The tiered retaining wall approach mitigates the bluff impact above the existing retaining wall and keeps the excavation contained within the existing wall instead of chasing behind the wall and needed to stabilize during construction.

3. What impact will the clearing and new alignment of the trail have on the public river corridor view? Grading and vegetation removal will expose the trail and the users, diminishing the natural character of the corridor for which the critical area was designated. How does the vegetative restoration plan ensure these views will be restored through tree and shrub plantings?

   Initial clearing and grubbing and grading activities will have a reduction in canopy screening due to the removal of existing cedar and Siberian elm species. The proposed planting plan shown above in Figure 1 shows that oaks with large and dense tree canopies will be planted along the trail near the 180 degree curve and shows that Ironwoods and Basswoods will be planted adjacent to the trail as it approaches the dam and where there is less screening impact.

   The cross sections shown in Figure 5 and Figure 6 are representative of the clearing and grubbing and proposed restoration within the bluff impact zone. For more information the attached pages at the end of the memo show the planting plan in the construction sheets and representative cross sections labeled with seeding zones and planting zones.

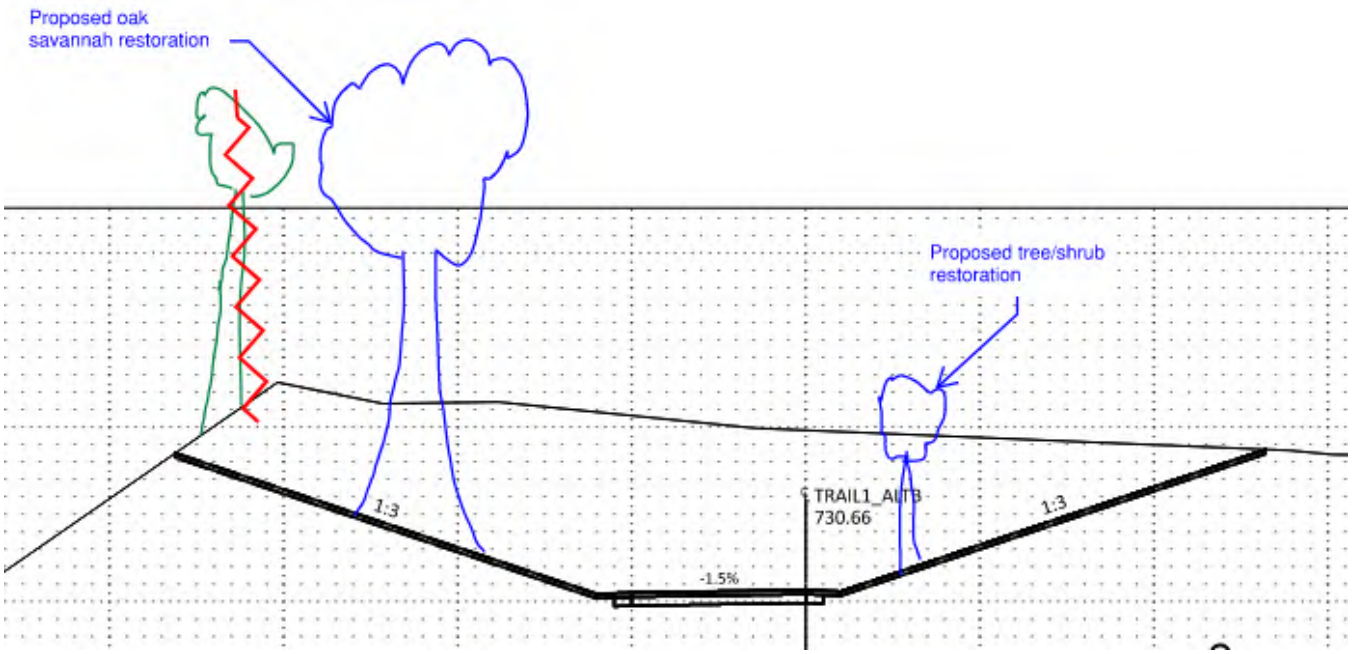


Figure 5: MRG Trail Cross Section – Representation of Removal and Proposed Restoration

For approximately half of the trail section that is within the bluff impact zone, the trail elevation is set lower than the foreslope tie into the bluff and will naturally screen the trail. This area is adjacent to the oak savannah restoration area which provides the trail and users natural screening while the tree canopy of the oaks matures.

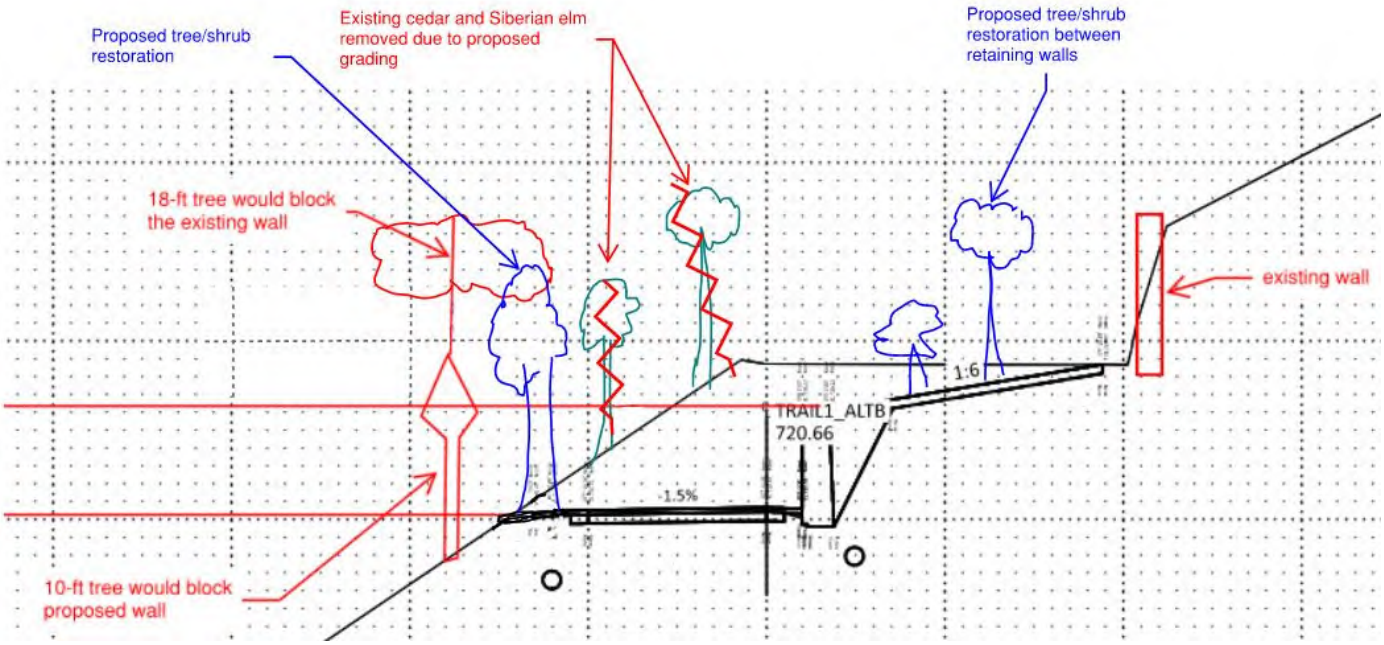
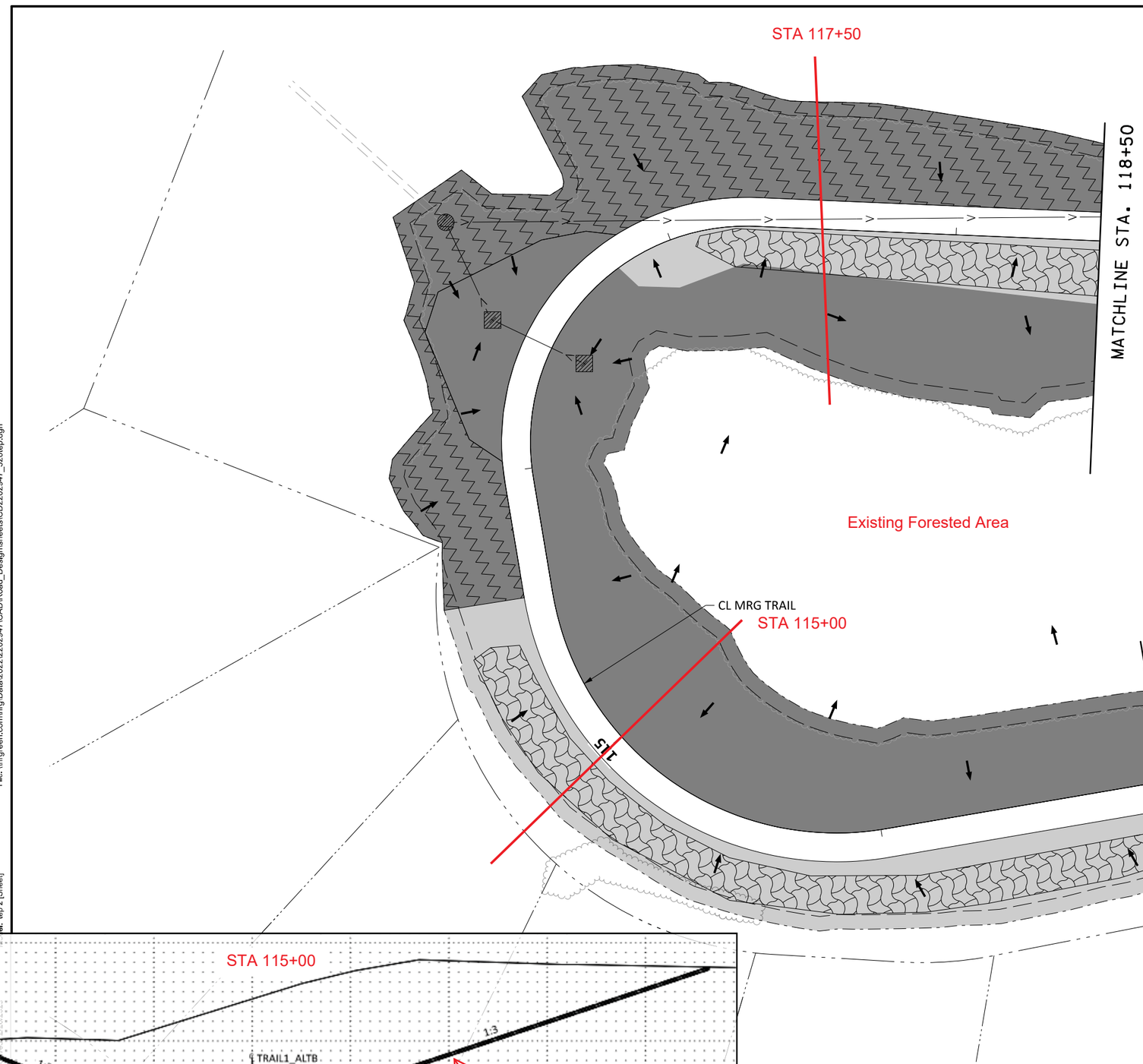
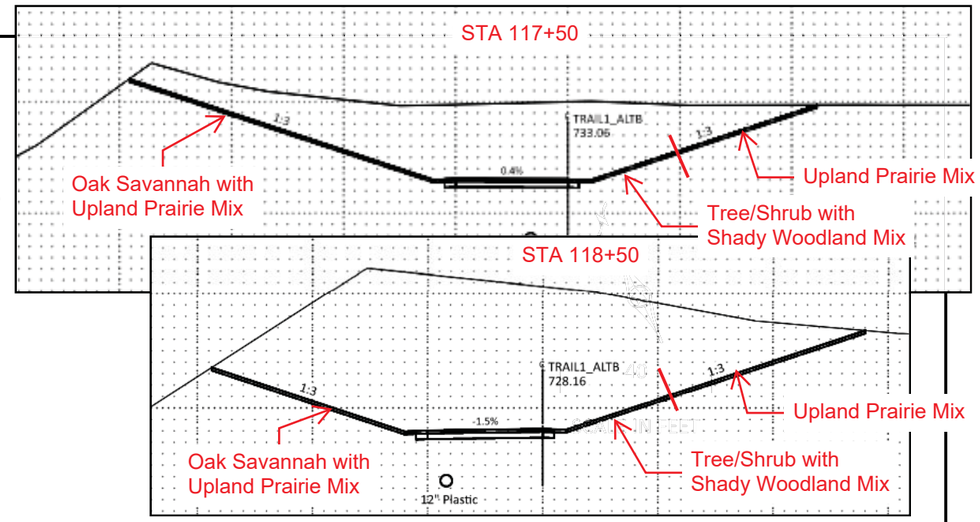


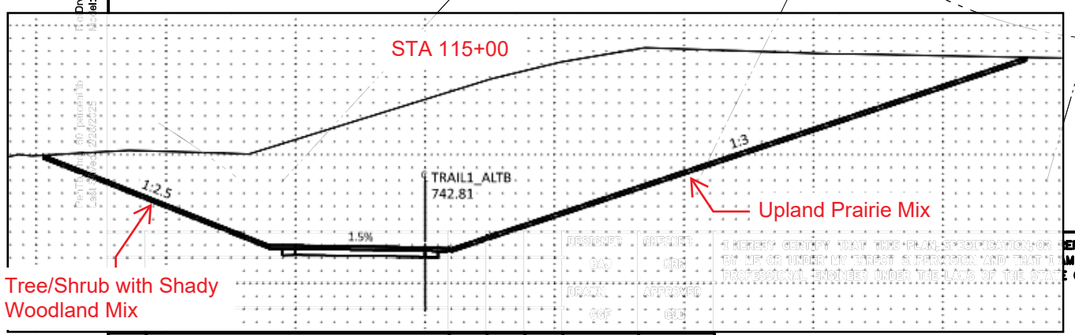
Figure 6: MRG Trail Cross Section – Representation of Removal and Proposed Restoration

The remainder of the trail in the bluff impact zone has typical foreslope tie-in and has less screening impact as the trail is realigning with the existing location and elevation as it goes downhill. Tree and shrub restoration is proposed along this segment of the trail to provide screening in place of the existing cedar and Siberian elm that will be removed. Tree and shrubs, as identified with spacing and canopy widths in Table 1, are proposed between the existing and proposed retaining wall will provide screening of the existing retaining wall.

In summary, the proposed restoration plan balances the existing vegetative communities, ecological history, and screening based on the trail cross section and elevation. Clearing and grubbing was mitigated as much as possible and is mostly dictated by the change in trail elevation, so that even in areas where the horizontal alignment has changed little, there is still a grading impact. However, trail users are still screened through the upper portion of the trail and around the large radius down hill because of the lowered trail profile and the foreslopes tying up to the existing mixed switchgrass or tallgrass vegetation.







LEGEND

- CONSTRUCTION LIMITS
- DISTURBANCE LIMITS
- EXISTING RIGHT OF WAY
- PARCEL LINES
- SURFACE FLOW DIRECTION

SEEDING ZONES

- UPLAND PRAIRIE MIX
- SHADY WOODLAND MIX

PLANTING ZONES

- TREE/SHRUB
- OAK SAVANNA
- ALT TREE/SHRUB

GENERAL NOTES:

1. CONTRACTOR TO REVIEW SPECIFICATINOS FOR SEEDING, PERMANENT EROSION CONTROL, AND PLANTING.
2. DAKOTA COUNTY TO PROVIDE SEED MIX FOR ALL SEEDING ACTIVITIES.
3. ALL INVASIVE AND/OR WEEDY VEGETATION SHALL BE REMOVED WITHIN THE DISTURBANCE LIMITS PRIOR TO NATIVE SEED APPLICATION.
4. ALL AREAS WITHIN 2.5 FEET OF BITUMINOUS TRAIL EDGE WILL BE SEEDED WITH A MNDOT MESIC INSLOPE SEED MIX AT AN APPLICATION RATE OF 65 LB/AC. THIS BUFFER ZONE IS NOT DISPLAYED ON PLAN SHEETS.
5. UPLAND PRAIRIE SEED MIX TO BE APPLIED AT A RATE OF 74 LBS / AC.
6. SHADY WOODLAND MIX TO BE APPLIED AT A RATE OF 70.4 LBS / AC.
7. ALL SEEDING ZONES ALSO RECEIVE A COVER CROP APPLICATION OF WINTER WHEAT. UTILIZE MNDOT SEED MIX WW AT 100 LBS / AC.
8. TREE AND SHRUB INSTALLATION SPACING IS DETAILED IN THE SPECIFICATIONS FOR ALL PLANTING ZONES.
9. CONTRACTOR TO PROTECT PLANTINGS WITH TREE TUBES AND WATERING BAGS AS DESCRIBED IN SPECIFICATIONS.

NO.	REVISIONS	BY	APR.	DATE
	DATE	2/28/2025		
	JOB NO.	XXXX-XX		

REPORT WAS PREPARED
M A DULY LICENSED
E OF MINNESOTA.

LIC. NO. 52241

TYPED NAME JORDAN R HOREJSI DATE 2/28/2025

HRGreen
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COURT INTERNATIONAL BUILDING
2550 UNIVERSITY AVENUE W., SUITE 400N
ST. PAUL, MINNESOTA 55114-1052
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Dakota COUNTY

DAKOTA COUNTY

TURF ESTABLISHMENT PLANS
SHEET 2 OF 3

SHEET 25
OF 26

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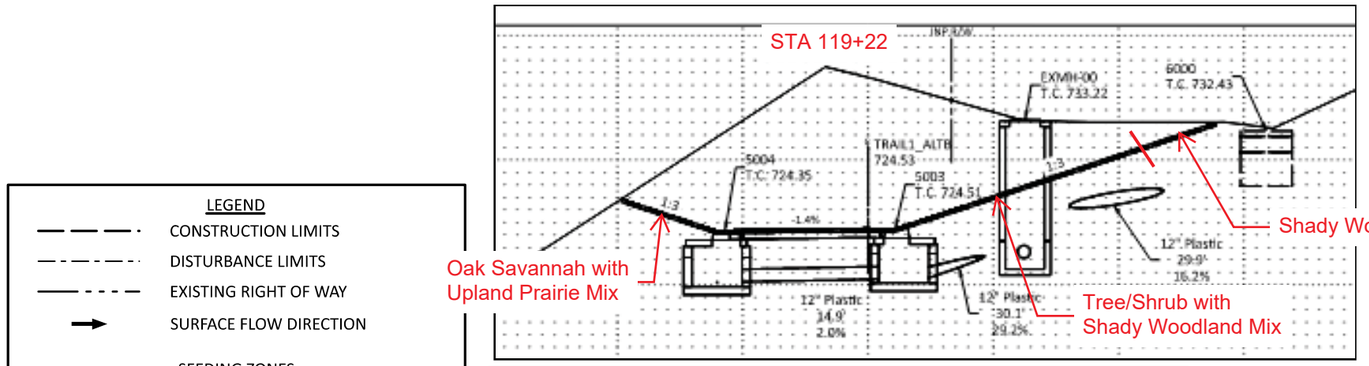

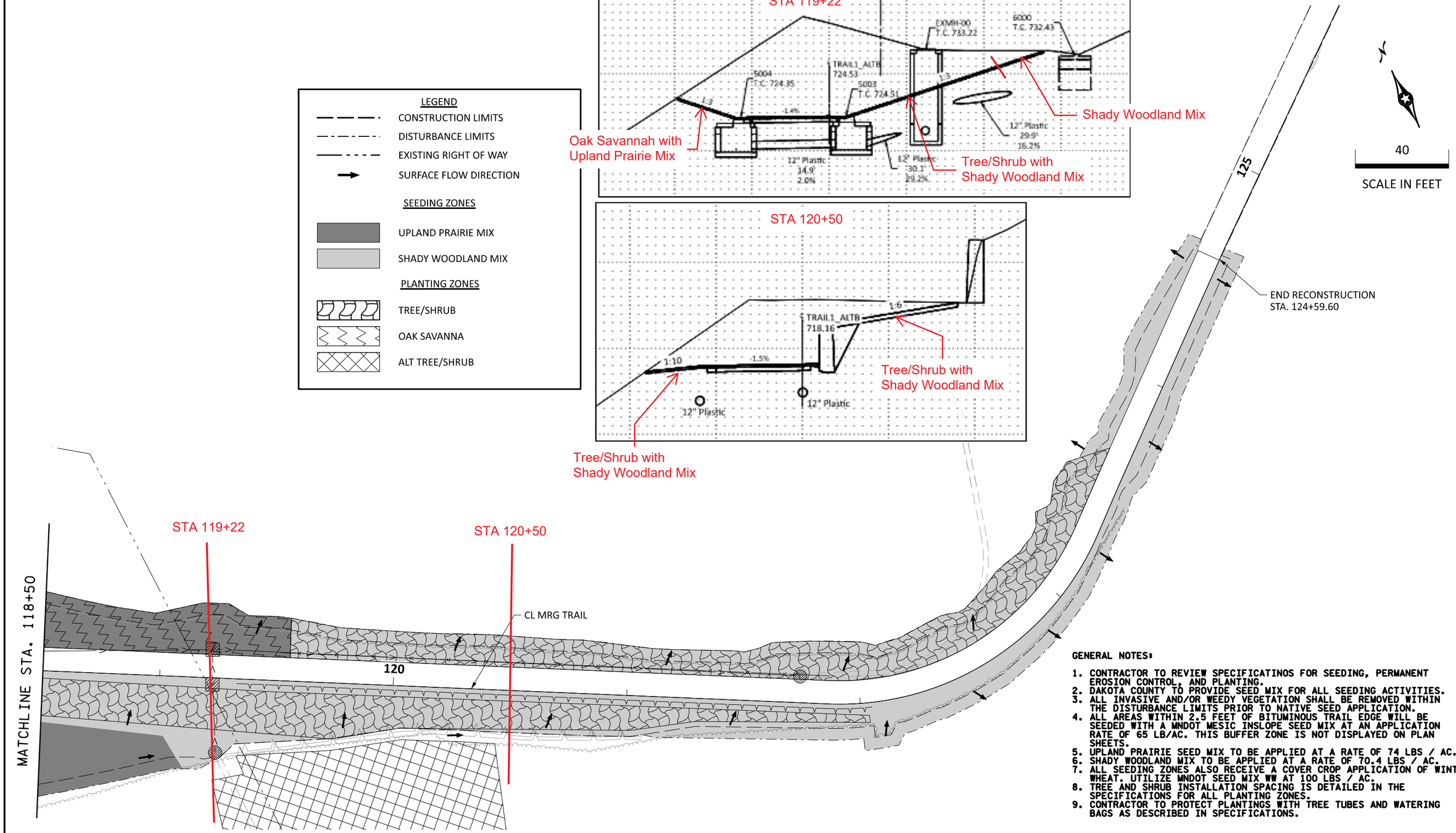

LEGEND

- CONSTRUCTION LIMITS
- DISTURBANCE LIMITS
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- SURFACE FLOW DIRECTION

SEEDING ZONES

- UPLAND PRAIRIE MIX
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NO.	REVISIONS	BY	APR.	DATE

DESIGNED BAJ | CHECKED KRR
DRAWN CGF | APPROVED CHB
DATE 2/28/2025 | JOB NO. XXXX-XX

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.

LIC. NO. 52241

TYPED NAME JORDAN R HOREJSI DATE 2/28/2025

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2550 UNIVERSITY AVENUE W., SUITE 400N
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Dakota COUNTY

DAKOTA COUNTY

TURF ESTABLISHMENT PLANS
SHEET 3 OF 3

SHEET 26
OF 26

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Last Saved: 2/28/2025

Justin Fortney

From: Huinker, Taylor (DNR) <Taylor.Huinker@state.mn.us>
Sent: Thursday, November 20, 2025 10:28 AM
To: Justin Fortney
Cc: jhorejsi@hrgreen.com; Adams, Mike; tony.wotzka@co.dakota.mn.us; 'McCaslin, Ted'; John Hinzman, AICP; Chris Jenkins
Subject: RE: Hastings MRCCA Variance - Hearing Notification

Hi Justin,
Thank you for the additional information. I do not have any additional concerns.
Taylor

From: Justin Fortney <JFortney@hastingsmn.gov>
Sent: Wednesday, November 19, 2025 2:59 PM
To: Huinker, Taylor (DNR) <Taylor.Huinker@state.mn.us>
Cc: jhorejsi@hrgreen.com; Adams, Mike <mike.adams@co.dakota.mn.us>; tony.wotzka@co.dakota.mn.us; 'McCaslin, Ted' <tmccaslin@hrgreen.com>; John Hinzman, AICP <JHinzman@hastingsmn.gov>; Chris Jenkins <CJenkins@hastingsmn.gov>
Subject: RE: Hastings MRCCA Variance - Hearing Notification

Hello Taylor,

I have attached a memo from HR Green who have been designing the project. Their memo serves to address the questions in your October 27 email. Please let me know if you have any additional concerns.

I have been reviewing the project for visual impacts also, as it relates to the vegetation clearing permit application. HR Green covers many technical aspects in their memo but there are two general ideas to keep in mind: 1. Most of the trees removed for trail realignment are not screening the new trail location, they are screening other areas further up the bluff. 2. Much of the new trail will be lowered, which essentially places it behind a berm, in addition to existing vegetative cover and proposed plantings.

Thank you,
Justin Fortney
City Planner
City of Hastings | City Hall | 101 4th Street East | Hastings, MN 55033
Direct: 651-480-2381 | Fax: 651-437-7082

Communication
Optimal Service
Respect for Resources
Enthusiasm

From: Huinker, Taylor (DNR) <Taylor.Huinker@state.mn.us>
Sent: Monday, October 27, 2025 10:43 AM
To: Justin Fortney <JFortney@hastingsmn.gov>
Subject: RE: Hastings MRCCA Variance - Hearing Notification

Hi Justin,

Thank you for sending this application over for the opportunity to comment. Overall, we are concerned about the intensive vegetation clearing and land disturbance proposed in the bluff impact zone and potential for impacts to the bluff's stability.

1. It is imperative that the vegetative restoration be robust, given the disturbance is proposed to occur within the bluff impact zone and bluff face itself. What is the proposed spacing and density of tree and shrub plantings? Can the entire restoration area include tree and shrub plantings?
2. Has a qualified individual, such as an engineer, evaluated the proposed disturbance to the bluff and determined whether it will impact the bluff's stability?
3. What impact will the clearing and new alignment of the trail have on the public river corridor view? Grading and vegetation removal will expose the trail and the users, diminishing the natural character of the corridor for which the critical area was designated. How does the vegetative restoration plan ensure these views will be restored through tree and shrub plantings?

Thank you,
Taylor

From: Justin Fortney <JFortney@hastingsmn.gov>
Sent: Tuesday, October 21, 2025 9:41 AM
To: MN_Commissioner (DNR) <commissioner.dnr@state.mn.us>; MISS_Planning@nps.gov
Cc: Huinker, Taylor (DNR) <Taylor.Huinker@state.mn.us>; forest_eidbo@nps.gov
Subject: FW: Hastings MRCCA Variance - Hearing Notification

This message may be from an external email source.
Do not select links or open attachments unless verified. Report all suspicious emails to Minnesota IT Services Security Operations Center.

Hello,

The email was returned, possibly due to size. I have compressed the attachments and added the staff report.

Thank you,
Justin Fortney
City Planner
City of Hastings | City Hall | 101 4th Street East | Hastings, MN 55033
Direct: 651-480-2381 | Fax: 651-437-7082

Communication
Optimal Service
Respect for Resources
Enthusiasm

From: Justin Fortney
Sent: Thursday, October 16, 2025 4:05 PM
To: 'commissioner'; 'NPS MISS Planning'
Cc: 'taylor.huinker'; 'Eidbo, Forest S'
Subject: Hastings MRCCA Variance - Hearing Notification

Hello,

Public notification attached along with full application materials. The Planning Commission will review the request on October 27, 2025. I will forward the staff report when finished next week.

Thank you,
Justin Fortney
City Planner
City of Hastings | City Hall | 101 4th Street East | Hastings, MN 55033
Direct: 651-480-2381 | Fax: 651-437-7082

Communication
Optimal Service
Respect for Resources
Enthusiasm

HASTINGS CITY COUNCIL

RESOLUTION NO. 11-06-25

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF HASTINGS GRANTING VARIANCES FOR A RETAINING WALL AND MRG TRAIL RECONSTRUCTION ON STEEP SLOPES WITHIN THE MRCCA NW OF LAKE REBECCA

Council member Leifeld introduced the following Resolution and moved its adoption:

WHEREAS, Dakota County, requests the following three variances on property generally located along the MRG Trail between Lake Rebecca earthen dam and the Eagle Bluff Neighborhood and legally described in Exhibit A; and

1. Construction of a hard surfaced trail on the face of bluffs greater than 30% slope. Hastings City Code Chapter 152A.08.G.3.a
2. Construction of a retaining wall within the BIZ (Bluff Impact Zone) for a purpose other than to correct an established erosion problem as determined by the city. Hastings City Code Chapter 152A.10.C2.b.
3. A two-foot height variance for the proposed seven-foot-tall retaining wall. Hastings City Code Chapter 152A.10.C.2.c.(1)

WHEREAS, a legally nonconforming trail requires modifications for maintenance, accessibility and safety on the Subject Property is that is within the Mississippi River Corridor Critical Area (MRCCA); and

WHEREAS, Hastings City Code Chapters listed above do not allow the required modifications within the MRCCA; and

WHEREAS, Dakota County is responsible for the maintenance and safety of the MRG trail system for which they seek the above variances on the Subject Property; and

WHEREAS, on October 27, 2025, the request was reviewed by the Planning Commission of the City of Hastings, as required by state law, city charter and city ordinance; and

WHEREAS the Planning Commission recommended approval of the request to the City Council subject to the findings of fact contained herein; and

WHEREAS the City Council acting as the Board of Zoning Adjustment and Appeals has reviewed the request and concurs with the recommendation of the Planning Commission; and

NOW THEREFORE BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF HASTINGS AS FOLLOWS:

That the City Council hereby approves the variances as presented to the City Council based on the following findings of fact:

1. If the strict letter of the regulations were to be carried out, the owner would encounter practical difficulties in providing an accessible 28-mile route from St. Paul to Hastings. This relatively limited section of the Mississippi River Greenway Trail is preexisting in this location that rises 60-feet in a relatively short distance. These physical surroundings and topographical conditions do not allow for an accessible trail under the strict letter of the regulations.
2. The conditions above are highly unique to the subject tract of land. While there may be other areas with similar elevation changes, they do not have an existing trail traversing them.
3. The applicant and property owners are government organizations simply providing a transportation route and do not seek the variances for profit or increased property value.
4. The granting of the variances will not be detrimental to the public welfare. In fact, without the variances, the existing trail layout with a hairpin curve and 9% grade will remain detrimental to the public welfare.
5. The variances would not impair light, air, increase congestion or fire danger, endanger the public safety, or diminish property values within the vicinity. The trail will become safer, existing erosion control issues will be repaired, and the native vegetation quality will be improved and increased.
6. The purpose and intent of the ordinance is to preserve and enhance the quality of important historic, cultural, aesthetic values, and natural systems and provide for the wise use of these areas. The project with the proposed variances will maintain vegetative screening of the trail from the public river corridor views, provide more accessible access to the Mississippi River corridor, repair current erosion issues in the vicinity of the trail, and restoration of natural vegetation using native species.
7. The 2040 Comprehensive Plan MRCCA Chapter guides us to provide adequate public trails to and along the river, utilize and maintain this regional trail, repair existing erosion, restoring natural vegetation in riparian areas with native species.
8. The proposal puts the property to use in a reasonable manner by continuing the existing use more safely, which has been identified in the MRCCA Comprehensive Plan chapter.
9. The elevation difference and existing location of this regional trail predate the provisions of the chapter, causing practical difficulties.

10. The proposal could not reasonably be accomplished under the current ordinance requirements because the existing slope and trail location dictate what must be done to lay out a trail with a grade of no more than 5%. Under the current ordinance requirements, this layout is not allowed.
11. The proposal will continue the existing character of the locality.
12. There are no economic considerations involved in the proposal.
13. The extent of land alterations is limited to the minimum necessary to properly adjust the trail, repair existing erosion, and replace invasive vegetation. The areas impacted must be graded and revegetated consistent with the grading and revegetation plans. These plans consider erosion, bluff stability, and public river corridor views.

BE IT FURTHER RESOLVED BY THE CITY COUNCIL OF THE CITY OF HASTINGS AS FOLLOWS:

Approval of the variance is subject to the following conditions:

1. Conformance with the City Council Staff Report dated November 3, 2025 and all attachments.
2. Approval is subject to a Sunset Clause; if progress on the proposal is not made within 18-months of City Council approval, the approval is null and void.
3. City of Hastings Planning Department approval of both MRCCA vegetation clearing and land alteration permit applications under review and conformance with all approvals.
4. Conformance with Hastings City Code Chapter 153 Shoreland Management, including grading, vegetation clearing, and erosion protection provisions.
5. Amend the existing trail lease agreement to include the slight trail layout changes.
6. Satisfactory responses to DNR questions within their October 27, 2025 email, asking for clarification on revegetation plans and engineering statement of bluff protection.

Council member Pemble moved a second to this resolution and upon being put to a vote adopted by 7 present.

Adopted by the Hastings City Council on November 3, 2025 by the following vote:

Ayes: Fasbender, Haus, Vihvachoff, Beck, Leifeld, Lawrence, Pemble
Nays: none
Absent: none

ATTEST:

Kelly Murtaugh
City Clerk

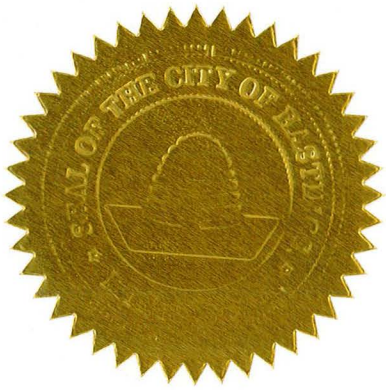
Mary D Fasbender
Mary Fasbender, Mayor

STATE OF MINNESOTA)
) ss.
COUNTY OF DAKOTA)

City of Hastings

I, the undersigned, being the duly qualified and acting City Clerk of the City of Hastings, Minnesota, DO HEREBY CERTIFY, that I have carefully compared the attached copy of Resolution 11-06-25 with the original on file in my office and the same is a full, true and complete copy thereof.

WITNESS, my hand as such City Clerk and the corporate seal of the City of Hastings this 3rd day of November, 2025.



Kelly Murtaugh

Kelly Murtaugh, City Clerk

Exhibit A

Legal Description

Parcel A
Outlot C, RIVERDALE OF HASTINGS, Dakota County, Minnesota.

Parcel B
That portion of Lot Three (3), in Section Twenty (20), Township One hundred fifteen (115) North of Range Seventeen (17) West of the Fifth Principal Meridian, in Dakota County, Minnesota, described as follows:
Beginning at a point on the west line of said Lot, 1918 feet North of the southwest corner thereof, thence South 49 degrees 56 minutes East 649 feet; thence North 51 degrees 34 minutes East 150 feet more or less, to the near shore of Lake Rebecca so-called; thence Northwesterly along the shore line to the West line of said Lot; thence South along the West line of said Lot to the point of beginning; save and except that as respects that portion of said tract which lies between the west line of said Lot three (3) and a line through said tract 50 feet east thereof, and parallel thereto, containing 32/100 of an acre, the right of the United States therein consisting only of the full, complete and perpetual right, power and privilege to overflow the same, and to cut, remove and dispose of all wood, timber and other natural or artificial projections or obstructions on said land, which in any way or at any time shall interfere with navigation, or the use of the land in connection with the maintenance or operation of said Lock and Dam, as the same may be found necessary or advisable by the United States, or tend to render the pool created by the said Lock and Dam inaccessible, unsafe or unsanitary, and also the United States shall have the right to enter upon such portion of said land from time to time as occasion may require, for all purposes connected with the construction, maintenance and operation of the Hastings Lock and Dam.

DEPARTMENT OF THE ARMY
SUPPLEMENTAL AGREEMENT NO. 1
LEASE NO. DACW22-1-83-5106
FOR PUBLIC PARK AND RECREATION PURPOSES AND/OR
FISH AND WILDLIFE PURPOSES

MISSISSIPPI RIVER NAVIGATION PROJECT – POOL 2
DAKOTA COUNTY, MINNESOTA

THIS SUPPLEMENTAL AGREEMENT, made on behalf of the United States, between the **SECRETARY OF THE ARMY,** hereinafter referred to as the Secretary, and the **CITY OF HASTINGS, MINNESOTA,** hereinafter referred to as the Lessee,

WITNESSETH:

WHEREAS, Lease No. DACW22-1-83-5106, which was entered into and made effective April 1, 1982, for a term of fifty (50) years, and ending March 31, 2032, between the Secretary and Lessee, for purposes of allowing the Lessee to use and occupy the premises for public park and recreation over portions of Government-owned lands for the benefit of the general public as identified in Exhibit "A"; and,

WHEREAS, Lease No. DACW37-1-96-0085, which was entered into and made effective August 2, 1996 for a term of twenty (20) years, and ending August 1, 2016, between the Secretary and the Lessee, for purposes of allowing the Lessee to operate and maintain the premises for public park and recreation over portions of Government-owned lands for the benefit of the general public as identified in Exhibit "B", has expired; and,

WHEREAS, Lease No. DACW37-1-96-0085 has a related use and is located adjacent from Lease No. DACW22-1-83-5106; and,

WHEREAS, the Lessee has requested that they be allowed to continue to operate and maintain area encumbered in Lease No. DACW37-1-96-0085; and,

WHEREAS, the Secretary concurs with the Lessee that Lease No. DACW37-1-96-0085 shall continue to be operated and maintained by the City of Hastings; and,

WHEREAS, the Secretary has determined that in lieu of issuing a new lease, it is more efficient to amend Lease No. DACW22-1-83-5106 to include Lease No. DACW37-1-96-0085; and,

NOW, THEREFORE, Lease No. DACW22-1-83-5106 is hereby amended to reflect an increase in overall lease acreage of 0.98 acre, more or less, as identified on Exhibit "B", attached hereto and made a part hereof.

All other terms and conditions of Lease No. DACW22-1-83-5106 shall remain unchanged and in effect for the remainder of the lease term.

IN WITNESS WHEREOF, I have hereunto set my hand this 19 day of May, 2020, by authority of the Secretary of the Army.

Kevin Sommerland
Chief, Real Estate
Real Estate Contracting Officer

THIS SUPPLEMENTAL AGREEMENT, to Lease No. DACW22-1-83-5106, is also executed by the Lessee this ____ day of _____, 2020.

Mary Fasbender
Mayor
City of Hastings

Julie Flaten
Clerk
City of Hastings

Exhibit "A"

Mississippi River Navigation Project - Lock and Dam No. 2
S 20 & 21, T 115N , R 17W
Dakota County, Minnesota
146 acres, more or less
Contract No. DACW22-1-83-5106
Supplemental Agreement No. 1

Exhibit "A"

St. Paul District
REAL ESTATE
US Army Corps of Engineers

0 300 600 1,200 Feet

The USACE Real Estate Tracts illustrated on this map are based on historic data sources. The data represents the results of data collection/processing for a specific activity and indicates the general existing conditions. As such, it is only valid for its intended use, content, and accuracy specifications. The user is responsible for the results of any application of the data other than its intended purpose.

N

Exhibit "B"

Mississippi River Navigation Project - Lock and Dam No. 2
S 20 & 21, T 115N , R 17W
Dakota County, Minnesota
0.98 acre, more or less (4290 ft. long x 10 ft. wide)
Contract No. DACW22-1-83-5106
Supplemental Agreement No. 1

Exhibit "B"

St. Paul District
REAL ESTATE
US Army Corps of Engineers

0 190 380 760 Feet

The USACE Real Estate Tracts illustrated on this map are based on historic data sources. The data represents the results of data collection/processing for a specific activity and indicates the general existing conditions. As such, it is only valid for its intended use, content, and accuracy specifications. The user is responsible for the results of any application of the data other than its intended purpose.

N

Wetland Delineation Report

CSAH 42 and Mississippi River Greenway Trail Corridor Study

Hastings, Dakota County, Minnesota

December 2023

HR Green Project No: 2202947

Prepared For:

Dakota County

Prepared by:

HR Green, Inc.

St. Paul, MN

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Appendices

Appendix A: Wetland Determination Data Forms
Appendix B: Site Photographs

1.0 Introduction

Nininger Road (CSAH 42) is a 2-lane road serving as a travel route to downtown Hastings from the west. The intersecting Mississippi River Greenway trail system serves local mobility function for residents as well as attracts metropolitan visitors. The purpose of the project is to evaluate opportunities to address short term trail needs along CSAH 42 while encompassing long-term objectives for the corridor and the city of Hastings.

This wetland delineation report investigates the existing roadway of CSAH 42 as well as the Mississippi River Greenway Trail from the blufftops of Hastings to the Mississippi River bottoms and lock and dam #2. The study area is shown in Figure 1 and subsequent figures.

The study area has a central coordinate at a central coordinate of 44.75089, -92.87643 in Hastings, Dakota County, Minnesota in the following Section/Township/Ranges: 20/115N/17W, 21/115N/17W, and 28/115N/17W.

This report describes the background data, delineation methods, and results from the October 23, 2023 field wetland delineation of the study area.

2.0 Background Data Collection and Review

2.1 USGS Quadrangle Map

The USGS 7.5” quadrangle topographic map was reviewed (See Figure 1). Elevations in the study area range between 680 and 800 feet above sea level. The high elevation occurs along CSAH 42 in the northwest study area while the low elevation occurs at the base of the Mississippi River Greenway Trail near a structure associated with lock and dam #2. CSAH 42 is at the top of the bluff and gently slopes to the southeast. The Mississippi River Greenway Trail contains a switchback curve towards the Mississippi River. Lakeside Cemetery is located northeast of CSAH 42 in the southeastern portion of the study area.

2.2 National Wetlands Inventory (NWI)

The U.S. Fish & Wildlife Service NWI GIS dataset for Minnesota was reviewed (See Figure 2). There are three NWI polygons within the study area (See Table 1).

TABLE 1: NWI POLYGONS IN STUDY AREA

NWI Polygon	Description	Location/Setting
PEM1Cx	Palustrine, emergent, seasonally flooded, excavated	Adjacent to Mississippi River Greenway Trail, between trail and residential area
PEM1Ax	Palustrine, emergent, temporarily flooded, excavated	Adjacent to Mississippi River Greenway Trail, between trail and residential area
PUBFx	Palustrine, unconsolidated bottom, semi-permanently flooded, excavated	Adjacent to Mississippi River Greenway Trail, between trail and residential area

Source: USFWS NWI Inventory, Minnesota Dataset

2.3 Minnesota DNR Public Waters Inventory

The Minnesota DNR Public Waters Inventory map for Dakota County (DNR 2011) shows no public waters within the study area. The nearest public waters are US Lock and Dam Pool #2/ Lake Rebecca which are both associated with the Mississippi River to the east of the study area.

2.4 Minnesota DNR

The Minnesota DNR State Designated Trout Stream (per Minnesota Rules Chapter 6264) GIS database was reviewed. No designated trout streams are present in the study area. The nearest designated trout stream is approximately 8 miles southwest of the study area.

2.5 Dakota County NRCS Soil Data

A United States Department of Agriculture (USDA) National Resources Conservation Service (NRCS) web soil survey was reviewed for the project study area. There are seven (7) soil map units present in the study area, none of which are identified as hydric. Table 2 shows the NRCS web soil survey map units present in the study area. See Figure 2.

TABLE 2: NRCS SOILS IN STUDY AREA

Map Unit Symbol	Map Unit Name	Hydric Rating	Drainage Rating	Area (acres)	Percent of Area (%)
39A	Wadena loam, 0-2% slopes	No	Well drained	1.6	7.7
41A	Estherville sandy loam, 0-2% slopes	No	Somewhat excessively drained	7.5	36.3
41B	Estherville sandy loam, 2-6% slopes	No	Somewhat excessively drained	2.9	13.9
415B	Kanaranzi loam, 2-6% slopes	No	Well drained	0.4	1.8
611F	Hawick loamy sand, 20-40% slopes	No	Excessively drained	3.1	15.3
858C	Urban land-Chetek complex, 1-15% slopes	No	Somewhat excessively drained	4.9	23.9
1027	Udorthents, wet	N/A	N/A	0.2	1.1

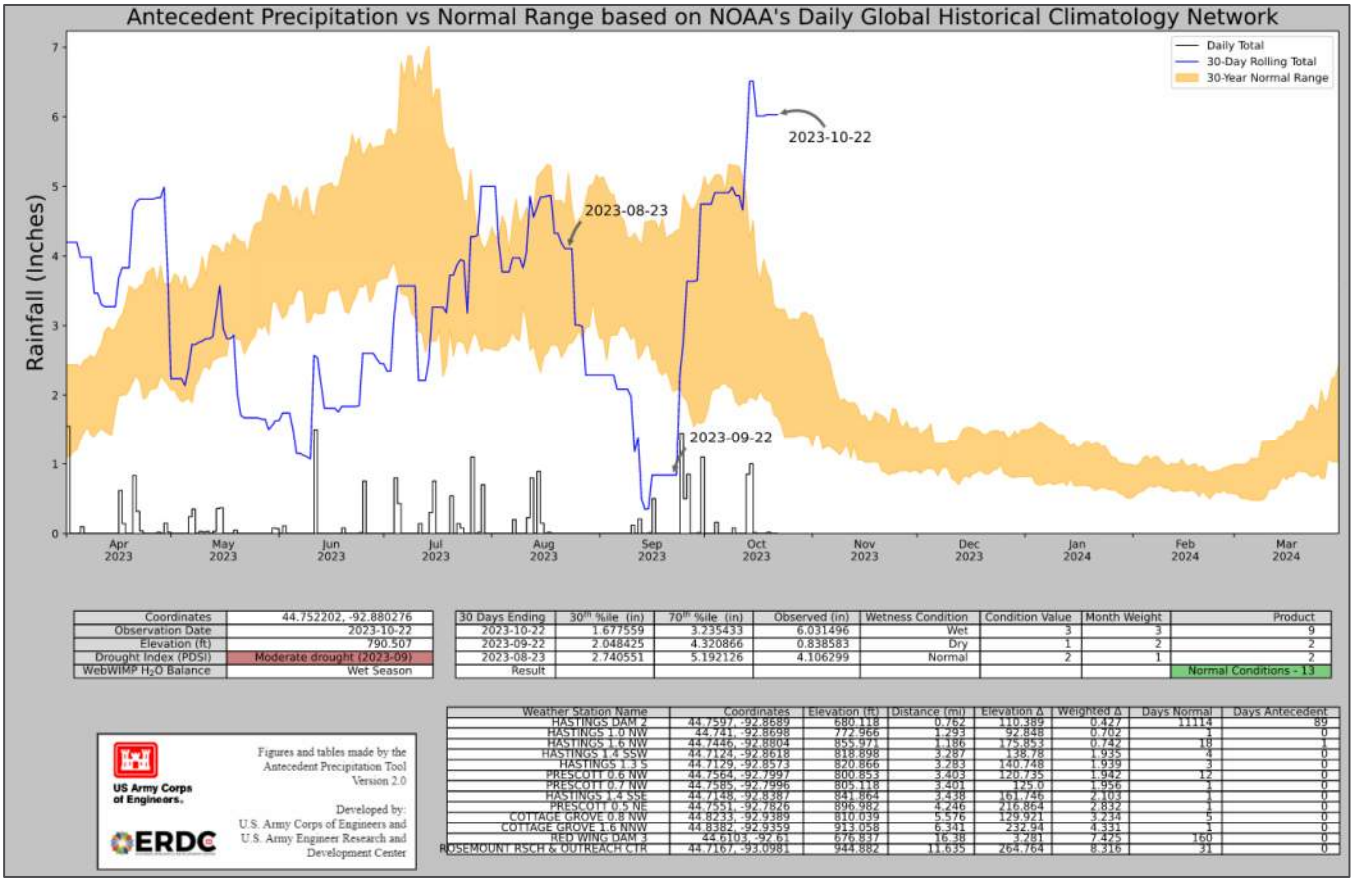
Source: USDA Web Soil Survey, NRCS SSURGO GIS Dataset for Dakota County, MN

2.6 FEMA National Flood Hazard Layer

The Federal Emergency Management Agency (FEMA) National Flood Hazard Layer online map was reviewed. There are minor portions of 0.2% and 1% annual chance of flood hazard in the northeast portion of the study area at the base of the trail.

2.7 Antecedent Precipitation

The USACE Antecedent Preciptiation Tool was queried to determine precipitation prior to the October 23, 2023 field visit. The tool displays 30 day rolling precipitation totals and compares them with normal range precipitation totals using data for area weather stations. The 30 day rolling average on August 23rd was Normal, September 22 was Dry, and Ocotober 22 was Wet. The drought index for the site was shown as “Moderate drought.”



Coordinates	44.752202, -92.880276
Observation Date	2023-10-22
Elevation (ft)	790.507
Drought Index (PDSI)	Moderate drought (2023-09)
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30th %ile (in)	70th %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2023-10-22	1.677559	3.235433	6.031496	Wet	3	3	9
2023-09-22	2.048425	4.320866	0.838583	Dry	1	2	2
2023-08-23	2.740551	5.192126	4.106299	Normal	2	1	2
Result							Normal Conditions - 13

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
HASTINGS DAM 2	44.7597, -92.8689	680.118	0.762	110.389	0.427	11114	89
HASTINGS 1.0 NW	44.741, -92.8698	772.966	1.293	92.848	0.702	1	0
HASTINGS 1.6 NW	44.7446, -92.8804	855.971	1.186	175.853	0.742	18	1
HASTINGS 1.4 SSW	44.7124, -92.8618	918.898	2.287	138.78	1.935	4	0
HASTINGS 1.3 S	44.7129, -92.8573	820.866	3.283	140.748	1.939	3	0
PRESCOTT 0.6 NW	44.7564, -92.7997	800.853	3.403	120.735	1.942	12	0
PRESCOTT 0.7 NW	44.7585, -92.7996	805.118	3.401	125.0	1.956	1	0
HASTINGS 1.4 SSE	44.7148, -92.8387	941.864	2.338	161.746	2.101	1	0
PRESCOTT 0.5 NE	44.7551, -92.7826	996.982	4.246	216.864	2.832	1	0
COTTAGE GROVE 0.8 NW	44.8233, -92.9389	810.039	5.576	129.921	3.234	5	0
COTTAGE GROVE 1.6 NNW	44.8382, -92.9359	913.058	6.341	232.94	4.331	1	0
RED WING DAM 3	44.6103, -92.61	676.837	16.38	3.281	7.425	160	0
ROSEMOUNT RSCH & OUTREACH CTR	44.7167, -93.0981	944.882	11.035	264.764	8.316	21	0

3.0 Methods

Wetland delineation activities were conducted by wetland scientist Ted McCaslin, PWS/MNPCP and Carl Folz, WPIT. An on-site wetland delineation was conducted on October 23, 2023. The delineation used methods described in the 1987 Corps of Engineers Wetlands Delineation Manual and the 2012 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast (NCNE) Region, Version 2.0.

Additionally, paired wetland points (one wetland/one upland) were sampled with a soil auger or shovel to a minimum depth of 18 inches for each similarly-situated wetland unless a restrictive layer was present. NCNE Region data forms were completed for plant communities and for representative wetland and non-wetland sites within the study area. Wetland vegetation, soil indicators, hydrology indicators and other data were recorded on NCNE data forms at five (5) sample points within the study area. Additional plots were sampled throughout the study area to refine the wetland boundaries before the boundaries were recorded. Data forms are included in Appendix A.

Wetland and aquatic resource boundaries were identified in the field, drawn on high-resolution photographs, and recorded with GPS equipment with real-time sub-meter accuracy. Representative photographs taken during the field delineation are in Appendix B.

Potential streams were observed for stream indicators including ordinary high-water marks (OHWM), running water, water flow direction, absence of vegetation within wetlands, active sediment sorting, bank erosion, and bank filling.

3.1 Vegetation

The hydrophytic vegetation criteria for wetland classification are met when greater than 50% of the dominant plant species are hydrophytes. The indicator status of plant species is expressed in terms of the estimated probabilities of that species occurring in wetland conditions within a given region. Hydrophytes include all plants with indicator status given as Facultative (FAC), Facultative Wet (FACW), or Obligate (OBL). Facultative Upland (FACU) and Upland (UPL) are not considered hydrophytes. The latest U.S. Army Corps of Engineers (USACE) National Wetland Plant List, NCNE indicators found in the 2018 Regional Wetland Plant List was used for species indicators.

3.2 Soils

A hydric soil is formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part. Hydric soils exhibit characteristic morphologies that result from repeated periods of saturation or inundation. Saturation or inundation, combined with soil microbial activity causes the depletion of oxygen. This promotes certain biogeochemical processes, such as the accumulation of organic matter and the reduction, translocation, or accumulation of iron and other reducible elements. These processes result in distinctive characteristics, or field indicators, that persist in the soil during both wet and dry periods. Regionally-specific hydric soil indicators are described in the USDA Field Indicators of Hydric Soils in the United States Version 8.2, 2018. Soils were evaluated for field indicators by directly by digging soil pits and using a soil probe in soils with heavy clay content. Soil colors are described using the Munsell color notation system in this report.

3.3 Hydrology

In order for an area to have wetland hydrology, it must exhibit one or more primary indicators and/or two or more secondary indicators for USACE jurisdictional and isolated wetlands. Primary indicators include either the direct presence of water as inundation or saturation within the upper 12 inches of the soil profile, or direct evidence of recent inundation including water marks, drift lines, sediment deposits, or drainage patterns. Secondary indicators are conditions reflecting anaerobic conditions produced because of saturation or inundation. Secondary indicators include such conditions as surface soil cracks, drainage patterns, crayfish burrows, geomorphic position, and a positive "FAC-Neutral Test" (i.e., the dominant vegetation is, on average, hydrophytic).

3.4 Streams

Streams were noted for as ephemeral features, intermittent, or perennial features as defined below:

- Ephemeral features flow only in direct response to precipitation, including ephemeral streams, swales, gullies, rills, and pools.
- Intermittent means surface water flowing continuously during certain times of the year and more than in direct response to precipitation (e.g., seasonally when the groundwater table is elevated or when snowpack melts).
- Perennial means surface water flowing continuously year-round.

4.0 Results

4.1 Wetlands

Two (2) wetlands were identified in the study area. See Figure 3 for wetland locations and Table 3 for summary data on the wetlands. The wetlands did not have surface connection to larger aquatic systems.

Wetland 1 an emergent constructed depressional wetland between the Mississippi River Greenway Trail and residential areas. Data Point 2 was taken within Wetland 1. Secondary hydrology indicators Geomorphic Position (D2) and FAC-Neutral Test (D5) were observed. Dominant hydrophytic vegetation of reed canary grass (*Phalaris arundinacea*) was observed. Hydric soil indicator Thick Dark Surface (A12) was observed. This depressional wetland extends beyond the study area limits, and transitions to upland as geomorphic position changes to slopes in the upland.

Wetland 2 is an emergent constructed depressional wetland with two stormwater outlets contributing water to the wetland. Data Point 4 was taken within Wetland 2 and primary hydrology indicators Drift Deposits (B3) and Water-Stained Leaves (B9) were observed. Dominant hydrophytic vegetation hybrid

cattail (*Typha x glauca*) and spotted-lady thumb (*Persicaria maculosa*) were observed. Hydric soil indicator Redox Dark Surface (F6) was observed in the Wetland. Wetland 2 extends beyond the study area limits and transitions to upland as geomorphic position changes to higher elevation surrounding the wetland.

TABLE 3: WETLANDS IN STUDY AREA

Feature	Acres in Study Area	Square Feet in Study Area	Latitude (Dec Degr)	Longitude (Dec Degr)	Observed Cowardin Class	Circular 39 Type	Associated Wetland Data Point
Wetland 1	0.002	69	44.75494	-92.88012	PEMA	Type 2	DP2
Wetland 2	0.001	23	44.75433	-92.87909	PEMCx	Type 3	DP4

4.2 Other Aquatic Resources

There were no other aquatic resources identified within the study area, but Lake Rebecca is adjacent to the northwest edge of the study area.

5.0 Summary

Two (2) wetlands and no other aquatic features were identified within the study area. The two wetlands occur between the existing Mississippi River Greenway Trail and residential areas and are associated with constructed stormwater features. The two depressional wetlands do not have surface connections to other wetlands or aquatic features.

6.0 References

Cowardin, L. M., V. Carter, F. C. Golet, and E. T. LaRoe. 1979. Classification of Wetlands and Deepwater Habitats of the United States. U.S. Fish and Wildlife Service.

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Minnesota Department of Natural Resources State Designated Trout Streams, Minnesota [shapefile] https://gisdata.mn.gov/dataset/env-trout-stream-designations

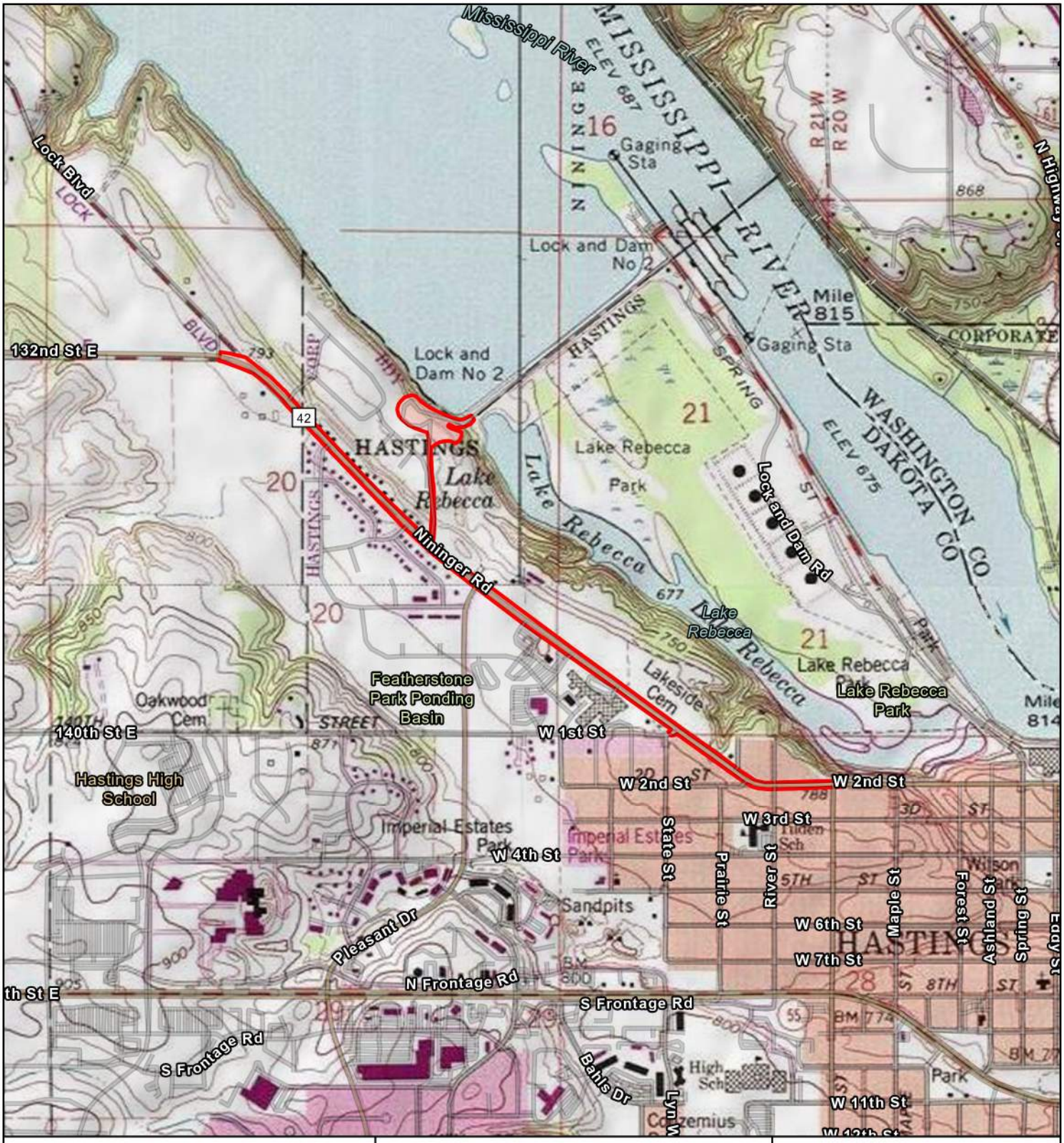
USDA - Web Soil Survey for Dakota County, Minnesota. 2016. National Cooperative Soil Survey On-line Database. http://websoilsurvey.nrcs.usda.gov/app/.

USFWS (2018). National Wetlands Inventory. U.S. Fish & Wildlife Service. https://data.nal.usda.gov/dataset/national-wetlands-inventory.

USGS, 2019, National Hydrography Dataset (NHD), https://www.usgs.gov/national-hydrography/access-national-hydrography-products.

USGS, Hastings, Vermillion, and St. Paul Quadrangles - Minnesota, Dakota Co., 7.5” Series, ArcGIS Online Services.

FIGURES



Legend

StudyArea

Figure 1

USGS Quadrangle

CSAH 42 - Mississippi River Trail

Hasting, Dakota County, MN

0 1,000 2,000

Feet

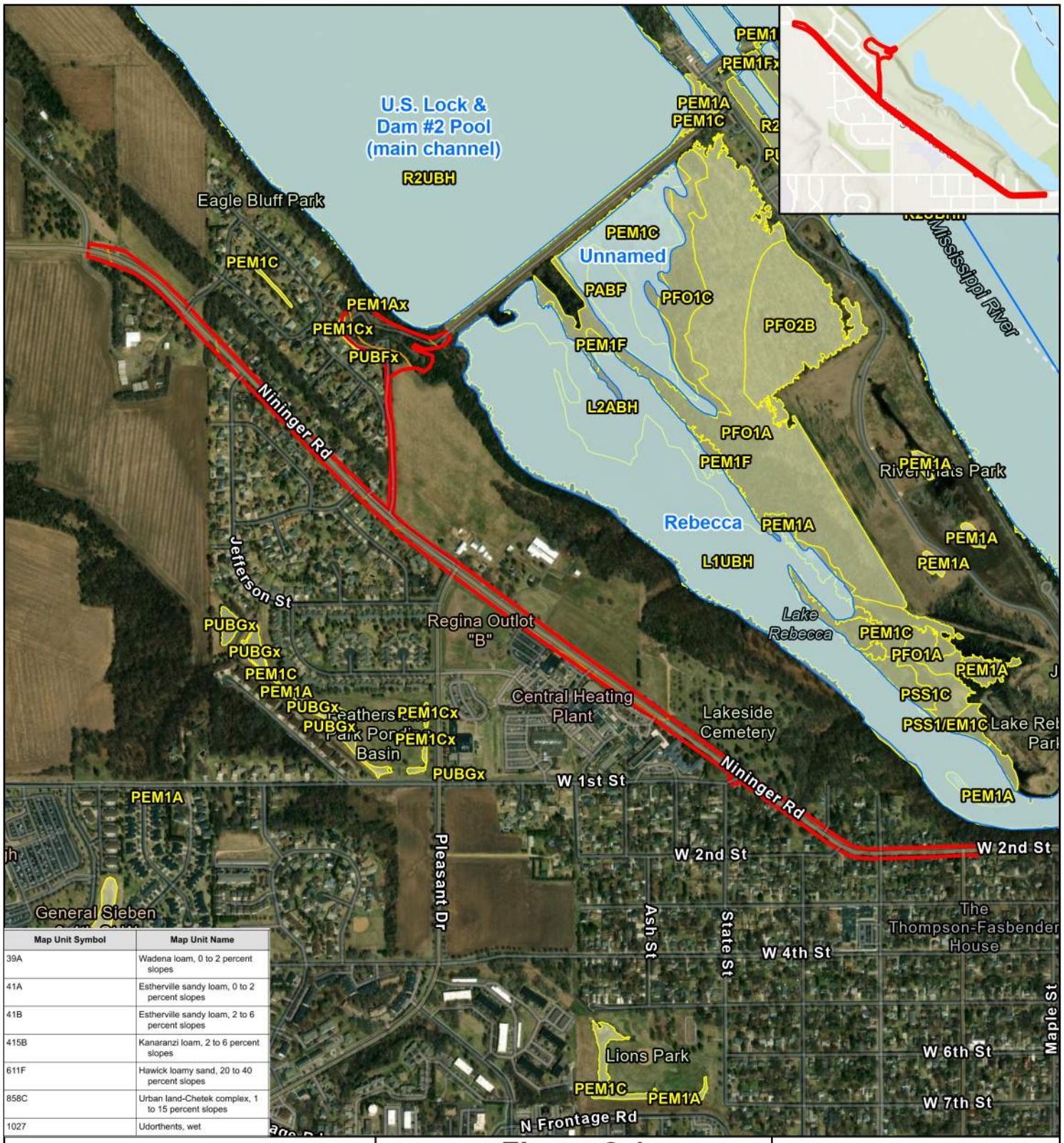
N

HRGreen

Date Printed:	Created By:
10/22/2023	CAF

1 inch equals 2,000 feet

Path: \\hrgreen.com\HRG\Data\2022\2202947\CAD\GIS\ArcPro\CSAH42_Wetlands\CSAH42_Wetlands.aprx



Map Unit Symbol	Map Unit Name
39A	Wadena loam, 0 to 2 percent slopes
41A	Estherville sandy loam, 0 to 2 percent slopes
41B	Estherville sandy loam, 2 to 6 percent slopes
415B	Kanaranzi loam, 2 to 6 percent slopes
611F	Hawick loamy sand, 20 to 40 percent slopes
858C	Urban land-Chetek complex, 1 to 15 percent slopes
1027	Udorthents, wet

Legend

- National Wetland Inventory
- StudyArea
- NRCS Soils
- PWI Streams
- Public Water Basin
- Public Water Wetland

Figure 2-1 Overview

Soils, NWI, PWI

CSAH 42 - Mississippi River Trail

Hasting, Dakota County, MN

0 490 980

Feet

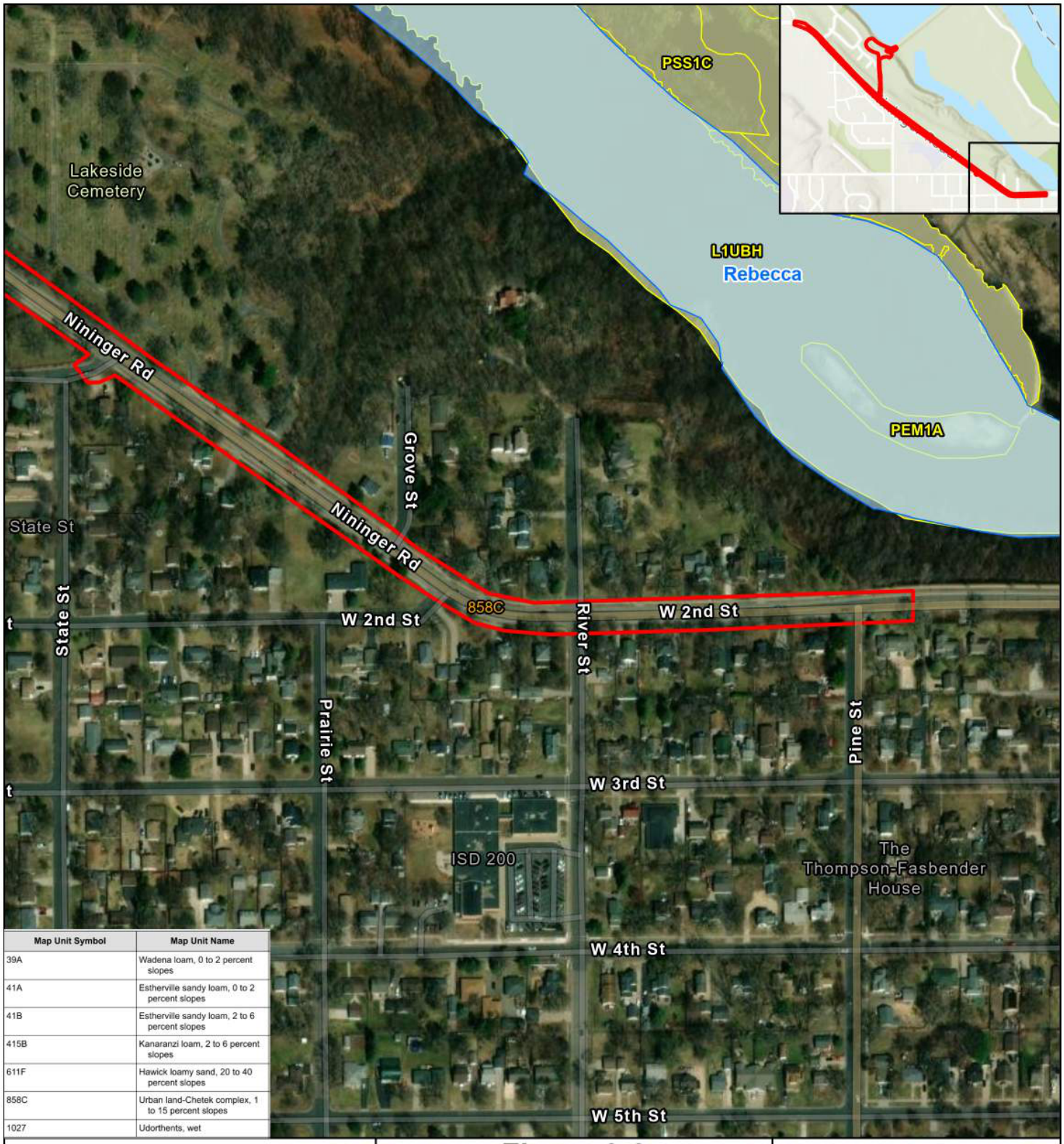
N

HRGreen

Date Printed:	Created By:
10/23/2023	CAF

1 inch equals 1,000 feet

Path: \\hrgreen.com\HRG\Data\2022\2202947\CAD\GIS\ArcPro\CSAH42_Wetlands\CSAH42_Wetlands.aprx



Map Unit Symbol	Map Unit Name
39A	Wadena loam, 0 to 2 percent slopes
41A	Estherville sandy loam, 0 to 2 percent slopes
41B	Estherville sandy loam, 2 to 6 percent slopes
415B	Kanaranzi loam, 2 to 6 percent slopes
611F	Hawick loamy sand, 20 to 40 percent slopes
858C	Urban land-Chetek complex, 1 to 15 percent slopes
1027	Udorthents, wet

Legend

- National Wetland Inventory
- StudyArea
- NRCS Soils
- PWI Streams
- Public Water Basin
- Public Water Wetland

Figure 2-2
CSAH 42 - South

Soils, NWI, PWI

CSAH 42 - Mississippi River Trail

Hasting, Dakota County, MN

0 150 300

Feet

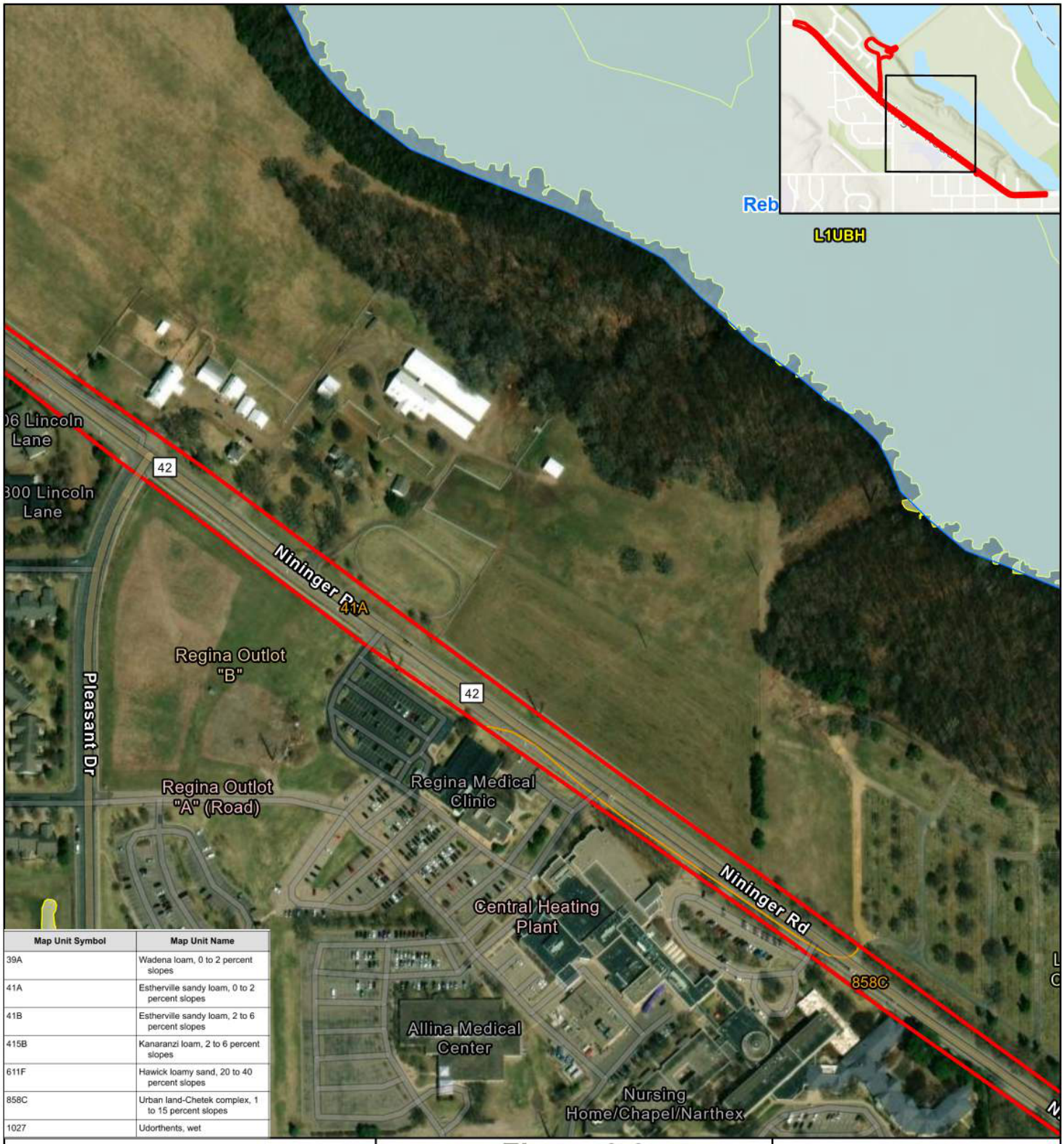
N

HRGreen

Date Printed:	Created By:
10/23/2023	CAF

1 inch equals 300 feet

Path: \\hrgreen.com\HRG\Data\2022\2202947\CAD\GIS\ArcPro\CSAH42_Wetlands\CSAH42_Wetlands.aprx



Map Unit Symbol	Map Unit Name
39A	Wadena loam, 0 to 2 percent slopes
41A	Estherville sandy loam, 0 to 2 percent slopes
41B	Estherville sandy loam, 2 to 6 percent slopes
415B	Kanaranzi loam, 2 to 6 percent slopes
611F	Hawick loamy sand, 20 to 40 percent slopes
858C	Urban land-Chetek complex, 1 to 15 percent slopes
1027	Udorthents, wet

Legend

- National Wetland Inventory
- StudyArea
- NRCS Soils
- PWI Streams
- Public Water Basin
- Public Water Wetland

Figure 2-3
CSAH 42 - Central

Soils, NWI, PWI

CSAH 42 - Mississippi River Trail

Hasting, Dakota County, MN

0 150 300

Feet

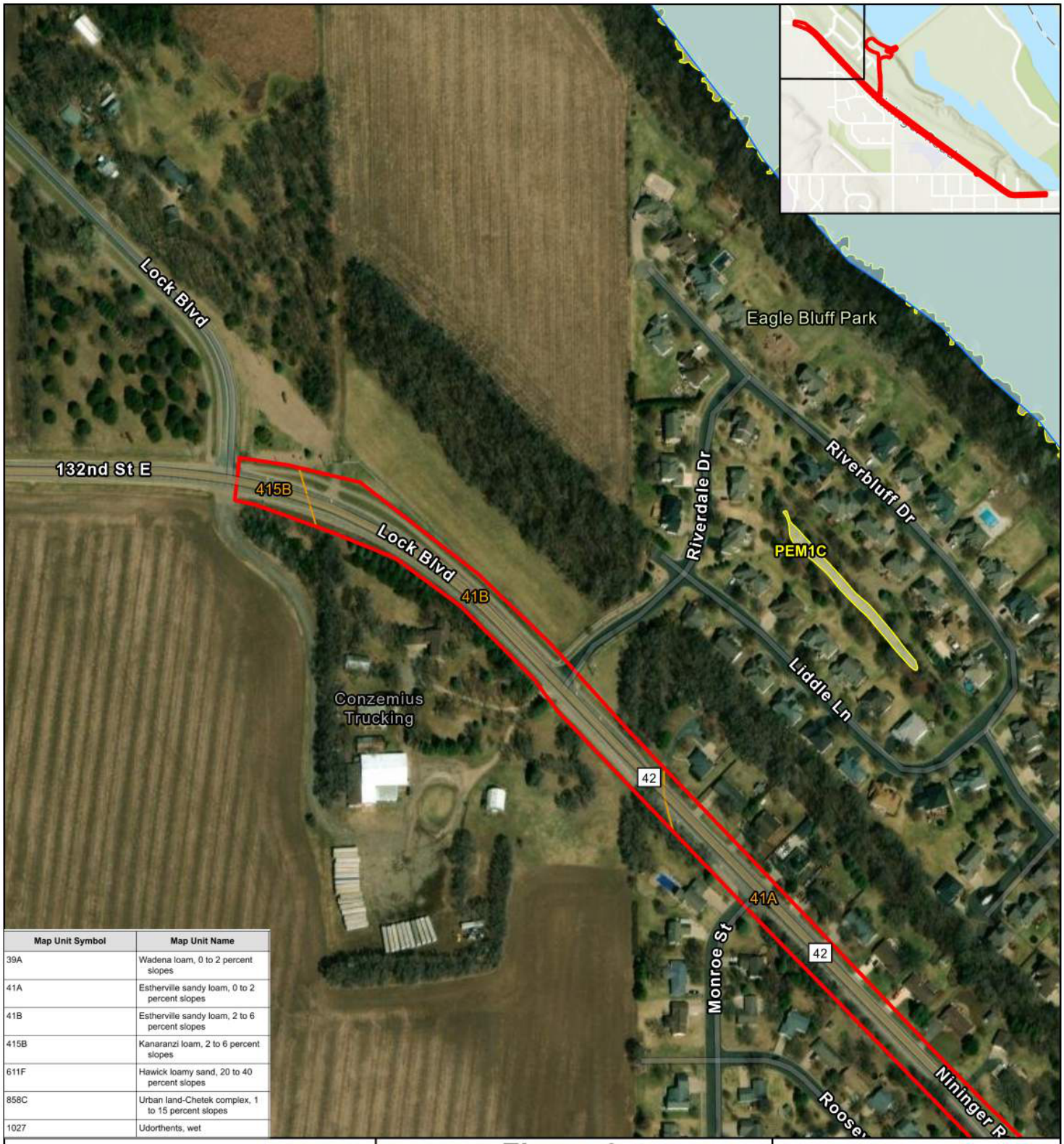
N

HRGreen

Date Printed:	Created By:
10/23/2023	CAF

1 inch equals 300 feet

Path: \\hrgreen.com\HRG\Data\2022\2202947\CAD\GIS\ArcPro\CSAH42_Wetlands\CSAH42_Wetlands.aprx



Map Unit Symbol	Map Unit Name
39A	Wadena loam, 0 to 2 percent slopes
41A	Estherville sandy loam, 0 to 2 percent slopes
41B	Estherville sandy loam, 2 to 6 percent slopes
415B	Kanaranzi loam, 2 to 6 percent slopes
611F	Hawick loamy sand, 20 to 40 percent slopes
858C	Urban land-Chetek complex, 1 to 15 percent slopes
1027	Udorthents, wet

Legend

- National Wetland Inventory
- StudyArea
- NRCS Soils
- PWI Streams
- Public Water Basin
- Public Water Wetland

Figure 2-4
CSAH 42 - North

Soils, NWI, PWI

CSAH 42 - Mississippi River Trail

Hasting, Dakota County, MN

0 150 300

Feet

N

HRGreen

Date Printed:	Created By:
10/23/2023	CAF

1 inch equals 300 feet

Path: \\hrgreen.com\HRG\Data\2022\2202947\CAD\GIS\ArcPro\CSAH42_Wetlands\CSAH42_Wetlands.aprx

Map Unit Symbol	Map Unit Name
39A	Wadena loam, 0 to 2 percent slopes
41A	Estherville sandy loam, 0 to 2 percent slopes
41B	Estherville sandy loam, 2 to 6 percent slopes
415B	Kanaranzi loam, 2 to 6 percent slopes
611F	Hawick loamy sand, 20 to 40 percent slopes
858C	Urban land-Chetek complex, 1 to 15 percent slopes
1027	Udorthents, wet

Legend

- National Wetland Inventory
- StudyArea
- NRCS Soils
- PWI Streams
- Public Water Basin
- Public Water Wetland

Figure 2-5
Mississippi River Greenway Trail

Soils, NWI, PWI

CSAH 42 - Mississippi River Trail

Hasting, Dakota County, MN

0 150 300

Feet

N

HRGreen.

Date Printed:	Created By:
10/23/2023	CAF

1 inch equals 300 feet

Path: \\hrgreen.com\HRG\Data\2022\2202947\CAD\GIS\ArcPro\CSAH42_Wetlands\CSAH42_Wetlands.aprx

Legend

- Study Area
- Delineated Features
- Delineated Outside Study Area
- Data Points

Figure 3-1
Overview

Delineated Features

CSAH 42 - Mississippi River Trail

Hasting, Dakota County, MN

0 475 950

Feet

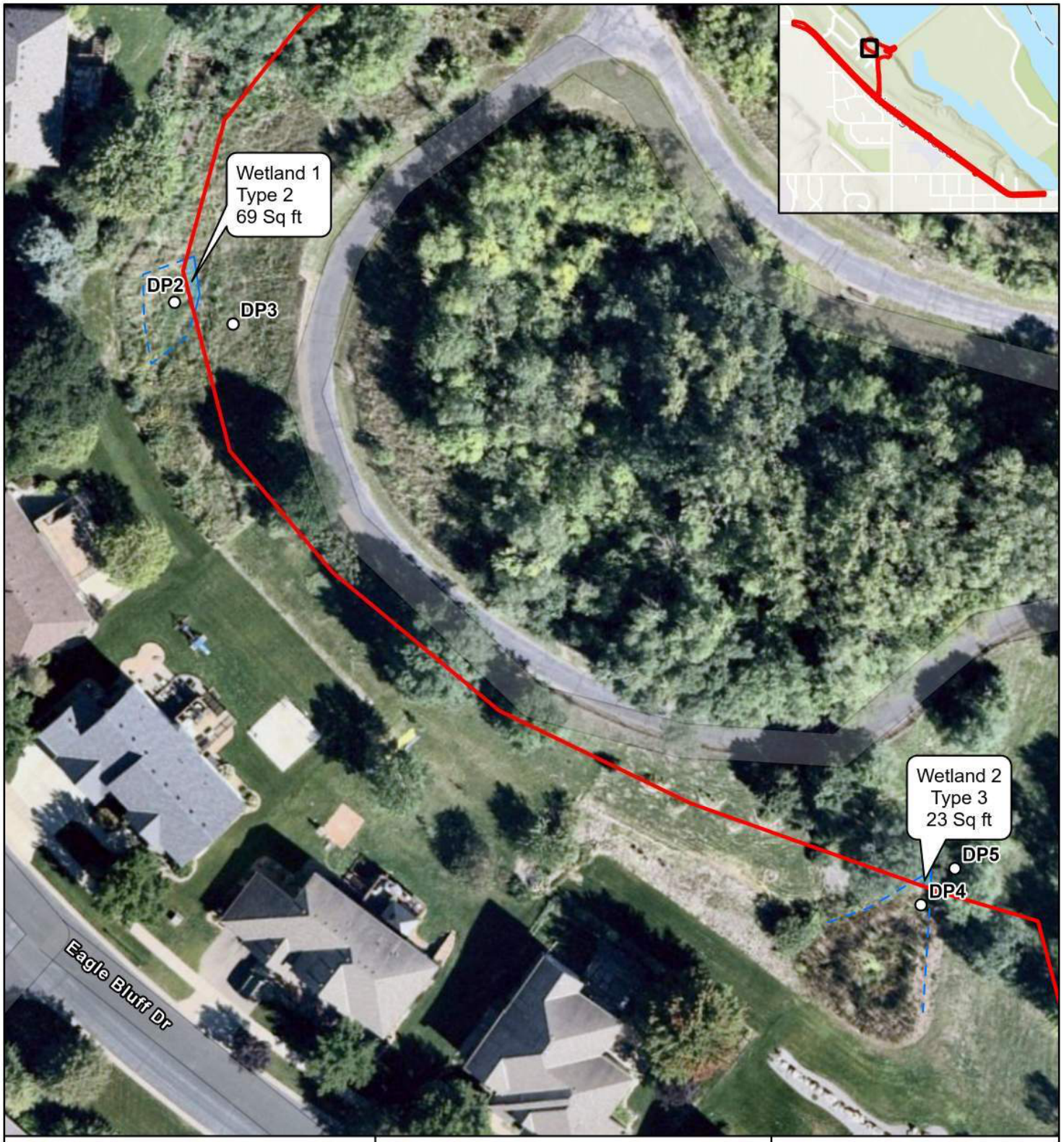
N

HRGreen

Date Printed:	Created By:
10/24/2023	CAF

1 inch equals 950 feet

Path: \\hrgreen.com\HRG\Data\2022\2202947\CAD\GIS\ArcPro\CSAH42_Wetlands\CSAH42_Wetlands.aprx



Legend

- Study Area
- Delineated Features
- Delineated Outside Study Area
- Data Points

Figure 3-2
Wetlands 1 and 2

Delineated Features

CSAH 42 - Mississippi River Trail

Hasting, Dakota County, MN

0 25 50

Feet

N

HRGreen

Date Printed:	Created By:
10/24/2023	CAF

1 inch equals 50 feet

Path: \\hrgreen.com\HRG\Data\2022\2202947\CAD\GIS\ArcPro\CSAH42_Wetlands\CSAH42_Wetlands.aprx

Legend

- Study Area
- Delineated Features
- Delineated Outside Study Area
- Data Points

Figure 3-3
Data Point 1

Delineated Features

CSAH 42 - Mississippi River Trail

Hasting, Dakota County, MN

0 25 50

Feet

N

HRGreen

Date Printed:	Created By:
10/24/2023	CAF

1 inch equals 50 feet

Path: \\hrgreen.com\HRG\Data\2022\2202947\CAD\GIS\ArcPro\CSAH42_Wetlands\CSAH42_Wetlands.aprx

APPENDIX A: WETLAND DETERMINATION DATA FORMS

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CSAH 42 Mississippi River Trail City/County: Dakota County Sampling Date: 2023-10-23

Applicant/Owner: Dakota County State: Minnesota Sampling Point: DP1

Investigator(s): Ted McCaslin and Carl Folz Section, Township, Range: S20 T115N R17W

Landform (hillslope, terrace, etc.): Toeslope Local relief (concave, convex, none): None Slope (%): 2

Subregion (LRR or MLRA): K 91A Lat: 44.75481207 Long: -92.87735778 Datum: WGS 84

Soil Map Unit Name: 1027 - Udorthents, wet NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No ✓	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** ✓
Hydric Soil Present?	Yes ____	No ✓	
Wetland Hydrology Present?	Yes ____	No ✓	If yes, optional Wetland Site ID: ____

Remarks: (Explain alternative procedures here or in a separate report.)

Toe slope down from trail adjacent to Pool #2 of Mississippi River. Likely floated plastic debris from Pool #2 in area.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Vis ble on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No ✓	Depth (inches): ____
Water Table Present?	Yes ____	No ✓	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No ✓	Depth (inches): ____

Wetland Hydrology Present? **Yes** ____ **No** ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: DP1

Tree Stratum (Plot size: 30 ft r)	Absolute % Cover	Dominant Species?	Indicator Status
1. Ulmus pumila	10	✓	FACU
2.			
3.			
4.			
5.			
6.			
7.			
	10 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft r)			
1. Cornus racemosa	60	✓	FAC
2. Fraxinus pennsylvanica	10		FACW
3. Rhamnus cathartica	10		FAC
4. Lonicera maackii	5		
5.			
6.			
7.			
	85 = Total Cover		
Herb Stratum (Plot size: 5 ft r)			
1. Carex pensylvanica	7	✓	FAC
2. Hydrophyllum virginianum	7	✓	FAC
3. Geranium maculatum	5	✓	FACU
4. Thalictrum thalictroides	5	✓	FACU
5. Carex blanda	4		FAC
6. Ageratina altissima	3		FACU
7.			
8.			
9.			
10.			
11.			
12.			
	31 = Total Cover		
Woody Vine Stratum (Plot size: 30 ft r)			
1.			
2.			
3.			
4.			
	0 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	10	x 2 =	20
FAC species	88	x 3 =	264
FACU species	23	x 4 =	92
UPL species	0	x 5 =	0
Column Totals:	121 (A)		376 (B)

Prevalence Index = B/A = 3.11

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ___ No ✓

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0 - 5	10YR 3/1	100					Loam	
5 - 13	10YR 3/2	100					Sandy Loam	
13 - 22	10YR 4/3	75	10YR 3/2	25	D	M	Sandy Loam	
-								
-								
-								
-								
-								
-								
-								
-								
-								

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) (**LRR R, MLRA 149B**)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** _____ **No** ✓

Remarks:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CSAH 42 Mississippi River Trail City/County: Dakota County Sampling Date: 2023-10-23

Applicant/Owner: Dakota County State: Minnesota Sampling Point: DP2

Investigator(s): Ted McCaslin and Carl Folz Section, Township, Range: S20 T115N R17W

Landform (hillslope, terrace, etc.): Basin Local relief (concave, convex, none): Concave Slope (%): 0

Subregion (LRR or MLRA): K 91A Lat: 44.75492211 Long: -92.88014105 Datum: WGS 84

Soil Map Unit Name: 39A - Wadena loam, 0 to 2 percent slopes NWI classification: PEM1Cx

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✓	No _____	**Is the Sampled Area within a Wetland?** **Yes ✓** **No _____**
Hydric Soil Present?	Yes ✓	No _____	
Wetland Hydrology Present?	Yes ✓	No _____	If yes, optional Wetland Site ID: _____

Remarks: (Explain alternative procedures here or in a separate report.)

Small isolated depression down from trail.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Vis ble on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ✓ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ✓ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes _____	No ✓	Depth (inches): _____
Water Table Present?	Yes _____	No ✓	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes _____	No ✓	Depth (inches): _____

Wetland Hydrology Present? Yes ✓ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: DP2

Tree Stratum (Plot size: 30 ft r)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft r)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		
Herb Stratum (Plot size: 5 ft r)			
1. Phalaris arundinacea	100	✓	FACW
2. Urtica dioica	5		FAC
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	105 = Total Cover		
Woody Vine Stratum (Plot size: 30 ft r)			
1.			
2.			
3.			
4.			
	0 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	100	x 2 =	200
FAC species	5	x 3 =	15
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	105 (A)		215 (B)

Prevalence Index = B/A = 2.05

Hydrophytic Vegetation Indicators:

✓ 1 - Rapid Test for Hydrophytic Vegetation

✓ 2 - Dominance Test is >50%

✓ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** ✓ **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0 - 3	10YR 2/1	100					Mucky Loam/Clay	
3 - 16	10YR 2/1						Clay Loam	
16 - 24	10YR 2/1	90	10YR 3/4	10	C	M	Clay Loam	
-								
-								
-								
-								
-								
-								
-								
-								
-								

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ✓ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) (**LRR R, MLRA 149B**)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ✓ **No** _____

Remarks:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CSAH 42 Mississippi River Trail City/County: Dakota County Sampling Date: 2023-10-23

Applicant/Owner: Dakota County State: Minnesota Sampling Point: DP3

Investigator(s): Ted McCaslin and Carl Folz Section, Township, Range: S20 T115N R17W

Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope (%): 5

Subregion (LRR or MLRA): K 91A Lat: 44.75489992 Long: -92.88005897 Datum: WGS 84

Soil Map Unit Name: 39A - Wadena loam, 0 to 2 percent slopes NWI classification: PEM1Cx

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ✓	**Is the Sampled Area within a Wetland?** Yes _____ No ✓
Hydric Soil Present?	Yes _____	No ✓	
Wetland Hydrology Present?	Yes _____	No ✓	If yes, optional Wetland Site ID: _____

Remarks: (Explain alternative procedures here or in a separate report.)

Upslope from basin

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Vis ble on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes _____	No ✓	Depth (inches): _____
Water Table Present?	Yes _____	No ✓	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes _____	No ✓	Depth (inches): _____

Wetland Hydrology Present? Yes _____ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants. Sampling Point: DP3

Tree Stratum (Plot size: 30 ft r)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft r)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		
Herb Stratum (Plot size: 5 ft r)			
1. Poa pratensis	55	✓	FACU
2. Solidago canadensis	25	✓	FACU
3. Bromus inermis	20		UPL
4. Cirsium arvense	5		FACU
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	105 = Total Cover		
Woody Vine Stratum (Plot size: 30 ft r)			
1.			
2.			
3.			
4.			
	0 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	85	x 4 =	340
UPL species	20	x 5 =	100
Column Totals:	105 (A)		440 (B)

Prevalence Index = B/A = 4.19

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ___ No ✓

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0 - 15	10YR 2/2	100					Clay Loam	
15 - 19	10YR 4/3	100					Sand	
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) (**LRR R, MLRA 149B**)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** _____ **No** ✓

Remarks:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CSAH 42 Mississippi River Trail City/County: Dakota County Sampling Date: 2023-10-23

Applicant/Owner: Dakota County State: Minnesota Sampling Point: DP4

Investigator(s): Ted McCaslin and Carl Folz Section, Township, Range: S20 T115N R17W

Landform (hillslope, terrace, etc.): Basin Local relief (concave, convex, none): Concave Slope (%): 1

Subregion (LRR or MLRA): K 91A Lat: 44.75431479 Long: -92.87909686 Datum: WGS 84

Soil Map Unit Name: 39A - Wadena loam, 0 to 2 percent slopes NWI classification: PUBFx

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✓	No _____	**Is the Sampled Area within a Wetland?** **Yes ✓** **No _____**
Hydric Soil Present?	Yes ✓	No _____	
Wetland Hydrology Present?	Yes ✓	No _____	If yes, optional Wetland Site ID: _____

Remarks: (Explain alternative procedures here or in a separate report.)

Storm water basin with culvert flow from north and west into basin. No outfall observed.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ✓ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ✓ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Vis ble on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ✓ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ✓ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes _____	No ✓	Depth (inches): _____
Water Table Present?	Yes _____	No ✓	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes ✓	No _____	Depth (inches): 15

Wetland Hydrology Present? Yes ✓ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants. Sampling Point: DP4

Tree Stratum (Plot size: 30 ft r)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft r)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0 = Total Cover		
Herb Stratum (Plot size: 5 ft r)			
1. Typha X glauca	70	✓	OBL
2. Persicaria maculosa	20	✓	FAC
3. Scirpus cyperinus	10		OBL
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	100 = Total Cover		
Woody Vine Stratum (Plot size: 30 ft r)			
1.			
2.			
3.			
4.			
	0 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	80	x 1 =	80
FACW species	0	x 2 =	0
FAC species	20	x 3 =	60
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	100 (A)		140 (B)

Prevalence Index = B/A = 1.40

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

✓ 2 - Dominance Test is >50%

✓ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** ✓ **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DP4

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0 - 3	10YR 2/1	100					Mucky Loam/Clay	
3 - 8	10YR 2/1	100					Clay Loam	
8 - 15	10YR 2/1	80	10YR 4/4	20	C	M	Clay Loam	
15 - 19	10YR 4/2	100					Sand	
-								
-								
-								
-								
-								
-								
-								
-								

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) (**LRR R, MLRA 149B**)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ✓ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ✓ **No** _____

Remarks:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CSAH 42 Mississippi River Trail City/County: Dakota County Sampling Date: 2023-10-23

Applicant/Owner: Dakota County State: Minnesota Sampling Point: DP5

Investigator(s): Ted McCaslin and Carl Folz Section, Township, Range: S20 T115N R17W

Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): None Slope (%): 4

Subregion (LRR or MLRA): K 91A Lat: 44.754351 Long: -92.879049 Datum: WGS 84

Soil Map Unit Name: 39A - Wadena loam, 0 to 2 percent slopes NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ✓	**Is the Sampled Area within a Wetland?** Yes _____ No ✓
Hydric Soil Present?	Yes _____	No ✓	
Wetland Hydrology Present?	Yes _____	No ✓	If yes, optional Wetland Site ID: _____

Remarks: (Explain alternative procedures here or in a separate report.)

Up from basin adjacent to 12 culvert into basin. Herbaceous layer mowed.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Vis ble on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes _____	No ✓	Depth (inches): _____
Water Table Present?	Yes _____	No ✓	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes _____	No ✓	Depth (inches): _____

Wetland Hydrology Present? Yes _____ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants. Sampling Point: DP5

Tree Stratum (Plot size: 30 ft r)	Absolute % Cover	Dominant Species?	Indicator Status
1. Ulmus pumila	40	✓	FACU
2. Juniperus virginiana	4		FACU
3.			
4.			
5.			
6.			
7.			
	44	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15 ft r)			
1. Juniperus virginiana	7	✓	FACU
2. Rhamnus cathartica	5	✓	FAC
3. Celtis occidentalis	3		FAC
4. Lonicera maackii	3		
5.			
6.			
7.			
	18	= Total Cover	

Herb Stratum (Plot size: 5 ft r)			
1. Poa pratensis	55	✓	FACU
2. Cirsium arvense	5		FACU
3. Taraxacum officinale	5		FACU
4. Medicago lupulina	4		FACU
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	69	= Total Cover	

Woody Vine Stratum (Plot size: 30 ft r)			
1. Vitis riparia	2		FAC
2.			
3.			
4.			
	2	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 25.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	10	x 3 =	30
FACU species	120	x 4 =	480
UPL species	0	x 5 =	0
Column Totals:	130 (A)		510 (B)

Prevalence Index = B/A = 3.92

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ___ No ✓

Remarks: (Include photo numbers here or on a separate sheet.)

Herbaceous layer mowed.

SOIL

Sampling Point: DP5

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0 - 14	10YR 3/1	100					Clay Loam	
14 - 22	10YR 3/2	90	10YR 4/3	10	C	M	Clay Loam	
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) (**LRR R, MLRA 149B**)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** _____ **No** ✓

Remarks:

APPENDIX B: SITE PHOTOGRAPHS

Wetland 1 - Data Points 1-3

Photo 1- Data Point 1 (Determined to be upland) at toe slope near bottom of trail.

Photo 2- Data Point 2 in Wetland 1

Photo 3- Soils associated with Data Point 3

Photo 4- West facing, Data Point 3, upland with Wetland 1 in background

Wetland 2 - Data Points 4-5

Photo 5- Data Point 4 in Wetland 2

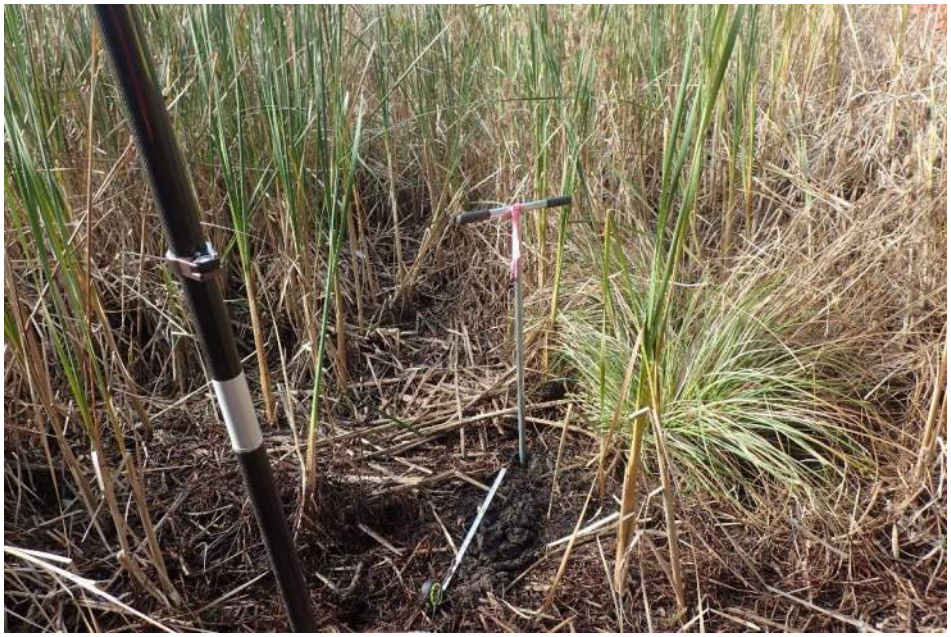


Photo 6- Soils associated with Data Point 4

Photo 7- Southwest facing, Wetland 2 with residential area in background

Photo 8- Data Point 5, with Wetland 2 in background

General Site Setting

Photo 9- Northeast facing, trail along dike road towards Lock and Dam #2

Photo 10- Southeast facing, stormwater inlet towards Wetland 2

Photo 11- Second stormwater inlet flowing into Wetland 2

Photo 12- East facing, Mississippi River Greenway Trail going downhill

CSAH 42 General Site Setting

Photo 13- East facing, CSAH 42 at intersection with Lock Blvd

Photo 14- Northwest facing, CSAH 42 at intersection with Pleasant Drive

Photo 15- Southeast facing, CSAH 42 near Allina Health Hospital

Photo 16- Northwest facing, CSAH 42 with a cemetery on both sides of road

Geotechnical Evaluation Report

Mississippi River Greenway Trail Improvements
Nininger Road to Lock and Dam No. 2
Hastings, Minnesota

Prepared for

HR Green, Inc.

DRAFT

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.

Kevin S. Zalec, PE
Senior Engineer
License Number: 47909
January 31, 2024

Project B2310830

Braun Intertec Corporation

Braun Intertec Corporation
11001 Hampshire Avenue S
Minneapolis, MN 55438

Phone: 952.995.2000
Fax: 952.995.2020
Web: braunintertec.com

January 31, 2024 Project B2310830

Mr. Tim Thoreen
HR Green, Inc.
2550 University Avenue, Suite 400N
St. Paul, MN 55114

Re: Geotechnical Evaluation
Mississippi River Greenway Regional Trail Improvements
Nininger Road to Lock and Dam No. 2
Hastings, Minnesota

Dear Mr. Thoreen:

We are pleased to present this Geotechnical Evaluation Report for the Mississippi River Greenway Improvements in Hastings, 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 Kevin Zalec at 952.995.2223 (kzalec@braunintertec.com).

Sincerely,

BRAUN INTERTEC CORPORATION

Kevin S. Zalec, PE
Senior Engineer

Joshua L. Kirk, PE
Director, Senior Engineer

c: Jordan Horejsi, HR Green

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Log of Hand Auger Boring Sheets C-1 to C-3, HAB-1 and HAB-2
Descriptive Terminology of Soil
Pavement Core Photo Log

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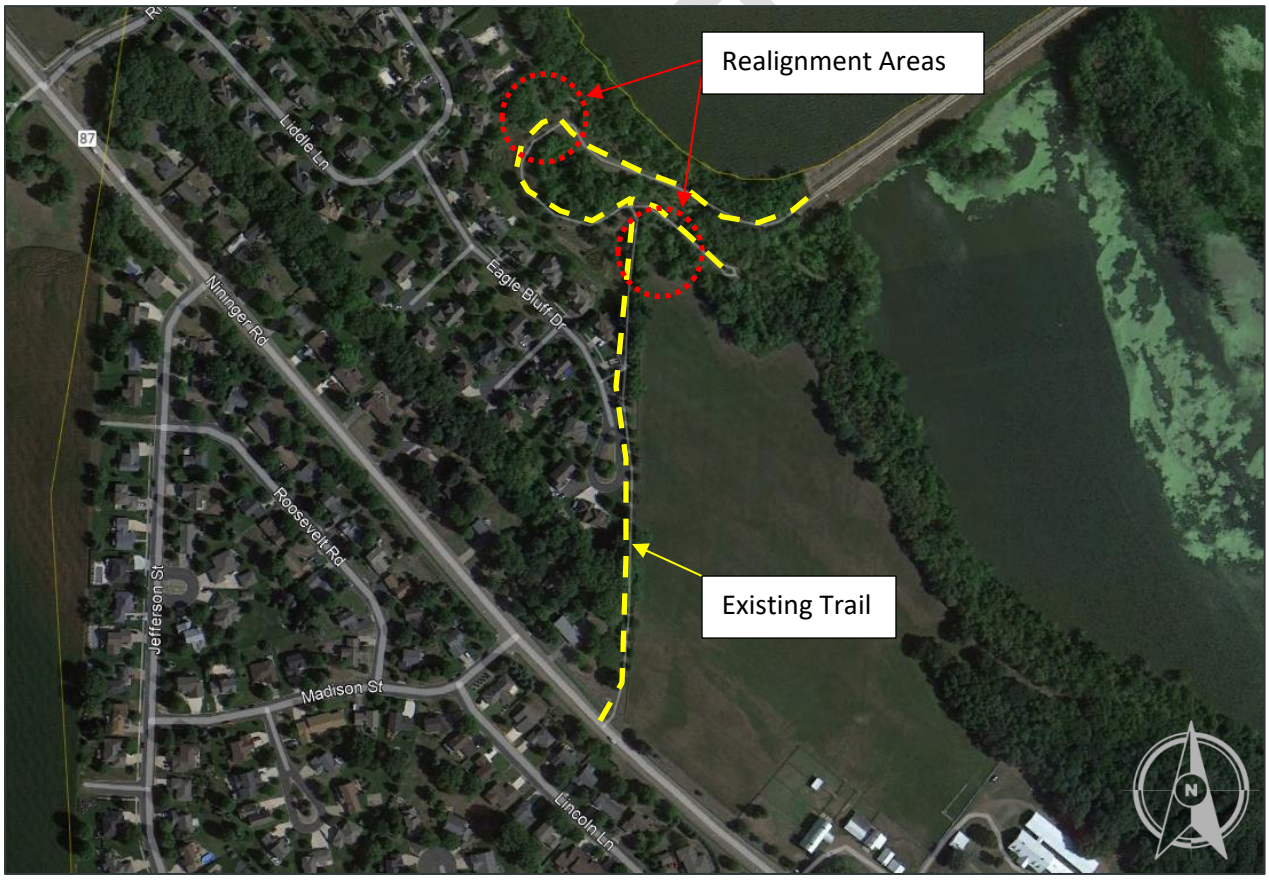
A. Introduction

A.1. Project Description

This Geotechnical Evaluation Report addresses the proposed design and construction of the Mississippi River Regional Trail Improvements project, located between Nininger Road (CSAH 42) and Lock and Dam No. 2 in Hastings, Minnesota. The project will include a mill and overlay of the existing trail, with slight realignments for slope improvements in the areas noted in Figure 1 below.

The figure below shows an illustration of the proposed site layout.

Figure 1. Site Layout



Aerial imagery extracted from Google Earth.

A.2. Site Conditions and History

Currently, the Mississippi River Greenway Trail extends north from Nininger Road towards the Mississippi River, where it connects to the top of Lock and Dam No. 2. The existing trail is bituminous paved. To the west are single-family residential structures, with an undeveloped field to the east of the trail alignment. Where the trail begins to descend the river scarp, the surrounding land is tree covered.

Current grades range at our exploration locations range from elevations of 718.7 feet at location C-3 to 782.2 feet at location C-1. Generally, the site is downward sloping, from south to north towards the Mississippi River.

A.3. Purpose

The purpose of our geotechnical evaluation will be to characterize subsurface geologic conditions at selected exploration locations, evaluate their impact on the project, and provide geotechnical recommendations for the design and construction of the proposed trail improvements. Geotechnical services were not requested for the CSAH 42 portion of the project.

A.4. Background Information and Reference Documents

We reviewed the following information:

- Request for Proposal prepared by Dakota County.
- Map M178, Surficial Geology of the Twin Cities Metropolitan Area, prepared by the Minnesota Geological Survey and dated 2007.
- Communications with HR Green, Inc. regarding the project.

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.

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A.5. Scope of Services

We performed our scope of services for the project in accordance with our Proposal QTB181568 to HR Green, Inc., dated July 21, 2023, and authorized on October 9, 2023. 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 coordinating clearing the exploration location of underground utilities. In consultation with HR Green, Inc., 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.

- Performing six pavement cores with shallow hand auger borings. Upon discussion with the design team, the scope was modified to perform three cores within the existing trail, denoted as C-1 to C-3.

- Performing five hand auger borings (HAB) borings outside of paved areas. Upon discussion with the design team regarding the alignment, we revised our scope to perform two HABs in areas of trail realignment denoted as HA-1 to HA-2, to nominal depths of 3 to 5 feet below grade. Due to encountering heavy gravel and possible cobbles, our HABs were terminated at depths of 2 to 2 1/2 feet below existing grade.

- Performing laboratory testing on select samples to aid in soil classification and engineering analysis.

- Preparing this report containing a hand auger boring and pavement core location sketch, logs of the hand auger borings, a summary of the soils encountered, results of laboratory tests, a photographic log of the pavement cores, and recommendations for pavement subgrade preparation and design of pavements.

We performed this geotechnical evaluation concurrently with a Modified Corridor Phase I Environmental Assessment (ESA) which we will submit separately. The project team should review the Modified Phase I ESA report in conjunction with this geotechnical evaluation report to understand both the geotechnical and environmental aspects of the site and how they may impact one another.

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B. Results

B.1. Geologic Overview

A review of Map M178, Surficial Geology of the Twin Cities Metropolitan Area indicates the project area is generally underlain by either the Langdon or Grey Cloud terrace deposits, considered part of the West Campus Formation that is described as fluvial sand and gravelly sand of mixed provenance.

We based the geologic origins used in this report on the soil types, 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. Pavement Core Results

We performed pavement cores and associated hand auger borings at three locations along the existing MRG trail where the mill and overlay is proposed. Shallow hand auger borings were also performed at two locations in proposed realignment areas. All core locations were selected by Braun Intertec in consultation with HR Green, Inc. at locations shown on the location sketch provided in the Appendix.

Information from the pavement cores and hand auger borings was used to obtain pavement layer thicknesses for the bituminous and aggregate base layers, if present, as well as to assess underlying bituminous material conditions. Results from the pavement coring and hand auger borings are provided in the table below. Photographs of the pavement cores are provided in the Appendix.

Table 1. Summary of Pavement Core Results

Core	Bituminous Thickness (nearest 1/4 inch)	Apparent Aggregate Base Thickness (nearest 1/4 inch)	Core Condition
C-1	2 1/2	2 1/4	Good condition overall
C-2	2 1/4	2	Good condition overall
C-3	2 1/4	2 1/4	Good condition overall
Average	**2 1/4**	**2 1/4**	---

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We did not perform gradation analysis on the apparent aggregate base material encountered as part of the pavement section, in accordance with our scope of work. Therefore, we cannot conclusively determine if the encountered material satisfies a particular specification.

B.3. Hand Auger Borings

The table below provides a summary of the hand auger borings. Please refer to the Log of Hand Auger Boring sheets in the Appendix for additional details and laboratory test results. Please see the sketches attached to this report for approximate locations.

Table 2. Hand Auger Boring Summary

Hand Auger	Total Depth (feet)	Approximate Topsoil Depth (feet)	Subgrade Soil Descriptions
HAB-1	2	1/3	Silty sand, dark brown, moist (0-4”) Sand with silt, little gravel, brown, moist (4-12”) Silty sand, with gravel, dark brown, moist (12”+)
HAB-2	2 1/2	1	Silty sand, dark brown, moist (0-12”) Clayey sand, with gravel, dark brown, moist (12”+)
C-1	6 1/2	---	Bituminous pavement (0-2 1/2”) Apparent aggregate base (2 1/2-4 3/4”) Silty sand with gravel, brown, moist (4 3/4”+)
C-2	3	---	Bituminous pavement (0-2 1/4”) Apparent aggregate base (2 1/4-4 1/4”) Clayey sand with gravel, brown, moist (4 1/4”+)
C-3	3	---	Bituminous pavement (0-2 1/4”) Apparent aggregate base (2 1/4-4 1/2”) Silty sand with gravel, brown, moist (4 1/4”+)

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B.4. Groundwater

We did not observe groundwater while advancing our borings. Therefore, it appears that groundwater is below the depths explored. Project planning should anticipate seasonal and annual fluctuations of groundwater.

B.5. Laboratory Test Results

The boring logs in show the results of our laboratory testing we performed, next to the tested sample depth. Tests were performed in general conformance with ASTM Standards. A summary of the tests performed along with their results are listed below. The Appendix includes graphical representations of the sieve analysis and sieve-hydrometer test results.

Table 3. Laboratory Test Summary

Laboratory Test	Range of Results	Comments
Moisture content (MC) tests, % (per ASTM D2216)	4 to 16	Generally at or below the probable optimum moisture content
Percent of particles passing the #200 Sieve, % (per ASTM D1140)	11 to 43	Soils classified as SP-SM, SM, or SC

C. Recommendations

C.1. Design and Construction Discussion

C.1.a. Reuse of On-Site Soils

The soils encountered within the borings are suitable for reuse as engineered fill. Soils with organic contents greater than 5 percent, if encountered, should not be reused as fill. This may result in the importing of soils to re-establish subgrade elevations in trail realignment areas.

C.1.b. Pavement Reclamation/Mill and Overlay

Based on our pavement cores and shallow hand auger borings performed for the project, we have provided recommendations for the mill-and-overlay rehabilitation approach for the sections of trail outside of realignments.

C.1.c. Construction Disturbance

The clayey and silty sand trail subgrades will be sensitive to disturbance and strength loss if subjected to repeated vehicle traffic. Subexcavation and recompaction or replacement of subgrade soils may be required if they lose strength or become unstable as a result of construction activity or exposure to moisture.

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C.2. Subgrade Preparation

C.2.a. Pavement Reclamation and Subgrade Preparation

For segments of trail to be realigned, we recommend the following steps for pavement subgrade preparation, understanding the site will generally require fills of less than 5 feet.

1. Strip existing structures, pavements, aggregate base section, topsoil, organic soils, vegetation, and/or soft clays from the new trail alignment.

2. Once the trail sections are cut to grade, have a geotechnical representative observe the excavated subgrade to evaluate if additional subgrade improvements are necessary. If the trail is going through areas of larger trees, some roots may need to be removed to facilitate the construction.

3. Scarify, moisture condition, and surface compact to at least 100 percent of standard Proctor density for fine-grained soils or to the requirements of the MnDOT penetration index method for granular soils.

4. Place pavement engineered fill to grade where required and compact in accordance with Section C.2.b to bottom of pavement section.

C.2.b. Engineered Fill Materials and Compaction

If imported material is to be used, Table 4 contains our recommendations for engineered fill. Note that similar materials compared to existing should be used to the degree possible; importing different soils for backfill may create lenses that could trap water and result in differential frost heave and other performance issues. If longitudinal transitions in soil type are required, we recommend tapering them at a rate of 20H:1V (horizontal:vertical) or flatter. Transitions in the transverse direction, such as at intersections, should be at least 4H:1V.

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Table 4. Recommended Fill and Compaction Specifications*

Material	Material Specification	Compaction Specification
Subgrade fill	Select Grading Material MnDOT 2106.1.A.6	MnDOT 2106.3.G.1
Below landscaped surfaces, where subsidence is not a concern	Non-Structural Grading Material MnDOT 2106.1.A.8	MnDOT 2106.3.G.2

*More select soils comprised of MnDOT 3149.2.J.2 Fine Filter Aggregate may be needed to accommodate work occurring in periods of wet or freezing weather.

We recommend placing engineered fill in accordance with MnDOT 2106. We recommend compacting engineered fill in accordance with the MnDOT specifications listed in Table 4. The project documents should specify relative compaction of engineered fill, based on the structure located above the engineered fill, and vertical proximity to that structure.

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.

C.3. Pavements

C.3.a. Pavement Rehabilitation – Mill and Overlay

As noted in Table 1, the in-place bituminous thicknesses encountered by the pavement cores performed varied between about 2 1/4 to 2 1/2 inches with an average thickness of about 2 1/4 inches. Underlying apparent aggregate base thicknesses encountered by the hand auger borings varied between about 2 to 2 1/4 inches, with an average thickness of about 2 1/4 inches.

The cores were observed to be in good condition with no apparent underlying stripping.

Given the in-place thicknesses and underlying conditions, we recommend mill and overlay be performed. We recommend mill and overlay be performed to a depth of about 1 inch, and we recommend a bituminous mix consisting of SPWEA230B. Pavement depth can vary between the core locations. The contractor may need to adjust the mill depth to account for unexpected conditions such as areas of thin pavement.

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Following mill and overlay, reflective cracking will likely occur within a year or two. If desired, a seal coat can be applied to the milled surface, prior to placement of the overlay, to slow the progression of reflective cracking. Routine maintenance should be performed as soon as cracking develops on the pavement surface to prolong the life of the mill and overlay.

C.3.b. Design Sections – Realignment Areas

Our scope of services for this project did not include laboratory tests on subgrade soils to determine an R-value for pavement design. Based on our experience with similar silty sand and clayey sand soils anticipated at the pavement subgrade elevation, we recommend pavement design assume an R-value of 20. Note the contractor may need to perform limited removal of unsuitable or less suitable soils to achieve this value. Table 5 provides recommended pavement sections, based on the soils support and traffic loads.

Table 5. Recommended Bituminous Pavement Sections

Roadway	Material Thickness (inches)	Layer	Specification
Trail	3	HMA Wear	SPWEA240B
	6	Aggregate Base	MnDOT 3138 (Class 5)

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C.3.c. Performance and Maintenance

We based the above reconstruction section pavement designs on a 20-year performance life. This is the amount of time before we anticipate the pavement will require major rehabilitation. This performance life assumes routine maintenance, such as seal coating and crack sealing. The actual pavement life will vary depending on variations in weather, traffic conditions and maintenance.

Many conditions affect the overall performance of pavements. Some of these conditions include the environment, loading conditions and the level of ongoing maintenance. Regarding bituminous pavements, 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.

D. Procedures

D.1. Manual Exploration

D.1.a. Hand Auger Borings

We drilled hand auger borings with a 3-inch-diameter bucket auger. We advanced the borings in 3- to 6-inch increments to depths of 3 to 5 feet below existing grade. We then withdrew the auger from the borehole to obtain cuttings.

D.2. Exploration Logs

D.2.a. 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 and other in-situ tests performed. The logs also present the results of laboratory tests performed on retrieved samples and groundwater measurements.

We inferred strata boundaries from changes in the auger cuttings. The strata boundary depths are only approximate and likely vary away from the boring locations. The boundaries themselves may occur as gradual rather than abrupt transitions.

D.2.b. Geologic Origins

We assigned geologic origins to the materials shown on the logs and referenced within this report, based on: (1) a review of the background information and reference documents cited above, (2) visual classification of the various geologic material samples retrieved during the course of our subsurface exploration, (3) laboratory test results, and (4) available common knowledge of the geologic processes and environments that have impacted the site and surrounding area in the past.

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.

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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 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.

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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.

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Appendix

DENOTES APPROXIMATE LOCATION OF HAND AUGER SOIL BORING

DENOTES APPROXIMATE LOCATION OF STANDARD PENETRATION TEST BORING

N

100' 0 200'

SCALE: 1"= 200'

F:\2023\B2310830\CAD\B2310830.dwg,Geotech,12/22/2023 8:24:55 AM

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Minneapolis, MN 55438
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Drawing Information

Project No:	B2310830
Drawing No:	B2310830
Drawn By:	JAG
Date Drawn:	11/16/23
Checked By:	KZ
Last Modified:	12/22/23

Project Information

Nininger Road/2nd Street (CSAH 42) and MRG Trail

CSAH 42 from Lock Boulevard to Pine Street and MRG Trail north of CSAH 42 to Lock and Dam No. 2

Hastings, Minnesota

Soil Boring Location Sketch

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LOG OF HAND AUGER

See Descriptive Terminology sheet for explanation of abbreviations

Project Number B2310830
Geotechnical Evaluation
Nininger Rd/2nd St (CSAH 42) & MRG Trail
CSAH 42 from Lock Blvd to Pine Street
Hastings, Minnesota

HAND AUGER: **C-1**
LOCATION: Captured with RTK GPS.
DATUM: NAD 1983 HARN Adj MN Dakota (US Feet)
NORTHING: 202288.3 EASTING: 613794.8
OPERATOR: LOGGED BY: K. Zalec START DATE: 11/24/23 END DATE: 11/24/23
SURFACE ELEVATION: 782.2 ft METHOD: Hand Auger SURFACING: Bituminous WEATHER:

Elev./ Depth ft	Water Level	Description of Materials (Soil-ASTM D2488 or 2487)	Sample	Sample Blows Recovery	q_p tsf	MC %	Tests or Remarks
781.8		PAVEMENT, 2 1/2 inches of bituminous over 2 1/4 inches of apparent aggregate base					
0.4		FILL: SILTY SAND (SM), fine to coarse-grained, with Gravel, brown, moist				5	P200=13%
			5				
775.7							
6.5		END OF HAND AUGER Boring immediately backfilled					Water not observed while augering.

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LOG OF HAND AUGER

See Descriptive Terminology sheet for explanation of abbreviations

Project Number B2310830
Geotechnical Evaluation
Nininger Rd/2nd St (CSAH 42) & MRG Trail
CSAH 42 from Lock Blvd to Pine Street
Hastings, Minnesota

HAND AUGER: **C-2**
LOCATION: Captured with RTK GPS.
DATUM: NAD 1983 HARN Adj MN Dakota (US Feet)
NORTHING: 203394.2 EASTING: 613480.3
OPERATOR: LOGGED BY: K. Zalec START DATE: 11/24/23 END DATE: 11/24/23
SURFACE ELEVATION: 751.2 ft METHOD: Hand Auger SURFACING: Bituminous WEATHER:

Elev./ Depth ft	Water Level	Description of Materials (Soil-ASTM D2488 or 2487)	Sample	Sample Blows Recovery	q_p tsf	MC %	Tests or Remarks
750.8		PAVEMENT, 2 1/4 inches of bituminous over 2 inches of apparent aggregate base					
0.3		FILL: CLAYEY SAND (SC), fine-grained, with Gravel, brown, moist				12	P200=34%
748.2							
3.0		END OF HAND AUGER Boring immediately backfilled					Water not observed while augering.
			5				

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LOG OF HAND AUGER

See Descriptive Terminology sheet for explanation of abbreviations

Project Number B2310830
Geotechnical Evaluation
Nininger Rd/2nd St (CSAH 42) & MRG Trail
CSAH 42 from Lock Blvd to Pine Street
Hastings, Minnesota

HAND AUGER: **C-3**
LOCATION: Captured with RTK GPS.
DATUM: NAD 1983 HARN Adj MN Dakota (US Feet)
NORTHING: 203366.5 EASTING: 613967.6
OPERATOR: LOGGED BY: K. Zalec START DATE: 11/24/23 END DATE: 11/24/23
SURFACE ELEVATION: 718.7 ft METHOD: Hand Auger SURFACING: Bituminous WEATHER:

Elev./ Depth ft	Water Level	Description of Materials (Soil-ASTM D2488 or 2487)	Sample	Sample Blows Recovery	q_p tsf	MC %	Tests or Remarks
718.3		PAVEMENT, 2 1/4 inches of bituminous over 2 1/4 inches of apparent aggregate base					
0.4		FILL: SILTY SAND (SM), fine to coarse-grained, with Gravel, brown, moist				8	P200=12%
715.7							
3.0		END OF HAND AUGER Boring immediately backfilled					Water not observed while augering.
			5				

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LOG OF HAND AUGER

See Descriptive Terminology sheet for explanation of abbreviations

Project Number B2310830
Geotechnical Evaluation
Nininger Rd/2nd St (CSAH 42) & MRG Trail
CSAH 42 from Lock Blvd to Pine Street
Hastings, Minnesota

HAND AUGER: **HAB-1**
LOCATION: Captured with RTK GPS.
DATUM: NAD 1983 HARN Adj MN Dakota (US Feet)
NORTHING: 203591.4 EASTING: 613558.4
OPERATOR: J. McIntosh LOGGED BY: K. Zalec
START DATE: 11/22/23 END DATE: 11/22/23
SURFACE ELEVATION: 741.6 ft METHOD: Hand Auger
SURFACING: Grass WEATHER:

Elev./ Depth ft	Water Level	Description of Materials (Soil-ASTM D2488 or 2487)	Sample	Sample Blows Recovery	q_p tsf	MC %	Tests or Remarks
741.2		SILTY SAND (SM), fine to medium-grained, trace roots, trace Gravel, dark brown, moist (TOPSOIL)					
0.3		POORLY GRADED SAND with SILT (SP-SM), fine to coarse-grained, little Gravel, brown, moist (GLACIAL OUTWASH)				4	P200=11%
740.6		SILTY SAND (SM), fine to coarse-grained, little Gravel, dark brown, moist (GLACIAL OUTWASH)				7	
1.0							
739.6							
2.0		END OF HAND AUGER					Water not observed while augering.
		Boring then backfilled with auger cuttings					
			5				

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LOG OF HAND AUGER

See Descriptive Terminology sheet for explanation of abbreviations

Project Number B2310830
Geotechnical Evaluation
Nininger Rd/2nd St (CSAH 42) & MRG Trail
CSAH 42 from Lock Blvd to Pine Street
Hastings, Minnesota

HAND AUGER: **HAB-2**
LOCATION: Captured with RTK GPS.
DATUM: NAD 1983 HARN Adj MN Dakota (US Feet)
NORTHING: 203301.1 EASTING: 613796.3
OPERATOR: J. McIntosh LOGGED BY: K. Zalec START DATE: 11/22/23 END DATE: 11/22/23
SURFACE ELEVATION: 761.6 ft METHOD: Hand Auger SURFACING: Grass WEATHER:

Elev./ Depth ft	Water Level	Description of Materials (Soil-ASTM D2488 or 2487)	Sample	Sample Blows Recovery	q_p tsf	MC %	Tests or Remarks
760.6		SILTY SAND (SM), fine-grained, trace roots, trace Gravel, dark brown, moist (TOPSOIL)					
1.0		CLAYEY SAND (SC), fine-grained, with Silt seams, fine Gravel, dark brown, moist				16	P200=43%
759.1							
2.5		END OF HAND AUGER Boring then backfilled with auger cuttings					Water not observed while augering.
			5				

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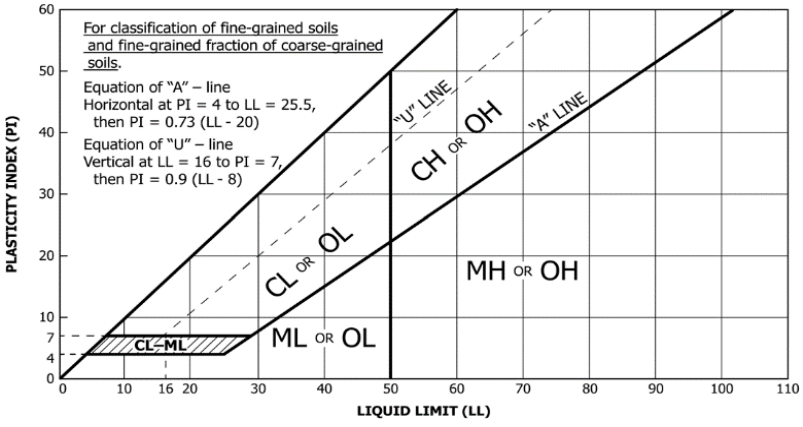
Descriptive Terminology of Soil

Based on Standards ASTM D2487/2488
(Unified Soil Classification System)

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[E F G]
			Fines Classify as CL or CH	GC	Clayey gravel[E F G]
	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[F G I]
			Fines classify as CL or CH	SC	Clayey sand[F G I]
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[K L M]
			PI < 4 or plots below "A" line[J]	ML	Silt[K L M]
		Organic	Liquid Limit – oven dried / Liquid Limit – not dried <0.75	OL	Organic clay[K L M N] / Organic silt[K L M O]
	Silts and Clays (Liquid limit 50 or more)	Inorganic	PI plots on or above "A" line	CH	Fat clay[K L M]
			PI plots below "A" line	MH	Elastic silt[K L M]
		Organic	Liquid Limit – oven dried / Liquid Limit – not dried <0.75	OH	Organic clay[K L M P] / Organic silt[K L M Q]
Highly Organic Soils		Primarily organic matter, dark in color, and organic odor		PT	Peat

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	**q_p**	Pocket penetrometer strength, tsf
WD	Wet density, pcf	**q_U**	Unconfined compression test, tsf
P200	% Passing #200 sieve	**LL**	Liquid limit
MC	Moisture content, %	**PL**	Plastic limit
OC	Organic content, %	**PI**	Plasticity index

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.

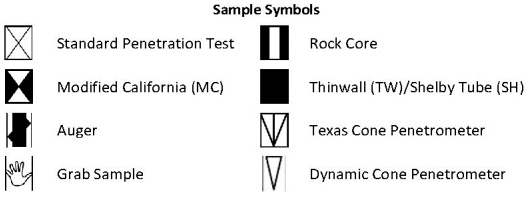
Recovery: Indicates the inches of sample recovered from the sampled interval. For a standard penetration test, full recovery is 18", and is 24" for a thinwall/shelby tube sample.

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 (▽).

Sample Symbols



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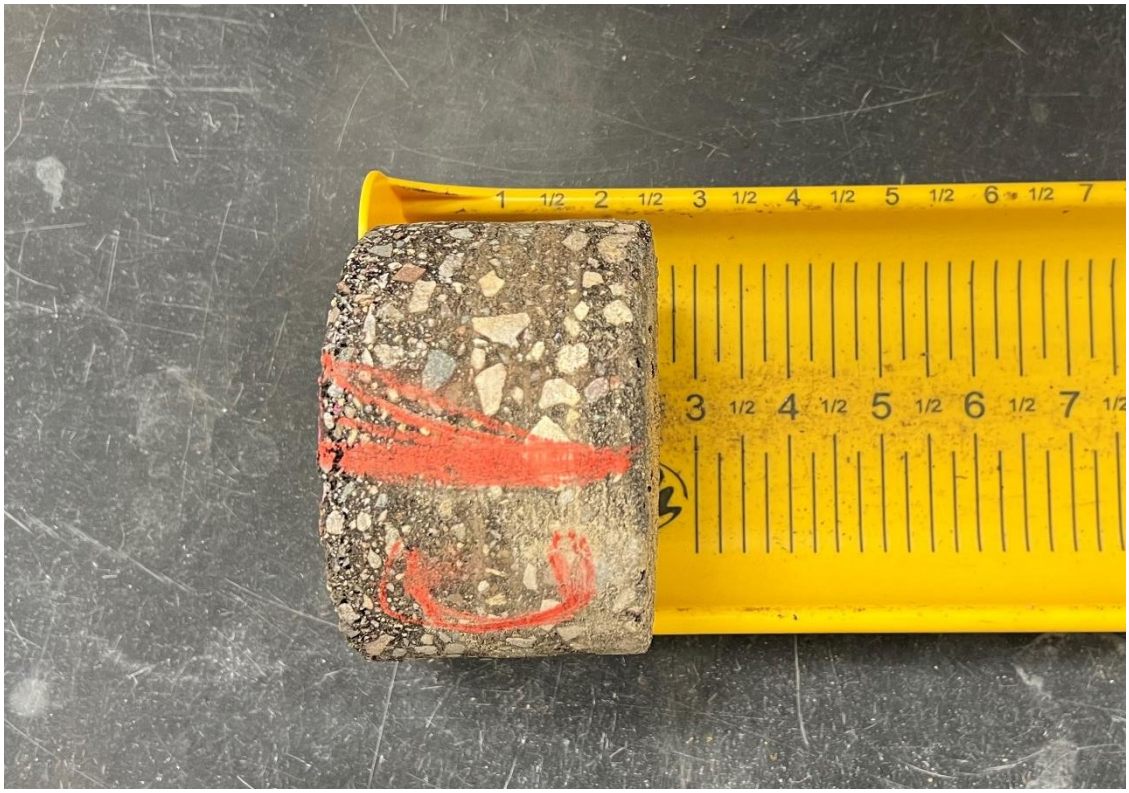
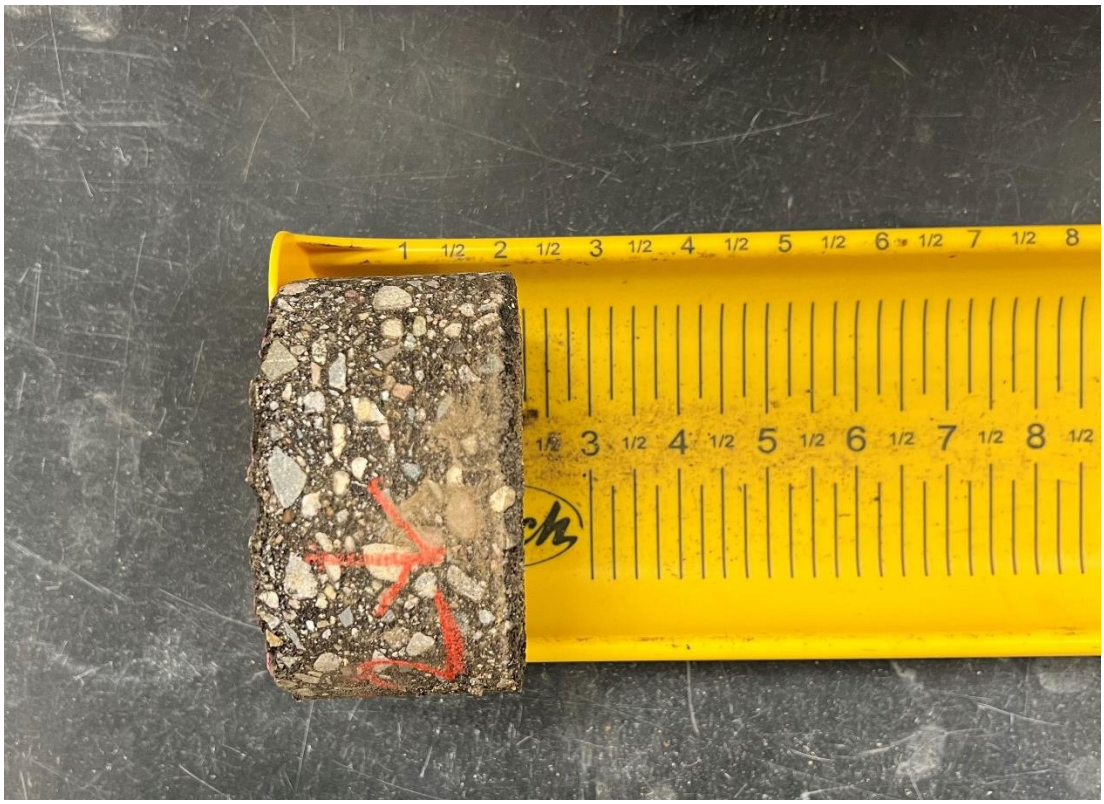
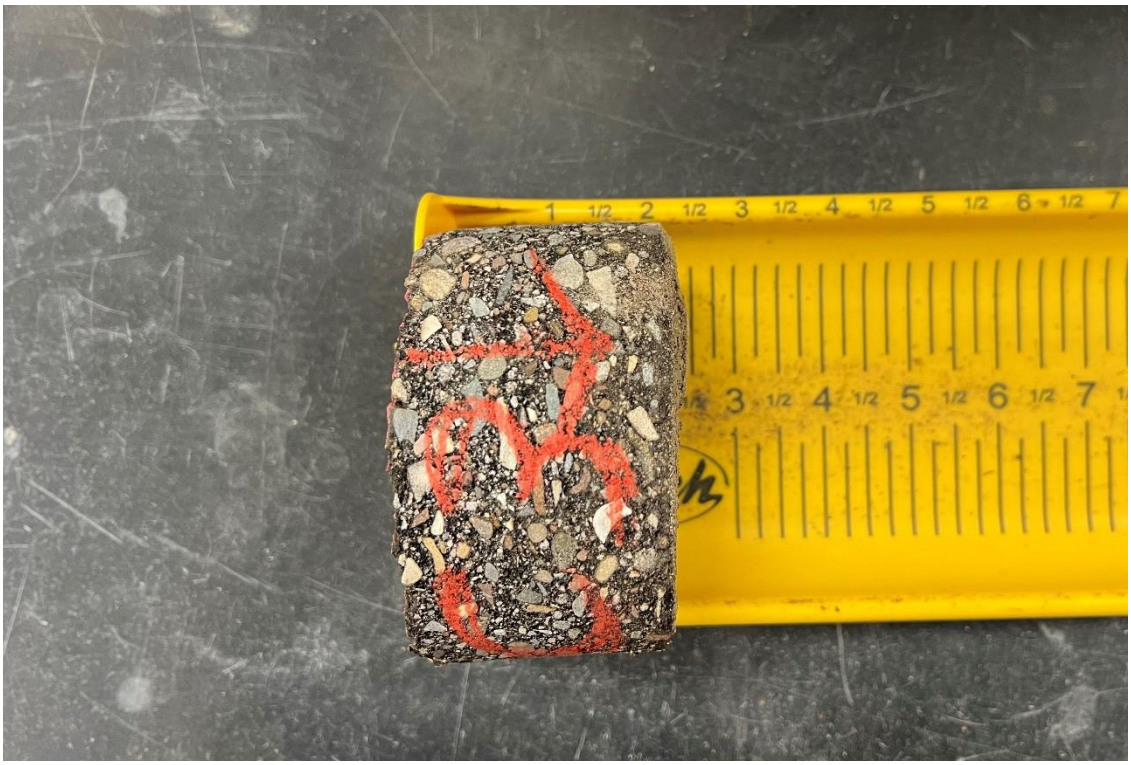


Core #:	C-1		Project: B2310830
Bituminous thickness:	2 1/2 inches	Aggregate Base Thickness:	2 1/4 inches
Project:	MRG Trail, Hastings, Minnesota		
Date:	November 30, 2023		



Core #:	C-2		Project: B2310830
Bituminous thickness:	2 1/4 inches	Aggregate Base Thickness:	2 inches
Project:	MRG Trail, Hastings, Minnesota		
Date:	November 30, 2023		



Core #:	C-3		Project: B2310830
Bituminous thickness:	2 1/4 inches	Aggregate Base Thickness:	2 1/4 inches
Project:	MRG Trail, Hastings, Minnesota		
Date:	November 30, 2023		

BRAUN INTERTEC

Braun Intertec Corporation
11001 Hampshire Avenue S
Minneapolis, MN 55438

Phone: 952.995.2000
Fax: 952.995.2020
Web: braunintertec.com

December 4, 2024 Project B2409961

Jordan Horejsi, PE
HR Green, Inc.
2500 University Ave W, Suite 400N
Saint Paul, MN 55114

Re: Retaining Wall Condition Assessment
Mississippi River Greenway (MRG) Trail
Hastings, Minnesota

Dear Mr. Horejsi:

Braun Intertec Corporation is pleased to provide this letter to report the findings of the condition assessment completed of the existing retaining wall located along the MRG Trail in Hasting, Minnesota.

Background

HR Green has been retained by Dakota County to provide engineering services for the reconstruction of the trail system in parts of the City of Hastings. Along one of the trails, there is an existing Mechanically Stabilized Earth (MSE) retaining wall that was constructed in 1996 consisting of modular blocks and geogrid reinforcement. At this particular location, the trail reconstruction will consist of lowering the trail elevation and constructing a new retaining wall in front of and lower than the existing retaining wall. HR Green has requested a condition assessment be completed on the existing retaining wall to understand if there are any potential structural integrity concerns that need to be considered when designing and planning for the new retaining wall.

Figure 1. Aerial View of Retaining Wall Location

Observations

The following information was obtained through a site visit on November 11, 2024 by Jason Hanlon, of Braun Intertec:

- The wall is approximate 180 feet in length and tapered from minimum of 1 course (8 inches) to a maximum 12 courses (8 feet) in height. **[Photographs 1-2]**

- The blocks were measured to be 8 inches high, 17-1/2 inches long and 12 inches wide. We were only able to visually see the top course to measure the width of the block, so it is not known if the blocks at lower courses would be wider. The blocks were placed in a running bond pattern.

- The wall had a consistent back batter of 7 to 8-degrees along the entire length of the wall. Measurement was taken using a 4-foot digital level approximately every 2 feet along the length of the wall. **[Photograph 3]** This can also be seen by the offset of approximately 1 inch from course-to-course. **[Photograph 4]**

- The wall is reinforced with a geogrid fabric, but only one layer was visibly confirmed to be located approximately 4 or 5 courses down from the top of the wall, depending on the step on the top of the wall. **[Photograph 5]**

- There is an approximate 30-degree backslope of the grade along the top of the wall.

- Through the use of a hand auger, it was determined there was no less than 1-1/2 to 2 courses below grade along the base of the retaining wall.

- The blocks were sounded through the use of a metal shovel dragging along the face of the blocks. There were no signs of loose or deteriorated conditions of the blocks that were found using this method nor by visually appearance of the blocks. There were areas where the blocks were visually weathered or had the presence of organic growth **[Photographs 6-7]**, but generally the faces of the retaining wall blocks were relatively clean considering the age.

- There were two locations along the top of the wall where the aggregate backfill could be visibly seen through the joint between blocks **[Photograph 8].**

Discussion

We used the following rating system to classify the structure as poor, fair or good condition from a structural standpoint. The following is our definition of these ratings:

- **Poor** – A majority of the components are showing signs of distress or signs of movement (lateral displacement or settlement).

- **Fair** – The majority of the components good condition but the majority of these components are showing non-structural distress (i.e., weathering, organic growth, etc.).

- **Good** – The structure does not have a significant amount of damage observed and has some areas where typical maintenance would be required.

Overall, the condition of the retaining wall was found to be in good condition, with some areas in good-to-fair condition due to presence of organic growth and the two locations where the aggregate backfill was visible. General maintenance to remove the organic growth shall continue to be completed along with the maintenance at the base of the wall to remove any shrubs/trees from growing.

We were not able to identify the location of the drain tile that would be present behind this type of wall construction. Generally, the drain tile would daylight at locations along the base of the wall or further down from one end of the wall. It is possible that the drain tile daylights to the opposite side of the current trail so the drain tile should be verified during the planning process of the new wall.

In regard to the potential effects of the construction of the new retaining wall on the existing retaining wall, MSE retaining walls can be adversely affected with repeated, or steady-state, vibrations that can be generated when the construction technique of the new wall uses vibratory pile installation. It is our understanding that the new wall may be installed within a distance of 10-feet from the existing wall. Construction induced vibrations from impact or vibratory pile driving can result in a peak particle velocity (PPV) from 1.5 to 2 in/sec at that distance, which has the potential to adversely affect engineered structures, such as this MSE wall. The main concern would be consolidation effects on the soils in the area that could result in settlement issues or lateral displacement issues within the existing wall. , As a way to limit the potential risks associated with construction-induced vibrations, we would suggest considering drilling and setting the piles for the new wall.

General

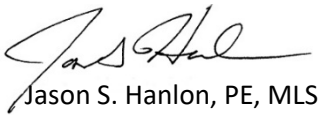
In performing its services, Braun Intertec used that degree of care and skill ordinarily exercised under similar circumstances by reputable members of its profession currently practicing in the same locality. No warranty, express or implied, is made.

If you have any questions, please contact Jason Hanlon at 651.487.7074 or jhanlon@braunintertec.com.

Sincerely,

BRAUN INTERTEC CORPORATION

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.



Jason S. Hanlon, PE, MLSE
License No. 41941
Director, Principal Engineer
December 4, 2024

Reviewed by:

Kimberly Deibel, PE
Senior Manager, Senior Engineer

Attachments:
Photo Exhibit (2 pages, 8 photos)

Photograph 1

View of the retaining wall looking west

Photograph 2

View of retaining wall looking east

Photograph 3

Measured batter of retaining (82 degrees from horizontal equals batter of 8 degrees)

Photograph 4

View of offset in block

Photograph 5

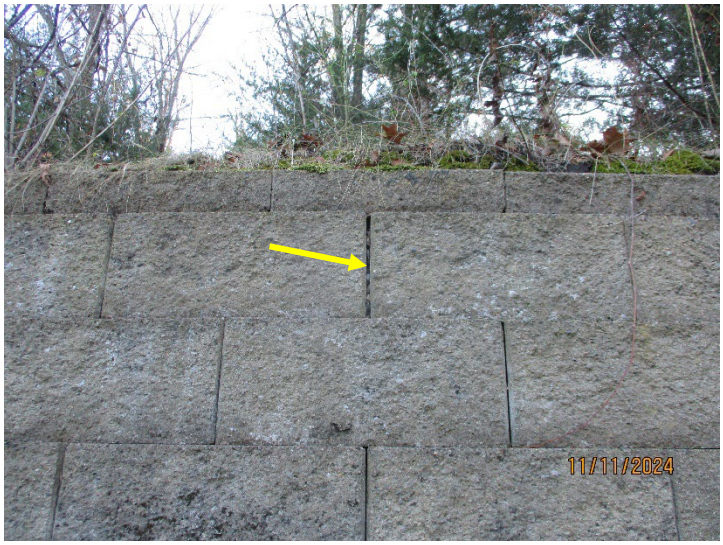
View of presence of geogrid

Photograph 6

View of organic growth along wall

Photograph 7

View of organic growth along wall



Photograph 8

View of gap in joint and aggregate backfill

2025

SALT Schedule of Materials Control

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Introduction

This Schedule of Materials Control (SMC) outlines the **MINIMUM** testing requirements for State Aid Funded and/or Federal Aid Projects **OFF** the National Highway and Trunk Highway System. Optional to this SMC is the MnDOT Materials Control Schedule. Usage of either schedule must be defined in the project proposal.

The SMC – LGA serves as a guide for material testing with allowable acceptance "as directed by the Engineer" detailed in Specification 1501.1(1) – Authority of the Engineer. These testing rates are a minimum and additional test may be taken at the Engineer's discretion. A minimal testing rate does not always ensure a quality product; field observations and attention to detail is crucial. Materials not listed on an approved products list may be sampled and tested as directed by the Engineer. Materials listed on a Qualified Products list may be accepted or tested at the discretion of the Engineer.

Federal Aid projects require Independent Assurance Inspection. Contact the MnDOT District IA Inspector when the job starts to provide the proper servicing of your project.

*****Agencies using MnDOT Metro Inspection Services will be sampled at the current MnDOT Schedule of Materials Control rates and will be billed accordingly.**

*****Contact the MnDOT District IA Inspector to provide servicing for your federal aid project.**

Definitions

Schedule of Materials Control

Schedule of Materials Control (SMC) are inserted into project proposals to direct how materials are to be sampled and tested. The SMC is updated yearly. Each SMC is project specific. Therefore, one needs to refer to their specific proposal.

Approved/ Qualified Products List

Products are "approved" when they have been found to routinely meet all applicable standards and specifications. The product is placed on the list based upon established successful manufacturer's quality control and warranties, but the listing may expire or require periodic renewal to verify the product has not changed over time. The approval process for the individual product should specify any expiration requirement. Testing may still be on at the Engineers discretion.

Certified Sources

Certified Sources must comply with each individual product's defined "certification procedure". Acceptance of products from certified sources follows the same sampling and testing as "approved/ qualified" products.

Quality control (QC): The activities performed by the **Contractor/Producer** that have to do with making sure the quality of a product or process meets the relevant contract requirements. All testing shall be performed by a certified tester.

Quality assurance (QA): The activities performed by the **Department/Agency** that have to do with making sure the quality of a product or process meets the relevant contract requirements. All testing shall be performed by a certified tester.

Verification Testing: Sampling and testing performed as called out herein to validate the quality of the product(s). **Part of QA.**

Material Acceptance Summary Instructions

STATE AID FOR LOCAL TRANSPORTATION
MATERIAL ACCEPTANCE SUMMARY

Rev. February 2019

SP/SAP(s)

Bid Item/ Spec No.	Item Description	Approved/ Qualified Product List (date checked)	Certificate of Compliance (date rec'd)	Accepted by Engineer* (date)
2105.604	Geotextile Fabric	5/26/18	5/26/18	6/6/18
2105.604	Soil Stabilized Geogrid	5/30/18	5/30/18	6/6/18
2357.506	Bituminous Material for Tack Coat	6/6/18	6/6/18	6/6/18
2573.503	Silt Fence, Type MS	5/14/18	5/14/18	6/6/18
2582.503	Epoxy Pavement Marking	7/30/18	7/30/18	7/31/18
3592	Drop-on Glass Beads	7/30/18	7/30/18	7/31/18
2574.508	Fertilizer Type 3	---	8/6/18	8/6/18
2575.508	Seed Mixture 22-111	8/6/18	8/6/18	8/6/18

Example Project

Date checked the Approved/Qualified product list. Print and file copy of approved list on acceptance date.

Date the certification was received. See specification 1603.3

Date accepted by the engineer.

* This item is hereby accepted by the Engineer as materially compliant for use on this project per the terms of specification 1501.1, subset (1).

Approved by Project Engineer: _____ Date: _____

Print Name: _____

Material Acceptance Summary

STATE AID FOR LOCAL TRANSPORTATION
MATERIAL ACCEPTANCE SUMMARY

Rev. February 2019

SP/SAP(s)

Bid Item/ Spec No.	Item Description	Approved/ Qualified Product List (date checked)	Certificate of Compliance (date rec'd)	Accepted by Engineer* (date)

* This item is hereby accepted by the Engineer as materially compliant for use on this project per the terms of specification 1501.1, subset (1).

Approved by Project Engineer: _____ Date: _____
Print Name: _____ Phone: _____

For an electronic Word version of this form, please visit the State Aid Construction webpage at: https://edocs-public.dot.state.mn.us/edocs_public/DMResultSet/download?docId=19623193

Bituminous Quality Management

The Contractor shall provide and maintain a quality control program as detailed in Specification 2360.2.G. The Engineer shall review the quality control program for compliance. This shall be provided at the precon.

	Type of Test	Spec Section (1)	Contractor / Producer – QC Testing Rates	Agency – QA Testing Rates
Start-Up Testing Rates for the 1st 2000 tons (2)	Bulk Specific Gravity	2360.2.G.7.b	1 test per 500 tons 55 lb. sample 3 full cylinder molds **(7)**	**(3) (10)** 1 Verification Mixture Sample test per day, all Verification samples are from a split (QC/QA) sample.
	Maximum Specific Gravity	2360.2.G.7.c		
	Air Voids (calculated)	2360.2.G.7.d		
	Asphalt Content	2360.2.G.7.a		
	Adj. Asphalt Film Thickness (AFT)	2360.2.E.7.e		
	Gradation	2360.2.G.7.f		
	Fines to Effective Asphalt Ratio (calculated)	2360.2.G.7.a/f		
	Coarse Aggregate Angularity (CAA)	2360.2.G.7.g	1 test per 1000 tons **(4) (5) (6) (7)**	
	Fine Aggregate Angularity (FAA)	2360.2.G.7.h		
	Added AC/Total AC Ratio (calculated)	2360.2.G.7.a		
Production Testing Rates	Bulk Specific Gravity	2360.2.G.7.b	1 test per 1000 tons 55 lb. sample 3 full cylinder molds **(7)**	**(3) (10)** Verification Mixture Sample test per day/ mix type, submit companion to the QC – CAA & FAA test results.
	Maximum Specific Gravity	2360.2.G.7.c		
	Air Voids (calculated)	2360.2.G.7.d		
	Asphalt Content	2360.2.G.7.a		
	Adj. Asphalt Film Thickness (AFT)	2360.2.E.7.e		
	Gradation (minimum of 1 per day)	2360.2.G.7.f		
	Added AC/Total AC Ratio (calculated)	2360.2.G.7.a		
	Coarse Aggregate Angularity (CAA)	2360.2.G.7.g	**(4) (5) (7)**	
	Fine Aggregate Angularity (FAA)	2360.2.G.7.h	**(4) (6) (7)**	
	TSR	2360.2.G.7.i	When directed by the Engineer	
	Aggregate Specific Gravity	2360.2.G.7.j		
	Mixture Moisture Content	2360.2.G.7.k	As directed by the Engineer	
	Asphalt Binder (QA ONLY)	2360	**(8)** 1 qt. steel container for asphalt binder	
	Asphalt Emulsion (QA ONLY)	2357	**(9)** ½ gal plastic container for asphalt emulsion. (Tack)	
	Compaction / Density Requirements	2360.3.D	Review special provisions	
	Small Quantity Requirements	< 500 tons per project may be accepted by the Engineer without testing.		

NOTES: Testing rates are minimum rates; additional testing is encouraged to ensure a quality product.

(1) Review Special Provisions & 2360.2G Mixture Quality Management.

(2) The testing rates apply only to mixtures that have not been tested on previous projects in the current year.

(3) The Agency shall witness a minimum of 1 (one) complete QC mixture sampling, splitting and test per day. The Agency shall take possession of all split QA samples immediately. The Agency shall randomly submit one QA split sample to the District Lab for Verification testing and inform with contractor the following day of test number. Additional verification samples can be taken at any time or location. When additional verification samples are taken, the contractor must test the Verification Companion split of this sample and include the results in the QC program.

(4) The Contractor will retain the extracted gradation samples in containers with field identification numbers for a period of 10 calendar days. The Engineer will identify which extracted gradation sample is the Verification Companion Sample and whether it is to be tested for coarse and fine aggregate angularity.

(5) **At start-up or new Mix Design**: 2 tests/ day for a minimum of 2 days, then 1/day if CAA is met. If CAA > 8% of requirement, 1 sample/ day but test 1/ week. No testing required for Class A and B Aggregates.

(6) **At start-up or new Mix Design**: 2 tests per day for a minimum of 2 days, then 1/day if FAA is met. If FAA > 5% of requirement, 1 sample/ day but test 1/week.

(7) Random number generation and determination of random sample location shall be consistent with Section 5 of ASTM D3665. The Engineer may approve alternate methods of random number generation.

(8) **During Asphalt Mixture Production (Field Verification):** Shall be from a certified supplier. Obtain asphalt binder samples from a sampling valve located between the pump and the drum. Contractor personnel shall obtain samples, under the observation of a department representative, by random selection from shipments of material at the project site. The samples shall be taken from the first load and subsequently 1 per 1000 tons of liquid asphalt binder for each supplier and grade of asphalt binder per contract. For contracts with less than approximately 25 tons (one truck transport) of asphalt binder, sampling may be waived. A minimum of 1 gallon of binder must be drawn and wasted from the sampling valve before the actual sample is drawn. Sample shall be sent in for verification testing.

(9) **During Mixture Production (Field Verification):** Shall be from a certified supplier. The Contractor shall sample first shipment, then submit 1 per 50,000 gallons. Sample emulsified asphalt in clean ½ gallon plastic container with wide screw top and send to MnDOT Chemical Lab within 7 days of sampling. Sample all emulsified asphalt from the distributor. Sample shall be sent in for verification testing. No Samples required unless directed by the Engineer.

(10) Conduct random belt samples and test for aggregate quality as directed by the Engineer.

Bituminous Specialty Items

Type of Test	Spec	Contractor/Producer – QC Testing Rates	Agency- QA Testing Rates
Gradation PASSRC & PASB	2363 3139.3	1 per 1,000 Ton with a minimum 1 per day.	1 per day. 35 lbs.
Micro-Surfacing	2354 3139.5	Stockpile: 1/1,500 Tons (min 1/day) Machine Hopper: 1/500 Ton (min 1/day)	Machine Hopper: 1/day, 30 lbs.
Seal Coat, Underseal & Otta Seal	2356 3137.2B	Stockpile: 1/1,500 Tons (min 1/day) Chip Spreader Hopper: 1/day	1/day from Hopper. 30 lbs.
% Crushing – CAA PASSRC & PASB	2363 3139.3	1 per 1,000 Ton with a minimum 1 per day.	1 per day from gradation test. 35 lbs.
Moisture / Aggregate Micro-Surfacing	2354 3139.5	Machine Hopper: 1/500 Tons (min 3/day)	1/day 2lbs
Sand Equivalence Micro-Surfacing	2354	1/day	Test at Engineer discretion, 25 lbs.
Flakiness Index Bituminous Seal Coat & Bituminous Underseal	2356	Sample taken from first load on first day, submit to Agency: 30 lbs.	Agency will test at their discretion, see Lab Manual 1223
Bituminous Mixture UTBWC	2353 3151.2G	1/500 Tons, min 1/day. %AC, Gradation, Max SpG, Adj.AFT	1/day, 20 lbs. 1 cylinder from truck box.
PASSRC & PASB	3151 2363	Asphalt spot check: min 1/day	-
Stone Matrix Asphalt – SMA Lab Manual 1203, 1204, 1205, 1211, 1214, 1806, 1807, 1808, 1813, 1853, 1854, 1855, AI SP-2 AASHTO T305	2365	**Tests**, %AC,gradation, Gmm, Gmb, Voids, VMA, CAA, Draindown, VCA, fines/effective asphalt. Rate, (1/1000 tons, min.1/day) Agg SpG, mix moisture, TSR to be tested as directed by Engineer. Submit companion 1 per day to agency: 3 full 6" by 12" cylinders	Tests: %AC, Gradation, Gmm, Gmb, Voids, VMA, CAA, VCA, fines/effective asphalt. Agency is not required to do drain down. Copy MDR to Project Engineer and Grading & Base Engineer.
Asphalt Binder Tests		Asphalt Emulsion List	Asphalt Binder List
UTBWC	2353 3151	**Asphalt Binder:** Sample first load, then 1/250,000 gallons. Sample size of 1 quart metal container. **Emulsified Asphalt:** Sample first load, then 1/50,000 gallons. Sample size of ½ gallon wide screw top plastic container.	
Micro-Surfacing	2354		
Seal Coat, Underseal & Otta Seal	2356		
Tack Coat	2357		
PASSRC & PASB	3151		
Asphalt Binder Rate Micro-Surfacing	2354	Verify Application Rate 3/day	Verify Application Rate 1/day
Fog Seal	2355	Verify Application Rate 1/day	Verify Application Rate 1/day
Seal Coat, Underseal & Otta Seal	2356		
Bit Tack Coat	2357		

Specification 2215 – Cold Inplace Recycling (CIR), Stabilized Full Depth Reclamation (SFDR) and Cold Central Plant Recycling Bituminous (CCPR)

Test Type	Contractor/Producer QC Testing Rates	Agency QA Testing Rates	Grading & Base Manual/Form
Gradation SFDR (Simple) Pre-ground un-stabilized material	1 per mile – report sieves 2" & 3"	Run gradation at the discretion of the Engineer	.215 / 101 report sieve 2" & 3"
Gradation (Entire) (Material to be stabilized)	One per day, give split sample to the Engineer	Run gradation at the discretion of the Engineer	.215 / 101 report sieve 2", 1.5", 1.25", 1", ¾", 3/8",#4, #10, #30.
Gradation (Simple) (Material to be stabilized)	1 per mile for SFDR & CIR. 1 per 2,000 ton for CCPR.	Run gradation at the discretion of the Engineer	.215 & .293 / 101 report sieve 2" & 1.5" for SFDR, 1.5" and 1.25" for CIR
CIR & SFDR Depth Check – Unstabilized and Stabilized	None	2 per day	.284 / 401
SFDR & CCPR Moisture – before injecting with bituminous, and Base One	2 per lane mile of anticipated daily production and after rain. 1 per mile for SFDR after mechanical drying.	1 / 10,000 sqyds	.245 Speedy tester not allowed.
Penetration Index (DCP) – SFDR only Unstabilized.	2 per mile		.255 / 205
Calibrate: mineral stabilizing agent application rate.	Once using design rate per vane feeder.	Observe contractor calibration	.286 or .287
Moisture: before injecting liquid bituminous material	2 per lane mile of daily anticipated SFDR & one after rain or mechanical drying out (disking, etc.).	none	.281 / 105
Yield: Mineral Stabilizing Agent and/or Liquid Bituminous Material	1 per transport load each type	1 per day each type	.286 & .287 / 402 & 403
Compaction: Nuclear density for SFDR stabilized and CIR	10 per lane mile, (**see note below**).	Observe the Contractor.	.282
Control Strip: SFDR Stabilized and CIR	Minimum of once per project	Observe the Contractor.	
Bituminous Material Samples		. 1 per 50,000 gallons; sample first load	1 quart each sample
Mineral Stabilizing Agent Samples	None	1 sample	None
Foaming asphalt checks expansion ratio & half life	1 per load	Observe the Contractor.	.285
Moisture (stabilized) – before placement of next layer during curing.	2 per day until moisture stabilizes & placement of HMA.	None	Grading & Base Manual

Note: The Engineer may require a Contractor to perform additional nuclear density tests in areas that the Engineer believes are failing density requirements.

Grading and Base Construction Items (1 of 4)

	Material Type	Spec.	Contractor / Producer QC Testing Rates	Minimum Required Agency QA Testing Rates	Verification Testing Sample
Gradation Testing (2) (3)	Aggregate Surfacing	3138	1 / 1,000 CY (CV) stockpile gradation only required for material on hand.	> 250 yd^3 (CV) or 500 Tons and < 2000 yd^3 (CV) or 4000 tons. Material is a minimum of one lot **(5)**. Test two random samples from each lot and average. > 2000 yd^3 (CV) or 4000 Tons. Divide into lots with lot size **(5)** no greater than 2000 yd^3 (CV) or 4000 Tons. Test two random samples from each lot and average.	1/source 30 lb.
	Aggregate Base	3138			
	Shoulder Base Aggregate	3138			
	Drainable Aggregate Base (OGAB & DSB)	3136			
	Granular and Select Granular Material (borrow/embankment)	3149.2B	1/10,000 CY (CV) only required for material on hand.	1/40,000 yd^3 (CV)	1/source 30 lb.
	Stabilizing Aggregate	3149.2C			
	Reclamation FDR	3135.2B	None	Test at Engineer's discretion. Inspect for oversize chunks (+3"), after the motor grader has overturned the material	None
	Granular Filter	3601.2B	1/source – before delivery on the project. Only required for materials on hand. Spec 1906.2	1/ source	1/source 30 lb.
	Backfill Materials	3149.2D			
	Granular Bedding	3149.2F			
	Aggregate Bedding	3149.2G			
	Coarse Filter Agg.	3149.2H			
	Filter Aggregate	3149.2J			
	Sand Cover	3149.2K			
Sand Cone, Nuclear Density or LWD / **Proctor**	Non-Granular Material Used to determine optimum moisture & maximum density.	2106 3149	None	1 per major soil, subgrade prep specified density requires 100% of proctor density.	1 sample 25 lb.
Sand Cone, Nuclear Density or LWD / **Specified Density ***	Non-Granular Material For non-granular material, i.e., material that does not meet 3149.2B.1		**AGENCY TESTING**: **Roadway Embankment**: One test per 4,000 yd3 (CV) or if test rolled, One test per 10,000 yd3 (CV) **Transverse culverts & abutments:** 1 test per every 2 feet of fill. **Structures and Longitudinal Trenches:** One test per 500 feet of each structure per 2 feet per fill. **Sidewalks and Trails**: 1 per 500 feet. **Subgrade Preparation:** One per 25 road stations.		

Grading and Base Construction Items (2 of 4)

Material Type		Spec.	Contractor / Producer QC Testing Rates	Minimum Required Agency QA Testing Rates	Verification Testing Sample
Penetration Index Method (DCP) or LWD *	Aggregate Base	3138 2211.3C	None	1 DCP tests per 500 yd^3 (CV) or 1 per 1000 Tons. If test rolled, 1 test / 1,500 yd3 (CV) or 3000 Tons.	None
	Shoulder Base Aggregate				
	Reclamation FDR	2215.3E 2215.2C		1 DCP test per 3,000 yd^2. If test rolled, 1 test / 10,000 yd^2	
	Walks & Trails	2521		1 per 500 feet of Sidewalk or Trail	
	Granular Materials Subgrade Preparation (for materials meeting 3149.2B1)	3149.2B	**AGENCY TESTING:** **Roadway Embankment:** One test per 2,000 yd3 (CV) or if test rolled, One test per 6,000 yd3 (CV) **Transverse culverts & abutments:** 1 test per every 2 feet of fill. **Longitudinal Trenches:** One test per 500 feet of each structure per 2 feet per fill. **Structures / Manholes / Catch Basins**: 1 test per every 2 feet of fill. **Sidewalks and Trails**: 1 per 500 feet. **Subgrade Preparation:** One per 25 road stations.		
Moisture Content Test During All Compaction Methods (4)	Aggregate Base, Shoulder, Surfacing & Walks	3138	None	**For 2118, 2211,2221, and 2521:** 1 / 1,000 yd3 up to 10 Maximum **For 2451:** 1 per structure, for multiple adjacent structures, may test once, use judgement **For Quality Compaction:** Test as directed by Engineer.	None
	Drainable Aggregate Base (OGAB & DSB)				
	Reclamation FDR	2215.3E	None	1 / 20,000 yd^2	
	All Embankment Materials	2106 3149	None	1/10,000 yd3 up to 10 Maximum **For Quality Compaction:** Test as directed by Engineer.	
	Subgrade Preparation	2106 3149		1 per 25 road stations **For Quality Compaction:** Test as directed by Engineer.	
Percent Crushing	Particle Count **(1)**	1906.2	1 required for Material on hand	1/source unless directed by Engineer, (required for 3138.2B & C, 3149.2C & G1, 3136.2B).	1 / source
Quality	Aggregate Quality Tests	3138 3149 3601	1 required for material on hand, Spec 1906.2	1/ source unless directed by Engineer	1 / source 30lb
Depth Check	Reclamation FDR	2215	1/Mile.	1 per day unless directed by Engineer	

Material Type		Spec.	Contractor / Producer QC Testing Rates	Minimum Required Agency QA Testing Rates	Verification Testing Sample
Test Rolling	Test Rolling (6)	2111	The contractor shall perform test rolling at the top of all: • Non-granular subgrade (2106) • Granular subgrade that does not meet 3149.2.B.2 (2106) • Base (2211) and shoulder base (2221) • Non-Stabilized Full Depth Reclamation (FDR) (2215) • Minimum 12’ width and 300’ length. Agency to observe test rolling.		

Verification Testing Samples are companion split samples to the QA sample:

- Companion gradation, proctor, QA crushing, aggregate quality samples not required 1,000 tons or less.
- Include the laboratory companion with the first field sample.
- Include the field sample results with the laboratory sample.
- Laboratories with AMRL Accreditation are not required to submit laboratory companion samples.
- Carbonate aggregate materials require 50 lb. samples for the laboratory testing.

NOTES:

(1) Percent crushing test is not required when the material is crushed from a quarry or contains 25% or greater recycled materials.

(2) Submit a laboratory companion to the first Acceptance Gradation sample for a bituminous extraction, see 3138.2C. Full Depth Reclamation samples are not required.

(3) The Certification of Aggregates and Granular Materials procedure and documentation of testing locations is at the discretion of the Engineer.

(4) For quality compaction per spec 2106.3G.2, test at Engineer's discretion.

(5) Lot sizes may be adjusted by the Engineer. This may be good practice if parts of the project are taking place in separate areas or at separate times, such as many turn lane or excavation areas or separate project stages.

(6) The Engineer may elect, with the concurrence of the Contractor, to have the Contractor test roll per 2111, “Test Rolling”, material meeting the requirements of 3149.2.B, “Select Granular Material”, in lieu of spot compaction testing. If this method is adapted, the Contractor would be required to first place 3” of base on top of the Select Granular prior to test rolling. For areas failing test rolling the Contractor is required to remove the base and recompact the material, then place the base back, and retest roll. There is no additional compensation to the Contractor if this method is adapted. Additionally, the Select Granular is not accepted until passing test rolling has occurred.

* Review the Special Provisions. The Grading and Base Manual allows the nuclear density gauge, see pages 60 and 65.

NOTES:

Conversions: 1 ton = 0.55 yd3 (CV), 1 ton = 0.7 yd3 (LV), 1 yd3 (CV) = 1.8 tons.

Less than 500 tons (250 CY) may be accepted by the Engineer without testing.

Grading and Base Construction Items (4 of 4)

Guidelines for Required Crushing & Aggregate Quality Tests

	3149 Granular Materials	**3138** Aggregate for Surface and Base	**3136** Drainable Bases
Crushing	Yes, for Stabilizing Aggregate, Fine Aggregate Bedding and Medium Filter Aggregate. Test waived if material contains recycled at twice the minimum crushing requirement. Not required for quarried sources.	**Yes**, for Class 5, 5Q & 6. Test waived if material contains recycled at twice the minimum crushing requirement. Not required for quarried sources. Class 2 must contain 100% crushed quarry rock.	**Yes.** Not required for quarried sources.
Bitumen Content	**At the discretion of the Engineer**	**At the discretion of the Engineer**	Not applicable
LAR	Not applicable	**Yes**, if source is carbonate quarry and does not contain bitumen.	**Yes**
Insoluble Residue	**Yes**, if source is carbonate quarry and does not contain bitumen.	**Yes**, if source is carbonate quarry and does not contain bitumen.	**Yes**, if source is carbonate quarry.
Litho Exam & Shale Float Test	**Yes**, for Medium Filter Aggregate	**Yes**, for Class 3, 4, 5, 5Q & 6, when not from quarried rock, and does not contain bitumen.	**Yes**, when not from a quarried source.

Testing procedures in the Grading & Base Manual.

Forms and worksheets at the Grading & Base website.

Gradation worksheets at the SALT Construction website.

MAKE SURE TO FILL OUT THE REQUIRED PRELIMINARY AND FINAL GRADING AND BASE REPORTS AND SUBMIT TO PROJECT ENGINEER.

http://www.dot.state.mn.us/materials/gradingandbasedocs/Forms/form001_08_043019.xlsx

Certified Ready-Mix Concrete (1 of 3)

The Prime Contractor is responsible to assure that all ready-mix concrete used is produced by an annually Certified Ready-Mix plant as detailed in Specification 2461.3F.

<table>
<tr><th>Material Spec.</th><th></th><th>Test Type (Concrete Manual)</th><th colspan="5">Contractor / Producer QC Testing Rates</th><th>Form</th></tr>
<tr><td rowspan="20">bridge
2406.2
2411.2
2461.2
2461.3

general
2301**
2452.2
2461.2
2461.3
2506.2
2511.2
2514.2
2520.2
2521.2
2531.2
2533.2
2545.2
2554.2
2557.2
2564.2
2565.2</td><td rowspan="20">Concrete Plant Production Testing Rates *</td><td rowspan="3">Gradation
(5-694.145)
(5-694.148)
3126, 3131, 3137</td><td colspan="5">For all JMF's & Bridge Deck Mix Designs
Daily Concrete Quantity:
1 per fraction per source per day between 20 – 400 yd³. If over 400 yd3 per day, take a second gradation after the DAILY total exceeds 400 yd3.
<u>Bridge Deck Concrete</u> must have passing gradations prior to mixing.</td><td rowspan="20">Concrete Agg. Work sheet, Agg. Grad. Control Charts, R-M Plant QC workbook. R-M Plant QA Workbook

2410 Sample ID Card</td></tr>
<tr><td colspan="5">For all other mix designs,
Weekly Concrete Quantity:
1 per fraction per source per week between 20 – 400 yd³. If over 400 yd3 produced per week, take a second gradation after the WEEKLY total exceeds 400yd3.</td></tr>
<tr><td colspan="5">Department Plant Monitor Testing Rates: Verification only
Verification Sample: When weekly concrete quantity is ≥ 20 yd³:
1 per fraction per source per week, split and tested by both Agency and Contractor</td></tr>
<tr><td>Moisture Content
(5-694.142)</td><td>QC rates:</td><td>1 every 4 hours When Daily Concrete Quantity ≥ 20 yd³</td><td>QA rates:</td><td>None</td></tr>
<tr><td>Test Type</td><td colspan="4">Agency QA Testing Rates (1)</td></tr>
<tr><td>Aggregate Quality
(5-694.146)</td><td colspan="4" rowspan="2">Minimum of 1 per each fraction - use of MnDOT test results for the same 30-day time period is acceptable. <u>For all bridge deck concrete poured during the month</u>: Test monthly quality to 3137.2D2 for each coarse aggregate fraction. Designate 3137.2D2 on the sample card. Gradation results will be included with the monthly quality tests.</td></tr>
<tr><td>Coarse Aggregate
(% Passing 200)
(5-694.146)</td></tr>
<tr><td colspan="5">Minimum Aggregate Sample Size All Aggregate Gradation and Quality samples require companions, double sample size</td></tr>
<tr><td>Aggregate Size</td><td>Gradation</td><td>Quality</td><td>Moisture</td><td>% -200 Course.Agg.</td></tr>
<tr><td>3/4" Plus, #4</td><td>30 lb.</td><td>50 lb.</td><td>2000 g</td><td>5000 g</td></tr>
<tr><td>3/4" Minus, #67</td><td>10 lb.</td><td>30 lb.</td><td>2000 g</td><td>2500 g</td></tr>
<tr><td>#7, CA-70</td><td>6 lb.</td><td>20 lb.</td><td>2000 g</td><td>2500 g</td></tr>
<tr><td>CIA to meet #67</td><td>6 lb.</td><td>20 lb.</td><td>500 g</td><td>500 g</td></tr>
<tr><td>CIA to meet JMF, FIA, CS, FS</td><td>500 g</td><td>20 lb.</td><td>500 g</td><td>500 g</td></tr>
<tr><td>CA-80, #89</td><td>1.1 lb. (500 g)</td><td>20 lb.</td><td>500 g</td><td>500 g</td></tr>
<tr><td>Fine Aggregate</td><td>1.1 lb. (500 g)</td><td>20 lb.</td><td>500 g</td><td>-</td></tr>
</table>

Certified Ready-Mix Concrete (2 of 3)

<table>
<tr><th>Spec.</th><th></th><th>Test Type</th><th>Agency QA Testing Rates (1)</th><th>Form</th></tr>
<tr><td rowspan="11">bridge
2406.2
2411.2
2461.2
2461.3

general
2301**
2452.2
2461.2
2461.3
2506.2
2511.2
2514.2
2520.2
2521.2
2531.2
2533.2
2545.2
2554.2
2557.2
2564.2
2565.2</td><td rowspan="11">Concrete Field-Testing Rates</td><td colspan="2"><u>Sampling Locations for Air, Slump, Temperature and Cylinder Testing</u>
First load each day per mix - Take sample after discharging approximately 1/4 yd3, stop further discharge until both slump and air content test are completed. The first load of concrete <u>must have passing air content and slump prior to placement.</u> Cast strength specimens from the same load as the air content and slump test. Test whenever adjustments are made to the mix. .
Subsequent tests - Sample from the middle portion of the load.</td><td rowspan="4">2409
Concrete Cylinder ID Card

When submitting samples, record all field test results and Batch Ticket Number on the Cylinder ID Card.</td></tr>
<tr><td>Air Content - Type 3 Concrete (5-694.541)</td><td>1 test per 100 yd3. Test first load each day per mix. Test when adjustments are made to the mix.</td></tr>
<tr><td>Slump (5-694.531)</td><td>Test first load each day per mix, then as necessary to verify passing slump. For Bridge Concrete: 1 test per 100 yd3. No testing required for slip form placement.</td></tr>
<tr><td>Air and Concrete Temperature (5-694.550)</td><td>Record temperature each time air content, slump or compressive strength specimen is performed/fabricated.</td></tr>
<tr><td rowspan="7">Compressive Strength (5-694.511) Standard cylinder size is 4 x 8, use 6 x 12 with aggregate greater than 1 1/4". Review 2461.3G.5 Test Methods and Specimens.</td><td><u>General Concrete Grades F, G, M, P, and R:</u> 1 set of 3 cylinders per 300 yd3 per mix per day.</td><td rowspan="7">2409
Concrete Cylinder ID Card

When submitting samples, record all field test results and Batch Ticket Number on the Cylinder ID Card.</td></tr>
<tr><td><u>Bridge Concrete Grades B, S, X, Y HPC, SCC and Mass Concrete (MC)</u>:
1 set of 3 cylinders per 100 yd3, then 1 set of 3 cylinders per 300 yd3 per mix per day
For Grades HPC, SCC and MC:
1 set of (56-day) cylinders per day</td></tr>
<tr><td rowspan="2">Agency will break 1 set of 3 cylinders at 28 days. Agency will cast 3 control cylinders, any additional control cylinders are the responsibility of the Contractor.</td></tr>
<tr><td></td></tr>
<tr><td>Cellular Concrete: 1 set of 4 cylinders (28 days) per day, fill in 2 equal lifts, <u>do not rod</u>, lightly tap the sides, cover and move to area with no vibration. Do not disturb for 24 hours.</td></tr>
</table>

NOTES:

(1) Review the requirements of 2461.3F Certified Ready-Mix Concrete, 2461.3G Concrete Placement and 5-694.010 Inspector's Checklist in the Concrete Manual.

*__Small Quantity Requirements__ are for less than 20 yd3 per day Plant Monitoring is not required, but __Concrete Field Testing is required__.

**__Concrete Pavement:__ Use Certified Ready-Mix Concrete testing rates when: a) The entire concrete paving project is less than 3,500 cu. yd. b) When a secondary plant is used to provide minor work.

Certified Ready-Mix Concrete (3 of 3)

The Prime Contractor is responsible to assure that all ready-mix concrete used is produced by an annually Certified Ready-Mix plant as detailed in Specification 2461.3F.

Guidelines

- The testing rates shown in this Schedule of Materials Control are minimums. Take as many tests as necessary to ensure quality concrete. Should circumstances arise on a project which makes the testing rate impractical, contact the Concrete Engineering Unit.
- All samples shall be taken in a random manner using an appropriate number generator.
- The first load of concrete for any pour must have passing air content and slump results, prior to placing.
- If batching or field adjustments are made, test the adjusted load for air content and if suspect, slump, before it gets into the work. The Engineer will determine if additional testing is required after each water adjustment made during slip form placement. Continue to test for air content and slump, if suspect, when test results are inconsistent or marginal.
- If any field test fails, reject the concrete or if the Producer adjusts the load to meet requirements, record the adjustments on the Certificate of Compliance. Retest the air content of the load, slump if required, and record the adjusted test results. Test the next load for air content and slump, if required, before it gets into the work.
- Material not meeting requirements shall not knowingly be placed in the work. If failing concrete inadvertently gets placed in the work, review either the MnDOT Standard Specifications for Construction or contact the Concrete Engineering Unit for monetary deduction recommendations.

Best practices

- It is recommended that the Agency Plant Monitor be present during critical pours, such as superstructure or paving concrete (i.e., 3A21, S mixes, JMF mixes).
- It is recommended that the Agency representative continually monitor the progress of all concrete pours in the field and review Certificate of Compliances. It is not a recommended practice to only perform minimum testing requirements and leave the pour.
- It is recommended to make standard strength cylinders after the first load of concrete unless that is the only load of concrete for that mix that day.
- The Agency is responsible for verification sampling. For safety and consistency in sampling and splitting of the sample, it is recommended that the agency and the producer/contractor obtain the verification sample in tandem. This will allow the producer/contractor to witness the sampling process and take possession of the verification companion.

Concrete Plant and Field Materials

All materials must come from certified or qualified sources. All certified sources must state so on the delivery invoices. The most current list of certified/approved sources can be found at MnDOT Material website. Materials listed on the Approved/Certified Products List are not required to be sampled but need to be listed on the Material Acceptance Summary detailed in the SALT SMC. Samples can be submitted as directed by the Engineer.

	Material	Spec. No.	Agency QA Field Sampling Rate	Form No.
Concrete Plant Batching Materials	Portland Cement	3101	Shall be a Certified Supplier - For certified ready-mix and concrete paving sample rates: 1 sample when the plant is certified. Take additional samples f the plant changes sources or as the contract requires. The producer obtains a 5 lb. sample and stores the sample in a sealed container provided by the Agency and includes the supplier's delivery invoice from which the sample is obtained.	24300 ID Card Cement Samples
	Slag	3102		
	Blended Cement	3103		
	Fly Ash	3115		24308 Fly Ash
	Admixtures (Acceleration, Retarding, Water-Reducing, Air-Entraining, etc.)	3113	For all concrete: 1 sample of Air Entrainment and Type A Water Reducer in a 1/2-pint plastic container provided by the Agency when the plant is certified. Take additional samples if the plant changes sources or as the contract requires. The Producer should agitate the admixture tank prior to obtaining samples form dispensing tubes and store the samples in sealed plastic containers provided by the Agency.	2410 Sample ID Card
	Water	3906	1 Non-Potable Water sample in a 1-gallon clean glass or plastic container from a questionable source. Clarified Water: 1 per month during Department production	
Concrete Field Materials	Preformed Joint Filler	3702	Visual Inspection	2410 Sample ID Card
	Preformed Elastomeric Type	3721	1 per lot. Only materials from a qualified source. Link to Approved Products List.	
	Silicone Joint Sealer	3722		
	Hot Poured Elastomeric Type	3723 3725		
	Burlap	3751	Visual Inspection	
	Colored Concrete Membrane Curing Compound	3752	Visual Inspection - Use only from qualified source.	
	Membrane Curing Compound	3753 3754 3755	Visual Inspection - Use only pre-approved curing compounds.	
	Plastic	3756	Visual Inspection - Must be white opaque and free from holes.	
	Refer to the "Metals" schedule for sampling requirements for concrete reinforcement.			

Concrete Pavement – Agency (1 of 2)

Test Type (concrete manual)	**Spec.**	**Concrete Paving Batch Plant Agency QA Testing**	**Certified Ready-Mix Plant Agency QA Testing**	**Form**
Gradation (1) (5-694.145) (5-694.148)	3126 3131 3137	Daily Concrete Quantity ≥ 500 **Agency QA Testing Rates: Verification only** **Verification Sample**: -, *1 per fraction per source per day, split and tested by both Agency and Contractor	Daily Concrete Quantity ≥ 100 yd3 **Agency QA Testing Rates: Verification only** **Verification Sample**: -, *1 per fraction per source per week, split and tested by both Agency and Contractor	JMF Concrete Aggregate Workbook
Aggregate Moisture - QC Verification **(2)** (5-694.142)	2301	If w/c incentives apply: 1 per 1000 yd3 or every 4 hours, whichever is greater. Take initial sample within the first 250 yd3.	If w/c incentives apply: 1 per 200 yd^3 or every 4 hours, whichever is greater. Take initial sample within the first 100 yd^3.	Concrete W/C Ratio Work sheet
Water Content, Microwave Oven Verification **(3)** (5-694.532)	2301	Take initial sample within the first 250 yd^3. At least one additional verification test should be taken if more than 1000 yd^3 is produced in a day.	Take initial sample within the first 100 yd^3. At least one additional verification test should be taken if more than 400 yd^3 is produced in a day.	
Coarse Aggregate, -200 sieve (5-694.146)	3131 3137	Test Verification sample on the first day of production and each time the Contractor mobilizes the plant, changes the aggregate sources, or the cleanliness of the coarse aggregate is in question, then 1 per week randomly thereafter. -200 test may be performed at the lab instead at the plant at the discretion of the Engineer.		JMF Concrete Aggregate Workbook
Coarse and Fine Aggregate Quality **(4)**	3126 3131 3137	During concrete production: 1 randomly selected test each fraction every 20,000 yd^3 of production. Split the Quality sample 4 ways: 1) Provide 2 quarters of the sample to the producer/contractor. 2) Submit the remaining sample to the lab for quality testing including testing the -200 sieve on the coarse aggregate.		2410 Sample ID Card
Alkali Silica Reactivity (ASR) Testing	2301	1 per paving project per sand source. Provide one 5 lb. sample of: cement, supplementary cementitious material (fly ash or slag), and sand. Write "Project Specific ASR Testing" on all 3 sample cards. **ASR Testing is not required if the entire project is less than 3,500 cubic yards.**		2410 24300 24308
Coarse Aggregate Quality Testing of Incentive / Disincentive	3137	**If coarse aggregate quality incentives apply:** Test the Class B aggregates for % absorption and Class C aggregates for % carbonate including any other test necessary to make those determinations. Sample the 2 largest fractions in accordance with the following table and 2301:		Coarse Agg Quality Incentive / Disincentive Work sheet 2410 Sample ID Card

Coarse Aggregate Quality Incentive/Disincentive Sampling Rates	
Plan Concrete Cubic Yards	Samples per fraction
3,500 - 7,500	3
7,501 - 10,000	5
10,001 - 25,000	10
25,001 - 50,000	15
50,001 +	20

*Use Certified Ready-Mix Concrete testing rates when: a) The entire concrete paving project is less than 3,500 cu. yd. b) When a secondary plant is used to provide minor work.

Concrete Pavement – Agency (2 of 2)

Test Type	Spec.	Concrete Field Testing - Agency QA Testing	Form
Air Content before consolidation	Review Concrete Manual Website	1 correlation air test per day	
Concrete Temperature		Record temperature each time air content, slump or strength test specimen is performed/fabricated by the Agency.	
Flexural Strength		Supply beam boxes or cylinder molds. Cure and test beams and cylinders MnDOT standard beam box size is 6" x 6" x 20" unless others are approved by the Concrete Engineer.	2162 Test Beam Data
Opening to Traffic Strength		Supply beam boxes or cylinder molds for field control testing. Cure and test beams and cylinders.	
Concrete Pavement Texture		Determine texture testing locations using random numbers. Observe Contractor Testing when possible.	Probing, Coring, Texture and MIT-Scan T2 Report
Thickness		**Determine probing and coring locations using random numbers. Initial pavement at core locations and re-initial the sides of specimens after coring to clearly verify their authenticity**. Field measure cores to the nearest 1/8". Transport to the MnDOT Office of Materials and Road Research for final thickness determination	
Surface Smoothness/ Dowel and Tie Bar Steel Location		Observe Contractor Testing when possible	

NOTES:

(1) All gradation samples shall be taken in the presence of the Agency, unless otherwise authorized by the Engineer. All samples shall be taken off the belt leading to the weigh hopper unless otherwise approved by the Engineer. **All gradations and quality tests require companion samples.** If Coarse Aggregate Quality Incentive / Disincentives apply: The Agency may also use the QA samples for incentive / disincentive testing. Notify the Contractor/Producer to double the QC/QA sample size. If well-graded aggregate incentives apply: Use the Contractor's gradation results for well-graded aggregate incentive calculations as verified by Agency testing. Use the Well-graded Concrete Agg. Worksheet.

(2) If w/c incentives apply: Use aggregate moisture results for determining the water content to calculate the w/c incentive/disincentive. Use the Concrete W/C Ratio Calculation Worksheet and do not leave sample unattended. Microwave oven verification testing to verify the w/c ratio is completed in conjunction with Agency aggregate moisture testing. Do not leave samples unattended.

(3) If w/c incentives apply: Microwave oven verification testing to verify the w/c ratio is completed in conjunction with Agency aggregate moisture testing. Do not leave samples unattended.

(4) Prior to concrete production: Obtain pre-production samples for quality testing at least 16 hours prior to concrete production. Samples may be taken from the stockpile and -200 test may be performed at the lab instead at the plant at the discretion of the Engineer. If the entire project is <3,500 yd3, pre-production sampling is not required.

Minimum Aggregate Sample Size *companion required, double sample				
Aggregate Size	**Gradation***	**Quality***	**Moisture**	**% -200 C.Agg**
3/4" Plus, #4	30 lb.	50 lb.	2000 g	5000 g
3/4" Minus, #67	10 lb.	30 lb.	2000 g	2500 g
#7, CA-70	6 lb.	20 lb.	2000 g	2500 g
CIA to meet #67	6 lb.	20 lb.	500 g	500 g
CIA to meet JMF	500 g	20 lb.	500 g	500 g
FIA, CS, FS	500 g	20 lb.	500 g	-
CA-80, #89	500 g	20 lb.	500 g	500 g
Fine Aggregate	500 g	20 lb.	500 g	-

Concrete Pavement – Producer/Contractor (1 of 2)

Test Type (concrete manual)	**Spec.**	**Concrete Paving Batch Plant Contractor/Producer QC Testing**	**Certified Ready-Mix Plant Contractor/Producer QC Testing**
Gradation **(1)** (5-694.145) (5-694.148)	3126 3131 3137	When > 250 yd^3 produced/ day: 1 per 2500 yd^3 per fraction per source. Take initial samples for aggregate gradation testing within the first 500 yd3. Test the verification companion sample on the day the sample was taken.	When 20-400yd^3 produced/ day: 1 per fraction per source. If over 400 yd3 per day, take a second gradation after the total exceeds 400 yd3. Test the verification companion sample on the day the sample was taken.
Coarse Aggregate -200 sieve (5-694.146)	3131 3137	Test the verification companion sample. Test these samples at the plant.	
Aggregate Moisture QC Verification **(2)** (5-694.142)	2301	If w/c incentives do not apply: 1 per 1000 yd^3, or 1 completed every 4 hours, whichever is the higher sampling rate.	If w/c incentives do not apply: 1 completed every 4 hours.
Water Content, Microwave Oven Verification	Review Concrete Manual 2301	If w/c incentives apply: Obtain the plastic concrete sample at the plant. See Concrete Manual (5-694.532)	
Unit Weight QC		Test one load of concrete per day at the plant. See Concrete Manual (5-694.542)	
Air Content QC (5-694.541)		Test the first load of concrete at the plant	
Coarse Aggregate Quality	3126 3131 3137	Test at Producer/Contractor Discretion	
Unit Weight		Test 1 load of concrete per day at the plant.	
Air Content for Type 3 Concrete (QC)		Test the first load of concrete at the plant.	
Coarse Aggregate Quality Testing for Incentive / Disincentive	3137	Test at the Contractor's discretion.	

* Use Certified Ready-Mix Concrete testing rates when: a) The entire concrete paving project is less than 3,500 cu. yd. b) When a secondary plant is used to provide minor work.

Concrete Pavement – Producer/Contractor (2 of 2)

NOTES:

(1) Performing testing on representative material at the end of the most recent day of production is allowed. If well-graded aggregate incentives apply: Use the Contractor's gradation results for well-graded aggregate incentive calculations as verified by Agency testing. Washing the fine aggregate gradation (QC) sample is not required when the result on the -#200 sieve of the unwashed sample is less than 1.0%. Wash all fine aggregate Verification Companion samples.

(2) Complete the initial moisture content and adjust the batch water prior to the start of concrete production each day. If weather conditions allow, performing moisture testing on representative material at the end of production the prior evening is allowed. Enter results into the batching system in real time.

Test Type	Spec.	Concrete Field Testing - Contractor QC Testing
Air Content before consolidation for Type 3 concrete	Review Concrete Manual Website	1 per 300 yd^3 or 1 per hour, whichever is less. Test first load each day per mix.
Slump		Test slump if concrete is suspected to be outside of required slump range as directed by the Engineer.
Concrete Temperature		Record temperature each time air content, slump or strength test specimen is performed/fabricated by the Contractor.
Flexural Strength		For information only: 1 beam (28-day) per week per mix. 1 cylinder (28-day) per week per mix may be substituted at the discretion of the Engineer. Provide moist curing environments, fabricate beams or cylinders, deliver to curing site, and clean beam boxes
Opening to Traffic		For opening to traffic: Make field control beams within the last hour of concrete poured each day. Substitute field control cylinders for field control beams at the discretion of the Engineer. Maturity testing is allowed in lieu of field control cylinders or beams. Fabricate beams or cylinders, deliver to curing site, and clean beam boxes.
Concrete Pavement Texture		Perform texture testing at locations determined by the Engineer in accordance with the Contract
Thickness		Probe, scan and core at locations determined by the Engineer in accordance with the Contract
Surface Smoothness		Measure smoothness of the final concrete as required by the Contract. Perform all profiling in the presence of the Engineer unless otherwise approved by the Engineer.
Dowel Bar and Tie Bar Steel Location		For Concrete projects greater than 3500 yd3. On the first day and each day of slip form pavement: (1) Verify the adequacy of the dowel bar anchoring by scanning seven random doweled contraction joints in each sublot. (2) Verify the presence and alignment of tie bar steel by scanning 75 lin. Ft. in each sublot. If the Engineer determines the first day's dowel bar anchoring and tie bar placement processes are acceptable, the Engineer may allow a reduction in scanned joints in each sublot as follows: (1) Verify the adequacy of the dowel bar anchoring by scanning four random doweled contraction joints per sublot. (2) Verify the presence and alignment of tie bar steel by scanning 25 lin. ft. out of every sublot.

Concrete Wearing Course for Bridges

Test Type (Concrete Manual)	**Spec.**	**Contractor/Producer QC Testing**	**Agency QA Testing**	**Form**
Gradation, Quality, Coarse Agg -200 QC/Verification (5-694.145) (5-694.146) (5-694.148)	3126 3137	**Prior to production**: The Contractor shall provide the Agency with: Aggregate pit numbers, 1 passing gradation result per fraction per source. Test Agency companion samples are Contractor's discretion. No quality tests are required.	Prior to production and each time aggregate is delivered to site: 1 gradation and quality per fraction prior to concrete production and each time aggregate is delivered to the site. Identify quality samples with a "Q" on the Sample ID Card and the Quality companion sample.	2410 Sample ID Card
Air Content - Type 3 Concrete (Verification) (5-694.541)	2431	None	1 per 15 yd^3, Test at beginning of pour each day.	Weekly Report of Low Slump Concrete
Slump (Verification) (5-694.531)		None	1 per 15 yd^3 Test at beginning of pour each day. For concrete from a concrete mobil, allow mix to hydrate 5 minutes before slump test to assure all cement is saturated.	
Compressive Strength (5-694.511)		None	1 cylinder (28 day) per 30 yd^3, standard cylinder mold size is 4 x 8 inch.	2409 Cyl. ID Card
Cement	3101	None	Each time cement is delivered to site. Obtain a 5 lb. sample. Store sample in a sealed container and include the supplier's delivery invoice from which the sample is obtained.	2430 Sample ID Card
Admixtures	3113	None	Each time new lot/batch admixture is delivered to site: Obtain a ½ pint sample. Store the sample in a sealed plastic container.	2410 Sample ID Card

Test	**Minimum Sample Size** **All gradation and aggregate quality tests require companion samples, double sample size. Samples taken at location identified on Contact Report located at plant.**	
Gradation	6 lb. for # 7, 500 g for CA-80	500 g for Sand
Quality	30 lb. for Coarse Aggregate	20 lb. Fine Aggregate

Concrete Pavement Repair – CPR for 3U18 and 3U58M

Test Type	Spec.	Contractor/Producer QC Testing	Agency QA Testing For volumetric batching only.	Forms
Gradation, Quality, Coarse Agg -200	3126 3137	**Prior to production**: The Contractor shall provide the Agency with: Aggregate pit numbers, 1 passing gradation result per fraction per source. No quality test results are required. Test companion samples at Contractor's discretion.	**Gradation:** Prior to concrete production and each time aggregate is delivered to the site. 1 per aggregate fraction prior to production and each time aggregate is delivered to the site. **Quality Testing & Coarse Agg -200:** 1 test per aggregate fraction per source. The Agency may use the gradation results for the Quality Samples as a substitute for 1 required field gradation. Identify quality samples with a "Q" on the Sample ID Card and the Quality companion sample.	2410 Sample ID Card
Air Content - Type 3 Concrete (Verification)	Review Concrete Manual Website	None	1 per 15 yd^3or 1 per 4 hours whichever results in the highest sampling rate. Test at beginning of pour each day.	2412 Weekly Report of Low Slump Concrete
Slump (Verification)		None	1 per 15 yd^3, Test at beginning of pour each day. Allow mix to hydrate 5 minutes before slump test to assure all cement is saturated. Test slump if concrete is suspected to be outside of required slump range.	
Compressive Strength		None	1 set of 3 cylinders (28 day) per 30 yd^3. The Agency will cast up to three (3) field control cylinders, standard cylinder mold size is 4 x 8 inch.	2409 Cyl. ID Card
Type 1 Cement	3101	None	**For Volumetric batching only:** Each time cement is delivered to site. Obtain a 5 lb. sample. Store sample in a sealed container and include the supplier's delivery invoice from which the sample is obtained.	2430 Sample ID Card
Admixtures	3113	None	Each time new lot/batch admixture is delivered to site: Obtain a ½ pint sample. Store the sample in a sealed plastic container.	2430 Sample ID Card

Test	**Minimum Sample Size** **All gradation and aggregate quality tests require companion samples, double sample size. Samples taken at location identified on Contact Report located at plant.**	
Gradation	6 lb. for # 7, 500 g for CA-80	500 g for Sand
Quality	30 lb. for Coarse Aggregate	20 lb. Fine Aggregate

Dowel Bar Retrofit – (DBR)

Test Type	Spec.	Contractor/Producer QC Testing	Agency QA Testing	Form
Gradation Testing (Verification), Quality Testing including, Coarse Agg -200	3137	**Prior to production:** The Contractor shall provide the Agency with: Aggregate pit numbers, 1 passing gradation result per fraction per source. No quality test results are required. Test companion samples are Contractor's discretion.	**Gradation:** Prior to concrete production and each time aggregate is delivered to the site. 1 per aggregate fraction prior to production and each time aggregate is delivered to the site. **Quality Testing & Coarse Agg -200:** 1 test per aggregate fraction per source. The Agency may use the gradation results for the Quality Samples as a substitute for 1 required field gradation. Identify quality samples with a "Q" on the Sample ID Card and the Quality companion sample.	2410 Sample ID Card

Test Type	Spec.	Agency QA Testing	Form
DBR Material Compressive Strength	Review Concrete Manual	**Contractor Testing: Any additional field control cylinders are the responsibility of the Contractor.** **Agency Testing:** 1 set of 3 cylinders (28 day) The Agency will cast up to three (3) field control cylinders, standard cylinder mold size is 4 x 8 inch.	2409 Cylinder ID Card

Test	Minimum Sample Size **All gradation and quality tests require companion samples, double sample size. Samples taken at location identified on Contact Report locates at plant.**	
Gradation	500 g for # 89 & Sand	
Quality	30 lb. Coarse Aggregate	20 lb. Fine Aggregate

Landscaping and Erosion Control Items

Kind of Material	Spec. #	Minimum Required Agency QA Acceptance Testing (Field Testing Rate)
Manufactured Topsoil Borrow, Salvaged Topsoil (stockpiled)	3877.2	As directed by the Engineer
Plant Stock & Landscape Materials	3861 and 2571.2A1	Materials must be in accordance with the Inspection and Contract Administration Guidelines for MnDOT Landscape Projects of which determines the minimum and maximum criteria thresholds. Certificate of Compliance, Nursery stock certificate registered with MN Dept. of Agriculture. Out of state products subject to pest quarantines must accompanied by documentation certifying all products are free of regulated pests.
Erosion Control Blanket	3885	Visual Inspection and Check approved products or approved vendors list - As directed by the Engineer.
Erosion Control Netting	3885	
Silt Fence	3886	
Erosion Stabilization Mat	3885	
Flotation Silt Curtain	3887	Accepted, based on manufacturers certification of compliance. Check weight of fabric.
Filter Logs	3897	Visual Inspection
Flocculants	3898	Obtain copy of Certificate of Compliance and MSDS
Fertilizer	3881	Obtain copy of invoice of blended material stating analysis.
Agricultural Lime	3879	Contractor must supply amount of ENP (Equivalent Neutralizing Power) for each shipment.
Mulch - Type 3	3882	Certified Weed Free (Certified sources only) Check for Certified Vendor tag from Minnesota Crop Improvement Association (MCIA).
Mulch - Type 6 - Woodchips		All wood chips supplied by a supplier outside the Emerald Ash Borer quarantine area or have an Emerald Ash Borer Compliance Agreement with the MDA
Seeds	3876	(Certified Vendors Only) (Mixes 100-299) Check for Certified Vendor tag from Minnesota Crop Improvement Association (MCIA).
Native Seed		(Mixes 300-399) certified seed only. Check for Certified Vendor tag from Minnesota Crop Improvement Association (MCIA).
Sod	3878	Visual Inspection - Check approved products list - As directed by the Engineer. Check for Certified Vendor tag from Minnesota Crop Improvement Association (MCIA) for salt tolerant sod.
Compost (from Certified Source)	3890	
Compost (from Non-Certified Source)		Visual Inspection - As directed by the Engineer.
Hydraulic Soil Stabilizer	3884	Check Approved/Qualified Products List - As directed by the Engineer.

Chemical Items

Kind of Material	Spec. No.	Minimum Required Agency QA Acceptance Testing (Field Testing Rate)
Asphalt Plank	3204	Visual Inspection - As directed by the Engineer.
Calcium Chloride	3911	Review the percentage required as per specification. Check for listing on Qualified Products website.
Magnesium Chloride	3912	
Hot-Pour Crack Sealant (for Crack Sealing/Filling)	3719 3723 3725	Retain Certification of Compliance. Check for listing on Qualified Products website.
Pavement Joint Adhesive	Special Provisions	Retain Certification of Compliance
Waterproofing Materials		
Membrane Waterproofing System	3757	Visual Inspection - Check qualified products list.
Waterproofing Materials - Three Ply System		
Asphalt Primer	3165	Verify supplied material meets ASTM D 41
Waterproofing Asphalt	3166	Verify supplied material meets ASTM D 449
Fabric	3201	Verify supplied material meets ASTM D 41
Paints		
Waterborne Latex - Traffic Paint	3591	Visual Inspection - Check qualified products list - retain Certificate of Compliance.
Epoxy Traffic Paint	3590	
Traffic Marking Paint	Special Provisions	
Non-Traffic Striping Paints	3500 Series	Retain Certification of Compliance
Bridge Structural Steel Paint	3520	Visual Inspection - Check approved products list - retain Certificate of Compliance.
Exterior Masonry Paint	3584	
Noise Wall Stain	Special Provisions	
Drop-on Glass Beads	3592	Visual Inspection - Check qualified products list. Retain Certificate of Compliance.
Pavement Marking Tape	3354	Visual Inspection - Check qualified products list. Retain Certificate of Compliance.
	3355	
	Special Provisions	
Signs and Markers	3352	Visual Inspection - Check qualified products list.

Metals (1 of 2)

Kind of Material	Spec. No.	Minimum Required Agency QA Acceptance Testing (Field Testing Rate) *
Guard Rail		
Fittings - Splicers, Bolts, Posts etc.	3381	Visual Inspection - Materials shall be approved before use. Call MnDOT inspector at 218-846-3613 to see if material has been approved.
Structural Plate Beam	3382	
Non-High Tension Guard Rail Cable	3381	
High Tension Guard Rail Cable	Special Provisions	
Steel Posts		
Steel Signposts	3401	Visual Inspection - As directed by the Engineer. Retain Certificate of Compliance in Project file.
Fence Posts, Brace Bars, Rails and others	3403	Visual Inspection - As directed by the Engineer. Retain Certificate of Compliance and certified mill analysis in project file.
	3406	
	3379	
Fence		
Barbed Wire	3376	Visual Inspection Retain Certification of Compliance, As directed by the Engineer.
Woven Wire		
Chain Link Fabric		
Components: cup, cap, nut, bolt, end clamp, tension band, truss rod tightener, hog ring, tie wire, tension stretcher bar, truss rod, clamp & tension wire		
Gates	3379	
Pipe		
Water Pipe and other Piping Materials	3364, 3365, 3366 & Special Provisions	Visual Inspection - As directed by the Engineer.
Reinforcing Steel - Inspected by MnDOT & will be charged back to the Local Agency.		
Uncoated Bars	3301	Retain Certificate of Compliance & Certified Mill Analysis
Epoxy Coated Bars	3301	For Epoxy-Coated bars, steel will be tagged "Inspected" when it has been sampled and tested by Mn/DOT prior to shipment, & it will be tagged "Sampled" when testing has not been completed prior to shipment. If the Epoxy-Coated bars are not tagged "Sampled" or "Inspected", submit samples (1 bar 3ft long for each size for each day's coating production), Certificate of Compliance, & Certified Mill Analysis for testing. Maintain original Cert. of Compliance & Certified Mill Analysis in project file.
Spirals	3305	
Stainless Steel Bars	Special Provisions	Visual Inspection Testing as directed by the Engineer (2 bars 3 ft. long per heat per bar size). Certified Mill Test Reports to be filed.

Metals (2 of 2)

Kind of Material	Spec. No.	Minimum Required Agency QA Acceptance Testing (Field Testing Rate) *	
Reinforcing Steel - Inspected by MnDOT & will be charged back to the Local Agency.			
Steel Fabric	3303	2 sq. ft. if epoxy coated.	Visual Inspection - Retain Certificate of Compliance.
Dowel Bars	3302	One dowel bar and basket from each shipment.	
Prestress/Post Tension Strands	3348 Spec Prov	One sample of 2 strands by 6 ft. from each heat/production lot.	
Castings			
Drainage Castings	3321	Visual Inspection - Check approved / qualified list.	
	2471		
Electrical	2565		
Anchor Rods (Cast in Place) and Structural Fasteners	3385 3391	Visual Inspection - Check approved / qualified list. Testing as directed by the Engineer (see notes below)	
Notes: Manufacturer must have one yearly passing test from the Department for each anchor rod or bolt type. Prior to installation, obtain copy of MnDOT passing test report from supplier. Specs 3385.2 A, B, & C require anchor rod markings per ASTM F 1554 S3. The end of each anchor bolt intended to project from the concrete must be die stamped with the grade identification as follows: Grade 36 = AB36, Grade 55 = AB55, Grade 105 = AB105.			
Anchorages (Drilled In)	Special Provisions	Visual Inspection - Check qualified products list.	
Structural Steel	Inspected by MnDOT & will be charged back to the Local Agency.		
Steel Bridge - Beams, Girders, Diaphragms, etc.	2471	Structural Metals Inspection Tag and field inspection for damage/defects, check dimensions for contract compliance. Review approved products list as directed by the Engineer. Note: Structural metals products will be inspected at the plant and will be shipped with a Structural Metals Inspection Tag. An inspection confirmation report will be completed by Structural Metals Inspection staff and sent to the field personnel. Only approved suppliers are allowed to supply Structural Metals products. A list of approved suppliers can be found on the Bridge Office website.	
Concrete Girders- Diaphragms and sole plates			
Expansion Joints			
Steel Bearings			
Railing-Structural tube and ornamental			
Drainage Systems			
Protection Angles			
Overhead Sign structures	2564 2471		
High Mast Lighting Structures	2545 2471		
Monotube Signal Structures	2565 2471		

*Check domestic steel requirement under 1601 Special Provision.

Geosynthetics, Pipe, Tile, Precast/ Prestressed Concrete

Kind of Material	Spec. No.	Minimum Required Agency QA Acceptance Testing (Field Testing Rate)
Corrugated Metal Products		
Culvert Pipe Under Drains Erosion Control Structures	3225 thru 3229, 3351, 3399	Make certain pipe is Certified on Invoice, retain certificate of compliance and certified mill analysis in project file.
Structural Plate	3231	
Aluminum Structural Plate	3233	Retain the Certificate of Compliance and mill analysis in project file.
Pipe		
Clay Pipe	3251	Visual Inspection
Reinforced Concrete Pipe and Arches, Precast Cattle Pass Units, Sectional Manhole Units	3236	Field Inspection: Check for damage and defects. Check dimensions and class as required.
Non-Reinforced Concrete Pipe	3253	
Drain Tile (Clay or Concrete)	3276	Visual Inspection - Acceptance as directed by the Engineer.
Thermoplastic (TP) Pipe ABS and PVC	3245	Obtain Certificate of compliance. Check for approved marking printed on pipe. Field Inspect for damage or defects.
Corrugated Polyethylene Pipe	3278	Check for markings (AASHTO M 252) Certificate of Compliance. Field Inspect for damage or defects.
Corrugated Polyethylene Pipe - Dual Wall 12"-48"	3247	Visual Inspection - Check approved products list. Obtain Certificate of Compliance.
Precast/Prestressed Concrete Structures - Inspected by MnDOT & will be charged back to the Local Agency.		
Reinforced Precast Box Culvert	3238	Field Inspection: Check for damage and defects. Check dimensions as required. Check for the "MnDOT" stamp and signature on the certification document.
Precast/Prestressed Concrete Structure (beams, posts, etc.)	2405	
Manholes and Catch Basins	2506 3622	
Sewer Joint Sealing Compound	3724	Visual Inspection - Acceptance as directed by the Engineer.
Preformed Plastic Sealer for Pipe	3726 Type b	Visual Inspection - Acceptance as directed by the Engineer.
Bituminous Mastic Joint Sealer for Pipe	3728	
EPS Geofoam	Special Provisions	Visual Inspection - Acceptance as directed by the Engineer. Check for yellow aged material, uniformity and dimensions.
Geotextile Fabric and Geogrid Reinforcement	3733 and Special Provisions	Obtain Certificate of Compliance stating minimum average roll values (MARV). MARV must meet Project requirements. Fabric must be listed on Geotextile Small Quantity Acceptance List.
Geotextile Small Quantity Acceptance List		
Silt Fence	3886	Visual Inspection - Check approved products list.

Electrical and Signal Equipment Items (1 of 2)

Kind of Material	Spec. No.	Minimum Required Agency QA Acceptance Testing (Field Testing Rate)
Lighting Standards (Aluminum or Steel)	3811	Visual Inspection - Obtain Certificate of Compliance. The Fabricator will submit "Certificate of Compliance," on a per project basis, to the Project Engineer.
Hand Holes (Precast, PVC, and LLDPE)	2545 2550 2565	Visual Inspection - Check approved/qualified products list. Traffic signal and street lighting projects require hand holes to be listed on the MnDOT Signals Approved Products List (APL). For cast iron frame and cover: see Metals - Drainage and Electrical Castings
Foundation	2545	Slump as needed, 1 cylinder per 25 cu. yds. Rebar is required in concrete foundations as specified in the Contract documents for all traffic control signals and roadway lighting projects.
Steel Screw In Foundations	2545 2565	See Approved/Qualified Products List for Roadway Lighting and Signals.
Conduit and Fittings		
Metallic	3801 3802	Visual Inspection - Conduit shall be labeled as being listed by a National Recognized Testing Laboratory (NRTL). For traffic signal and street lighting projects, specific requirements are contained in the Special Provisions for each project.
Non-Metallic (Rigid and HDPE)	3803 Special Provisions	
Anchor Rods and Bolts (Cast in Place)	3385	Visual Inspection - Manufacturer must have one yearly passing test from the Department for each anchor rod or bolt type. Prior to installation, obtain copy of Mn/DOT passing test report from supplier. Specs 3385.2 A, B, & C require anchor rod markings per ASTM F 1554 S3. The end of each anchor bolt intended to project from the concrete must be die stamped with the grade identification as follows: Grade 36 = AB36, Grade 55 = AB55, Grade 105 = AB105.
Anchorages (Drilled In)	Special Provision	Visual Inspection - Check qualified products list.
Miscellaneous Hardware	2545 2565	Visual Inspection - Check approved products list. Will carry "Inspected" tag if sampled and tested prior to shipment. No sample necessary if "Inspected". Do not use if not tested. Field sample at sampling rate for laboratory testing. For traffic signal and street light lighting projects, various miscellaneous hardware is required to be listed on the MnDOT Signals and Lighting Approved Products Lists (APL). The Contract documents indicate, which items must be on the Signals and/or Lighting APL.

Electrical and Signal Equipment Items (2 of 2)

Kind of Material	Spec. No.	Minimum Required Agency QA Acceptance Testing (Field Testing Rate)
Cable and Conductors		
Power Conductors	3815.2B1	Visual Inspection - Make certain the conductors are the type specified. Submit Field Inspection report showing type and quantities used. Shall be labeled as being listed by a National Recognized Testing Laboratory (NRTL) and type where applicable.
Loop Detector Conductors (No Tubing)	3815.2B2 (a)	
Electrical Cables and Single Conductors with Jacket	3815.2B2(b) 3815.2B3	Visual Inspection - Usually inspected at the distributor. Documentation showing project number, reel number(s), & MnDOT test number(s) will be included with each project shipment. If such documentation is not received from Contractor, submit sample for testing along with material certification from manufacturer. Do not use if not tested. Pre-inspected materials will not be tagged; an inspection report will be sent by the MnDOT inspector for each shipment. Project inspectors should verify that the shipping documents agree with this inspection report. Call Steve Grover at 651-366-5540 or Cindy Schellack at 651-366-5543 with questions. For traffic signal and street lighting projects, the Special Provisions for each project contain electrical cable and conductor specifications.
	3815.2B5	
	3815.2C1 thru .2C8	
	3815.2C14	
	Special Provisions	
Fiber Optic Cables	3815.2C13	Visual Inspection - Check approved products list for Traffic Management Systems.
Ground Rods	2545	Visual Inspection - Check approved products list. Shall be labeled as being listed by a National Recognized Testing Laboratory (NRTL). Detail materials on Materials Acceptance Summary.
	2565	
Luminaires and Lamps	3810	Visual Inspection - Check approved products list. Traffic signal and street lighting projects require luminaries and lamps to be listed on the MnDOT Lighting Approved/Qualified Products List (APL). The conductors shall be labeled as being listed by a National Recognized Testing Laboratory (NRTL) and type, where applicable.
Electrical Systems	2565	Electrical Systems are to be reported as a "System" using the LIGHTING, SIGNAL AND TRAFFIC RECORDER INSPECTION REPORT. To be certified by the Project Engineer.
Traffic Signal Systems	2565	Traffic Signal Systems are to be reported as a "System" using the LIGHTING, SIGNAL AND TRAFFIC RECORDER INSPECTION REPORT. To be certified by the Project Engineer.

Brick, Stone, and Masonry Units

Kind of Material	Spec. No.	Minimum Required Agency QA Acceptance Testing (Field Testing Rate)
Brick		
Sewer (clay) and Building	3612 to 3615	Visual Inspection - Acceptance as directed by the Engineer.
Sewer (Concrete)	3616	Visual Inspection - Acceptance as directed by the Engineer. Air entrainment required. Obtain air content statement from supplier.
Concrete Masonry Units		
Sewer Construction	3621	Visual Inspection - Acceptance as directed by the Engineer. Air entrainment required. Obtain air content statement from supplier.
Modular Block Retaining Walls	Review Current Special Provisions	Visual Inspection - Note: All lots of blocks upon delivery shall have Manufacturer or Independent laboratory test results to verify passing both compression and freeze-thaw requirements. * Wall units and cap units are considered separate block types.
Reinforced Concrete Cribbing	3661	Visual Inspection - Acceptance as directed by the Engineer. Will be stamped when inspected prior to shipment.
Stone for Masonry or Rip-Rap	2511, 3601 and Special Provisions	Visual Inspection - Acceptance as directed by the Engineer.

Remarks: each source shall be approved by Project Engineer or supervisor for quality, prior to use. For questions on quality, contact District Materials or Geology Unit.

Miscellaneous Materials

Kind of Material	Spec. No.	Minimum Required Agency QA Acceptance Testing (Field Testing Rate)
Timber, Lumber Piling & Posts	3412 to 3471 & 3491	Visual Inspection - Acceptance as directed by the Engineer. Untreated materials shall be inspected in the field. Treated materials shall be Certified on the Invoice or Shipping Ticket. Material is inspected and stamped by an Independent Agency as per Specification 3491. Contact Laboratory for additional information.
Miscellaneous pieces and Hardware (Galvanized)	3392 3394	Visual Inspection - Acceptance as directed by the Engineer.
Insulation Board	3760	
Elastomeric Bearing Pads - Plain or Laminated	3741 and Special Provisions	Check dimensions. Check repair of tested pad. Obtain copy of Certificate of Compliance. DO NOT USE ANY PADS THAT ARE NOT CERTIFIED.
Cotton Duck Bearing Pads		

Approved/Qualified Products & Resources

Approved/Qualified Products

- Asphalt Products
- Bridge Products
- Concrete Products
- Crack and Joint Material Products
- Drainage
- Erosion Control and Landscaping Products
- Geosynthetic
- Maintenance Shop Supplies
- Paint/Stain/Coating Systems (Non-Pavement)
- Pavement Markings
- Precast Concrete
- Roadside Barriers
- Roadway Lighting Products
- Signals Products
- Signing Products
- Snow and Ice Chemical Products
- Temporary Traffic Control Devices
- Traffic Management Systems/ITS
- Truncated Domes
- Vehicle Safety Lighting
- Walls (Retaining/Noise)

Additional Resources

- SALT Construction webpage
- Bituminous Engineering
    - Asphalt Binder Certified Supplier
    - Asphalt Emulsion Certified Supplier
- Concrete Engineering
    - MnDOT Concrete Manual
    - QC & QA RM Plant Workbooks
    - MnDOT Certified Ready-Mix Program
- Grading & Base Engineering
    - Testing procedures in the Grading & Base Manual
    - Forms and worksheets at the Grading & Base website
    - Gradation worksheets on the SALT Construction website

Contacts

MnDOT Construction and Materials State Aid Contacts

Districts 1, 2, 3, 4
Ross Hendrickson, State Aid Construction Specialist
ross.hendrickson@state.mn.us
218-766-3745

Districts 6, 7, 8
Rollin Larson, State Aid Construction Specialist
rollin.larson@state.mn.us
507-205-6403

Metro

Michael Pretel, State Aid Construction Engineer
michael.pretel@state.mn.us
651-755-3346

MnDOT Specialty Offices Contacts

Grading & Base

Terry Beaudry terry.beaudry@state.mn.us	Grading & Base Engineer	651-366-5456
John Bormann john.bormann@state.mn.us	Grading & Base Specialist	651-366-5596

*Bituminous**

John Garrity john.garriy@state.mn.us	Bituminous Engineer	651-366-5577
Greg Johnson Greg.johnson@state.mn.us	Asst. Bituminous Engineer	651-366-5464
Chelsea Bennett chelsea.bennett@state.mn.us	Asst. Bituminous Engineer	651-366-5482
Joel Ulring joel.ulring@state.mn.us	Pavement Preservation	651-366-5432
Mike Skurdalsvold	Bituminous Mix Design Specialist	612-499-2998
Ray Betts ray.betts@state.mn.us	Bituminous Trial Mix Lab Tech	651-366-5469
Rich Kane richard.kane@state.mn.us	Bituminous Plant & Lab Testing	612-437-3005

*See website for the contact list by topic

*Concrete**

Maria Masten maria.masten@state.mn.us	Concrete Engineer	651-334-4015
Jacob Gave jacob.gave@state.mn.us	Asst. Concrete Engineer	612-554-9289
Rob Golish robert.golish@sate.mn.us	Asst. Concrete Engineer	651-216-0516
Matt Herbst	Concrete Engineering Specialist	651-283-7127

Matt.herbst@state.mn.us		
Brad Swenson brad.swenson@state.mn.us	Concrete Engineering Specialist	218-232-1012
Gordy Bruhn gordon.bruhn@state.mn.us	Concrete Field Engineering Specialist	651-398-9597
Mike Daniels michael.daniels@state.mn.us	Concrete Engineering Specialist	320-293-9421

*See website for the contact list by topic

Contacts for other materials can be found on the Materials and Road Research Contacts webpage.

Contacts for Approved Products can be found at the Approved/Qualified Products Contact webpage.

Materials Lab. Contacts	Independent Assurance
District 1, Duluth Leila DeLuca Phone: 218-725-2738 D1.duluth.lab.dot@state.mn.us	Kristopfer Westerbur Cell: 218-348-6297 kristopfer.westerbur@state.mn.us
District 2, Bemidji Jason Kissel Phone: 218-755-6542 jason.kissel@state.mn.us Mike Murphy (Concrete & Aggregates) Phone: 218-755-6593 mike.murphy@state.mn.us Dustin Reese (Bituminous) Phone: 218-755-6593 dustin.reese@state.mn.us	Ray Wesley Cell: 218-766-6949 raymond.wesley@state.mn.us
District 3A, Baxter Tom Boser Phone: 218-828-5755 tom.boser@state.mn.us	Matt Miles Cell: 218-232-6748 matt.miles@state.mn.us
District 3B, Saint Cloud Nick Fisher Phone: 320-2236500 nicholas.fisher@state.mn.us Andy Kostreba Phone: 320-223-6554 andy.kostreba@state.mn.us	Travis Erickson Cell: 320-291-3582 travis.erickson@state.mn.us
District 4, Detroit Lakes Bruce Bryngelson Phone: 218-846-3614 bruce.bryngelson@state.mn.us Wayne Koons Phone: 218-846-3617	Casey Clarke Cell: 218-849-7393

wayne.koons@state.mn.us	casey.clarke@state.mn.us
Metro District, Maplewood Lab Brent Sculley Phone 651-366-5409 brent.sculley@state.mn.us	**Waters Edge** Phone: 651-234-7356 West Zachary Lyrek-Hanks Phone: 651-775-1018 zachary.Lyrek-Hanks@state.mn.us Brad Worthington Phone: 651-775-1151 brad.worthington@state.mn.us East Charlie Pursley Phone: 651-755-1244 charles.pursley@state.mn.us Erik Teiken Phone: 651-775-0998 eric.teiken@state.mn.us
District 6, Rochester Scott Swanson Phone: 507-286-7580 scott.a.swanson@state.mn.us Jeff Bale (Aggregates) Phone: 507-286-7586 jeff.bale@state.mn.us Joe Drees (Bituminous) Phone: 507-286-7582 joe.drees@state.mn.us Gary Vinge Phone: 507-286-7585 gary.vinge@sate.mn.us	Dennis Hayes Cell: 507-251-0138 dennis.hayes@state.mn.us
District 7, Mankato Lee McLaughlin Phone: 507-304-6189 lee.mclaughlin@state.mn.us	Mitch Jordahl Cell:507-380-9619 mitch.jordahl@state.mn.us
District 8, Willmar and Marshall Jon Vlaminck Phone: 320-214-6348 Cell: 320-894-7409 jon.vlaminck@state.mn.us **District 8B, Marshall** Matt Steinbronn Phone: 507-537-2068 matthew.steinbronn@state.mn.us	Paul Janke Cell: 320-212-5739 paul.janke@state.mn.us

Sample Sizes

	Lbs.	
Bituminous	35	Aggregate for Gradation QC/QA
	80	for each plus #4 Aggregate Type for Quality Testing
	35	for each minus #4 Aggregate Type for Quality Testing
	80	for each RAP material for Quality Testing
	10	RAS (shingles) for Processed Gradation and Quality Testing
	65	for Mix Properties (QC/QA) 3 full 6" by 12”-cylinder molds for QA
	90	for TSR (QC/QA) 4 full 6" by 12”-cylinder molds for QA
	90	for Aggregate Specific Gravity QC/QA
	-	1 quart of Asphalt Binder QA
	-	1/2 gallon for Asphalt Emulsion QA
Grading & Base	30	Aggregate for Gradation (Companion sample from 60 lb. split).
	25	Moisture Density Test – Proctor (Companion from 50 lb. split).
	30	Aggregate Quality/Percent Crushing Test - 1 per source
Ready-Mix Concrete	25	Gradation 3/4" plus
	10	Gradation 3/4" minus
	6	Gradation CA 70 & #7
	1	Gradation - Sand (500 g), CA 80, #89.
	4.4	Moisture Test Coarse Aggregate (2000 g)
	1.1	Moisture Test Fine Aggregate (500 g)
	50	Quality 3/4" plus - lab sample
	30	Quality 3/4" minus - lab sample
	30	Fine Aggregate - lab sample
	10	3/4" Plus for the -200 Coarse Aggregate Test (5000 grams)
	6	3/4" Minus for the -200 Coarse Aggregate Test (2500 grams)
	5	Cement, Blended Cement, Fly Ash
	-	1/2-pint plastic container for admixtures.

Non-Collusion and Conflict of Interest Statement

Please print or type (in ink)

CONTRACTOR NAME: _____ FEDERAL TAX ID NUMBER:_____

Company Address:_____

City: _____ State: _____ Zip Code: _____

Contact Person: _____Title:_____

Phone Number: _____ Fax Number: _____ email: _____

In signing this bid, proposal or quote, Contractor certifies that it has not, either directly or indirectly, entered into any agreement or participated in any collusion or otherwise taken any action in restraint of the competition; that no attempt has been made to induce any other person or firm to submit or not to submit a bid, proposal or quote; that this bid, proposal or quote has been independently arrived at without collusion with any other party submitting a bid, proposal or quote, competitor or potential competitor, that this bid, proposal or quote has not been knowingly disclosed prior to the opening of the bids, proposals or quotes to any bid, proposal or quote competitor; that the above statement is accurate under penalty or perjury.

Contractor also certifies that to the best of its knowledge none of its owners, directors, officers or principals (collectively, "Corporate Executive") are closely related to any County employee who has or may appear to have any control over the award, management, or evaluation of the contract. A Contractor's Corporate Executive is closely related when any of the following circumstances exist:

1. A Corporate Executive and any County employee who has or appears to have any control over the award, management or evaluation of the contract are related by blood, marriage or adoption; or

2. A Corporate Executive and any County employee who has or appears to have any control over the award, management or evaluation of the contract are current or former business partners, co-workers, or have otherwise previously worked closely together in the private or public sector; or

3. A Corporate Executive and any County employee who has or appears to have any control over the award, management or evaluation of the contract share a personal relationship that is beyond that of a mere acquaintance, including but not limited to friendship or family friendship.

If one or more of the above circumstances exist, Contractor must disclose such circumstance(s) to Dakota County in writing. Failure to disclose such circumstances invalidates the Contract.

Contractor will comply with all terms, conditions, specifications required by the party submitting a bid, proposal or quote in this Request for Bid, Proposal or Quote and all terms of our bid, proposal or quote response.

_____ _____ _____

Authorized Signature Title Date

You are advised that according to Dakota County Board Resolution 18-485 and Policy 2751, if there is a question as to whether there may be an appearance of a conflict of interest, the contract shall be presented to the County Board for approval, regardless of the amount of the contract. Whether a conflict of interest or the appearance of a conflict of interest exists is a determination made by Dakota County.

Submit this form as part of the Bid, Proposal or Quote response.

Signatures on your Bid/Proposal/Quote Response (Non-Collusion, Trade Secret, Bid/Proposal/Quote Forms, etc.) require a 'WET' signature. Digital signatures are NOT accepted.

V.7 Revised: MMH (06-19)

Dakota County

Bond No. _____

Bid Bond Form

KNOW ALL MEN BY THESE PRESENTS, That we

_____

as Principal, and _____

as Surety, are held and firmly bound unto the county of _____),

as Obligee, in the sum of five percent (5%) of the total amount of bid. ($_____) Dollars.

THE CONDITION OF THIS OBLIGATION IS SUCH, that if the principal shall be awarded a contract.

Upon the accompanying proposal dated _____ for the performance of

STATE PROJECT _____

_____

and shall within the time stated in the proposal enter into a contract for the performance of the work and give bond as required by law, then this obligation shall be void; otherwise, the Principal and Surety shall pay unto the Obligee the amount of this bond, not as penalty, but as liquidated damages sustained by the Obligee as the result of such failure on the part of the Principal to execute said contract and bond.

Dated this _____ day of _____, 20_____.

PRINCIPAL

_____

_____

_____

_____

BY: _____

Attorney-in-fact

CORPORATE ACKNOWLEDGEMENT OF
CONTRACTOR'S SIGNATURE

STATE OF _____)
)ss.
COUNTY OF _____)

On this _____ day of _____, 20_____ before me personally appeared _____ to me personally known, who being by me duly sworn did say that they are respectively _____ and _____ of _____ a corporation; that the seal affixed to the foregoing instrument is the corporate seal of the corporation, and that said instrument was executed in behalf of the corporation by authority of its Board of Director and they acknowledged said instrument to be the free act and deed of the corporation.

_____

Notary Seal

INDIVIDUAL OR CO-PARTNERSHIP
ACKNOWLEDGEMENT OF
CONTRACTOR'S SIGNATURE

STATE OF _____)
)ss.
COUNTY OF _____)

On this _____ day of _____, 20_____, before me personally appeared _____ to me personally known to be the person _____ described in and who executed the foregoing contract and acknowledged that _____ he _____, executed the same as _____ free act and deed.

_____

Notary Seal

STATE OF _____)
)ss.
COUNTY OF _____)

On this _____day _____, 20_____, before me personally came

_____ to be known to be an Attorney-in-Fact of

_____, the corporation described in the within

instrument, and he acknowledged that he executed the within instrument as the act of the said _____

_____ in accordance with authority duly conferred upon him by said Company.

_____
Notary Public

NOTICE TO CORPORATE SUREITIES: This bond will not be accepted unless executed or countersigned by a Minnesota agent, resident officers, or attorney-in-fact whose name and address must be noted in the space hereinafter provided.

Full Name of Surety Co. _____

Home Office Address _____

Name of Attorney-in-fact _____

Name of Local Agency _____

Address of Local Agency _____

If this bond is executed outside of the State of Minnesota it must be countersigned by a Minnesota Resident Agent of the Surety Company.

Name of Agent affixing countersignataure _____

Address _____

Trade Secret Information Form

The following form must be provided by Responder to assist the County in making appropriate determinations about the release of data provided in Responder's bid or proposal.

All responders must select one of the following boxes:

☐ My bid/proposal **does not** contain "trade secret information", as defined in Minn. Stat. § 13.37, Subd. 1(b). I understand that my entire bid/proposal will become public record in accordance with Minn. Stat. § 13.591.

☐ My bid/proposal **does** contain "trade secret information" because it contains data that:

1. (a) is a formula, pattern, compilation, program, device, method, technique or process; **AND**
   (b) is the subject of efforts by myself or my organization that are reasonable under the circumstances to maintain its secrecy; **AND**
   (c) derives independent economic value, actual or potential, from not being generally known to, and not being readily ascertainable by proper means by, other persons who can obtain economic value from its disclosure or use.
2. I have submitted one paper and one digital copy of my bid or proposal from which the confidential trade secret information has been excised. The confidential trade secret information has been excised in such a way as to allow the public to determine the general nature of the information removed while retaining as much of the document as possible **AND** I am attaching an explanation justifying the trade secret designation.

Please note that failure to attach an explanation may result in a determination that the data does not meet the statutory trade secret definition. All data for which trade secret status is not justified will become public in accordance with Minn. Stat. § 13.591.

Revised: 6/28/2018

Submit this form as part of the Bid, Proposal or Quote response.

Project: _____

Company: _____

Contact information of the person authorized by the Responder to answer any inquiries by Dakota County concerning the request for confidentiality:

Name: _____

Address: _____

Telephone: _____

Signatures on your Bid/Proposal/Quote Response (Non-Collusion, Trade Secret, Bid/Proposal/Quote Forms, etc.) require a 'WET' signature. Digital signatures are NOT accepted.

Language to be inserted in ALL SOLICITATIONS

Public Records and Requests for Confidentiality

Pursuant to the Minnesota Government Data Practices Act, Minnesota Statutes Section 13.591, the names of all entities that submitted a timely bid/proposal to Dakota County will be public once opened. All other information remains private until Dakota County has completed negotiating a contract with the selected Responder. After a contract has been negotiated, all information received is public information except "trade secret" information as defined in Minnesota Statutes Section 13.37. All information submitted by a Responder therefore shall be treated as public information by Dakota County unless the Responder properly requests that information be treated as a confidential trade secret at the time of submitting the bid/proposal.

Any request for confidential treatment of trade secret information in a Responder's proposal must sufficiently describe the facts that support the classification of information as confidential trade secret. The request must include the name, address, and telephone number of the person authorized by the Responder to answer any inquiries by Dakota County concerning the request for confidentiality. This information shall be provided on the Trade Secret Information Form. Dakota County reserves the right to make the final determination of whether data identified as confidential trade secret by a Responder falls within the trade secret exemption in the Minnesota Government Data Practices Act.

The envelope or mailing container of any documents submitted with the proposal that the Responder believes contain confidential trade secret information must be clearly marked as containing confidential trade secret information. Each page upon which trade secret information appears must be marked as containing confidential trade secret information.

In addition to marking the documents as confidential, the Responder must submit one paper and one digital copy of the proposal from which the confidential trade secret information has been excised. The confidential trade secret information must be excised in such a way as to allow the public to determine the general nature of the information removed while retaining as much of the document as possible.

The Responder's failure to request confidential treatment of confidential trade secret information pursuant to this subsection will be deemed by Dakota County as a waiver by the Responder of any confidential treatment of the trade secret information in the bid or proposal.

Requests by the public for the release of information held by Dakota County are subject to the provisions of the Minnesota Government Data Practices Act, Minnesota Statutes Chapter 13. Responders are encouraged to familiarize themselves with these provisions prior to submitting a proposal.

By submitting this bid or proposal, Responder agrees to indemnify and hold the County, its agents and employees, harmless from any claims or causes of action relating to the County's withholding of data based upon reliance on the representations that the information is a trade secret as defined in Minnesota Statutes Section 13.37 and therefore is not public, including the payment of all costs and attorney fees incurred by the County in defending such an action.

Revised: 6/22/2018

ATTACHMENT A
PRIME CONTRACTOR RESPONSE

RESPONSIBLE CONTRACTOR VERIFICATION AND CERTIFICATION OF COMPLIANCE

STATE PROJECT NUMBER: _____

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 response to this solicitation. A response received without this form, will 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: (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: (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;*

(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.

ATTACHMENT A-1

FIRST-TIER SUBCONTRACTORS LIST

SUBMIT PRIOR TO EXECUTION OF A CONTRUCTION CONTRACT

STATE PROJECT NUMBER: _____

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**

*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:	

ATTACHMENT A-2

ADDITIONAL SUBCONTRACTORS LIST

PRIME CONTRACTOR TO SUBMIT AS SUBCONTRACTORS ARE ADDED TO THE PROJECT

STATE PROJECT NUMBER: _____

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**

*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:	

Bidder must fill in unit prices in numerals; make the correct extension for each item and grand total. For complete information concerning these items, see Plans and Specifications, including Special Provisions.

CP 42-161

Line No.	Item No.	Description	Units	Quantity	Unit Price	Total Price
1	2011.601	AS BUILT	LUMP SUM	1		
2	2021.501	MOBILIZATION	LUMP SUM	1		
3	2051.501	MAINT. & RESTORATION OF HAUL ROADS	LUMP SUM	1		
4	2104.502	REMOVE VEHICULAR GATE	EACH	1		
5	2104.502	REMOVE MANHOLE	EACH	3		
6	2104.502	REMOVE SIGN	EACH	6		
7	2104.502	REMOVE PICNIC TABLE	EACH	2		
8	2104.502	REMOVE BENCH	EACH	2		
9	2104.503	SAWING BITUMINOUS PAVEMENT (FULL DEPTH)	LIN FT	20		
10	2104.503	REMOVE PIPE SEWERS	LIN FT	585		
11	2104.503	REMOVE CHAIN LINK FENCE	LIN FT	1642		
12	2104.504	REMOVE BITUMINOUS PAVEMENT	SQ YD	2408		
13	2104.607	SALVAGE RANDOM RIPRAP	CU YD	5		
14	2106.507	EXCAVATION - COMMON	CU YD	12738		
15	2106.507	COMMON EMBANKMENT (CV)	CU YD	865		
16	2211.507	AGGREGATE BASE (CV) CLASS 5	CU YD	430		
17	2215.504	FULL DEPTH RECLAMATION	SQ YD	1012		
18	2360.509	TYPE SP 9.5 WEARING COURSE MIX (2, C)	TON	550		
19	2411.507	STRUCTURE EXCAVATION CLASS E	CU YD	75		
20	2411.618	PREFABRICATED MODULAR BLOCK WALL	SQ FT	2060		
21	2411.618	ANTI-GRAFFITI COATING	SQ FT	2060		
22	2411.618	ARCHITECTURAL SURFACE FINISH (CONCRETE STAIN)	SQ FT	2060		
23	2451.507	FINE AGGREGATE BEDDING (CV)	CU YD	186		
24	2451.607	STRUCTURAL BACKFILL	CU YD	75		
25	2502.503	4" PERF TP PIPE DRAIN	LIN FT	260		
26	2503.503	12" PVC PIPE SEWER	LIN FT	671		
27	2503.602	CONNECT TO EXISTING CATCH BASIN	EACH	1		
28	2506.502	CASTING ASSEMBLY	EACH	6		
29	2506.503	INSTALL CASTING	EACH	1.0		
30	2506.503	CONSTRUCT DRAINAGE STRUCTURE DESIGN H	LIN FT	2.8		
31	2506.503	CONSTRUCT DRAINAGE STRUCTURE DESIGN SD-48	LIN FT	3.4		
32	2506.503	CONSTRUCT DRAINAGE STRUCTURE DESIGN 48-4020	LIN FT	25.3		
33	2506.602	RECONSTRUCT DRAINAGE STRUCTURE	LIN FT	2		
34	2540.602	CONCRETE PICNIC TABLE	EACH	2		
35	2540.602	BENCH	EACH	2		
36	2557.603	WOODEN FENCE	LIN FT	416		
37	2563.601	TRAFFIC CONTROL	LUMP SUM	1		
38	2573.502	STORM DRAIN INLET PROTECTION	EACH	6		
39	2573.502	CULVERT END CONTROLS	EACH	1		
40	2573.503	SILT FENCE; TYPE HI	LIN FT	3661		
41	2573.503	SEDIMENT CONTROL LOG TYPE COMPOST	LIN FT	36.0		
42	2574.505	SUBSOILING	ACRE	1.2		
43	2574.505	SOIL BED PREPARATION	ACRE	1		
44	2574.507	LOAM TOPSOIL BORROW	CU YD	287		
45	2574.508	FERTILIZER TYPE 1	POUND	112		
46	2575.504	ROLLED EROSION PREVENTION CATEGORY 25	SQ YD	3100.5		
47	2575.504	ROLLED EROSION PREVENTION CATEGORY 35	SQ YD	8174.3		
48	2576.504	ROLLED EROSION PREVENTION CATEGORY 45	SQ YD	129.1		
49	2575.505	SEEDING	ACRE	2.45		
50	2575.505	MOWING	ACRE	5		
51	2575.505	WEED SPRAYING	ACRE	1		
52	2575.506	WEED SPRAY MIXTURE	GALLON	0		
53	2575.603	ROOT BARRIER	LIN FT	1187		
54	2575.608	SEED MIXTURE WINTER WHEAT	POUND	246		
55	2575.608	SEED MIXTURE LOW MAINTENANCE FESCUE	POUND	81		

Bidder must fill in unit prices in numerals; make the correct extension for each item and grand total. For complete information concerning these items, see Plans and Specifications, including Special Provisions.

Line No.	Item No.	Description	Units	Quantity	Unit Price	Total Price
56	2575.608	SEED MIXTURE UPLAND PRAIRIE	POUND	116		
57	2575.608	SEED MIXTURE SHADY WOODLAND	POUND	39		
58	2575.618	OVERSTORY TREE	EACH	38		
59	2575.618	UNDERSTORY TREE	EACH	110		
60	2575.618	SHRUB PLANTING	EACH	220		

CP 42-161 TOTAL BID AMOUNT: _____

BIDDER NAME: _____

Form 21126D

Project No. **CP 42-161**

The undersigned hereby acknowledges that all requirements included in the hard copy proposal, addenda, amendments, plans, standard specifications, and supplemental specifications are a part of this bid and contract.

Signed: _____

PROPOSAL GUARANTY required by 1208 of the Specifications: "A (bond), prepared as required by 1208 of the Specifications and payable to the Dakota County Treasurer, in an amount equal to at least 5% of the total amount of the bid is submitted herewith as a proposal guaranty.

NON-COLLUSION DECLARATION: A Non-Collusion Declaration is found in this proposal which must be signed by each bidder.

RECEIPT OF ADDENDA as required by 1210 of the Specifications:

The undersigned hereby acknowledges receipt of and has considered:

Addendum No. _____ Dated _____ Addendum No. _____ Dated _____

Addendum No. _____ Dated _____ Addendum No. _____ Dated _____

Signed: _____

EXECUTION OF PROPOSAL as required by 1206 of the Specifications:

This proposal dated the _____ day of _____ , 20 _____

Signed: _____ , P.O. Address _____ as an individual.

Signed: _____ , P.O. Address _____ as an individual.

Doing business under the name and style of _____

Signed: _____ , for _____ , a partnership.

Name	Business Address
_____	_____
_____	_____
_____	_____

Signed: _____ , for _____ , a corporation.

Incorporated under the laws of the State of _____

Name of President _____ Business Address _____

Name of Vice-President _____ Business Address _____

Name of Secretary _____ Business Address _____

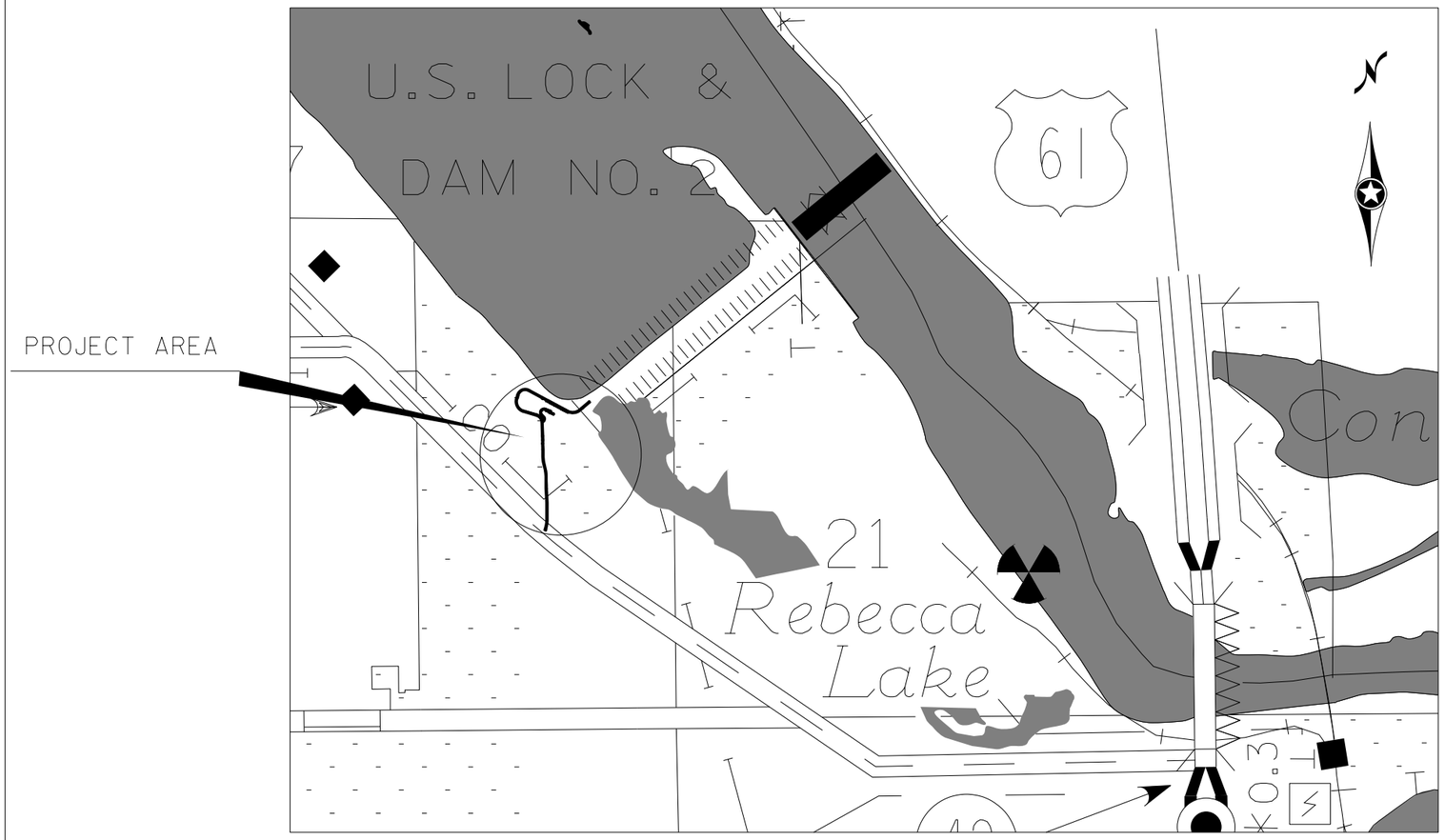
Name of Treasurer _____ Business Address _____

(NOTE: Signatures shall comply with 1206 of the Specifications.)

DAKOTA COUNTY

CONSTRUCTION PLAN FOR GRADING, BITUMINOUS SURFACING, ADA IMPROVEMENTS, RETAINING WALL

LOCATED ON MISSISSIPPI RIVER GREENWAY TRAIL 0.3 MILES NORTH WEST OF COUNTY RD 42 AND PLEASANT DR



SCALES

INDEX MAP	1500'	
GENERAL LAYOUT	400'	
PLAN	40'	
PROFILE	100' HORIZ.	VAR VERT.

PLAN REVISIONS		
DATE	SHEET NO.	APPROVED BY

PROJECT LOCATION

COUNTY : DAKOTA

Dakota COUNTY

GOVERNING SPECIFICATIONS

THE 2025 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION 'STANDARD SPECIFICATIONS FOR CONSTRUCTION' SHALL GOVERN.

INDEX

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	GENERAL LAYOUT
3	STATEMENT OF ESTIMATED QUANTITIES
4	CONSTRUCTION NOTES, STANDARD PLANS AND STANDARD PLATES
5-7	TABULATIONS
8	TYPICAL SECTIONS
9-10	DESIGN DETAILS
11-12	ALIGNMENT PLANS AND TABULATIONS
13-16	REMOVAL PLANS
17-20	CONSTRUCTION PLANS
21-22	CONSTRUCTION PROFILES
23	RETAINING WALL PLAN AND PROFILE
24-25	DRAINAGE PLANS AND PROFILES
26-28	STORM WATER POLLUTION PREVENTION PLAN
29-32	EROSION CONTROL PLANS
33-36	TURF ESTABLISHMENT PLANS
X1-X22	CROSS SECTIONS

THIS PLAN CONTAINS 36 SHEETS

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

PRINT NAME: JORDAN R HOREJSI LICENSE # 52241

SIGNATURE: DATE: 4/24/2026

DESIGN SQUAD BRETT JOHNSON, KENDAL RUSTEN
TYLER MAXSON

HRGreen
COURT INTERNATIONAL BUILDING
2550 UNIVERSITY AVENUE W., SUITE 400N
ST. PAUL, MINNESOTA 55114-2015
P: 651.644.4389 F: 713.965.0044

COUNTY PROJ. NO. 42-161 SHEET NO. 1 OF 36 SHEETS

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Last Saved: 4/24/2026

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NO.	REVISIONS	BY	APR.	DATE

DESIGNED BAJ | CHECKED KRR
DRAWN KRR | APPROVED JRH
DATE 4/24/2026 | JOB NO. 42 - 161

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.

TYPED NAME JORDAN R HOREJSI LIC. NO. 52241 DATE 4/24/2026

HRGreen
Building Communities. Improving Lives.
COURT INTERNATIONAL BUILDING
2550 UNIVERSITY AVENUE W., SUITE 400N
ST. PAUL, MINNESOTA 55114-1052
P: 651.644.4389 F: 651.644.9446

Dakota COUNTY

DAKOTA COUNTY
CP 42-161
GENERAL LAYOUT
SHEET 1 OF 1

SHEET 2
OF 36

STATEMENT OF ESTIMATED QUANTITIES

SHEET NO	TAB	ITEM NUMBER	ITEM DESCRIPTION	NOTES	UNITS	TOTAL ESTIMATED QUANTITY
		2011.601	AS BUILT		LUMP SUM	1
		2021.501	MOBILIZATION		LUMP SUM	1
		2051.501	MAINT. & RESTORATION OF HAUL ROADS		LUMP SUM	1
5	B	2104.502	REMOVE VEHICULAR GATE		EACH	1
5	B	2104.502	REMOVE MANHOLE		EACH	3
5	B	2104.502	REMOVE SIGN		EACH	6
5	B	2104.502	REMOVE PICNIC TABLE	(1)	EACH	2
5	B	2104.502	REMOVE BENCH	(1)	EACH	2
5	B	2104.503	SAWING BITUMINOUS PAVEMENT (FULL DEPTH)		LIN FT	20
5	B	2104.503	REMOVE PIPE SEWERS		LIN FT	585
5	B	2104.503	REMOVE CHAIN LINK FENCE		LIN FT	1642
5	B	2104.504	REMOVE BITUMINOUS PAVEMENT	(P)	SQ YD	2408
5	B	2104.607	SALVAGE RANDOM RIPRAP		CU YD	5
5	A	2106.507	EXCAVATION - COMMON	(P)	CU YD	12738
5	A	2106.507	COMMON EMBANKMENT (CV)	(P)	CU YD	865
5	C	2211.507	AGGREGATE BASE (CV) CLASS 5	(P)	CU YD	430
5	D	2215.504	FULL DEPTH RECLAMATION		SQ YD	1012
5	C	2360.509	TYPE SP 9.5 WEARING COURSE MIX (2,C)		TON	550
6	E	2411.507	STRUCTURE EXCAVATION CLASS E		CU YD	75
6	E	2411.618	PREFABRICATED MODULAR BLOCK WALL		SQ FT	2060
6	E	2411.618	ANTI-GRAFFITI COATING		SQ FT	2060
6	E	2411.618	ARCHITECTURAL SURFACE FINISH (CONCRETE STAIN)		SQ FT	2060
7	H	2451.507	FINE AGGREGATE BEDDING (CV)	(P)	CU YD	186
6	E	2451.607	STRUCTURAL BACKFILL		CU YD	75
6	E	2502.503	4" PERF TP PIPE DRAIN		LIN FT	260
7	H	2503.503	12" PVC PIPE SEWER		LIN FT	671
7	H	2503.602	CONNECT TO EXISTING CATCH BASIN		EACH	1
7	H	2506.502	CASTING ASSEMBLY		EACH	6
		2506.503	INSTALL CASTING		EACH	1
7	H	2506.503	CONSTRUCT DRAINAGE STRUCTURE DESIGN H		LIN FT	2.8
7	H	2506.503	CONSTRUCT DRAINAGE STRUCTURE DESIGN SD-48		LIN FT	3.4
7	H	2506.503	CONSTRUCT DRAINAGE STRUCTURE DESIGN 48-4020		LIN FT	25.3
7	H	2506.602	RECONSTRUCT DRAINAGE STRUCTURE		LIN FT	2.4
6	F	2540.602	CONCRETE PICNIC TABLE		EACH	2
6	F	2540.602	BENCH		EACH	2
6	F	2557.603	WOODEN FENCE		LIN FT	416
		2563.601	TRAFFIC CONTROL		LUMP SUM	1
6	G	2573.502	STORM DRAIN INLET PROTECTION		EACH	6
6	G	2573.502	CULVERT END CONTROLS		EACH	1
6	G	2573.503	SILT FENCE; TYPE HI		LIN FT	3661
6	G	2573.503	SEDIMENT CONTROL LOG TYPE COMPOST		LIN FT	36
6	G	2574.505	SUBSOILING		ACRE	1.2
6	G	2574.505	SOIL BED PREPARATION	(P)	ACRE	1.0
5	A	2574.507	LOAM TOPSOIL BORROW	(2)	CU YD	287
6	G	2574.508	FERTILIZER TYPE 1		POUND	112
6	G	2575.504	ROLLED EROSION PREVENTION CATEGORY 25		SQ YD	3101
6	G	2575.504	ROLLED EROSION PREVENTION CATEGORY 35		SQ YD	8174
6	G	2576.504	ROLLED EROSION PREVENTION CATEGORY 45		SQ YD	129

STATEMENT OF ESTIMATED QUANTITIES

SHEET NO	TAB	ITEM NUMBER	ITEM DESCRIPTION	NOTES	UNITS	TOTAL ESTIMATED QUANTITY
6	G	2575.505	SEEDING		ACRE	2.5
6	G	2575.505	MOWING		ACRE	4.9
6	G	2575.505	WEED SPRAYING		ACRE	1.2
6	G	2575.506	WEED SPRAY MIXTURE		GALLON	0.15
6	G	2575.603	ROOT BARRIER		LIN FT	1187
6	G	2575.608	SEED MIXTURE WINTER WHEAT		POUND	246
6	G	2575.608	SEED MIXTURE LOW MAINTENANCE FESCUE		POUND	81
6	G	2575.608	SEED MIXTURE UPLAND PRAIRIE		POUND	116
6	G	2575.608	SEED MIXTURE SHADY WOODLAND		POUND	39
6	G	2575.618	OVERSTORY TREE		EACH	38
6	G	2575.618	UNDERSTORY TREE		EACH	110
6	G	2575.618	SHRUB PLANTING		EACH	220

SPECIFIC NOTES:

(P) PLAN QUANTITY

(1) REMOVAL OF CONCRETE BENCH PAD AND PICNIC TABLE PAD IS INCIDENTAL. ALL MATERIAL ASSOCIATED WITH BENCH REMOVAL BECOMES PROPERTY OF THE CONTRACTOR.

(2) USE AS DIRECTED BY ENGINEER

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NO.	REVISIONS	BY	APR.	DATE

DESIGNED BAJ | CHECKED KRR
DRAWN KRR | APPROVED JRH
DATE 5/1/2026 | JOB NO. 42 - 161

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.

TYPED NAME JORDAN R HOREJSI LIC. NO. 52241 DATE 5/1/2026

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Dakota COUNTY

DAKOTA COUNTY
CP 42-161
ESTIMATED QUANTITIES
SHEET 1 OF 1

SHEET 3
OF 36

CONSTRUCTION NOTES:

PERPETUATE DRAINAGE ON ALL AREAS DISTURBED BY CONSTRUCTION (INCIDENTAL).

ALL MATERIAL NOT UTILIZED ON THIS PROJECT SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND DISPOSED OF OFF THE R/W IN ACCORDANCE WITH SPEC 2104.

EARTHWORK FINISHING AND TOPSOIL COVERING OPERATIONS SHALL BE CONDUCTED CONCURRENTLY WITH GRADING OPERATIONS SO FAR AS TO PERMIT COMPLETION OF THE EROSION CONTROL ITEMS AT THE EARLIEST PRACTICAL TIME. TOPSOIL COVERING SHALL BE COMPLETED AS SOON AS POSSIBLE AFTER THE GRADING SOILS HAVE BEEN FINISHED TO GRADE IN ANY SIGNIFICANT AREA.

EXCAVATED MATERIAL SHOULD BE USED TO THE FULLEST EXTENT PRACTICAL, SO FAR AS THE EXCAVATED MATERIAL IS DESIGNATED SUITABLE WITH RESPECT TO THE REQUIREMENTS OF THE PROJECT. SEE MNDOT SPECIFICATION 2106.

UNSUITABLE SOILS ARE DEFINED AS SOILS WHICH DO NOT MEET OR ARE NOT MANUFACTURED TO MEET ANY OF THE DEFINED CATEGORIES IN SPEC 2106. THESE SOILS ARE THEREFORE NOT REUSABLE AS STRUCTURAL BACKFILL OR EMBANKMENT. MATERIALS DEFINED AS UNSUITABLE (ORGANIC MATERIAL, DEBRIS) MUST BE REMOVED FROM THE EMBANKMENT FOUNDATION. THE UNSUITABLE MATERIALS SHALL BE DISPOSED OF IN ACCORDANCE WITH SPEC 2104 & 2106. MATERIALS SUCH AS PEAT, MARL, MULCH AND OTHER UNSTABLE MATERIALS NOT TO BE USED IN THE PAVEMENT EMBANKMENTS SHALL BECOME PROPERTY OF THE CONTRACTOR AND BE DISPOSED OF OFF THE RIGHT OF WAY. NO DIRECT COMPENSATION WILL BE MADE THEREFORE.

SUITABLE GRADING MATERIAL (COMMON EMBANKMENT) ON THIS PROJECT SHALL CONSIST OF ALL SOILS ENCOUNTERED WITH THE EXCEPTION OF DEBRIS, ORGANIC MATERIAL, AND OTHER UNSUITABLE MATERIAL. EXISTING AGGREGATE AND TOPSOIL SHOULD BE SALVAGED AND REUSED IN NEW CONSTRUCTION WHERE POSSIBLE. SEE MNDOT SPECIFICATION 2106.

BITUMINOUS SURFACING, CONCRETE ITEMS, ABANDONED UTILITY ITEMS OR ANY OTHER MATERIAL WHICH MAY BE ENCOUNTERED DURING CONSTRUCTION THAT ARE NOT SUITABLE FOR SALVAGE OR FOR TRAIL CONSTRUCTION, MUST BE DISPOSED OF BY THE CONTRACTOR OFF THE RIGHT-OF-WAY IN ACCORDANCE WITH SPEC. 2104.

CONCRETE TRUCKS THAT WASH OUT WITHIN THE PROJECT LIMITS MUST DO SO AT A LOCATION APPROVED BY THE ENGINEER. HARDENED CONCRETE WASTE MUST BE REMOVED FROM THE PROJECT LIMITS AND PROPERLY DISPOSED IN ACCORDANCE WITH SPEC. 2104.(INCIDENTAL).

SURVEYS AND RIGHT OF WAY

THE CONTRACTOR SHALL PRESERVE ALL LAND, AND PROPERTY CORNERS, VERTICAL AND HORIZONTAL CONTROLS, AND RIGHT OF WAY MONUMENTS.

GRADING

GRADING LIMITS AS SHOWN ON THE TYPICAL SECTIONS AND DETAILS IN THIS PLAN ARE FOR THE COMPUTATION OF PAY QUANTITIES. TEMPORARY AND INTERMEDIATE GRADING LIMITS AND SLOPES ARE TO BE DETERMINED BY THE CONTRACTOR DURING CONSTRUCTION, DEPENDING ON SOIL PROPERTIES AND SAFETY FACTORS. ADDITIONAL EXCAVATION AND BACKFILL BEYOND THE LIMITS SHOWN IN THE PLAN FOR SOIL AND SAFETY ISSUES WILL BE CONSIDERED THE CONTRACTOR'S RESPONSIBILITY WITH NO DIRECT PAYMENT.

GRADING GRADE IS DEFINED AS THE BOTTOM OF THE AGGREGATE BASE (CV) CLASS 5.

THE GRADING LIMITS AS DEPICTED IN THESE PLANS REPRESENT THE ESTIMATED AREA OF REQUIRED EXCAVATION AND EMBANKMENT. THE CONSTRUCTION LIMITS ARE TO FOLLOW THE PERMANENT OR TEMPORARY EASEMENT LINES UNLESS OTHERWISE DEPICTED IN THE PLANS, OR AS DIRECTED BY THE ENGINEER. THE AREA BETWEEN THE GRADING LIMITS AND CONSTRUCTION LIMITS IS TO BE USED FOR SITE ACCESS, PLACEMENT OF SEDIMENT CONTROL BMP'S, OR TEMPORARY STORAGE OF TOPSOIL. THE CONTRACTOR SHALL KEEP THE DISTURBANCE IN THIS AREA TO A MINIMUM.

TEMPORARY TURF ESTABLISHMENT

TEMPORARY EROSION CONTROL DEVICES AND THEIR SUGGESTED LOCATIONS HAVE BEEN SHOWN IN THE PLANS ALONG WITH PAY ITEMS FOR THEIR USE. THIS DOES NOT, HOWEVER, RELIEVE THE CONTRACTOR OF THEIR RESPONSIBILITIES TO CONDUCT THEIR CONSTRUCTION IN A MANNER THAT WILL CONTROL EROSION. RESPONSIBILITY FOR CONTROLLING EROSION IS SET FORTH IN MNDOT SPECIFICATIONS 1717, 1803, 2101, 2105, 2573, 2575, AND AS AMENDED BY THE SPECIAL PROVISIONS.

THE SPECIFIED EROSION AND SEDIMENT CONTROL PRACTICES ARE THE MINIMUM. ADDITIONAL PRACTICES MAY BE REQUIRED DURING THE COURSE OF CONSTRUCTION.

EXISTING TOPSOIL AND TOPSOIL

ANY REFERENCE TO TOPSOIL IN THE PLAN OR SPECIAL PROVISIONS WILL PERTAIN TO THE NATURAL (INPLACE) SOIL. IF THE CONTRACTOR FEELS THE EXISTING TOPSOIL IS NOT SUFFICIENT OR SUITABLE FOR REPLACEMENT, THEY MUST MAKE THIS KNOWN TO THE OWNER BEFORE ANY MATERIAL IS REMOVED FROM THE SITE OR RISK NOT BEING PAID FOR ANY REPLACEMENT TOPSOIL HAULED IN.

PAYMENT FOR TOPSOIL IS INCLUDED IN COMMON EMBANKMENT (CV). TOPSOIL STRIPPING IS PAID FOR UNDER THE EXCAVATION - COMMON PAY ITEM. USE LOAM TOPSOIL BORROW AS DIRECTED BY THE ENGINEER.

THE CONTRACTOR SHALL REMOVE ALL STICKS AND ROCKS EXCEEDING 3" IN ANY DIMENSION AT THE TIME OF FINAL TOPSOIL PLACEMENT AND/OR AFTER LOOSENING THE SOIL PRIOR TO SEEDING OR BOTH. THIS IS INTENDED TO PROMOTE SEED ESTABLISHMENT AND PREVENT EROSION.

RETAINING WALL

RETAINING WALLS OF 4" AND OVER FROM FOUNDATION TO WALL TOP REQUIRE CITY OF HASTINGS BUILDING PERMIT.
CONTACT LONNIE JOHNSON, BUILDING OFFICIAL WITH QUESTIONS:
LJOHNSON@HASTINGSMN.GOV
651-480-2375

BITUMINOUS AND AGGREGATE

PROVIDE A UNIFORM TACK COAT AS DOCUMENTED IN THE MOST RECENT SPEC 2357 - BITUMINOUS TACK COAT REQUIREMENTS, WHICH SHALL BE INCIDENTAL.

COMPACTION FOR AGGREGATE BASE MUST BE BY THE QUALITY COMPACTION METHOD.

PERMANENT TURF ESTABLISHMENT

ALL AREAS DISTURBED BY CONSTRUCTION WILL REQUIRE TURF ESTABLISHMENT. PERMANENT TURF ESTABLISHMENT (FINAL STABILIZATION) MUST BE COMPLETED WITHIN THE TIME FRAME INDICATED IN THE SWPPP NARRATIVE.

ALL AREAS DISTURBED BY THE CONTRACTOR'S EQUIPMENT OR OPERATIONS THAT WERE NOT NECESSARY FOR THE PLANNED CONSTRUCTION MUST BE RESTORED AS INDICATED ABOVE, OR AS DIRECTED BY THE OWNER AT THE CONTRACTOR'S EXPENSE.

UTILITIES

THE SUBSURFACE UTILITY INFORMATION IN THE PLAN IS UTILITY QUALITY LEVEL D.

THE CONTRACTOR IS HEARBY REMINDED OF THEIR RESPONSIBILITIES UNDER STATE LAW TO CONTACT ALL UTILITIES THAT MAY HAVE FACILITIES IN THE AREA. THE CONTACT MUST BE MADE THROUGH GOPHER STATE-ONE-CALL.

THE FOLLOWING STANDARD PLATES, APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION, SHALL APPLY ON THIS PROJECT

STANDARD PLATES

PLATE NO.	DESCRIPTION
3007F	SHEAR REINFORCEMENT FOR PRECAST DRAINAGE STRUCTURES
4000J	MANHOLE OR CATCH BASIN (MASONRY, FIELD CONSTRUCTION) - DESIGN A
4006L	MANHOLE OR CATCH BASIN PRECAST - DESIGNS G AND H
4022A	MANHOLE OR CATCH BASIN COVER (3 FT. × 2 FT. OPENING)
4024A	48" DIA. PRECAST SHALLOW DEPTH CATCH BASIN - DESIGN SD
4101D	RING CASTING FOR MANHOLE OR CATCH BASIN
4108F	ADJUSTING RINGS FOR CATCH BASINS AND MANHOLES
4110F	COVER CASTING FOR MANHOLE (FOR USE IN ALL TRAFFIC AREAS) – CASTING NO. 715 AND 716
4125D	CATCH BASIN FRAME CASTING (FOR SQUARE GRATE) – CASTING NO. 806
4132G	CATCH BASIN FRAME CASTING (FOR SQUARE GRATE) - CASTING NO. 805
4134A	CURB BOX CASTING FOR CATCH BASIN (FOR DESIGN B CURBS)- CASTING NO. 825
4140D	SPECIAL GRATE CASTINGS FOR CATCH BASIN (CONVEX AND CONCAVE) - CASTING NO. 720 AND
4143E	STOOL GRATE & CONCRETE FRAME (MEDIAN DRAINS) - CASTING NO. 731
4154B	CATCH BASIN GRATE CASTING - CASTING NO. 816
4180J	MANHOLE OR CATCH BASIN STEP

THE FOLLOWING STANDARD PLANS, APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION, SHALL APPLY ON THIS PROJECT

STANDARD PLANS

INDEX NO.	SUBJECT	APPROVED	REVISED
5-297.115 (1 of 2)	STAKING INFORMATION SHEET	08-06-2014	
5-297.115 (2 of 2)	STAKING INFORMATION SHEET	08-06-2014	
5-297.301 (1 of 3)	STANDARD PLANTING DETAILS	12-11-2015	02-14-2019
5-297.301 (2 of 3)	STANDARD PLANTING DETAILS	12-11-2015	
5-297.301 (3 of 3)	STANDARD PLANTING DETAILS	12-11-2015	
5-297.404 (1 of 3)	PERMANENT EROSION CONTROL - ALONG ROADWAYS, DITCHES, AND FLUMES	02-28-2017	
5-297.404 (3 of 3)	PERMANENT EROSION CONTROL - REPP (BLANKET) STAPLE PATTERN FOR SLOPES	01-08-2020	
5-297.405 (1 of 8)	TEMPORARY SEDIMENT CONTROL - SILT CURTAIN OR SILT FENCE TYPE TB	02-28-2017	
5-297.405 (2 of 8)	TEMPORARY SEDIMENT CONTROL - FILTER BERMS, SEDIMENT CONTROL LOGS, AND BALE BARRIERS	01-08-2020	
5-297.405 (4 of 8)	TEMPORARY SEDIMENT CONTROL - STORM DRAIN INLET PROTECTION	02-28-2017	
5-297.405 (5 of 8)	TEMPORARY SEDIMENT CONTROL - CONSTRUCTION EXITS	02-28-2017	
5-297.405 (6 of 8)	TEMPORARY SEDIMENT CONTROL - SILT FENCE	02-28-2017	
5-297.405 (8 of 8)	TEMPORARY SEDIMENT CONTROL - CULVERT END CONTROLS	02-28-2017	
5-297.442	STANDARD STORM SEWER BEDDING FOR RIGID AND FLEXIBLE PIPE	11-15-2024	
5-297.640 (1 of 2)	MODULAR BLOCK RETAINING WALL GENERAL NOTES	03-29-2023	
5-297.640 (2 of 2)	MODULAR BLOCK RETAINING WALL STORMWATER MANAGEMENT AND VEGETATION NOTES	03-29-2023	
5-297.643	MODULAR BLOCK RETAINING WALL SOIL REINFORCEMENT FOR 1V:2H FILL SLOPE, CASE 2	03-29-2023	
5-297.645 (1 of 2)	MODULAR BLOCK RETAINING WALL DETAILS	03-29-2023	
5-297.645 (2 of 2)	MODULAR BLOCK RETAINING WALL DETAILS	03-29-2023	

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CP 42-161
CONSTRUCTION NOTES, STANDARD PLANS AND STANDARD PLATES
SHEET 1 OF 1

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EARTHWORK TABULATION — A

STATION TO STATION	2106 EXCAVATION - COMMON (6)	2106 COMMON EMBANKMENT (CV) (7)
	CU YD	CU YD
MRG TRAIL		
STA. 100+22 TO STA. 109+29	34	34
STA. 109+29 TO STA. 113+00	920	97
STA. 113+00 TO STA. 118+50	7907	366
STA. 118+50 TO STA. 124+60	3142	179
OVERLOOK TRAIL		
STA. 00+00 TO STA. 2+47	32	64
STA. 2+47 TO STA. 4+73	704	125
TOTAL	12738	865

(6) 6" TOPSOIL STRIPPING INCLUDED IN EXCAVATION - COMMON

(7) 4" TOPSOIL PLACEMENT INCLUDED IN COMMON EMBANKMENT (CV)

REMOVALS — B

STATION TO STATION	2104 REMOVE VEHICULAR GATE	REMOVE MANHOLE	REMOVE SIGN	REMOVE PICNIC TABLE (3)	REMOVE BENCH	SAWING BITUMINOUS PAVEMENT (FULL DEPTH)	REMOVE PIPE SEWERS	REMOVE CHAIN LINK FENCE (1)	REMOVE BITUMINOUS PAVEMENT	SALVAGE RANDOM RIPRAP
	EACH	EACH	EACH	EACH	EACH	LIN FT	LIN FT	LIN FT	SQ YD	CU YD
MRG TRAIL										
STA. 109++29 TO STA. 113+00	1		1			10		409 (2)	606	
STA. 113+00 TO STA. 118+50		1	4		1		240	309	681	
STA. 118+50 TO STA. 124+60		2	1			10	345	394	697	5
OVERLOOK TRAIL										
STA. 00+00 TO STA. 2+47					1			78	79	
STA. 2+47 TO STA. 4+73				2				452	345	
TOTAL	1	3	6	2	2	20	585	1642	2408	5

(1) 4.5' CHAIN LINK FENCE HEIGHT

(2) 40 LIN FT OF 6' CHAIN LINK FENCE HEIGHT

(3) REMOVAL OF CONCRETE PICNIC PAD IS INCIDENTAL

AGGREGATE AND BITUMINOUS SUMMARY — C

STATION TO STATION	2211 AGGREGATE BASE (CV) CLASS 5	2360 TYPE SP 9.5 WEARING COURSE MIX (2,C) (SPWEB240C) (4)
	CU YD	TON
MRG TRAIL		
STA. 100+22 TO STA. 105+75		110
STA. 105+75 TO STA. 109+29		70
STA. 109+29 TO STA. 113+00	90	70
STA. 113+00 TO STA. 118+50	130	110
STA. 118+50 TO STA. 124+60	140	130
OVERLOOK TRAIL		
STA. 00+00 TO STA. 2+47	70	60
STA. 2+47 TO STA. 4+73		
TOTAL	**430**	**550**

(4) BITUMINOUS MIXTURE COMPUTED AT 115 LBS/SY-IN

FULL DEPTH RECLAMATION — D

STATION TO STATION	2215 FULL DEPTH RECLAMATION (5)
	SQ YD
MRG TRAIL	
STA. 100+22 TO STA. 105+75	620
STA. 105+75 TO STA. 109+29	392
TOTAL	**1012**

(5) CONTRACTOR SHALL MAKE APPROPRIATE ADJUSTMENTS TO EQUIPMENT AND/OR PROCEDURE TO ENSURE DETERIORATED PAVEMENT MEETS THE GRADATION REQUIREMENTS AND ENSURE THAT OVERSIZED MATERIALS ARE NOT PASSING THROUGH

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RETAINING WALL — E

STATION TO STATION	2411 STRUCTURE EXCAVATION CLASS E (5)	2411 PREFABRICATED MODULAR BLOCK WALL	2411 ANTI-GRAFFITI COATING	2411 ARCHITECTURAL SURFACE FINISH (CONCRETE STAIN)	2451 STRUCTURAL BACKFILL	2502 4" PERF TP PIPE DRAIN
	CU YD	SQ FT	SQ FT	SQ FT	CU YD	LIN FT
MRG TRAIL						
STA. 109++29 TO STA. 113+00						
STA. 113+00 TO STA. 118+50						
STA. 118+50 TO STA. 124+60	75	2060	2060	2060	#REF!	260
OVERLOOK TRAIL						
STA. 00+00 TO STA. 2+47						
STA. 2+47 TO STA. 4+73						
TOTAL	**75**	**2060**	**2060**	**2060**	**#REF!**	**260**

(5) MEASUREMENT BASED ON VERTICAL FACE AREA OF MODULAR BLOCK RETAINING WALL AS MEASURED FROM PLAN TOP OF WALL TO 2' BELOW THE FINISHED GRADE.

MISCELLANEOUS — F

STATION TO STATION	2540 CONCRETE PICNIC TABLE (6)	2540 BENCH (6)	2557 WOODEN FENCE (7)
	EACH	EACH	LIN FT
MRG TRAIL			
STA. 109++29 TO STA. 113+00			63
STA. 113+00 TO STA. 118+50		1	
STA. 118+50 TO STA. 124+60			235
OVERLOOK TRAIL			
STA. 00+00 TO STA. 2+47		1	118
STA. 2+47 TO STA. 4+73	2		
TOTAL	**2**	**2**	**416**

(6) 6" AGGREGATE BASE (CV) CLASS 5 TO BE PLACED UNDER CONCRETE PAD

(7) INCLUDES CONCRETE FOOTING

EROSION CONTROL AND TURF ESTABLISHMENT TABULATION — G

STATION TO STATION	LOCATION	STORM DRAIN INLET PROTECTION	CULVERT END CONTROLS	SILT FENCE, TYPE HI	SEDIMENT CONTROL LOG TYPE COMPOST	SUBSOILING (1)	SOIL BED PREPARATION	FERTILIZER TYPE 1 (4)	ROLLED EROSION PREVENTION CATEGORY 25	ROLLED EROSION PREVENTION CATEGORY 35	ROLLED EROSION PREVENTION CATEGORY 45	SEEDING	MOWING (2)	WEED SPRAYING (3)	WEED SPRAY MIXTURE	ROOT BARRIER	SEED MIXTURE WINTER WHEAT	SEED MIXTURE LOW MAINTENANCE FESCUE	SEED MIXTURE UPLAND PRAIRIE	SEED MIXTURE SHADY WOODLAND	OVERSTORY TREE	UNDERSTORY TREE	SHRUB PLANTING
		EACH	EACH	LIN FT	LIN FT	ACRE	ACRE	POUND	SQ YD	SQ YD	SQ YD	ACRE	ACRE	ACRE	GALLON	LIN FT	POUND	POUND	POUND	POUND	EACH	EACH	EACH
TRAIL																							
STA. 100+22 TO STA. 105+75	LT & RT			368		0.1		23	945			0.2	0.4	0.1	0.01		20	16	10				
STA. 105+75 TO STA. 109+29	LT & RT			606	11	0.1		15	554			0.2	0.4	0.1	0.01		20	11	6				
STA. 109+29 TO STA. 113+00	LT & RT		1	532		0.1	0.1	15	140	777		0.2	0.3	0.1	0.01	20	17	11	9	1	1	2	3
STA. 113+00 TO STA. 118+50	LT & RT	2		826		0.5	0.5	23		4531		0.9	1.9	0.5	0.06	417	94	17	50	15	18	48	97
STA. 118+50 TO STA. 124+60	LT & RT	4		870	25	0.2	0.2	25		2094	129	0.5	0.9	0.2	0.03	750	46	18	6	23	19	60	120
OVERLOOK																							
STA. 00+00 TO STA. 2+47	LT & RT			172		0.1	0.1	11	126	773		0.2	0.4	0.1	0.01		21	8	14				
STA. 2+47 TO STA. 4+73	LT & RT			287		0.1	0.1		1335			0.3	0.6	0.1	0.02		28		21				
CHART TOTAL		**6**	**1**	**3661**	**36**	**1.2**	**1.0**	**112**	**3101**	**8174**	**129**	**2.5**	**4.9**	**1.2**	**0.15**	**1187**	**246**	**81**	**116**	**39**	**38**	**110**	**220**

(1) SUBSOILING PER SPEC 2574. QUANTITIES INCLUDE INFILTRATION BASINS, IMPACTED WETLAND AREAS, AND REMOVED ROAD BED AREAS.

(2) WEED SPRAYING WILL BE MEASURED BY THE AREA COVERED OR AREA SPOT SPRAYED BY HERBICIDE AND SUCCESSFULLY APPLIED AS INDICATED BY DEAD NOXIOUS WEEDS.

(3) WEED SPRAY MIXTURE WILL BE MEASURED BY VOLUME OF HERBICIDE FURNISHED AND USED. WEED SPRAY WILL BE CLOPYRALID HERBICIDE LABELED FOR RIGHT OF WAY USE AND FORMULATED AT 3 LB ACID EQUIVALENT PER GALLON AT APPLICATION RATE OF 1 PINT/AC, UNLESS OTHERWISE STATED IN THE PLANS.

(4) FERTILIZER ANALYSIS 20-10-20 WITH APPLICATION RATE OF 350 POUNDS/ACRE.

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STORM SEWER																			H
STRUCT. NO.	STRUCTURE LOCATION			CONSTRUCT													DRAINS TO		NOTES
				SPEC. 2451	SPEC. 2503						SPEC. 2506								
	ALIGNMENT	STATION	LOCATION OFFSET	FINE AGGREGATE BEDDING (CV)	PIPE SEWER				SLOPE OF PIPE %	CONNECT TO EXISTING CATCHBASIN	CONSTRUCT DRAINAGE STRUCTURE		TOP OF CASTING ELEVATION	STRUCT. INVERT ELEVATION	CASTING ASSEMBLY (5)		RECONSTRUCT DRAINAGE STRUCTURE	STRUCT. NO.	PIPE INVERT ELEVATION	
					TYPE	DIAM.	CLASS	LENGTH			DESIGN	PAY HEIGHT			TYPE	EACH				
				CU YD		INCH		LIN FT		EACH		LIN FT			TYPE	EACH	LIN FT			
5000	MRG TRAIL	116+42.9	12.5RT	10	PVC	12	(None)	35	1.4		H	2.8	735.78	733.00	M - 11	1		5001	732.52	
5001	MRG TRAIL	116+42.7	22.7LT	11	PVC	12	(None)	39	1.4		SD-48	3.4	735.78	732.42	M - 11	1		5002	731.90	
5002	MRG TRAIL	116+56.5	53.6LT	83	PVC	12	(None)	300	3.9		48-4020	12.0	743.67	731.80	A - 7D	1		5004	720.20	(1)
5003	MRG TRAIL	119+23.1	2.3RT	4	PVC	12	(None)	15	2.0		48-4020	4.0	724.51	720.50	M - 1	1		5004	720.20	
5004	MRG TRAIL	119+22.2	11.3LT	70	PVC	12	(None)	252	5.3		48-4020	4.3	724.35	720.10	M - 1	1		5005	706.90	
5005	MRG TRAIL	121+73.8	11.2LT		EX						48-4020	5.0	711.77	706.80	M - 1	1		EX	EX	(1) (2)
6000	MRG TRAIL	119+25.1	31.8RT	8	PVC	12	(None)	30	23.1	1	EX CB	-		728.40	-			5003	721.45	(3)
6001	SCENIC	1+67.3	10.2LT		EX						EX MH		759.90		-		2.4	EX		(4)
TOTALS				186				671		1		31.5				6	2.4			

(1) CONTRACTOR TO VERIFY EXISTING STORM SEWER SIZE AND ELEVATION PRIOR TO ORDERING STRUCTURE.

(2) RETAINING WALL 4" PERF TP PIPE DRAIN TO CONNECT TO STRUCTURE AT ELEVATION 707.0. PROVIDE AT LEAST 1' OF COVER OVER DRAINTILE.

(3) CONNECT PROPOSED PIPE TO EXISTING UPSTREAM CATCH BASIN.

(4) REMOVE EXISTING CONE SECTION. REBUILD STRUCTURE TO PROP. TOP OF CASTING ELEVATION CONTRACTOR TO FIELD MEASURE EXISTING MH PRIOR TO ORDERING NEW SECTION. ROTATE CASTING TO OFFSET AS FAR AS POSSIBLE FROM PROPOSED ASPHALT TRAIL. SALVAGE AND INSTALL FRAME AND RING CASTING. PAID FOR AS RECONSTRUCT DRAINAGE STRUCTURE AND INSTALL CASTING.

(5) SEE TAB I FOR CASTING INFORMATION

GENERAL NOTES:

OUTLET ELEVATION IS THE INVERT ELEVATION OF THE PIPE AT THE INSIDE EDGE OF THE FLOWS FROM STRUCTURE
INVERT ELEVATION IS THE INVERT ELEVATION OF THE PIPE AT THE INSIDE EDGE OF THE FLOWS TO STRUCTURE.

PIPE INVERT ELEVATIONS ARE TO CENTER OF STRUCTURE.

ALL STRUCTURES GREATER THAN 3.5' IN DEPTH WILL REQUIRE STEPS. (INCIDENTAL)

CASTING ELEVATION AND LOCATION ARE TO CENTER OF GRATE/COVER.

MANDREL TESTING IS REQUIRED FOR ALL PLASTIC PIPE.

CASTING ASSEMBLY INFORMATION						I
TYPE OF STRUCTURE	CATCH BASIN				MANHOLE	
TYPE OF ASSEMBLY	M-1		M-11		A-7D	
CASTING DESCRIPTION	FRAME	GRATE	FRAME	GRATE	FRAME	COVER
CASTING NUMBER	700-4	720		731	700-7	715
STANDARD PLATE NO.	4101	4140	4143	4143	4101	4110
HEIGHT (IN FEET)						
NUMBER REQUIRED	3		2		1	

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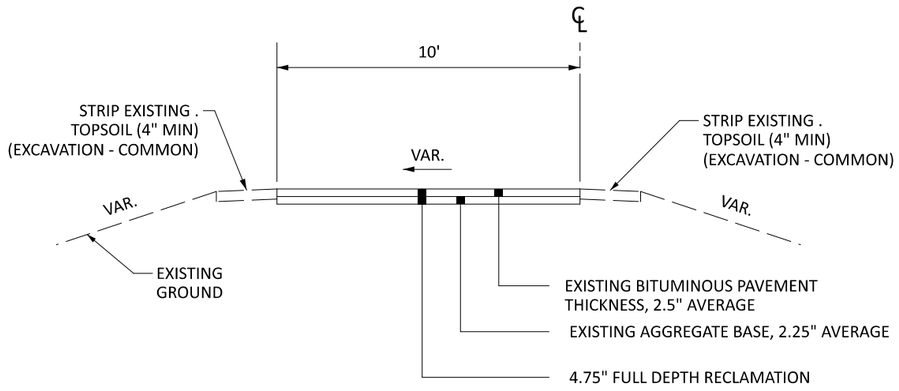
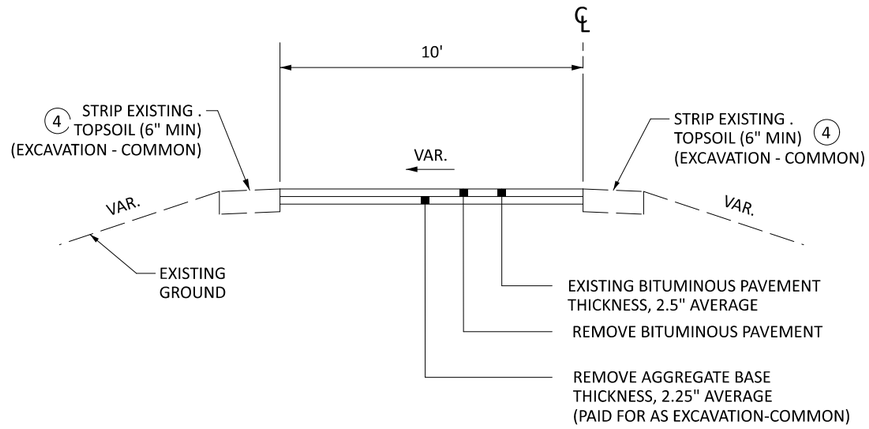
EXISTING TRAIL TYPICAL SECTION

MRG TRAIL STA. 100+12.25 TO STA. 109+29.45



EXISTING TRAIL TYPICAL SECTION

MRG TRAIL STA. 109+29.45 TO STA. 124+59.60
OVERLOOK TRAIL STA. 0+00.00 TO STA. 4+73.03



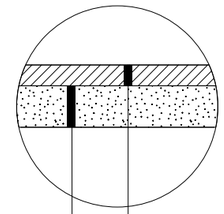
GENERAL NOTES:

1. ALL SLOPES ARE 'FT/FT' UNLESS OTHERWISE NOTED.

NOTES:

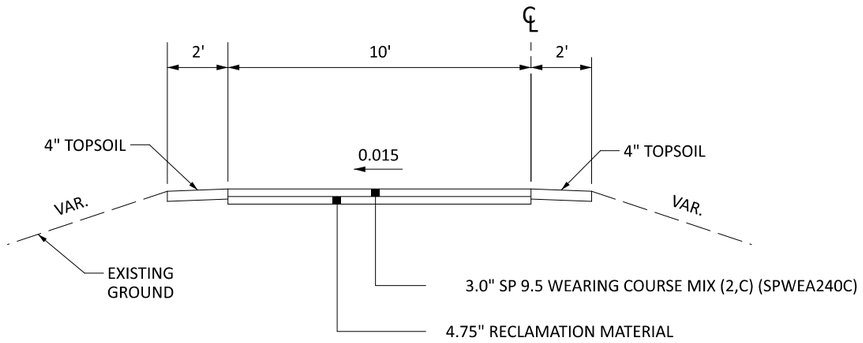
1. CROSS SLOPES DIRECTION VARY. SEE CONSTRUCTION PLAN AND CROSS SECTIONS FOR DETAILS.
2. SEE RETAINING WALL SHEETS FOR RETAINING WALL DETAILS
3. EXISTING RETAINING WALL MRG TRAIL STA. 119+34.44 TO STA. 120+96.96
4. THE CONTRACTOR SHALL STRIP 6" OF TOPSOIL. THE TOP 2" SHALL BE CONSIDERED UNSUITABLE AS DEFINED ON SHEET 4

INSET A



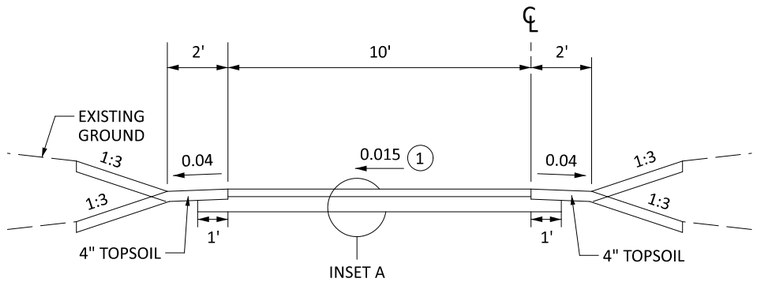
PROPOSED TRAIL TYPICAL SECTION

MRG TRAIL STA. 100+12.25 TO STA. 109+29.45



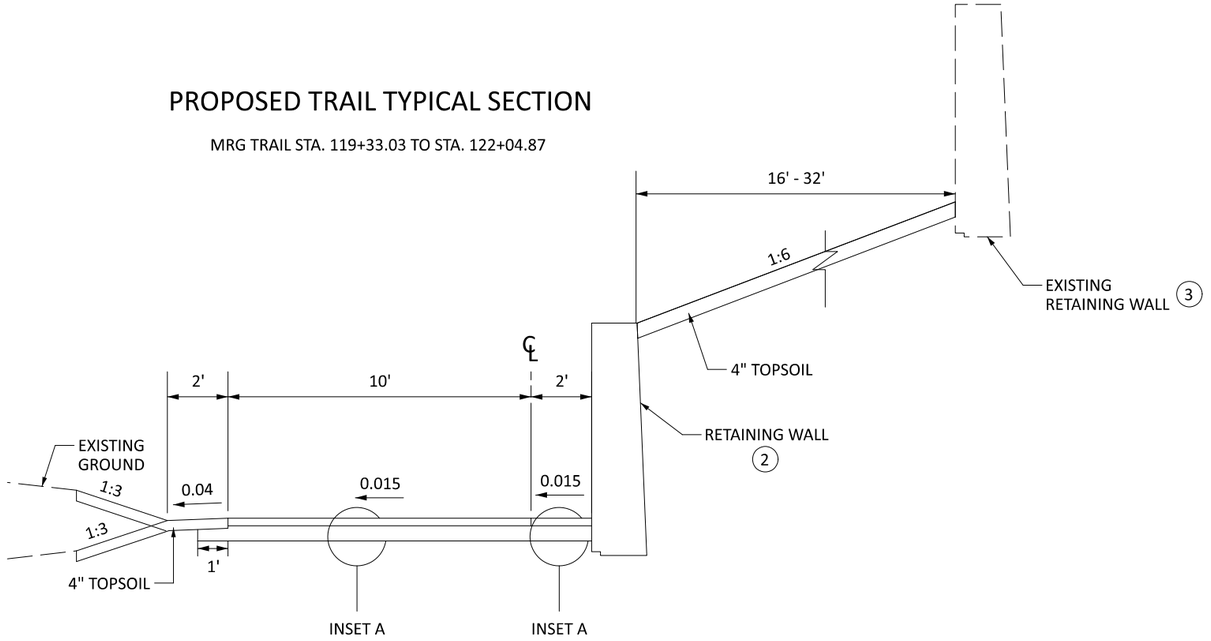
PROPOSED TRAIL TYPICAL SECTION

MRG TRAIL STA. 109+29.45 TO STA. 119+33.03
MRG TRAIL STA. 122+04.87 TO STA. 124+59.60
OVERLOOK TRAIL STA. 0+00.00 TO STA. 2+47.40



PROPOSED TRAIL TYPICAL SECTION

MRG TRAIL STA. 119+33.03 TO STA. 122+04.87



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TYPICAL SECTIONS

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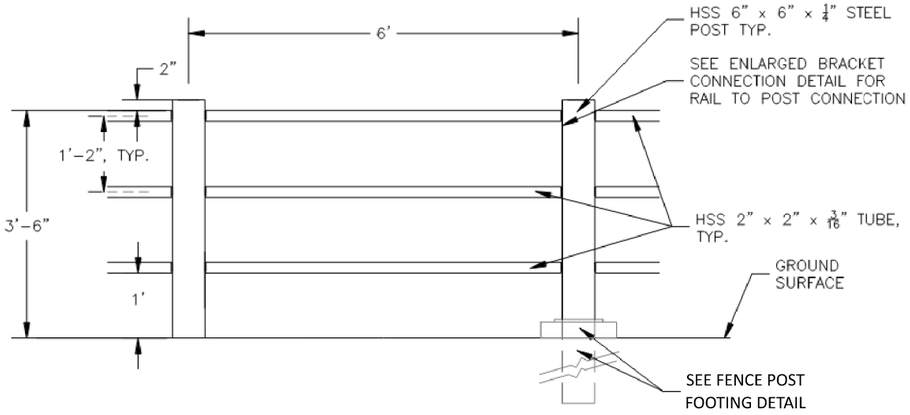
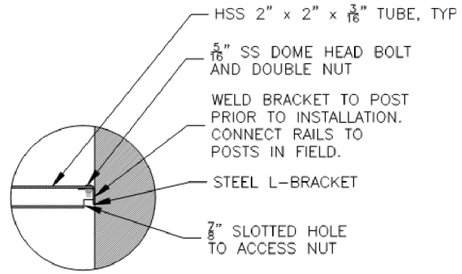
GENERAL FENCE DETAIL NOTES:

1. DETAILS SHOW INTENDED OVERALL DIMENSIONS. DETAILS MAY NOT SHOW ALL REQUIRED COMPONENTS. CONTRACTOR RESPONSIBLE FOR REVIEWING AND SUPPLYING ALL REQUIRED COMPONENTS.
2. DRAWINGS ILLUSTRATE DESIGN INTENT ONLY. STRUCTURAL COMPONENTS SHALL BE DESIGNED TO MEET LOCAL BUILDING CODES.
3. CONTRACTOR TO PROVIDE ENGINEERED DETAILED SHOP DRAWINGS SIGNED BY A MINNESOTA LICENSED STRUCTURAL ENGINEER FOR FINAL CONSTRUCTION.
4. SHOP DRAWINGS MUST SPECIFY ALL STRUCTURAL MATERIAL DIMENSIONS, CONNECTIONS, HARDWARE, AND FOOTING DETAILS.
5. CONCRETE FOOTINGS, AGGREGATE BASE, AND COMPACTED SUBGRADE ARE INCIDENTAL TO RAILING AND FENCING COMPONENTS.
6. REFER TO SPECIFICATIONS FOR CONCRETE SURFACING FINISH.
7. ALL RAILING MEASUREMENTS ARE TO CENTERLINE OF RAILINGS. SUBMIT SHOP DRAWINGS FOR ALL RAILING COMPONENTS FOR APPROVAL PRIOR BEGINNING CONSTRUCTION.
8. FOR STEEL CONNECTIONS TO BE WELDED, GRIND SMOOTH ALL WELDS.

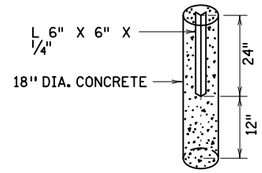


NOTES:
1. POST AND RAIL TUBES TO BE ASTM A709-50W (WEATHERING STEEL).
2. FASTENERS STAINLESS STEEL ASTM A276, TYPE 304 OR 316.
3. CONCRETE TO BE MNDOT MIX 3Y43, REINFORCEMENT GRADE 60.
4. SUBSURFACE CONDITIONS TO BE VERIFIED BY CONTRACTOR PRIOR TO INSTALLATION.

1 WEATHERING STEEL 3-RAIL FENCE ELEVATION



2 BRACKET CONNECTION DETAIL



3 FOUNDATION DETAILS

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NO.	REVISIONS	BY	APR.	DATE

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DRAWN KRR | APPROVED JRH
DATE 4/24/2026 | JOB NO. 42 - 161

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TYPED NAME JORDAN R HOREJSI LIC. NO. 52241 DATE 4/24/2026

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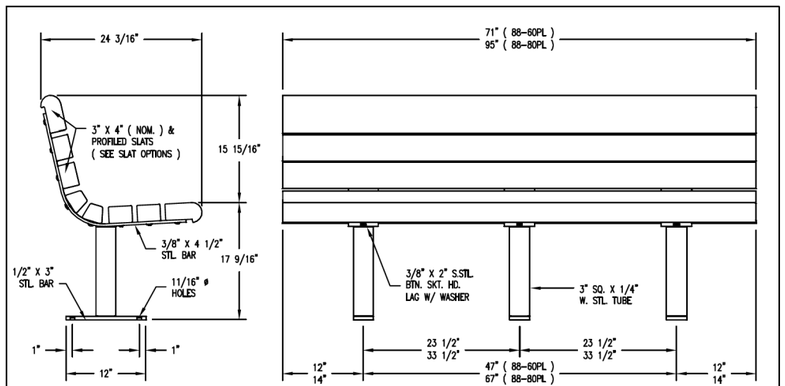
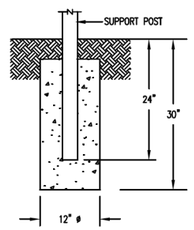
CP 42-161
DESIGN DETIALS
SHEET 1 OF 2

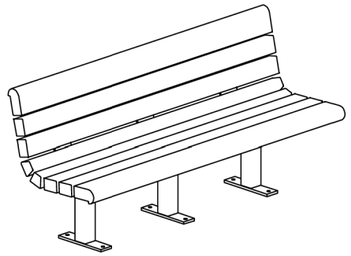
SHEET 9
OF 36

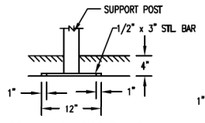


☒ S-2 SURFACE

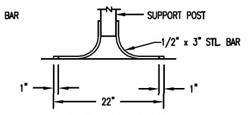


☐ S-1 EMBEDMENT





☐ S-4 SUB FLOOR



☐ S-3 GULL WING

LENGTH OPTIONS
- ☒ 6' BENCH
- ☐ 8' BENCH

SLAT OPTIONS
- ☒ "CEDAR" RECYCLED PLASTIC
- ☐ "GREY" RECYCLED PLASTIC
- ☐ "REDWOOD" RECYCLED PLASTIC
- ☐ "WALNUT" RECYCLED PLASTIC
- ☐ OTHER _____

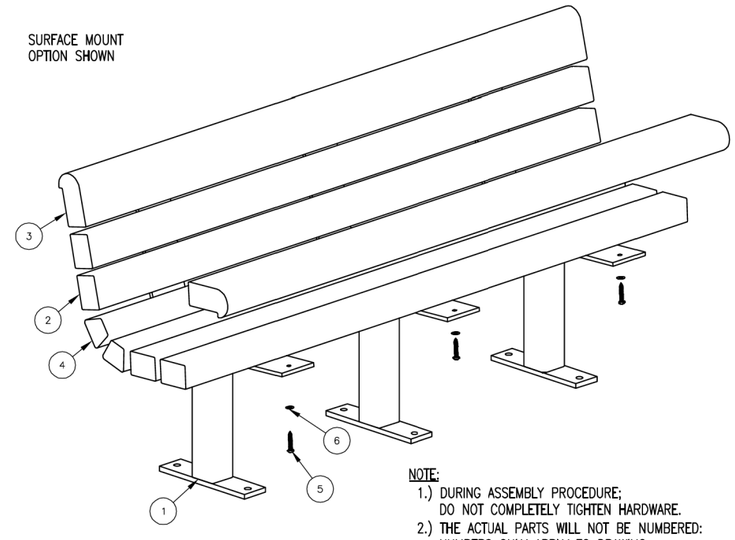
NOTES

1.) ALL STL. MEMBERS COATED W/ ZINC RICH EPOXY THEN FINISHED W/ BLACK POLYESTER POWDER COATING
2.) 1/2" X 3 3/4" EXPANSION ANCHOR BOLT PROVIDED FOR S-2, S-3 & S-4 OPTIONS.

DuMor, inc.
P.O. Box 142 Mifflintown, PA 17059-0142

SCALE :	NONE
DATE DRAWN :	7/31/95
DRAWN BY :	AH
DATE REV. :	10/25/11
REV. BY :	RDH
TITLE :	BENCH
REV.	D
DRAWING NUMBER	88 SERIES PL
SHEET	1 OF 2

SURFACE MOUNT
OPTION SHOWN



NOTE:
1.) DURING ASSEMBLY PROCEDURE; DO NOT COMPLETELY TIGHTEN HARDWARE.
2.) THE ACTUAL PARTS WILL NOT BE NUMBERED: NUMBERS ONLY APPLY TO DRAWING.
3.) SEE SPEC. SHEET 1 FOR MOUNTING OPTION.

STEP 1:
USE 3 - PC. SUPPORT FOR SURFACE MOUNT (1)
4 - PCS. 3" X 4" X 71" PLASTIC INT'R SLAT (2)
2 - PCS. 71" PLASTIC EDGE SLAT (3)
2 - PCS. 71" PLASTIC TRAP SLAT (4)
24 - PCS. 3/8" X 2" SS. BTN. SKT. HD. LAG SCR. (5)
24 - PCS. 3/8" SS. FLAT WASHER (6)
ATTACH SLATS (2, 3, & 4) TO SUPPORT FOR SURFACE MOUNT (1) USING HARDWARE (5 & 6). TIGHTEN TO SNUG FIT.
REPEAT UNTIL ALL SLATS ARE ATTACHED.

STEP 2:
UPON COMPLETION OF BENCH ASSEMBLY SQUARE ALL COMPONENTS THEN TIGHTEN ALL HARDWARE.

STEP 3:
ANCHOR ACCORDING TO SUPPORT OPTION USED.

ITEM	QTY	PART NO	DESCRIPTION
1	3	0-88-00-01/S-2	BENCH SUPPORT FOR SURFACE MOUNT
2	4	0-88-60PL-02	3" X 4" X 71" PLASTIC INT'R SLAT
3	2	0-88-60PL-03	71" PLASTIC EDGE SLAT
4	2	0-88-60PL-04	71" PLASTIC TRAP SLAT
5	24	1-13-016	3/8" X 2" SS BTN SKT HD LAG SCR
6	24	1-22-024	3/8" SS FLAT WASHER

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P.O. Box 142 Mifflintown, PA 17059-0142

SCALE :	NONE
DATE DRAWN :	7/31/95
DRAWN BY :	AH
DATE REV. :	10/25/11
REV. BY :	RDH
TITLE :	BENCH ASSEMBLY
REV.	D
DRAWING NUMBER	88 SERIES PL
SHEET	2 OF 2

NO.	REVISIONS	BY	APR.	DATE

DESIGNED	BAJ
CHECKED	KRR
DRAWN	KRR
APPROVED	JRH
DATE	4/24/2026
JOB NO.	42 - 161

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SHEET 10
OF 36

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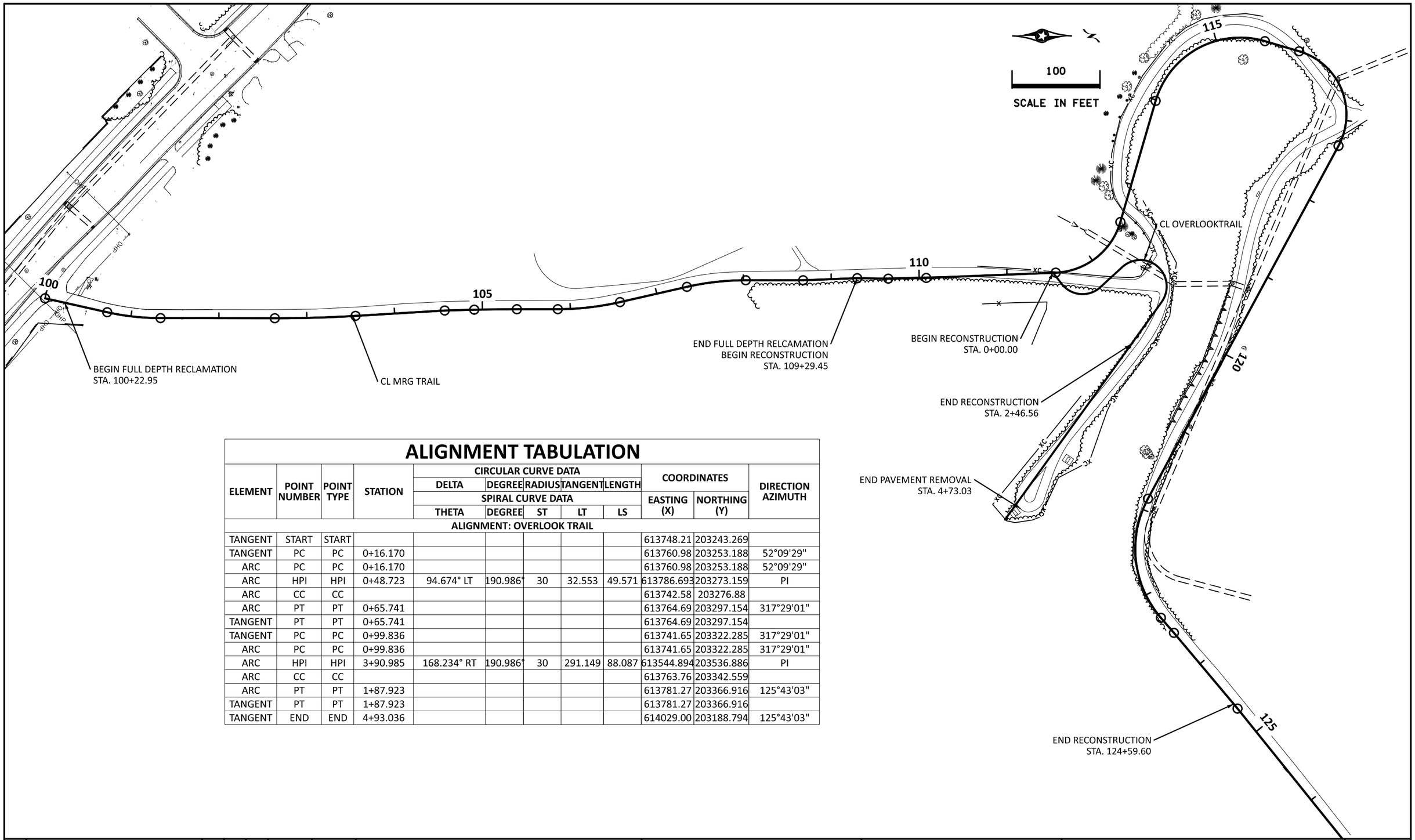

ALIGNMENT TABULATION

ELEMENT	POINT NUMBER	POINT TYPE	STATION	CIRCULAR CURVE DATA					COORDINATES		DIRECTION AZIMUTH
				DELTA	DEGREE	RADIUS	TANGENT	LENGTH			
				SPIRAL CURVE DATA					EASTING (X)	NORTHING (Y)	
				THETA	DEGREE	ST	LT	LS			
ALIGNMENT: OVERLOOK TRAIL											
TANGENT	START	START							613748.21	203243.269	
TANGENT	PC	PC	0+16.170						613760.98	203253.188	52°09'29"
ARC	PC	PC	0+16.170						613760.98	203253.188	52°09'29"
ARC	HPI	HPI	0+48.723	94.674° LT	190.986°	30	32.553	49.571	613786.693	203273.159	PI
ARC	CC	CC							613742.58	203276.88	
ARC	PT	PT	0+65.741						613764.69	203297.154	317°29'01"
TANGENT	PT	PT	0+65.741						613764.69	203297.154	
TANGENT	PC	PC	0+99.836						613741.65	203322.285	317°29'01"
ARC	PC	PC	0+99.836						613741.65	203322.285	317°29'01"
ARC	HPI	HPI	3+90.985	168.234° RT	190.986°	30	291.149	88.087	613544.894	203536.886	PI
ARC	CC	CC							613763.76	203342.559	
ARC	PT	PT	1+87.923						613781.27	203366.916	125°43'03"
TANGENT	PT	PT	1+87.923						613781.27	203366.916	
TANGENT	END	END	4+93.036						614029.00	203188.794	125°43'03"

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DRAWN KRR | APPROVED JRH
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CP 42-161
ALIGNMENT PLANS AND TABULATIONS
SHEET 1 OF 2

SHEET 11
OF 36

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				SPIRAL CURVE DATA							
				THETA	DEGREE	ST	LT	LS			
ALIGNMENT: MRG TRAIL											
TANGENT	START	START	100+00.000						613777.34	202096.64	
TANGENT	PC	PC	100+72.465						613793.12	202167.37	12°34'57"
ARC	PC	PC	100+72.465						613793.12	202167.37	12°34'57"
ARC	HPI	HPI	101+03.179	12.520° LT	20.463°	280	30.714	61.184	613799.82	202197.35	PI
ARC	CC	CC							613519.85	202228.37	
ARC	PT	PT	101+33.649						613799.85	202228.06	00°03'45"
TANGENT	PT	PT	101+33.649						613799.85	202228.06	
TANGENT	PC	PC	102+63.600						613799.99	202358.01	00°03'45"
ARC	PC	PC	102+63.600						613799.99	202358.01	00°03'45"
ARC	HPI	HPI	103+09.549	3.509° LT	3.820°	1500	45.949	91.868	613800.04	202403.96	PI
ARC	CC	CC							612299.99	202359.65	
ARC	PT	PT	103+55.468						613797.28	202449.82	356°33'12"
TANGENT	PT	PT	103+55.468						613797.28	202449.82	
TANGENT	HPI	HPI	104+57.107						613791.17	202551.28	356°33'12"
TANGENT	HPI	HPI	104+57.107						613791.17	202551.28	
TANGENT	HPI	HPI	104+90.735						613790.23	202584.89	358°23'55"
TANGENT	HPI	HPI	104+90.735						613790.23	202584.89	
TANGENT	HPI	HPI	105+39.225						613789.73	202633.38	359°24'16"
TANGENT	HPI	HPI	105+39.225						613789.73	202633.38	
TANGENT	PC	PC	105+85.749						613789.67	202679.91	359°55'55"
ARC	PC	PC	105+85.749						613789.67	202679.91	359°55'55"
ARC	HPI	HPI	106+21.597	12.784° LT	17.905°	320	35.848	71.399	613789.63	202715.75	PI
ARC	CC	CC							613469.67	202679.53	
ARC	PT	PT	106+57.148						613781.65	202750.7	347°08'52"
TANGENT	PT	PT	106+57.148						613781.65	202750.7	
TANGENT	PC	PC	107+35.184						613764.3	202826.79	347°08'52"
ARC	PC	PC	107+35.184						613764.3	202826.79	347°08'52"
ARC	HPI	HPI	107+69.079	12.892° RT	19.099°	300	33.895	67.503	613756.76	202859.83	PI
ARC	CC	CC							614056.78	202893.52	
ARC	PT	PT	108+02.687						613756.78	202893.73	00°02'24"
TANGENT	PT	PT	108+02.687						613756.78	202893.73	
TANGENT	HPI	HPI	108+67.977						613756.82	202959.02	00°02'24"
TANGENT	HPI	HPI	108+67.967						613756.82	202959.01	
TANGENT	HPI	HPI	109+29.552						613754.46	203020.53	357°47'52"
TANGENT	HPI	HPI	109+29.552						613754.46	203020.53	
TANGENT	HPI	HPI	109+64.888						613754.96	203055.87	00°48'28"
TANGENT	HPI	HPI	109+64.888						613754.96	203055.87	
TANGENT	HPI	HPI	110+08.086						613754.13	203099.06	358°53'55"
TANGENT	HPI	HPI	110+08.086						613754.13	203099.06	

ALIGNMENT TABULATION

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				DELTA	DEGREE	RADIUS	TANGENT	LENGTH	EASTING (X)	NORTHING (Y)	
				SPIRAL CURVE DATA							
				THETA	DEGREE	ST	LT	LS			
ALIGNMENT: MRG TRAIL											
TANGENT	PC	PC	111+55.531						613748.09	203246.38	357°39'12"
ARC	PC	PC	111+55.531						613748.09	203246.38	357°39'12"
ARC	HPI	HPI	112+13.031	71.414° LT	71.620°	80	57.5	99.712	613745.74	203303.83	PI
ARC	CC	CC							613668.16	203243.1	
ARC	PT	PT	112+55.243						613690.53	203319.91	286°14'23"
TANGENT	PT	PT	112+55.243						613690.53	203319.91	
TANGENT	PC	PC	113+98.707						613552.79	203360.03	286°14'23"
ARC	PC	PC	113+98.707						613552.79	203360.03	286°14'23"
ARC	HPI	HPI	114+99.018	90.178° RT	57.296°	100	100.311	157.39	613456.48	203388.08	PI
ARC	CC	CC							613580.75	203456.04	
ARC	PT	PT	115+56.097						613484.83	203484.3	16°25'02"
TANGENT	PT	PT	115+56.097						613484.83	203484.3	
TANGENT	PC	PC	115+96.736						613496.32	203523.29	16°25'02"
ARC	PC	PC	115+96.736						613496.32	203523.29	16°25'02"
ARC	HPI	HPI	116+89.284	101.958ÿþ° RT	76.394°	75	92.549	133.463	613522.47	203612.06	PI
ARC	CC	CC							613568.26	203502.09	
ARC	PT	PT	117+30.199						613603.9	203568.08	118°22'32"
TANGENT	PT	PT	117+30.199						613603.9	203568.08	
TANGENT	PC	PC	121+86.377						614005.27	203351.28	118°22'32"
ARC	PC	PC	121+86.377						614005.27	203351.28	118°22'32"
ARC	HPI	HPI	122+69.135	69.184° LT	47.746°	120	82.758	144.898	614078.09	203311.95	PI
ARC	CC	CC							614062.3	203456.86	
ARC	PT	PT	123+31.276						614140.73	203366.03	49°11'31"
TANGENT	PT	PT	123+31.276						614140.73	203366.03	
TANGENT	HPI	HPI	123+53.943						614157.88	203380.85	49°11'31"
TANGENT	HPI	HPI	123+53.943						614157.88	203380.85	
TANGENT	HPI	HPI	124+66.349						614243.95	203453.14	49°58'15"
TANGENT	HPI	HPI	124+66.349						614243.95	203453.14	

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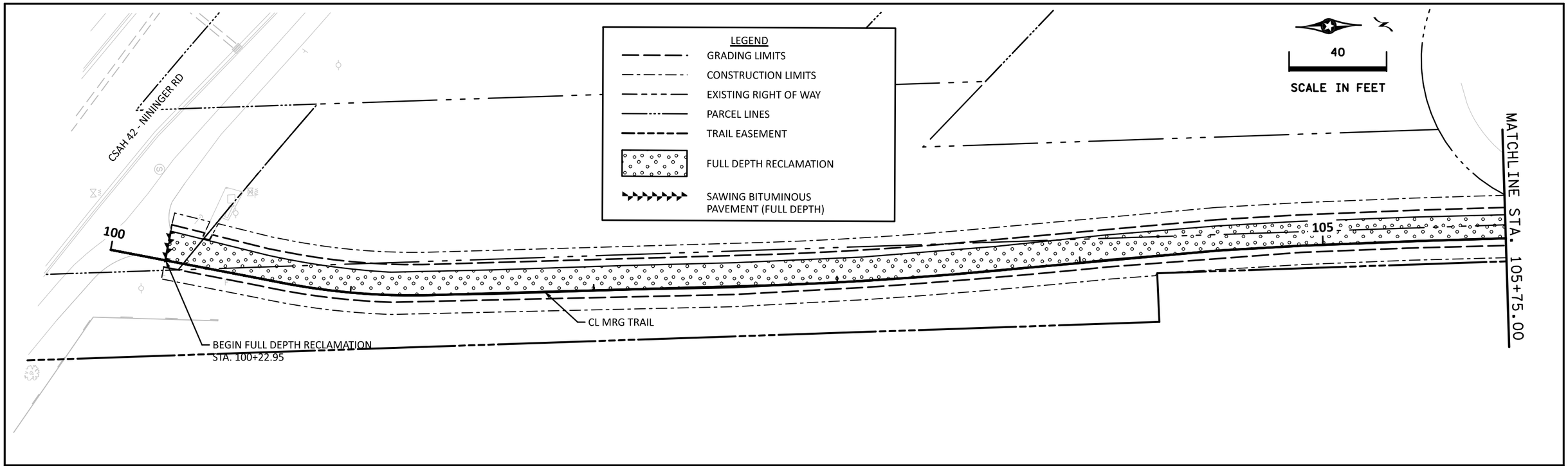
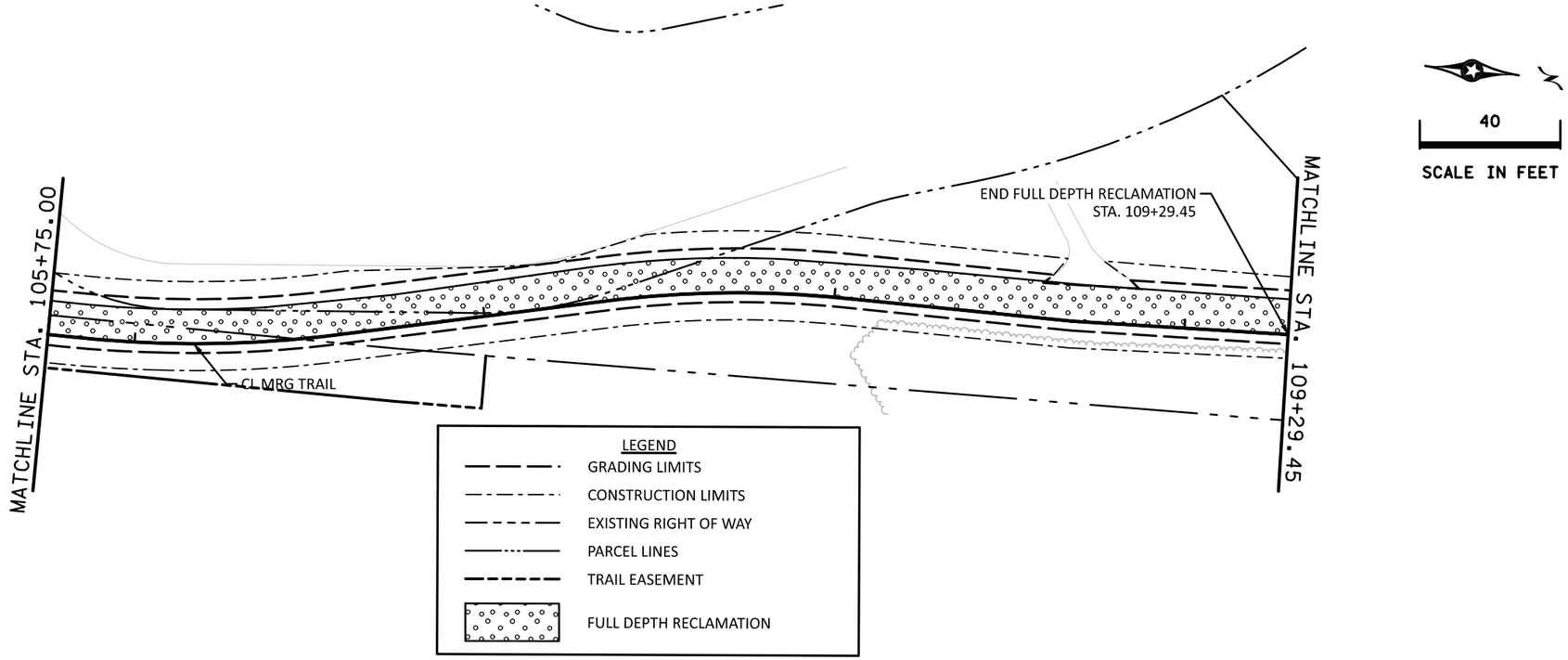
CP 42-161
ALIGNMENT PLANS AND TABULATIONS
SHEET 2 OF 2

SHEET 12
OF 36





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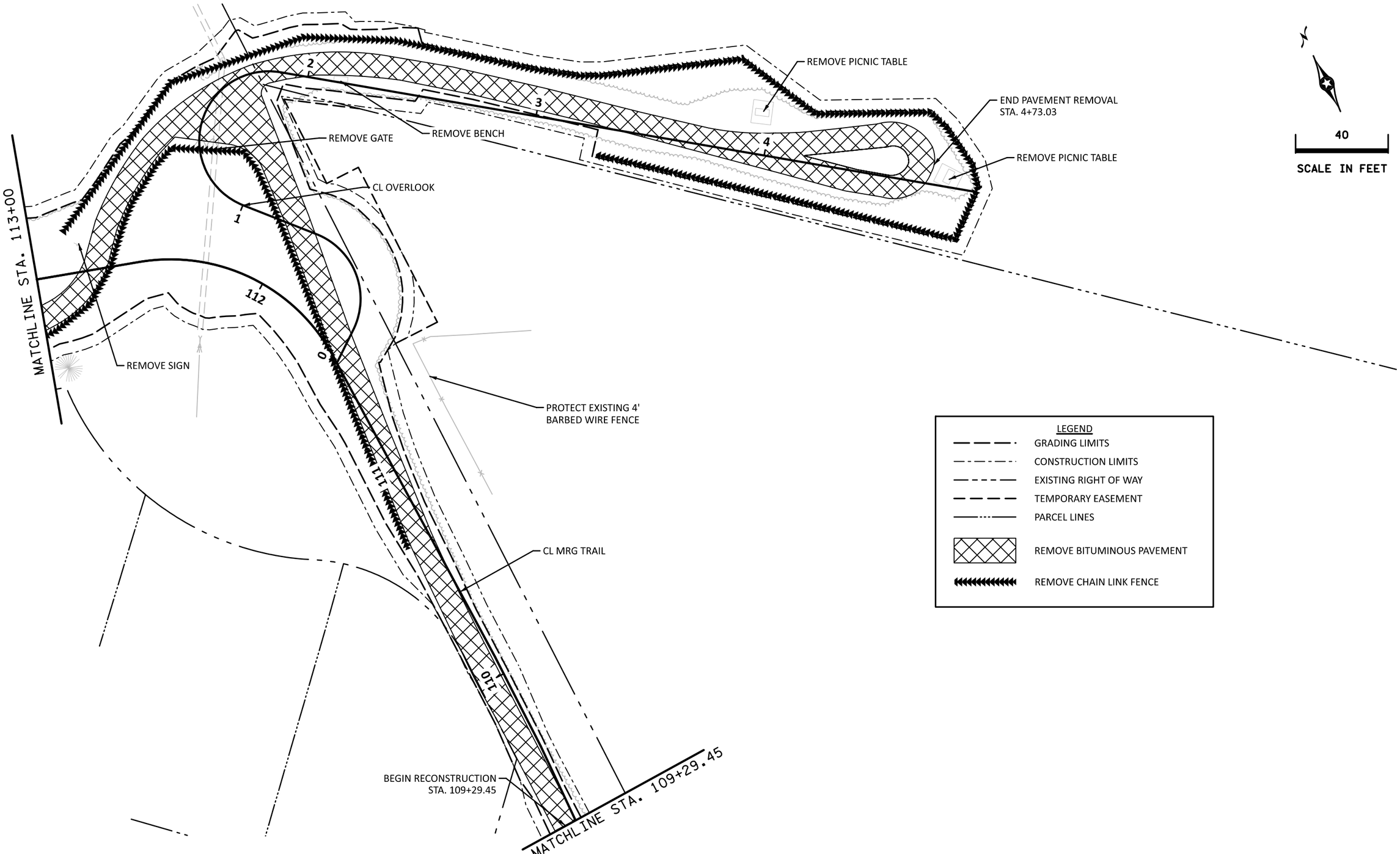
CP 42-161
REMOVAL PLANS
SHEET 1 OF 4

SHEET 13
OF 36



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LIC. NO. 52241

TYPED NAME JORDAN R HOREJSI DATE 4/24/2026

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ST. PAUL, MINNESOTA 55114-1052
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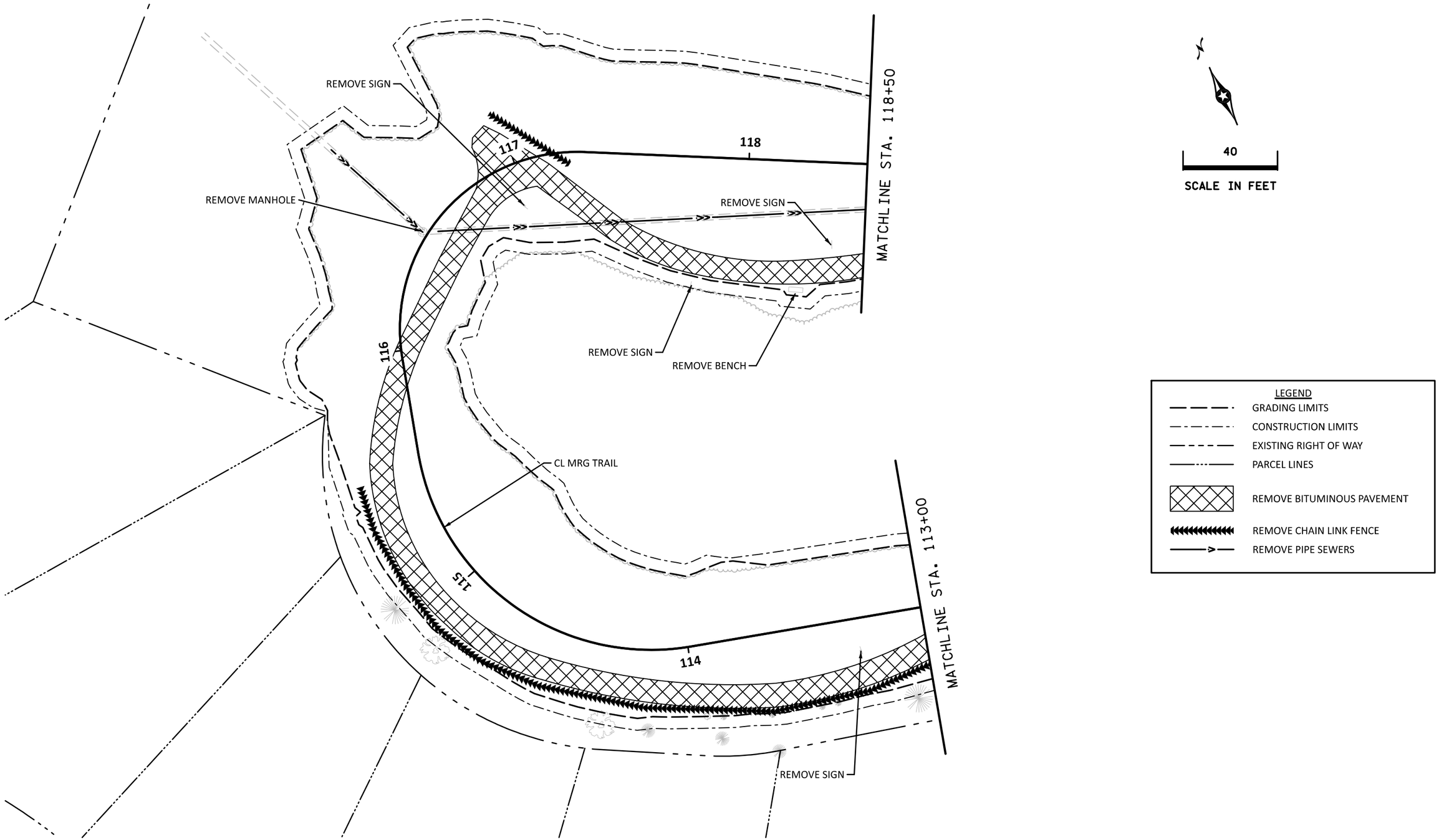
Dakota COUNTY

DAKOTA COUNTY
CP 42-161
REMOVAL PLANS
SHEET 2 OF 4

SHEET 14
OF 36



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SCALE IN FEET

LEGEND

- GRADING LIMITS
- CONSTRUCTION LIMITS
- EXISTING RIGHT OF WAY
- PARCEL LINES
- REMOVE BITUMINOUS PAVEMENT
- REMOVE CHAIN LINK FENCE
- REMOVE PIPE SEWERS

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DRAWN KRR | APPROVED JRH
DATE 4/24/2026 | JOB NO. 42 - 161

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Dakota COUNTY

DAKOTA COUNTY
CP 42-161
REMOVAL PLANS
SHEET 3 OF 4

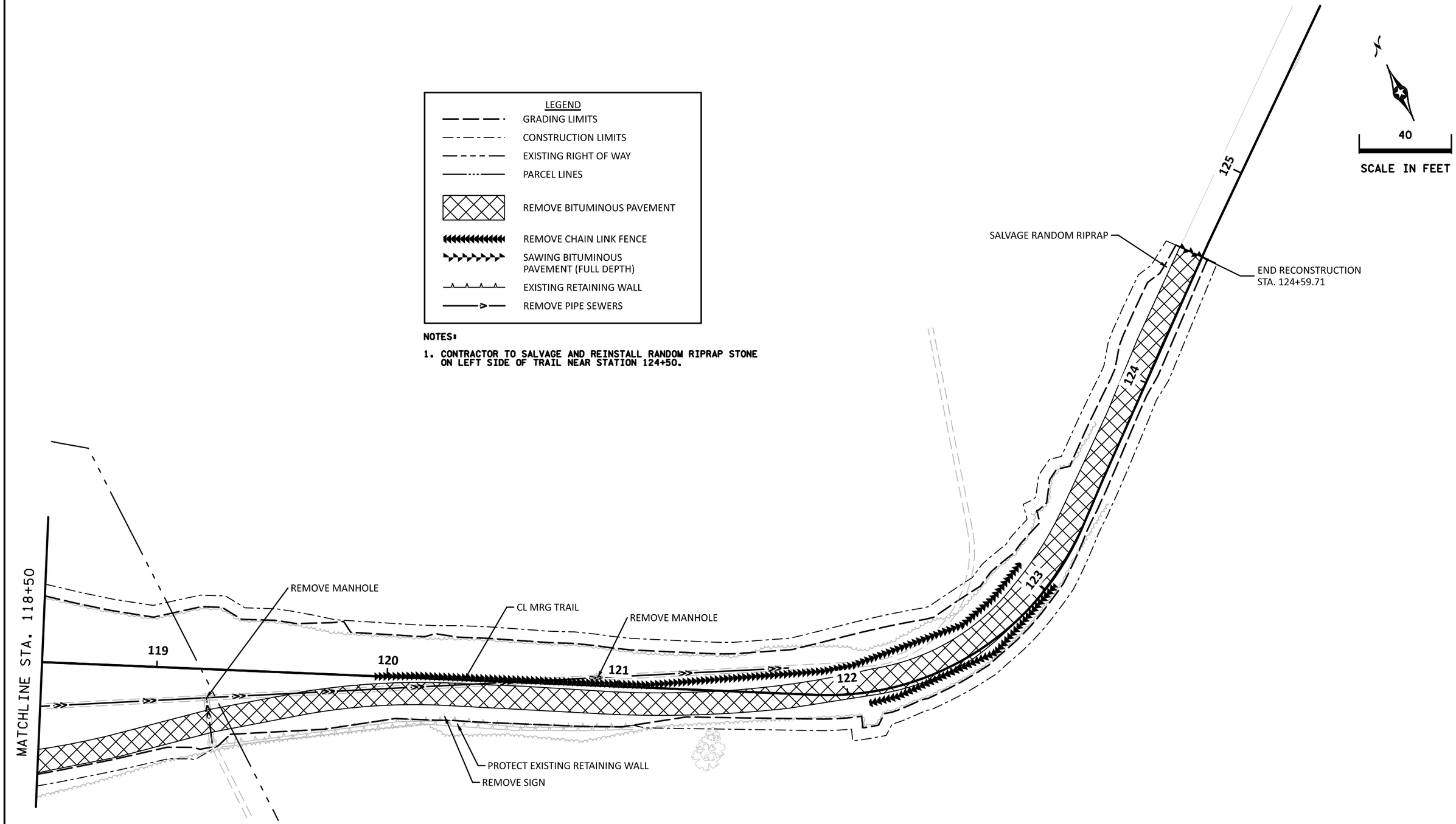
SHEET 15
OF 36

LEGEND

- GRADING LIMITS
- CONSTRUCTION LIMITS
- EXISTING RIGHT OF WAY
- PARCEL LINES
- REMOVE BITUMINOUS PAVEMENT
- REMOVE CHAIN LINK FENCE
- SAWING BITUMINOUS PAVEMENT (FULL DEPTH)
- EXISTING RETAINING WALL
- REMOVE PIPE SEWERS

NOTES:

1. **CONTRACTOR TO SALVAGE AND REINSTALL RANDOM RIPRAP STONE ON LEFT SIDE OF TRAIL NEAR STATION 124+50.**



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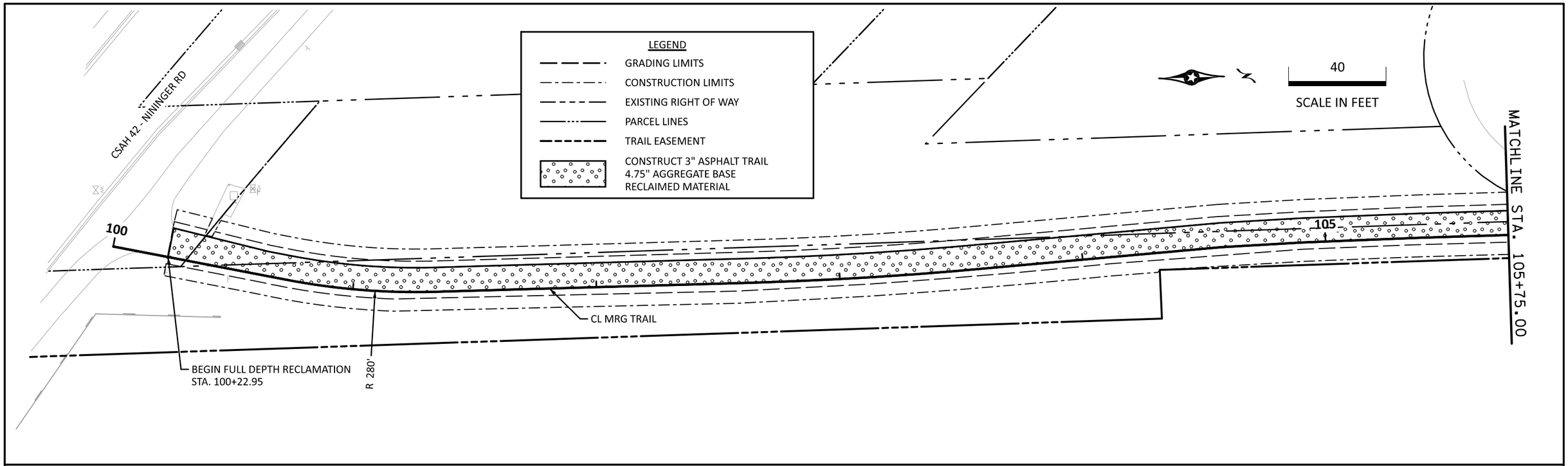
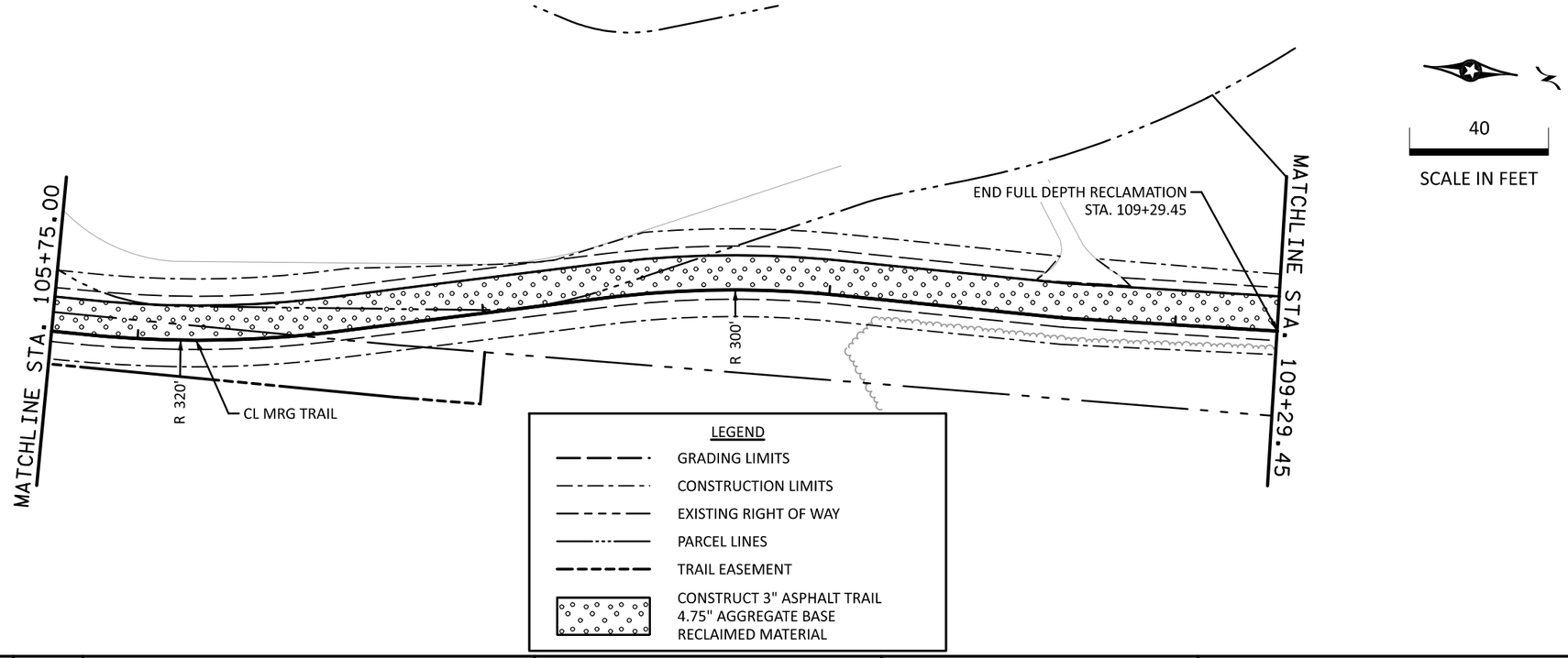
REMOVAL PLANS
SHEET 4 OF 4

SHEET 16
OF 36





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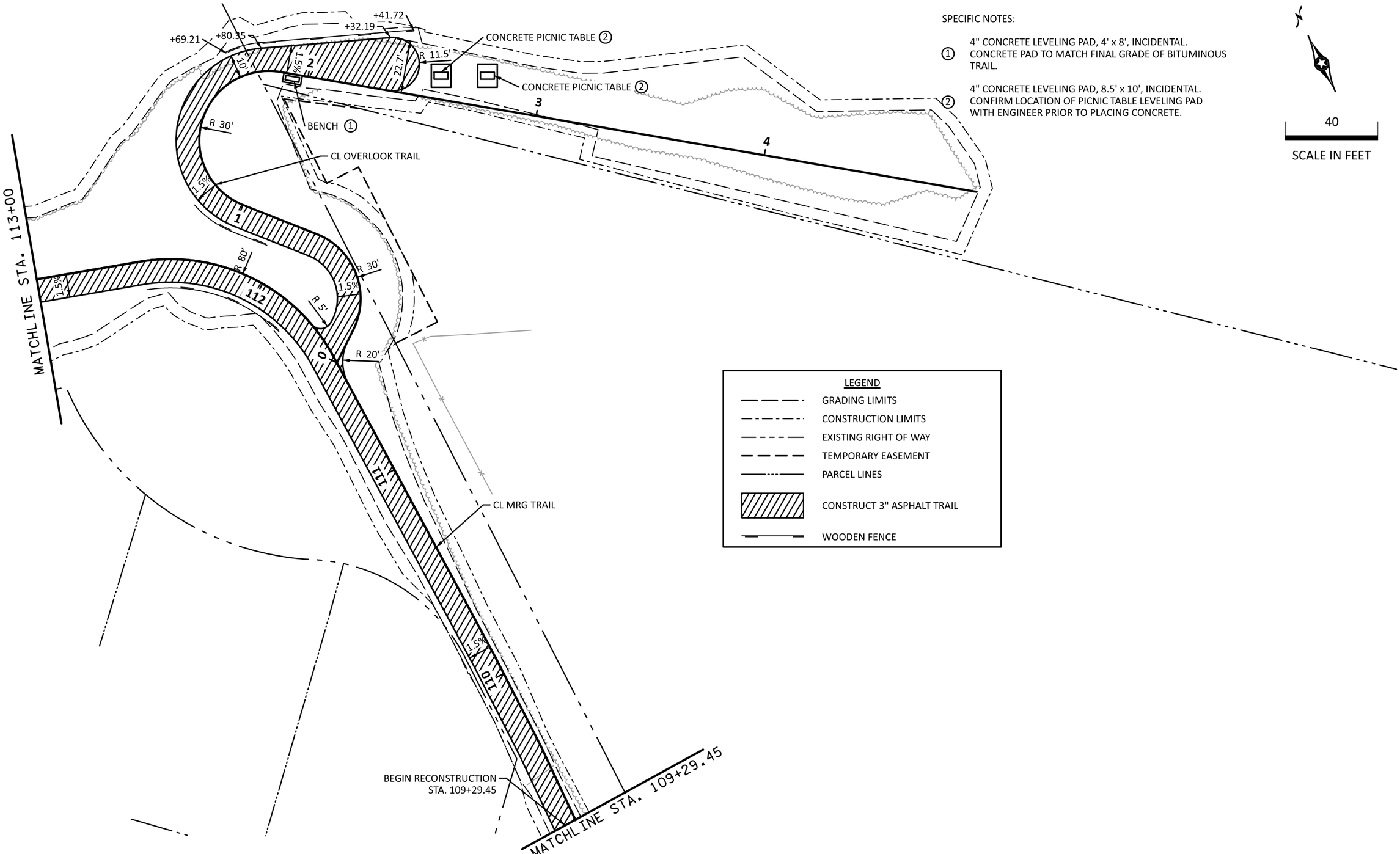
CP 42-161
CONSTRUCTION PLANS
SHEET 1 OF 4

SHEET 17
OF 36



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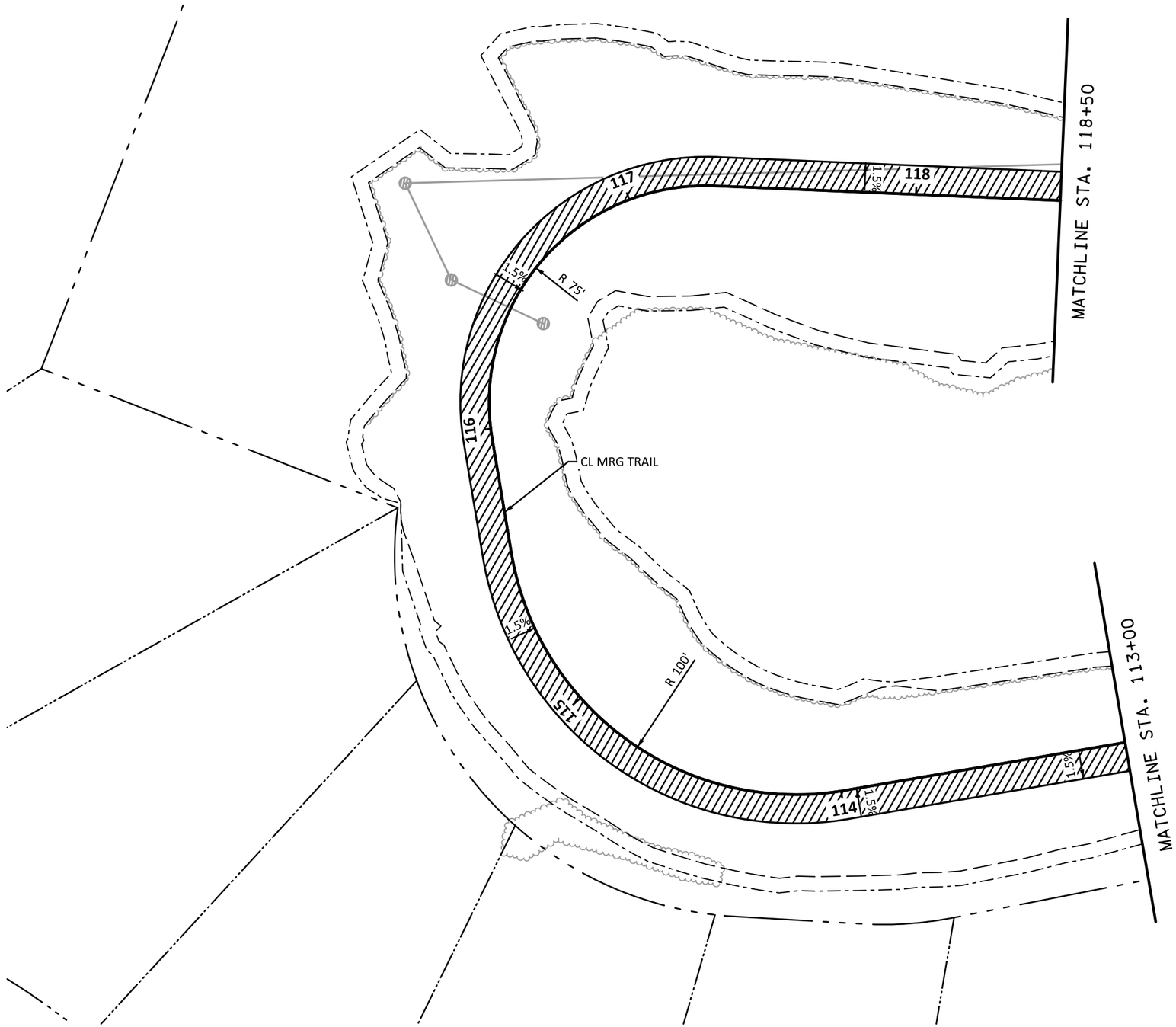
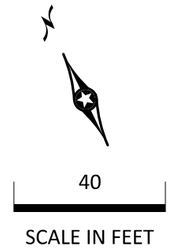
Dakota COUNTY

DAKOTA COUNTY
CP 42-161
CONSTRUCTION PLANS
SHEET 2 OF 4

SHEET 18
OF 36





LEGEND

- GRADING LIMITS
- CONSTRUCTION LIMITS
- EXISTING RIGHT OF WAY
- PARCEL LINES
- CONSTRUCT 3" ASPHALT TRAIL

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Dakota COUNTY

DAKOTA COUNTY
CP 42-161
CONSTRUCTION PLANS
SHEET 3 OF 4

SHEET 19
OF 36

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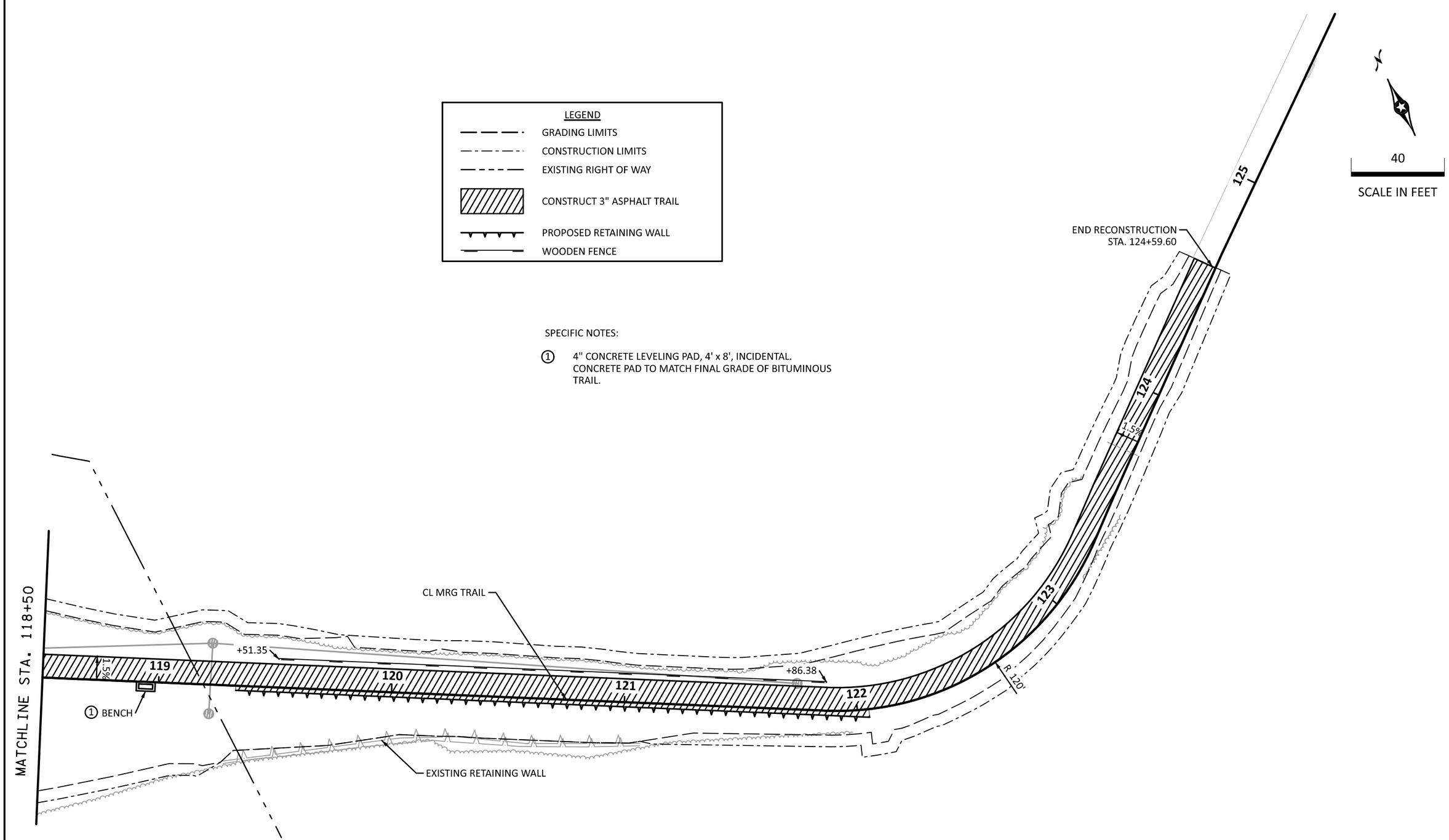
LEGEND

- GRADING LIMITS
- CONSTRUCTION LIMITS
- EXISTING RIGHT OF WAY
- CONSTRUCT 3" ASPHALT TRAIL
- PROPOSED RETAINING WALL
- WOODEN FENCE

SPECIFIC NOTES:

① 4" CONCRETE LEVELING PAD, 4' x 8', INCIDENTAL. CONCRETE PAD TO MATCH FINAL GRADE OF BITUMINOUS TRAIL.



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Dakota COUNTY

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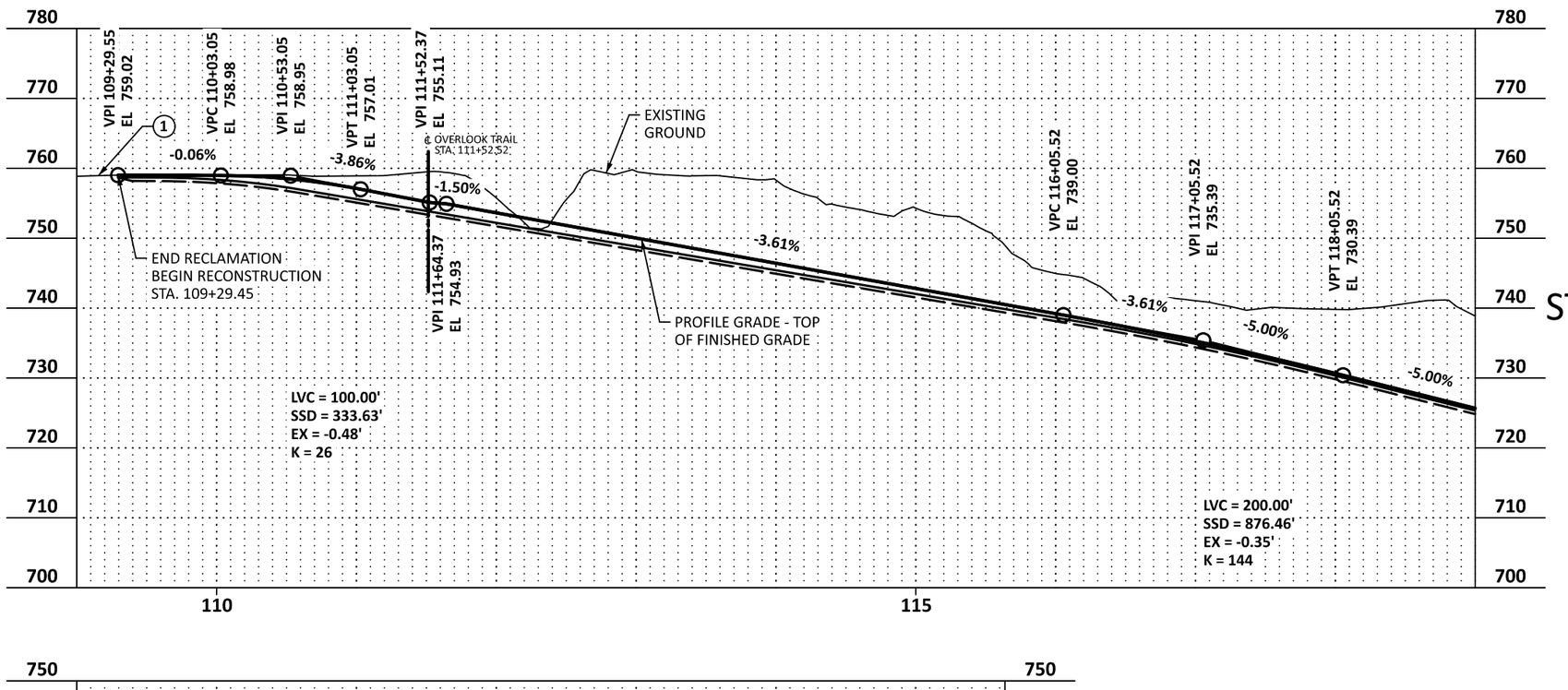
CP 42-161
CONSTRUCTION PLANS
SHEET 4 OF 4

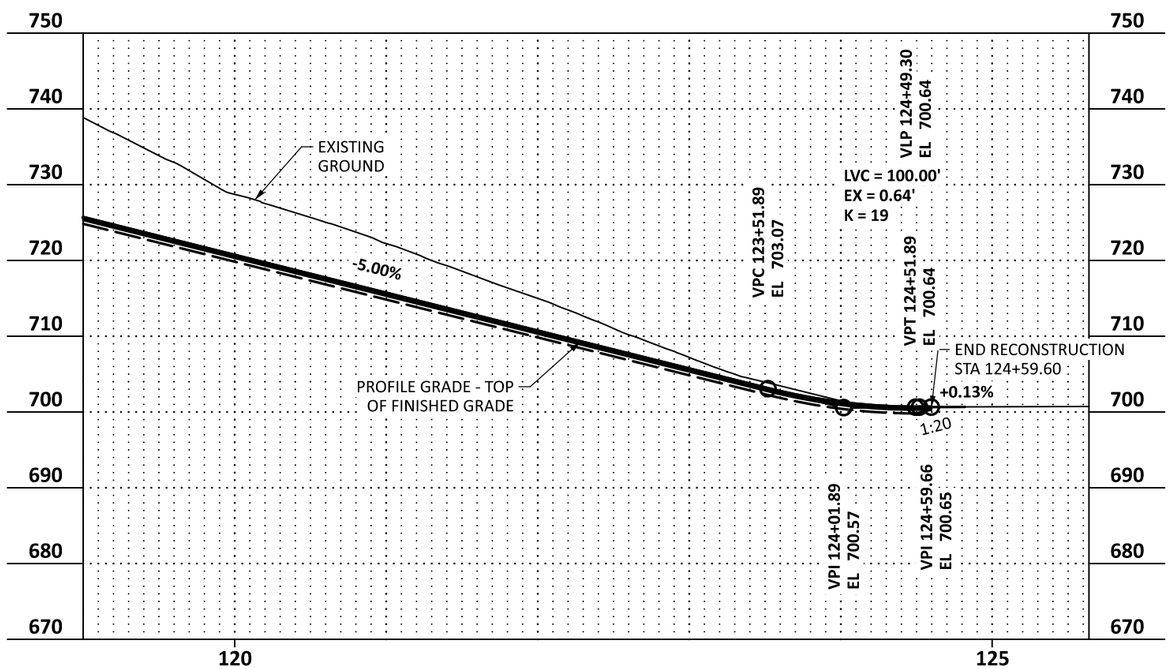
SHEET 20
OF 36



MRG TRAIL PROFILE
STATIONS 109+29.49 TO 119+00.00

NOTE

(1) PAVEMENT RECLAMATION FROM STATION 100+22.95 TO 109+29.49. PROPOSED PAVEMENT TO MATCH EXISTING PROFILE



MRG TRAIL PROFILE
STATIONS 119+00.00 TO 124+59.60

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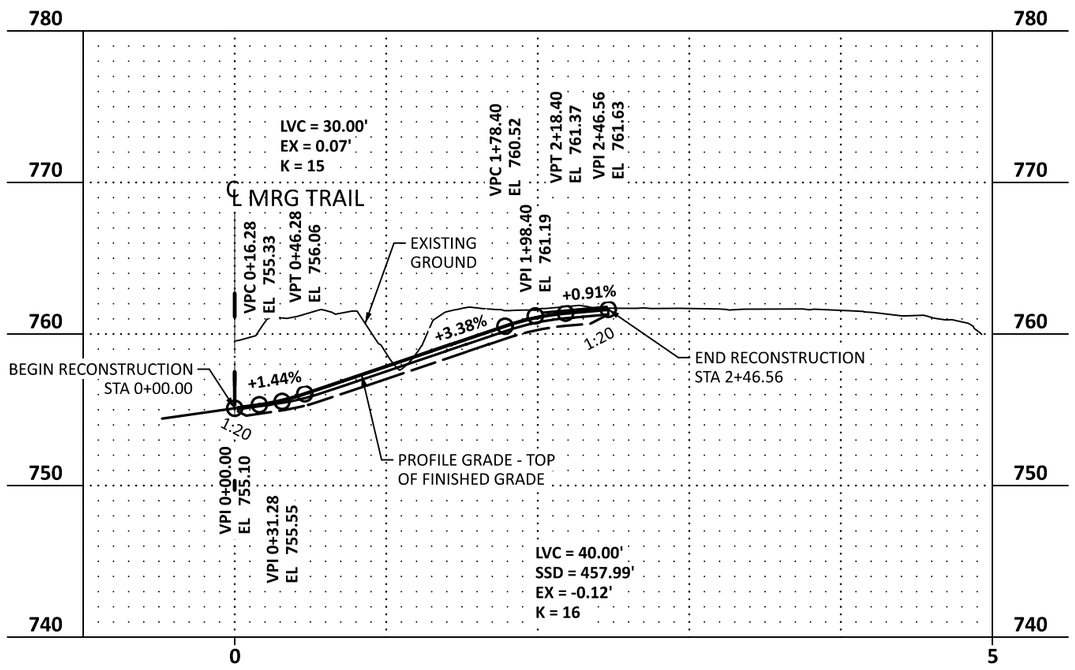
Dakota COUNTY

DAKOTA COUNTY
CP 42-161
CONSTRUCTION PROFILES
SHEET 1 OF 2

SHEET 21
OF 36



OVERLOOK TRAIL PROFILE
STATIONS 0+00.00 TO 2+46.56

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Dakota COUNTY

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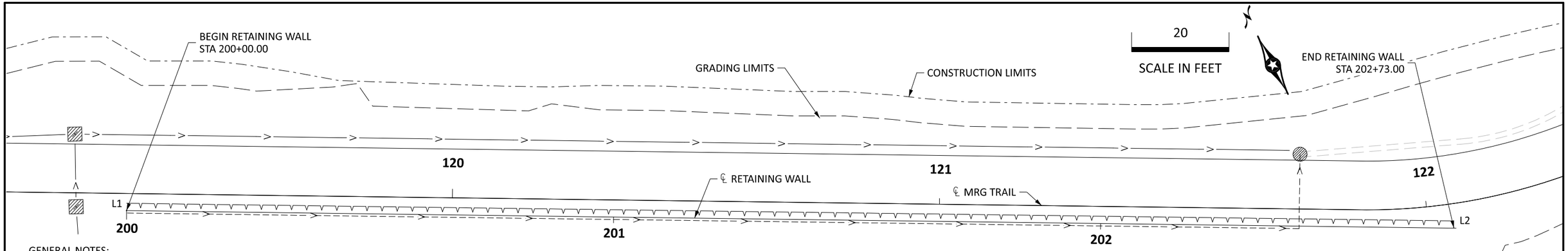
CP 42-161
CONSTRUCTION PROFILES
SHEET 2 OF 2

SHEET 22
OF 36



GENERAL NOTES:
1. SLOPE SWALE BEHIND WALLS TO END OF WALL.
2. ALL RETAINING WALL MATERIALS INCLUDING, BUT NOT LIMITED TO BLOCK, CAP, LEVELING PAD, COARSE AGGREGATE, GEOTEXTILE, DRAINAGE SYSTEM SHALL BE CONSIDERED INCIDENTAL TO THE RETAINING WALL CONSTRUCTION.

REFERENCE NOTES:

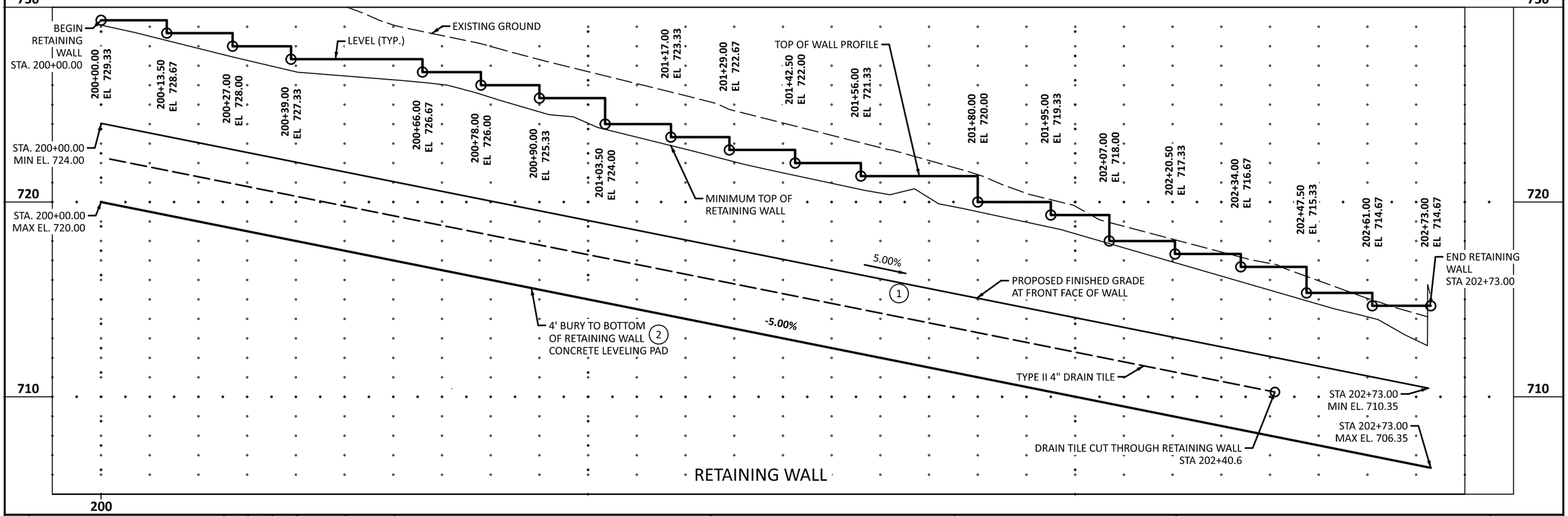
(1) BLOCK SHALL BE BURIED A MINIMUM OF 2 FEET.

(2) BOTTOM OF LEVELING PAD SHALL BE BURIED BELOW LINE SHOWN. CONCRETE LEVELING PAD SHALL BE CONSTRUCTED HORIZONTAL AND LEVEL WITH A MINIMUM STEP TRANSITION OVERLAP OF 24 INCHES.

EXISTING RETAINING WALL

ALIGNMENT TABULATION

ELEMENT	POINT NUMBER	POINT TYPE	STATION	CIRCULAR CURVE DATA DELTA	DEGREE	RADIUS	TANGENT	LENGTH	SPIRAL CURVE DATA THETA	DEGREE	ST	LT	LS	COORDINATES EASTING (X)	NORTHING (Y)	DIRECTION AZIMUTH
ALIGNMENT: MRG TRAIL RETAINING WALL																
TANGENT	L1	START	200+00.00											613780.79	203468.55	
TANGENT	L2	END	202+73.00											614020.99	203338.81	S61.624°E



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Dakota COUNTY

DAKOTA COUNTY
CP 42-161
RETAINING WALL PLAN AND PROFILE
SHEET 1 OF 1

SHEET 23
OF 36

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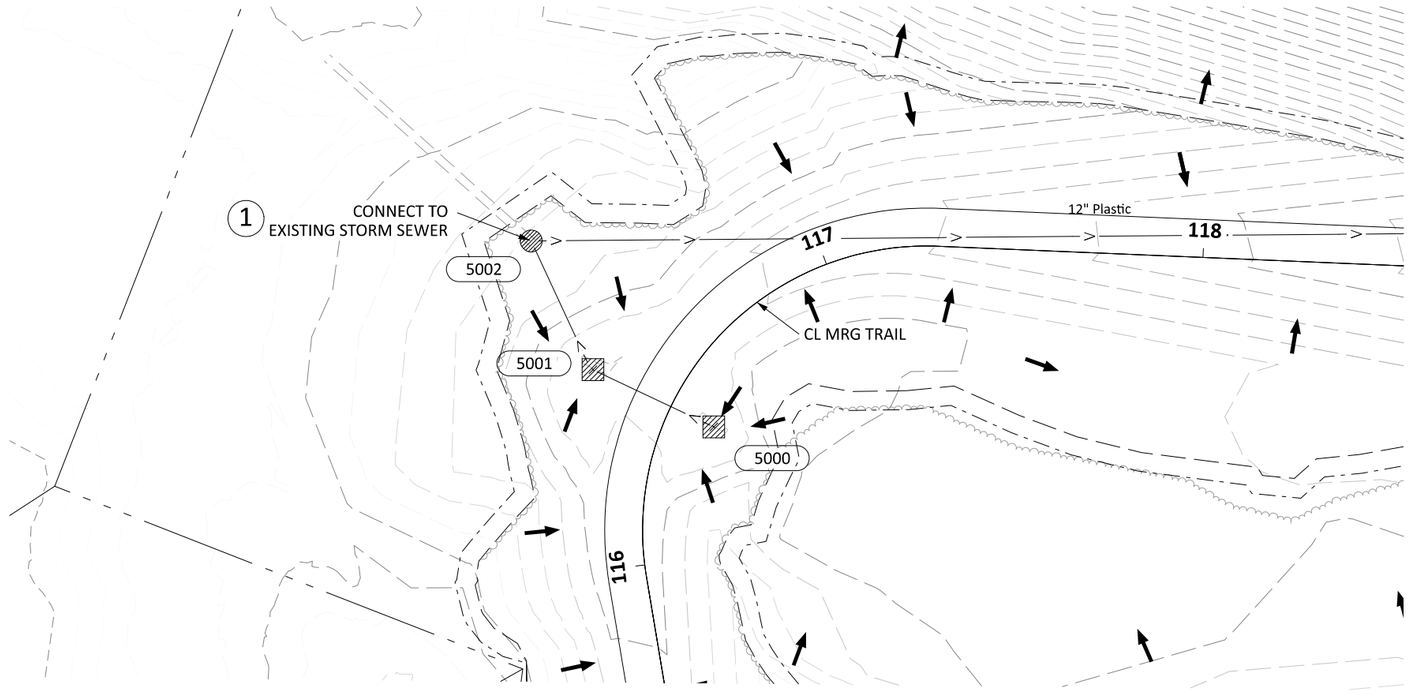
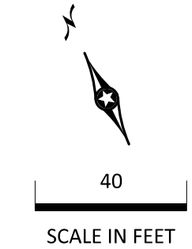
SPECIFIC NOTES:

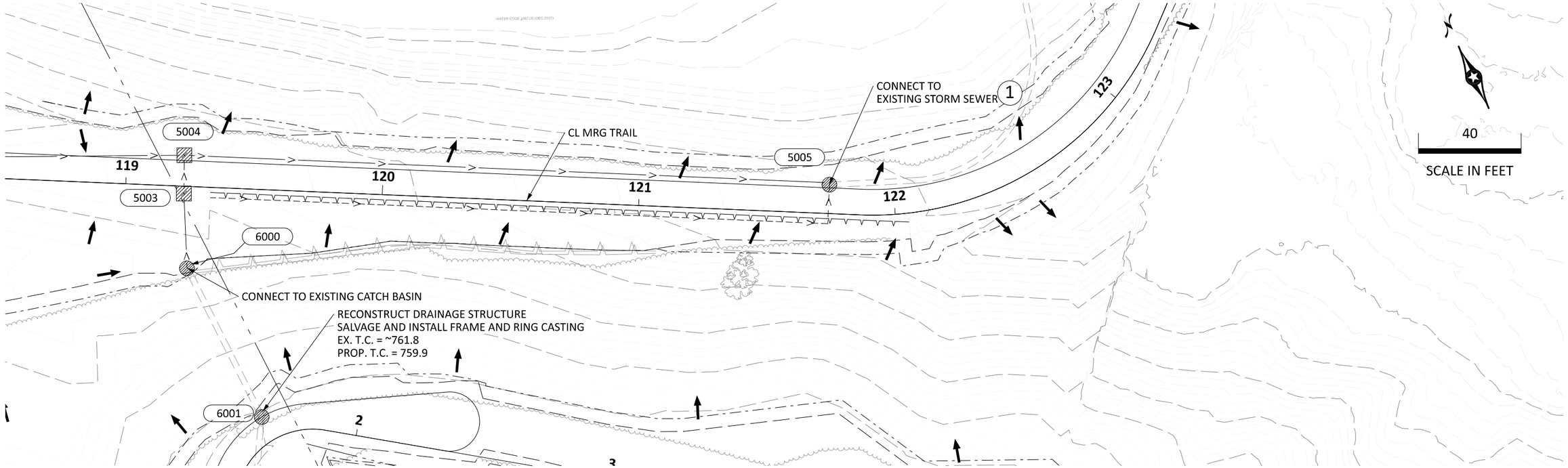
1. CONTRACTOR TO VERIFY EXISTING STORM SEWER SIZE AND ELEVATION PRIOR TO ORDERING STRUCTURE.





LEGEND

- GRADING LIMITS
- CONSTRUCTION LIMITS
- EXISTING RIGHT OF WAY
- PIPE SEWER/CULVERT
- MANHOLE
- CATCH BASIN
- xxxx STRUCTURE NUMBER
- SURFACE FLOW DIRECTION



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LIC. NO. 59324

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CP 42-161
DRAINAGE PLANS AND PROFILES
SHEET 1 OF 2

SHEET 24
OF 36

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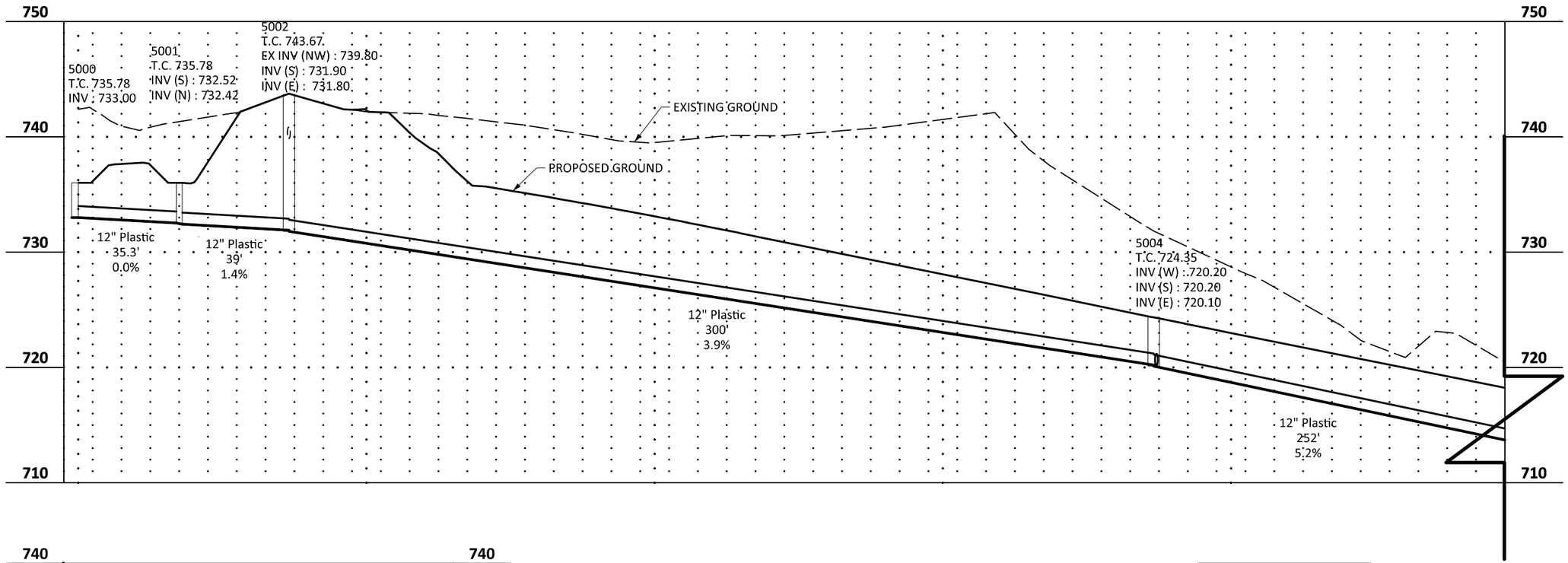

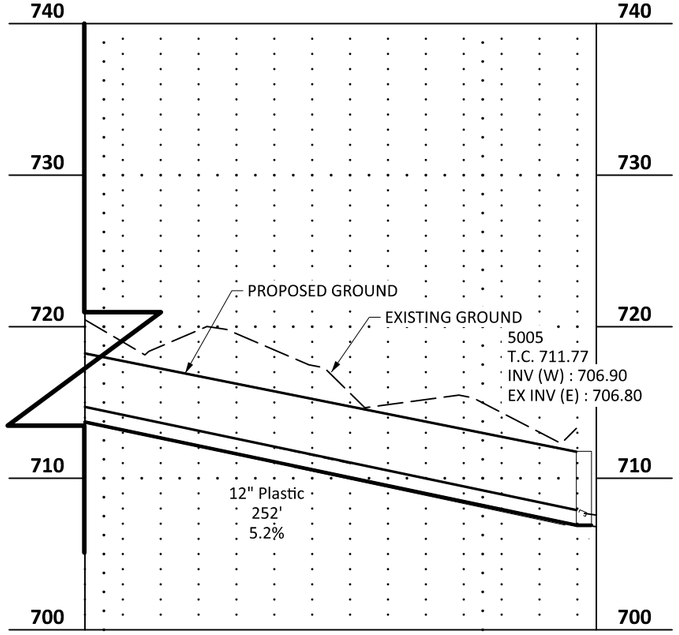

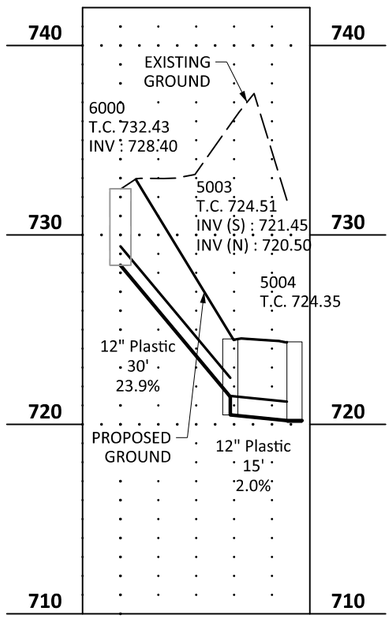

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Dakota COUNTY

DAKOTA COUNTY

CP 42-161
DRAINAGE PLANS AND PROFILES
SHEET 2 OF 2

SHEET 25
OF 36

STORM WATER POLLUTION PREVENTION PLAN (SWPPP) NARRATIVE

PROJECT DESCRIPTION/LOCATION

THE MINNESOTA RIVER GREENWAY TRAIL IMPROVEMENT PROJECT IS LOCATED DIRECTLY BETWEEN THE U.S. LOCK AND DAM 2 ON THE MISSISSIPPI RIVER AND EAGLE BLUFF DRIVE IN THE NORTHWESTERN CORNER OF HASTINGS, MN.

THE PLANNED SCOPE OF THE PROJECT INCLUDES:

CLEARING TREES AND FENCE FOR TRAIL IMPROVEMENTS, RECONSTRUCTING AND REALIGNING THE EXISTING TRAIL, SLOPE EXCAVATION, CONSTRUCTION OF A RETAINING WALL, PROVIDING EROSION CONTROL MEASURES, TURF ESTABLISHMENT AND PLANTING ACTIVITIES, RELOCATION OF EXISTING STORM SEWER, AND SUPPORTING THE RECRATIONAL FUNCTION OF THE MINNESOTA RIVER GREENWAY TRAIL.

RECEIVING WATERS

RECEIVING WATER	STA. OR R.P.	SPECIAL WATER	IMPAIRED WATER	TROUT	TMDL	INVASIVE
MISSISSIPPI RIVER (A) (B)			AQC, AQL, AQR, AI, FC PCB-F, PFOS-F, PFOS-W		Hg-F,Hg-W, NUTRIENTS, TSS	

(A)CONSTRUCTION RELATED IMPAIRMENT, (B) NON-CONSTRUCTION RELATED IMPAIRMENT.

THE RECEIVING WATERS LISTED IN THE TABLE ABOVE ARE LOCATED WITHIN ONE MILE (AERIAL RADIUS) OF THE PROJECT LIMITS AND RECEIVE RUNOFF FROM THE PROJECT SITE. THE IMPAIRED WATERS (LISTED IN TABLE ABOVE) ARE IMPAIRED FOR (A) CONSTRUCTION RELATED OR (B) NON-CONSTRUCTION RELATED IMPAIRMENTS. CONSTRUCTION RELATED IMPAIRMENTS MAY REQUIRE ADDITIONAL BMPS AS OUTLINED IN APPENDIX A OF THE NPDES PERMIT.

AREAS OF ENVIRONMENTAL SENSITIVITY (AES) AND INFESTED WATERS

IN ADDITION TO THE LIST OF SPECIAL AND IMPAIRED WATERS THE CONTRACTOR SHALL BE AWARE THAT THERE ARE WETLANDS WITHIN AND NEAR THE PROJECT BOUNDARY.

SOIL TYPES

SOIL TYPES TYPICALLY FOUND ON THIS PROJECT ARE SILTY SANDS AND CLAYEY SANDS.

LONG TERM MAINTENANCE AND OPERATION
PROJECT PERSONNEL AND TRAINING

DAKOTA COUNTY STAFF ARE RESPONSIBLE FOR THE LONG TERM MAINTENANCE AND OPERATION OF THE PERMANENT STORMWATER SYSTEM.

THIS SWPPP WAS PREPARED BY PERSONNEL THAT ARE CERTIFIED IN THE DESIGN OF CONSTRUCTION SWPPPS. INDIVIDUALS WITH SWPPP TRAINING:

BRIDGET OSBORN
HR GREEN, INC
EXPIRATION OF SWPPP 2027

PROVIDE A CERTIFIED EROSION CONTROL SUPERVISOR IN GOOD STANDING WHO IS KNOWLEDGEABLE AND EXPERIENCED IN THE APPLICATION OF EROSION PREVENTION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES. THE EROSION CONTROL SUPERVISOR WILL WORK WITH THE PROJECT ENGINEER TO OVERSEE THE IMPLEMENTATION OF THE SWPPP AND THE INSTALLATION, INSPECTION, AND MAINTENANCE OF THE EROSION PREVENTION AND SEDIMENT CONTROL BMPS BEFORE, DURING AND AFTER CONSTRUCTION UNTIL THE NOTICE OF TERMINATION (NOT) HAS BEEN FILED WITH THE MPCA. PROVIDE PROOF OF CERTIFICATION AT THE PRECONSTRUCTION MEETING. WORK WILL NOT BE ALLOWED TO COMMENCE UNTIL PROOF OF CERTIFICATION HAS BEEN PROVIDED TO THE PROJECT ENGINEER.

PROVIDE AT LEAST ONE CERTIFIED INSTALLER FOR EACH CONTRACTOR OR SUBCONTRACTOR THAT INSTALLS THE PRODUCTS LISTED IN SPECIFICATION SECTION 2573.3.A.2. PROVIDE PROOF OF CERTIFICATION AT THE PRECONSTRUCTION MEETING. WORK WILL NOT BE ALLOWED TO COMMENCE UNTIL PROOF OF CERTIFICATION HAS BEEN PROVIDED TO THE PROJECT ENGINEER.

PROJECT CONTACTS

THE PROJECT ENGINEER AND CONTRACTOR ARE RESPONSIBLE FOR IMPLEMENTATION OF THE SWPPP AND INSTALLATION, INSPECTION, AND MAINTENANCE OF THE EROSION PREVENTION AND SEDIMENT CONTROL BMPS BEFORE, DURING AND AFTER CONSTRUCTION UNTIL THE NOTICE OF TERMINATION HAS BEEN FILED.

ORGANIZATION	CONTACT NAME	PHONE
CITY OF HASTINGS	JOHN CAVEN	651-480-2369
DAKOTA COUNTY	MIKE ADAMS	651-554-6538

MPCA DUTY OFFICER 24 HOUR EMERGENCY NOTIFICATION:
651-649-5451 OR 800-422-0798

CHAIN OF RESPONSIBILITY

DAKOTA COUNTY AND THE CONTRACTOR ARE CO-PERMITEES FOR THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) CONSTRUCTION PERMIT. THE CONTRACTOR IS RESPONSIBLE TO COMPLY WITH ALL ASPECTS OF THE NPDES CONSTRUCTION PERMIT AT ALL TIMES UNTIL THE NOTICE OF TERMINATION (NOT) HAS BEEN FILED WITH THE MPCA. THE CONTRACTOR WILL DEVELOP A CHAIN OF COMMAND WITH ALL OPERATORS ON THE SITE TO ENSURE THAT THE SWPPP WILL BE IMPLEMENTED AND STAY IN EFFECT UNTIL THE CONSTRUCTION PROJECT IS COMPLETE, THE ENTIRE SITE HAS UNDERGONE FINAL STABILIZATION, AND A NOTICE OF TERMINATION (NOT) HAS BEEN SUBMITTED TO THE MPCA.

LOCATION OF SWPPP REQUIREMENTS

THE REQUIRED SWPPP ELEMENTS MAY BE LOCATED IN MANY PLACES WITHIN THE PLAN SET AS WELL AS IN THE SPECIAL PROVISIONS, MNDOT SPEC BOOK (2025 EDITION). THE NOTES AND TABLE BELOW ARE INTENDED TO BE A QUICK REFERENCE FOR THE CONTRACTOR AND PROJECT ENGINEER TO USE IN THE FIELD. THERE MAY BE ADDITIONAL REQUIRED SWPPP ELEMENTS INCLUDED ON THE PROJECT THAT ARE NOT LISTED ON THIS SHEET.

LOCATION OF SWPPP REQUIREMENTS IN PROJECT PLAN

DESCRIPTION	LOCATION
TEMPORARY EROSION CONTROL MEASURES	SHEETS NO. 29 - 32
PERMANENT EROSION CONTROL MEASURES	SHEETS NO. 29 - 32
DIRECTION OF FLOW	SHEETS NO. 29 - 32
FINAL STABILIZATION	SHEETS NO. 33 - 36
SOILS AND CONSTRUCTION NOTES	SHEETS NO. 4
DRAINAGE STRUCTURES	SHEETS NO. 24 - 25
DRAINAGE TABULATION	SHEETS NO. 7
STORM SEWER PROFILE SHEETS	SHEETS NO. 25
EROSION AND SEDIMENT CONTROL DETAILS	MNDOT STANDARD PLANS
EROSION CONTROL TABULATION	SHEET NO. 6
TURF ESTABLISHMENT TABULATION	SHEET NO. 6
SITE MAP	SHEET NO. 2

SITE INSPECTION AND MAINTENANCE

INSPECT THE ENTIRE CONSTRUCTION SITE A MINIMUM OF ONCE EVERY SEVEN DAYS DURING ACTIVE CONSTRUCTION AND WITHIN 24 HOURS AFTER A RAINFALL EVENT GREATER THAN 0.5 INCHES IN 24 HOURS. INSPECT ALL TEMPORARY AND PERMANENT WATER QUALITY MANAGEMENT, EROSION PREVENTION AND SEDIMENT CONTROL BMPS UNTIL THE SITE HAS UNDERGONE FINAL STABILIZATION AND THE NOT HAS BEEN SUBMITTED. INSPECT SURFACE WATER INCLUDING DRAINAGE DITCHES FOR SIGNS OF EROSION AND SEDIMENT DEPOSITION. INSPECT CONSTRUCTION SITE VEHICLE EXIT LOCATIONS FOR EVIDENCE OF TRACKING ONTO PAVED SURFACES. INSPECT SURROUNDING PROPERTIES FOR EVIDENCE OF OFF SITE SEDIMENT ACCUMULATION. INSPECT INFILTRATION AREAS FOR SIGNS OF SEDIMENT DEPOSITION AND COMPACTION (TO ENSURE THAT EQUIPMENT IS NOT BEING DRIVEN ACROSS THE AREA).

RECORD ALL INSPECTIONS AND MAINTENANCE ACTIVITIES IN WRITING WITHIN 24 HOURS. SUBMIT INSPECTION REPORTS IN A FORMAT THAT IS ACCEPTABLE TO THE PROJECT ENGINEER. INCLUDE THE FOLLOWING IN THE RECORDS OF EACH INSPECTION AND MAINTENANCE ACTIVITY:
A. DATE AND TIME OF INSPECTIONS
B. NAME OF PERSONS CONDUCTING INSPECTIONS
C. FINDINGS OF INSPECTIONS, INCLUDING RECOMMENDATIONS FOR CORRECTIVE ACTIONS
D. CORRECTIVE ACTIONS TAKEN, INCLUDING DATES, TIMES, AND PARTY COMPLETING MAINTENANCE ACTIVITIES
E. DATE AND AMOUNT OF ALL RAINFALL EVENTS GREATER THAN 0.5 INCH IN 24 HOURS
F. DOCUMENTS AND CHANGES MADE TO THE SWPPP

REPLACE, REPAIR OR SUPPLEMENT ALL NONFUNCTIONAL BMPS BY THE END OF THE NEXT BUSINESS DAY FOLLOWING DISCOVERY UNLESS LISTED DIFFERENTLY BELOW:
A. REPAIR, REPLACE, OR SUPPLEMENT PERIMETER CONTROL DEVICES WHEN IT BECOMES NONFUNCTIONAL OR SEDIMENT REACHES 1/2 THE HEIGHT OF THE DEVICE. COMPLETE REPAIRS BY THE END OF THE NEXT BUSINESS DAY FOLLOWING DISCOVERY.
B. REPAIR OR REPLACE INLET PROTECTION DEVICES WHEN THEY BECOME NONFUNCTIONAL OR SEDIMENT REACHES 1/2 THE HEIGHT AND/OR DEPTH OF THE DEVICE.
C. DRAIN AND REMOVE SEDIMENT FROM TEMPORARY AND PERMANENT SEDIMENT BASINS ONCE THE SEDIMENT HAS REACHED 1/2 THE STORAGE VOLUME. COMPLETE WORK WITHIN 72 HOURS OF DISCOVERY.
D. REMOVE ALL DELTAS AND SEDIMENT DEPOSITED IN SURFACE WATERS INCLUDING DRAINAGE WAYS, CATCH BASINS, AND OTHER DRAINAGE SYSTEMS. RESTABILIZE ANY AREAS THAT ARE DISTURBED BY SEDIMENT REMOVAL OPERATIONS. SEDIMENT REMOVAL AND STABILIZATION MUST BE COMPLETED WITHIN 7 DAYS OF DISCOVERY. PREPARE AND SUBMIT A SITE MANAGEMENT PLAN FOR WORKING IN SURFACE WATERS. CONTACT ALL APPROPRIATE AUTHORITIES PRIOR TO WORKING IN SURFACE WATERS.
E. REMOVE TRACKED SEDIMENT FROM PAVED SURFACES BOTH ON AND OFF SITE WITHIN 24 HOURS OF DISCOVERY. STREET SWEEPING IS REQUIRED 3 TIMES PER WEEK DURING PAVEMENT CONSTRUCTION PERIODS. STREET SWEEPING MAY HAVE TO OCCUR MORE OFTEN TO MINIMIZE OFF SITE IMPACTS. LIGHTLY WET THE PAVEMENT PRIOR TO SWEEPING.
F. MAINTAIN ALL BMPS UNTIL WORK HAS BEEN COMPLETED, SITE HAS GONE UNDER FINAL STABILIZATION, AND THE NOTICE OF TERMINATION (NOT) HAS BEEN SUBMITTED TO THE MPCA.

LAND FEATURE CHANGES

TOTAL DISTURBED AREA	3.89 ACRES
TOTAL EXISTING IMPERVIOUS SURFACE AREA	1.85 ACRES
TOTAL PROPOSED IMPERVIOUS SURFACE AREA	1.76 ACRES
TOTAL PROPOSED NET CHANGE IN IMPERVIOUS SURFACE AREA	-0.09 ACRES

ENVIRONMENTAL REVIEW

THERE ARE NO STORMWATER MITIGATION MEASURES REQUIRED AS A RESULT OF AN ENVIRONMENTAL, ARCHAEOLOGICAL OR AGENCY REVIEW. ALL MITIGATION MEASURES HAVE BEEN ADDRESSED IN THIS PLAN SET OR THE SPECIAL PROVISIONS.

THIS PROJECT IS NOT LOCATED IN A WELL HEAD PROTECTION AREA OR A DRINKING WATER SUPPLY MANAGEMENT AREA.

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NO.	REVISIONS	BY	APR.	DATE

DESIGNED BAJ | CHECKED KRR
DRAWN KRR | APPROVED TDM
DATE 4/24/2026 | JOB NO. 42 - 161

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.

TYPED NAME TYLER D MAXSON LIC. NO. 59324 DATE 4/24/2026

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DAKOTA COUNTY
CP 42-161
STORM WATER POLLUTION PREVENTION PLAN
SHEET 1 OF 3

SHEET 26
OF 36

STORM WATER POLLUTION PREVENTION PLAN (SWPPP) NARRATIVE (CONTINUED)

STABILIZATION TIME FRAMES

AREA	TIME FRAME	NOTES
LAST 200 LINEAL FEET OF DRAINAGE DITCH OR SWALE	WITHIN 24 HOURS OF CONNECTION TO SURFACE WATER OR PROPERTY EDGE	1, 2, 3
REMAINING PORTIONS OF DRAINAGE DITCH OR SWALE	7 DAYS	1, 3
PIPE AND CULVERT OUTLETS	24 HOURS	
EXPOSED SOILS AND STOCKPILES	7 DAYS	1
WITHIN 200 FEET OF A PUBLIC WATER	24 HOURS	7

1. INITIATE STABILIZATION IMMEDIATELY WHEN CONSTRUCTION HAS TEMPORARILY OR PERMANENTLY CEASED ON ANY PORTION OF THE SITE. COMPLETE STABILIZATION WITHIN THE TIME FRAME LISTED. IN MANY INSTANCES THIS WILL REQUIRE STABILIZATION TO OCCUR MORE THAN ONCE DURING THE COURSE OF THE PROJECT. TEMPORARY SOIL STOCKPILES WITHOUT SIGNIFICANT CLAY OR SILT AND STOCKPILED AND CONSTRUCTED ROAD BASE ARE EXEMPT FROM THE STABILIZATION REQUIREMENT.

2. STABILIZE WETTED PERIMETER OF DITCH (I.E. WHERE THE DITCH GETS WET).

3. APPLICATION OF MULCH, HYDROMULCH, TACKIFIER AND POLYACRYLAMIDE ARE NOT ACCEPTABLE STABILIZATION METHODS IN THESE AREAS.

4. STABILIZE ALL AREAS OF THE SITE PRIOR TO THE ONSET OF WINTER. ANY WORK STILL BEING PERFORMED WILL BE SNOW MULCHED, SEEDED, AND BLANKETED WITHIN THE TIME FRAMES IN THE NPDES PERMIT.

5. TOPSOIL BERMS MUST BE STABILIZED IN ORDER TO BE CONSIDERED PERIMETER CONTROL BMPS. USE RAPID STABILIZATION METHOD 2, 3, OR 4 AS DIRECTED BY THE ENGINEER. THE SEED MIX USED IN THE RAPID STABILIZATION MAY BE SUBSTITUTED AS FOLLOWS:
   A. SINGLE YEAR CONSTRUCTION BETWEEN MAY 1 - AUGUST 1, SEED WITH SEED MIXTURE 21-111
   B. SINGLE YEAR CONSTRUCTION BETWEEN AUGUST 1 AND OCTOBER 31, SEED WITH SEED MIXTURE 21-112
   C. MULTI YEAR CONSTRUCTION 22-111

6. KEEP DITCHES AND EXPOSED SOILS IN AN EVEN ROUGH GRADED CONDITION IN ORDER TO BE ABLE TO APPLY EROSION CONTROL MULCHES, HYDROMULCHES AND BLANKETS.

7. SEE WATER RESOURCES NOTES FOR A LIST OF PUBLIC WATER EXCLUSION DATES. TWENTY FOUR HOUR STABILIZATION REQUIREMENT ONLY APPLIES DURING THE EXCLUSION DATES.

GENERAL SWPPP NOTES FOR CONSTRUCTION ACTIVITY

1. AMEND THE SWPPP AND DOCUMENT ANY AND ALL CHANGES TO THE SWPPP AND ASSOCIATED PLAN SHEETS IN A TIMELY MANNER. STORE THE SWPPP AND ALL AMENDMENTS ON SITE AT ALL TIMES.

2. PREPARE AND SUBMIT A SITE MANAGEMENT PLAN FOR THE ENGINEER'S ACCEPTANCE FOR CONCRETE MANAGEMENT, CONCRETE SLURRY APPLICATION AREAS, WORK IN AND NEAR AREAS OF ENVIRONMENTAL SENSITIVITY, AREAS IDENTIFIED IN THE PLANS AS "SITE MANAGEMENT PLAN AREA", ANY WORK THAT WILL REQUIRE DEWATERING, AND AS REQUESTED BY THE ENGINEER. SUBMIT ALL SITE MANAGEMENT PLANS TO THE ENGINEER IN WRITING. ALLOW A MINIMUM OF 7 DAYS FOR MNDOT TO REVIEW AND ACCEPT SITE MANAGEMENT PLAN SUBMITTALS. WORK WILL NOT BE ALLOWED TO COMMENCE IF A SITE MANAGEMENT PLAN IS REQUIRED UNTIL ACCEPTANCE HAS BEEN GRANTED BY THE ENGINEER. THERE WILL BE NO EXTRA TIME ADDED TO THE CONTRACT DUE TO THE UNTIMELY SUBMITTAL.

3. IT IS THE DESIGNER'S INTENT THAT THE CONTRACTOR BUILD PONDS AND PLACE EROSION CONTROL BMPS BEFORE PUTTING THEM INTO ACTIVE SERVICE TO THE MAXIMUM EXTENT PRACTICABLE.

4. BURNING OF ANY MATERIAL IS NOT ALLOWED WITHIN PROJECT BOUNDARY.

5. DO NOT DISTURB AREAS OUTSIDE OF THE CONSTRUCTION LIMITS. DELINEATE AREAS NOT TO BE DISTURBED PRIOR TO STARTING GROUND DISTURBING ACTIVITIES. IF IT BECOMES NECESSARY TO DISTURB AREAS OUTSIDE OF THE CONSTRUCTION LIMITS OBTAIN WRITTEN PERMISSION FROM THE PROJECT ENGINEER PRIOR TO PROCEEDING. PRESERVE ALL NATURAL BUFFERS SHOWN ON THE PLANS.

6. ROUTE STORMWATER AROUND UNSTABILIZED AREAS OF THE SITE WHENEVER FEASIBLE. PROVIDE EROSION CONTROL AND VELOCITY DISSIPATION DEVICES AS NEEDED TO KEEP CHANNELS FROM ERODING AND TO PREVENT NUISANCE CONDITIONS AT THE OUTLET.

7. DIRECT DISCHARGES FROM BMPS TO VEGETATED AREAS WHENEVER FEASIBLE. PROVIDE VELOCITY DISSIPATION DEVICES AS NEEDED TO PREVENT EROSION.

8. THE EROSION PREVENTION AND SEDIMENT CONTROL BMPS SHALL BE PLACED AS NECESSARY TO MINIMIZE EROSION FROM DISTURBED SURFACES AND TO CAPTURE SEDIMENT ON SITE. ALL EROSION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO COMMENCEMENT OF ANY REMOVAL WORK AND/OR GROUND DISTURBING ACTIVITIES COMMENCE.

9. ESTABLISH SEDIMENT CONTROL DEVICES ON ALL DOWN GRADIENT PERIMETERS AND UPGRADIENT OF ANY BUFFER ZONES BEFORE ANY UP GRADIENT LAND DISTURBING ACTIVITIES BEGIN. MAINTAIN SEDIMENT CONTROL DEVICES UNTIL CONSTRUCTION IS COMPLETE AND THE SITE IS STABILIZED.

10. LOCATE PERIMETER CONTROL ON THE CONTOUR TO CAPTURE OVERLAND, LOW- VELOCITY SHEET FLOWS DOWN GRADIENT OF ALL EXPOSED SOILS AND PRIOR TO DISCHARGING TO SURFACE WATERS. PLACE J-HOOKS AT A MAXIMUM OF 100 FOOT INTERVALS.

11. PROVIDE PERIMETER CONTROL AROUND ALL STOCKPILES. PLACE BMP A MINIMUM 5 FEET FROM THE TOE OF SLOPE WHERE FEASIBLE. DO NOT PLACE STOCKPILES IN NATURAL BUFFER AREAS, SURFACE WATERS OR STORMWATER CONVEYANCES.

12. FLOATING SILT CURTAIN IS ALLOWED AS PERIMETER CONTROL FOR IN WATER WORK ONLY. PLACE THE FLOATING SILT CURTAIN AS CLOSE TO SHORE AS POSSIBLE. PLACE PERIMETER CONTROL BMP ON LAND IMMEDIATELY AFTER THE IN WATER WORK IS COMPLETED.

13. DITCH CHECKS WILL BE PLACED AS INDICATED ON THE PLANS DURING ALL PHASES OF CONSTRUCTION.

14. PROTECT STORM SEWER INLETS AT ALL TIMES WITH THE APPROPRIATE INLET PROTECTION FOR EACH SPECIFIC PHASE OF CONSTRUCTION. PROVIDE INLET PROTECTION DEVICES WITH EMERGENCY OVERFLOW CAPABILITIES. SILT FENCE PLACED IN THE INLET GRATE IS NOT AN ACCEPTABLE INLET PROTECTION BMP FOR GRADING OPERATIONS. SILT FENCE PLACED IN THE GRATE IS ONLY ALLOWED FOR SHORT INTERVALS DURING MILLING OR PAVING OPERATIONS. INLET PROTECTION DEVICES MAY NEED TO BE PLACED MULTIPLE TIMES IN THE SAME LOCATION OVER THE LIFE OF THE CONTRACT. INLET PROTECTION DEVICES WILL BE PAID FOR ONCE PER INLET REGARDLESS OF THE NUMBER OF TIMES THE BMP IS PLACED. KEEP ALL STORM SEWER INLET PROTECTION DEVICES IN GOOD FUNCTIONAL CONDITION AT ALL TIMES. REPLACE INLET PROTECTION DEVICE WITH A SUITABLE ALTERNATIVE IF THE PROJECT ENGINEER DEEMS AN INLET PROTECTION DEVICE TO BE NONFUNCTIONAL, IN POOR CONDITION, INEFFECTIVE, OR NOT APPROPRIATE FOR THE CURRENT CONSTRUCTION ACTIVITIES. THERE WILL BE NO COST TO THE COUNTY FOR REPLACEMENT OF INLET PROTECTION DEVICES.

15. PLACE CONSTRUCTION EXITS, AS NECESSARY, TO PREVENT TRACKING OF SEDIMENT ONTO PAVED SURFACES BOTH ON AND OFF THE PROJECT SITE. PROVIDE CONSTRUCTION EXITS OF SUFFICIENT SIZE TO PREVENT TRACK OUT. MAINTAIN CONSTRUCTION EXITS WHEN EVIDENCE OF TRACKING IS DISCOVERED. REGULAR STREET SWEEPING IS NOT AN ACCEPTABLE ALTERNATIVE TO PROPER CONSTRUCTION EXIT INSTALLATION AND MAINTENANCE.

16. DISCHARGE TURBID OR SEDIMENT LADEN WATER TO TEMPORARY SEDIMENT BASINS WHENEVER FEASIBLE. IN THE EVENT THAT IT IS NOT FEASIBLE TO DISCHARGE THE SEDIMENT LADEN WATER TO A TEMPORARY SEDIMENT BASIN, THE WATER MUST BE TREATED SO THAT IT DOES NOT CAUSE A NUISANCE CONDITION IN THE RECEIVING WATERS OR TO DOWNSTREAM LANDOWNERS. CLEAN OUT ALL PERMANENT STORMWATER BASINS REGARDLESS OF WHETHER USED AS TEMPORARY SEDIMENT BASINS OR TEMPORARY SEDIMENT TRAPS TO THE DESIGN CAPACITY AFTER ALL UPGRADIENT LAND DISTURBING ACTIVITY IS COMPLETED.

17. PROVIDE SCOUR PROTECTION AT ANY OUTFALL OF DEWATERING ACTIVITIES.

18. PROVIDE STABILIZATION IN ANY TRENCHES CUT FOR DEWATERING OR SITE DRAINING PURPOSES.

19. REMOVE SEDIMENT FROM STORMWATER SYSTEM AT THE END OF PROJECT. THIS MAY REQUIRE PLUGGING THE DOWNSTREAM PIPE AND PUMPING THE TURBID WATER. DO NOT DISCHARGE WASH WATER INTO THE MISSISSIPPI RIVER.

20. PRESERVE A MINIMUM OF 50 FOOT NATURAL BUFFER OR (IF BUFFER IS INFEASIBLE) PROVIDE REDUNDANT SEDIMENT CONTROLS WHEN A SURFACE WATER IS LOCATED WITHIN 50 FEET OF LAND DISTURBANCE AND STORMWATER FLOWS TO THE SURFACE WATER.

POLLUTION PREVENTION

1. PROVIDE A SPILL KIT AT EACH WORK LOCATION ON THE SITE.

2. STORE ALL BUILDING MATERIALS THAT HAVE THE POTENTIAL TO LEACH POLLUTANTS, PESTICIDES, HERBICIDES, INSECTICIDES, FERTILIZERS, TREATMENT CHEMICALS, AND LANDSCAPE MATERIALS UNDER COVER AND WITH SECONDARY CONTAINMENT.

3. PROVIDE A SECURE STORAGE AREA WITH RESTRICTED ACCESS FOR ALL HAZARDOUS MATERIALS AND TOXIC WASTE. RETURN ALL HAZARDOUS MATERIALS AND TOXIC WASTE TO THE DESIGNATED STORAGE AREA AT THE END OF THE BUSINESS DAY UNLESS INFEASIBLE. STORE ALL HAZARDOUS MATERIALS AND TOXIC WASTE (INCLUDING BUT NOT LIMITED TO OIL, DIESEL FUEL, GASOLINE, HYDRAULIC FLUIDS, PAINT, PETROLEUM BASED PRODUCTS, WOOD PRESERVATIVES, ADDITIVES, CURING COMPOUNDS, AND ACIDS) IN SEALED CONTAINERS WITH SECONDARY CONTAINMENT. CLEAN UP SPILLS IMMEDIATELY.

4. STORE, COLLECT AND DISPOSE OF ALL SOLID WASTE.

5. POSITION ALL PORTABLE TOILETS SO THAT THEY ARE SECURE AND CANNOT BE TIPPED OR KNOCKED OVER. PROPERLY DISPOSE OF ALL SANITARY WASTE.

6. FUEL AND MAINTAIN VEHICLES IN A DESIGNATED CONTAINED AREA WHENEVER FEASIBLE. USE DRIP PANS OR ABSORBENT MATERIALS TO PREVENT SPILLS OR LEAKED CHEMICALS FROM DISCHARGING TO SURFACE WATER OR STORMWATER CONVEYANCES. PROVIDE A SPILL KIT AT EACH LOCATION THAT VEHICLES AND EQUIPMENT ARE FUELED OR MAINTAINED AT.

7. LIMIT VEHICLE AND EQUIPMENT WASHING TO A DEFINED AREA OF THE SITE. CONTAIN RUNOFF FROM THE WASHING AREA TO A TEMPORARY SEDIMENT BASIN OR OTHER EFFECTIVE CONTROL. PROPERLY DISPOSE OF ALL WASTE GENERATED BY VEHICLE AND EQUIPMENT WASHING. ENGINE DEGREASING IS NOT ALLOWED ON THE SITE.

8. PROVIDE EFFECTIVE CONTAINMENT FOR ALL LIQUID AND SOLID WASTES GENERATED BY WASHOUT OF CONCRETE, STUCCO, PAINT, FORM RELEASE OILS, CURING COMPOUNDS AND OTHER CONSTRUCTION MATERIALS. LIQUID AND SOLID WASHOUT WASTES MUST NOT CONTACT THE GROUND. DESIGN THE CONTAINMENT SO THAT IT DOES NOT RESULT IN RUNOFF FROM THE WASHOUT OPERATIONS OR CONTAINMENT AREA.

9. CREATE AND FOLLOW A WRITTEN DISPOSAL PLAN FOR ALL WASTE MATERIALS. INCLUDE IN THE PLAN HOW THE MATERIAL WILL BE DISPOSED OF AND THE LOCATION OF THE DISPOSAL SITE. SUBMIT PLAN TO THE ENGINEER.

10. USE METHODS AND OPERATIONAL PROCEDURES THAT PREVENT DISCHARGE OR PLACEMENT OF BITUMINOUS GRINDINGS, CUTTINGS, MILLINGS, AND OTHER BITUMINOUS WASTES FROM AREAS OF EXISTING OR FUTURE VEGETATED SOILS AND FROM ALL WATER CONVEYANCE SYSTEMS, INCLUDING INLETS, DITCHES AND CURB FLOW LINES.

11. USE METHODS AND OPERATIONAL PROCEDURES THAT PREVENT CONCRETE DUST, PARTICLES, CONCRETE WASH OUT, AND OTHER CONCRETE WASTES FROM LEAVING RIGHT OF WAY, DEPOSITING IN EXISTING OR FUTURE VEGETATED AREAS, AND FROM ENTERING STORMWATER CONVEYANCE SYSTEMS, INCLUDING INLETS, DITCHES AND CURB FLOW LINES. USE METHODS AND OPERATIONAL PROCEDURES THAT PREVENT SAW CUT SLURRY AND PLANING WASTE FROM LEAVING MNDOT RIGHT OF WAY AND FROM ENTERING STORMWATER CONVEYANCE SYSTEMS INCLUDING DITCHES AND CULVERTS.

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NO.	REVISIONS	BY	APR.	DATE

DESIGNED BAJ | CHECKED KRR
DRAWN KRR | APPROVED TDM
DATE 4/24/2026 | JOB NO. 42 - 161

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.

TYPED NAME TYLER D MAXSON LIC. NO. 59324 DATE 4/24/2026

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DAKOTA COUNTY

CP 42-161
STORM WATER POLLUTION PREVENTION PLAN
SHEET 2 OF 3

SHEET 27
OF 36

STORM WATER POLLUTION PREVENTION PLAN (SWPPP) NARRATIVE (CONTINUED)

WATER RESOURCES NOTES

THESE NOTES ALONG WITH THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) NARRATIVE ARE INTENDED TO GIVE INFORMATION ON CRITICAL DRAINAGE FEATURES, NATURAL RESOURCES AND CONTRACTOR OPERATIONS THAT MAY IMPACT DRAINAGE AND NATURAL RESOURCES.

1. THE SIZE AND ELEVATION OF CULVERTS, STORM SEWER PIPES, CATCH BASINS, PERMEABLE DITCH BLOCKS AND OVERFLOW DEVICES HAVE BEEN SPECIFICALLY DESIGNED TO CONFORM TO APPLICABLE DESIGN STANDARDS, MINNESOTA POLLUTION CONTROL AGENCY (MPCA) AND STORMWATER PERMIT REQUIREMENTS. CHANGING THESE ITEMS OR THE DIRECTION OF FLOW FROM WHAT IS SHOWN ON THE PLANS MAY CAUSE PROBLEMS OFF THE PROJECT AND COULD MEAN THE PROJECT IS OUT OF COMPLIANCE WITH APPROVED DRAINAGE PERMITS. ANY CHANGES TO THE SIZE, ELEVATION OR DIRECTION OF FLOW OF THE DRAINAGE SYSTEM MUST BE APPROVED BY THE ENGINEER.

2. SUBSOIL ALL DISTURBED GREEN SPACES EXCEPT AS LISTED IN 2574.3.A.4.

3. PERFORM POST INSTALLATION MANDREL TESTING OF ALL PLASTIC PIPE PER MNDOT SPEC 2503. SUBMIT TESTING RESULTS TO ENGINEER PRIOR TO BACKFILLING.

4. ANY SUBSURFACE DRAINAGE TILES DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED, REPLACED OR REROUTED, AND CONNECTED TO THE EXISTING TILE OR DRAINAGE SYSTEM TO ENSURE THAT EXISTING UPLAND DRAINAGE IS PERPETUATED. THIS SHOULD BE DONE TO THE APPROVAL AND SATISFACTION OF THE ENGINEER.

5. THE FOLLOWING WATER RELATED PERMITS APPLY TO THIS PROJECT:

AGENCY	TYPE OF PERMIT
MINNESOTA POLLUTION CONTROL AGENCY (MPCA)	NPDES CONSTRUCTION PERMIT
MINNESOTA DEPT. OF NAT. RESOURCES (MnDNR)	APPROPRIATIONS PERMIT

REVIEW ALL PERMITS FOR ANY SPECIAL CONDITIONS THAT WILL AFFECT CONSTRUCTION OF THE PROJECT.
NO PERMANENT STORMWATER MANAGEMENT SYSTEMS ARE REQUIRED FOR THIS PROJECT. PART III.D. OF THE NPDES PERMIT INDICATES PROJECTS THAT INCREASE IMPERVIOUS SURFACES LESS THAN ONE (1) TOTAL ACRE DO NOT NEED TO RETAIN ANY WATER QUALITY VOLUME ON SITE.

TEMPORARY DEWATERING ACTIVITIES MAY BE REQUIRED. THEREFORE IT IS POSSIBLE THAT A PERMIT FOR THE TEMPORARY APPROPRIATION OF WATERS OF THE STATE, NON-IRRIGATION FROM MNDNR WILL BE REQUIRED FOR THIS PROJECT. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING THIS PERMIT PRIOR TO COMMENCING DEWATERING ACTIVITIES. ALL TEMPORARY DEWATERING SHALL BE DISCHARGED TO AN APPROVED LOCATION FOR TREATMENT PRIOR TO DISCHARGE TO THE RECEIVING WATER. SUBMIT A SITE MANAGEMENT PLAN TO THE ENGINEER FOR APPROVAL PRIOR TO COMMENCING WORK.

6. THE FOLLOWING TYPES OF WATERS HAVE WORK IN WATER EXCLUSIONS. NO WORK IN THE WATER IS ALLOWED DURING THE EXCLUSION DATES. SEE DNR PERMIT FOR WHICH WATERBODIES THIS APPLIES TO.

WATERBODY	EXCLUSION DATES
LAKES	APRIL 1 - JUNE 30
NON-TROUT STREAMS	APRIL 1 - JUNE 30
TROUT STREAMS	SEPTEMBER 15 - MAY 15
TROUT STREAMS IN LAKE SUPERIOR WATERSHED (1)	SEPTEMBER 15 - JUNE 30

(1) INCLUDES ST. LOUIS, CLOQUET, NEMADJI AND NORTH SHORE WATERSHEDS.

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NO.	REVISIONS	BY	APR.	DATE

DESIGNED BAJ | CHECKED KRR
DRAWN KRR | APPROVED TDM
DATE 4/24/2026 | JOB NO. 42 - 161

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TYPED NAME TYLER D MAXSON LIC. NO. 59324 DATE 4/24/2026

HRGreen
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COURT INTERNATIONAL BUILDING
2550 UNIVERSITY AVENUE W., SUITE 400N
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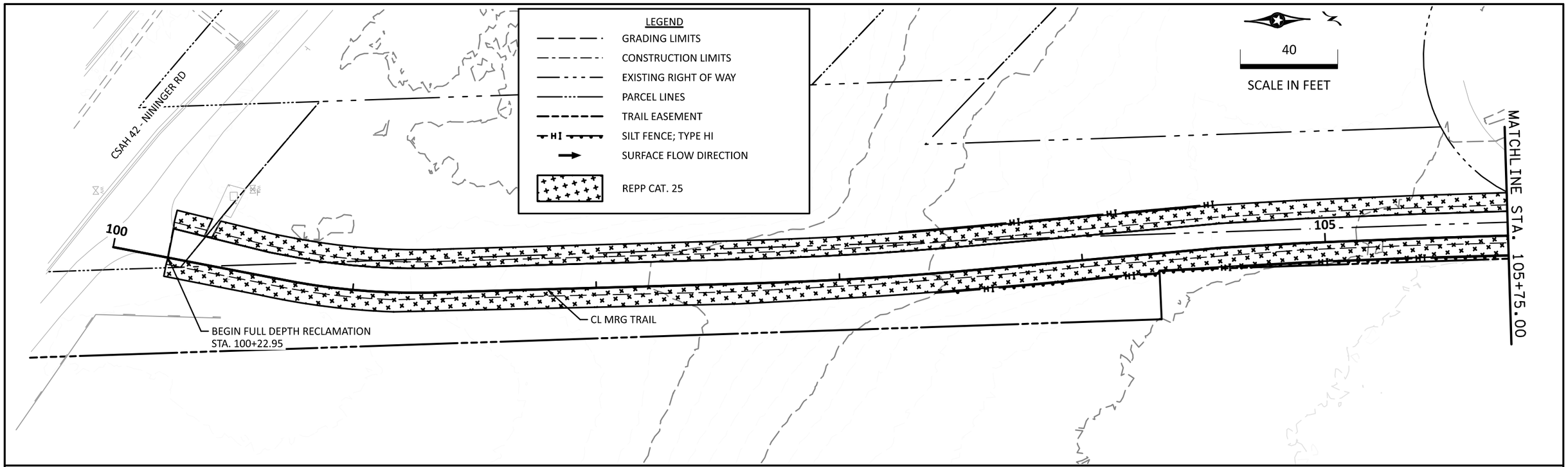
DAKOTA COUNTY

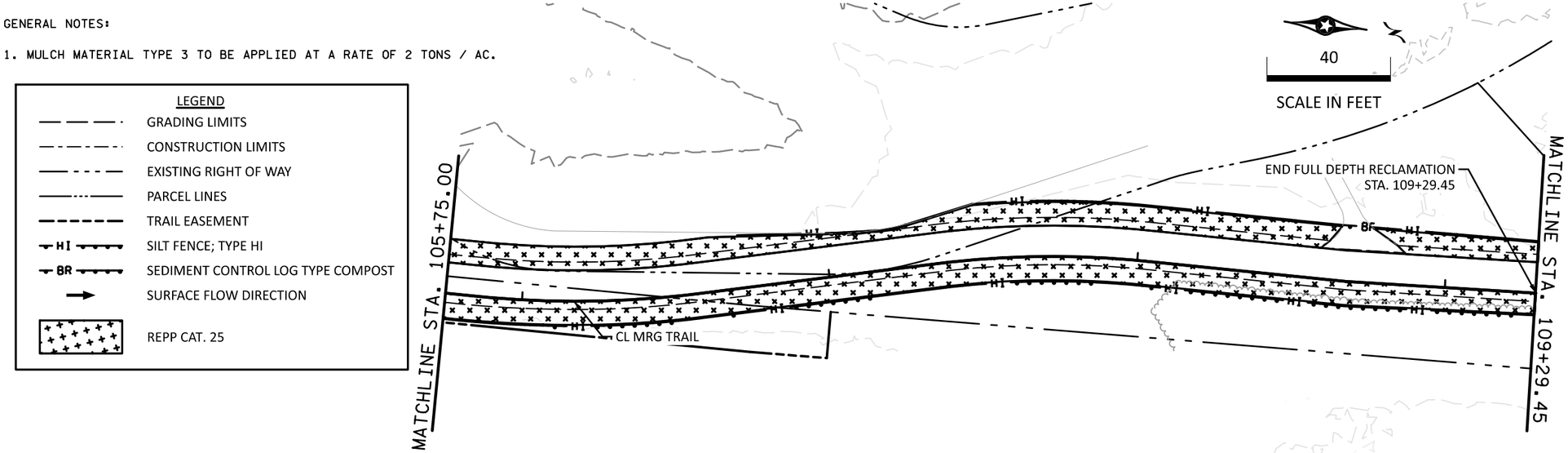
CP 42-161
STORM WATER POLLUTION PREVENTION PLAN
SHEET 3 OF 3

SHEET 28
OF 36



GENERAL NOTES:

1. MULCH MATERIAL TYPE 3 TO BE APPLIED AT A RATE OF 2 TONS / AC.



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Dakota COUNTY

DAKOTA COUNTY
CP 42-161
EROSION CONTROL PLANS
SHEET 1 OF 4

SHEET 29
OF 36

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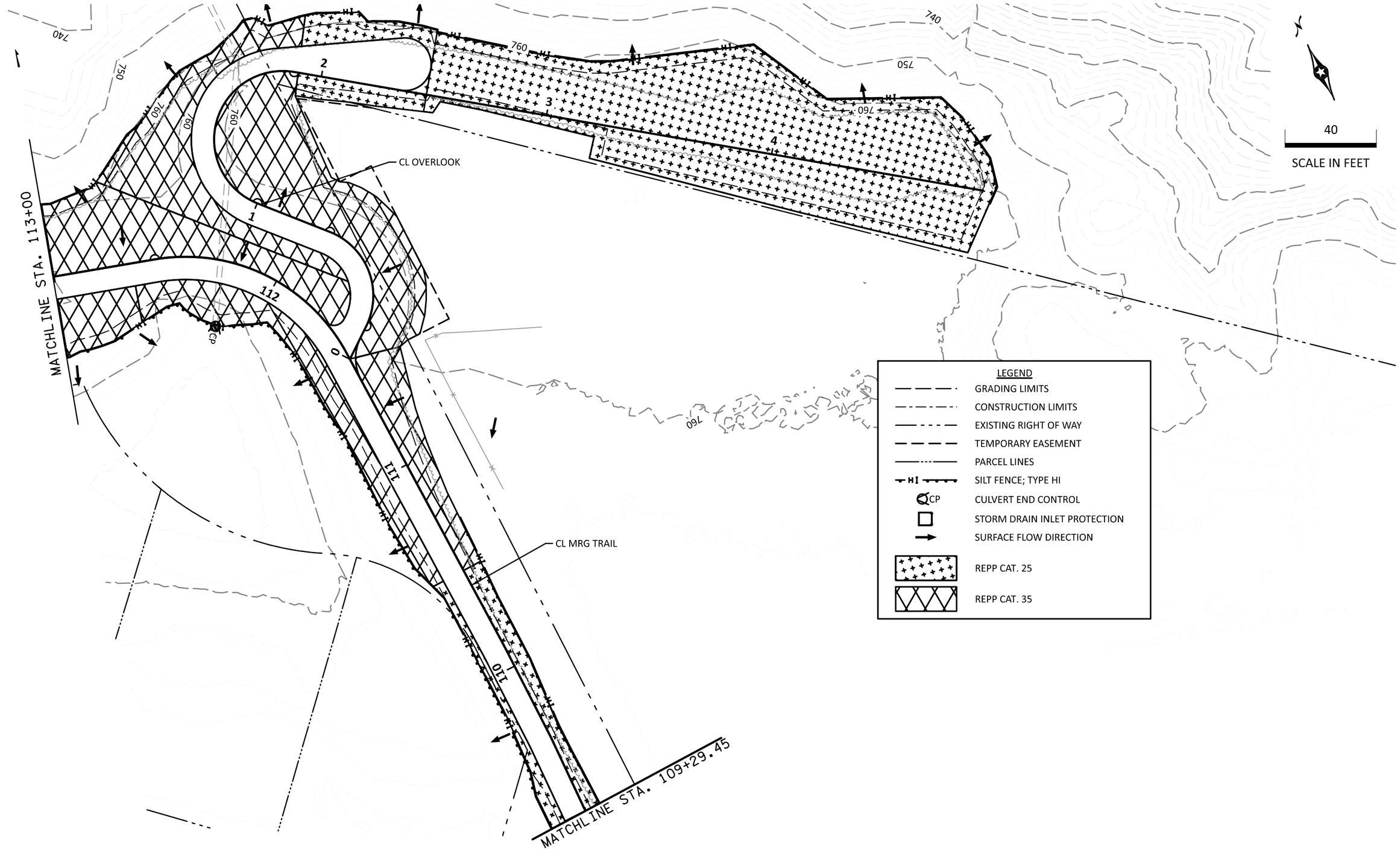

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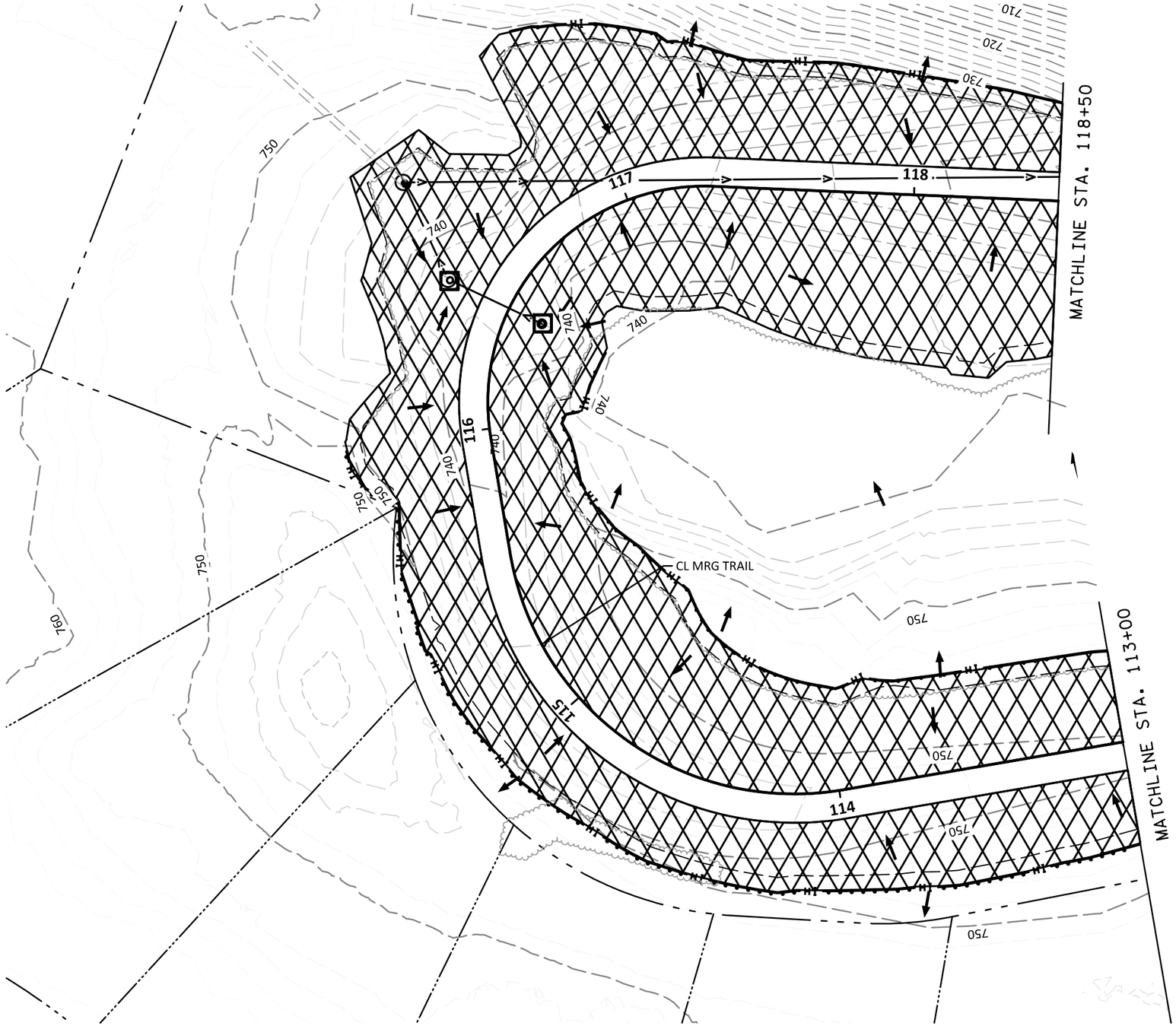
Dakota COUNTY

DAKOTA COUNTY
CP 42-161
EROSION CONTROL PLANS
SHEET 2 OF 4

SHEET 30
OF 36



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SCALE IN FEET

LEGEND

- GRADING LIMITS
- CONSTRUCTION LIMITS
- EXISTING RIGHT OF WAY
- PARCEL LINES
- HI — SILT FENCE; TYPE HI
- CP — CULVERT END CONTROL
- STORM DRAIN INLET PROTECTION
- SURFACE FLOW DIRECTION
- REPP CAT. 35

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Dakota COUNTY

DAKOTA COUNTY
CP 42-161
EROSION CONTROL PLANS
SHEET 3 OF 4

SHEET 31
OF 36

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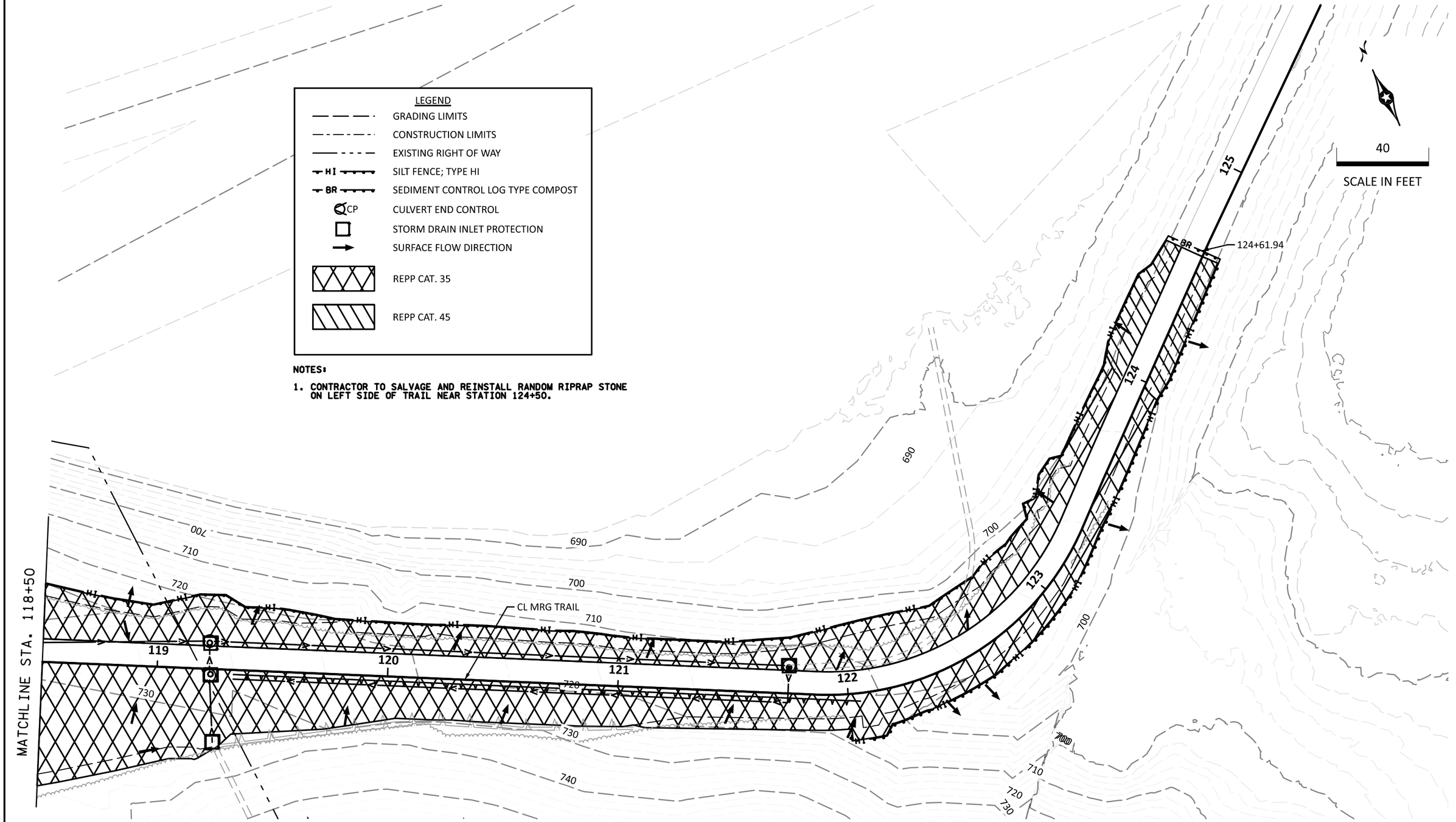
LEGEND

- GRADING LIMITS
- CONSTRUCTION LIMITS
- EXISTING RIGHT OF WAY
- HI — SILT FENCE; TYPE HI
- BR — SEDIMENT CONTROL LOG TYPE COMPOST
- CP — CULVERT END CONTROL
- STORM DRAIN INLET PROTECTION
- SURFACE FLOW DIRECTION
- REPP CAT. 35
- REPP CAT. 45

NOTES:

1. **CONTRACTOR TO SALVAGE AND REINSTALL RANDOM RIPRAP STONE ON LEFT SIDE OF TRAIL NEAR STATION 124+50.**



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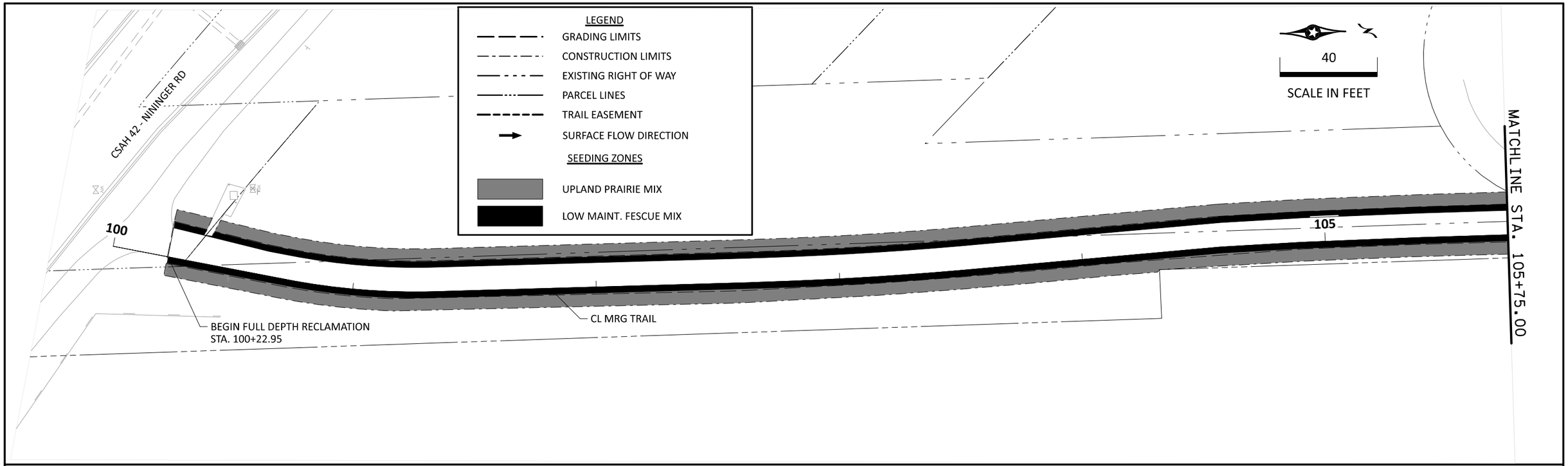
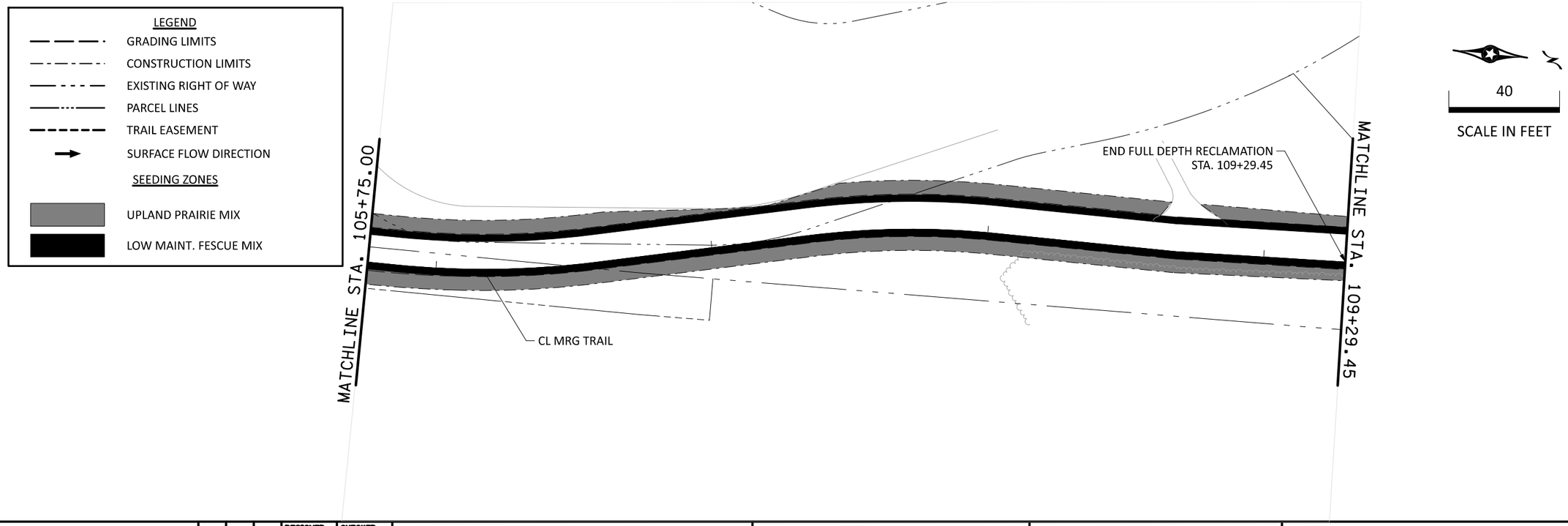
Dakota COUNTY

DAKOTA COUNTY
CP 42-161
EROSION CONTROL PLANS
SHEET 4 OF 4

SHEET 32
OF 36





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Dakota COUNTY

DAKOTA COUNTY
CP 42-161
TURF ESTABLISHMENT PLANS
SHEET 1 OF 4

SHEET 33
OF 36

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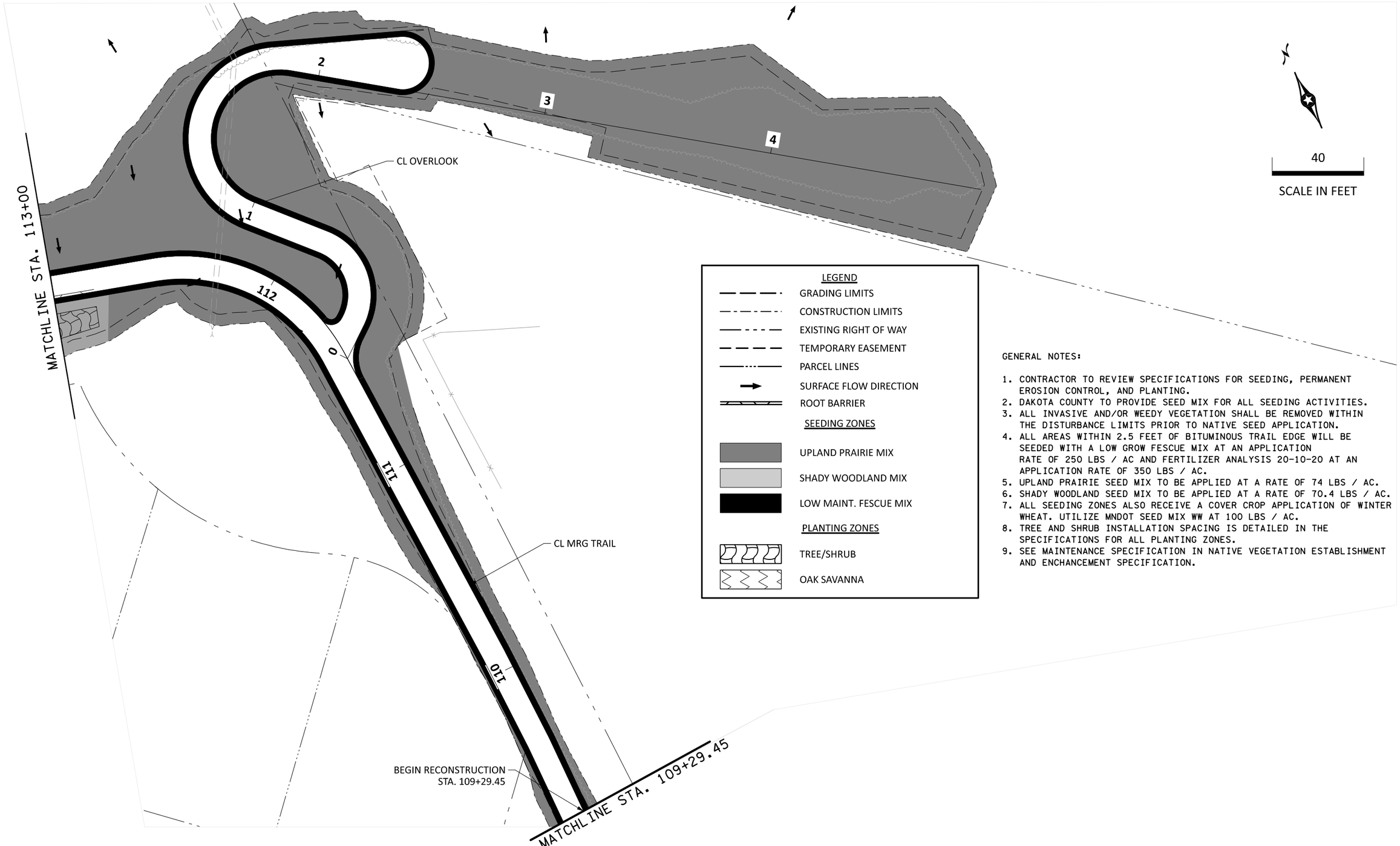

GENERAL NOTES:

1. CONTRACTOR TO REVIEW SPECIFICATIONS FOR SEEDING, PERMANENT EROSION CONTROL, AND PLANTING.
2. DAKOTA COUNTY TO PROVIDE SEED MIX FOR ALL SEEDING ACTIVITIES.
3. ALL INVASIVE AND/OR WEEDY VEGETATION SHALL BE REMOVED WITHIN THE DISTURBANCE LIMITS PRIOR TO NATIVE SEED APPLICATION.
4. ALL AREAS WITHIN 2.5 FEET OF BITUMINOUS TRAIL EDGE WILL BE SEEDED WITH A LOW GROW FESCUE MIX AT AN APPLICATION RATE OF 250 LBS / AC AND FERTILIZER ANALYSIS 20-10-20 AT AN APPLICATION RATE OF 350 LBS / AC.
5. UPLAND PRAIRIE SEED MIX TO BE APPLIED AT A RATE OF 74 LBS / AC.
6. SHADY WOODLAND SEED MIX TO BE APPLIED AT A RATE OF 70.4 LBS / AC.
7. ALL SEEDING ZONES ALSO RECEIVE A COVER CROP APPLICATION OF WINTER WHEAT. UTILIZE MNDOT SEED MIX WW AT 100 LBS / AC.
8. TREE AND SHRUB INSTALLATION SPACING IS DETAILED IN THE SPECIFICATIONS FOR ALL PLANTING ZONES.
9. SEE MAINTENANCE SPECIFICATION IN NATIVE VEGETATION ESTABLISHMENT AND ENCHANCEMENT SPECIFICATION.

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Dakota COUNTY

DAKOTA COUNTY
CP 42-161
TURF ESTABLISHMENT PLANS
SHEET 2 OF 4

SHEET 34
OF 36

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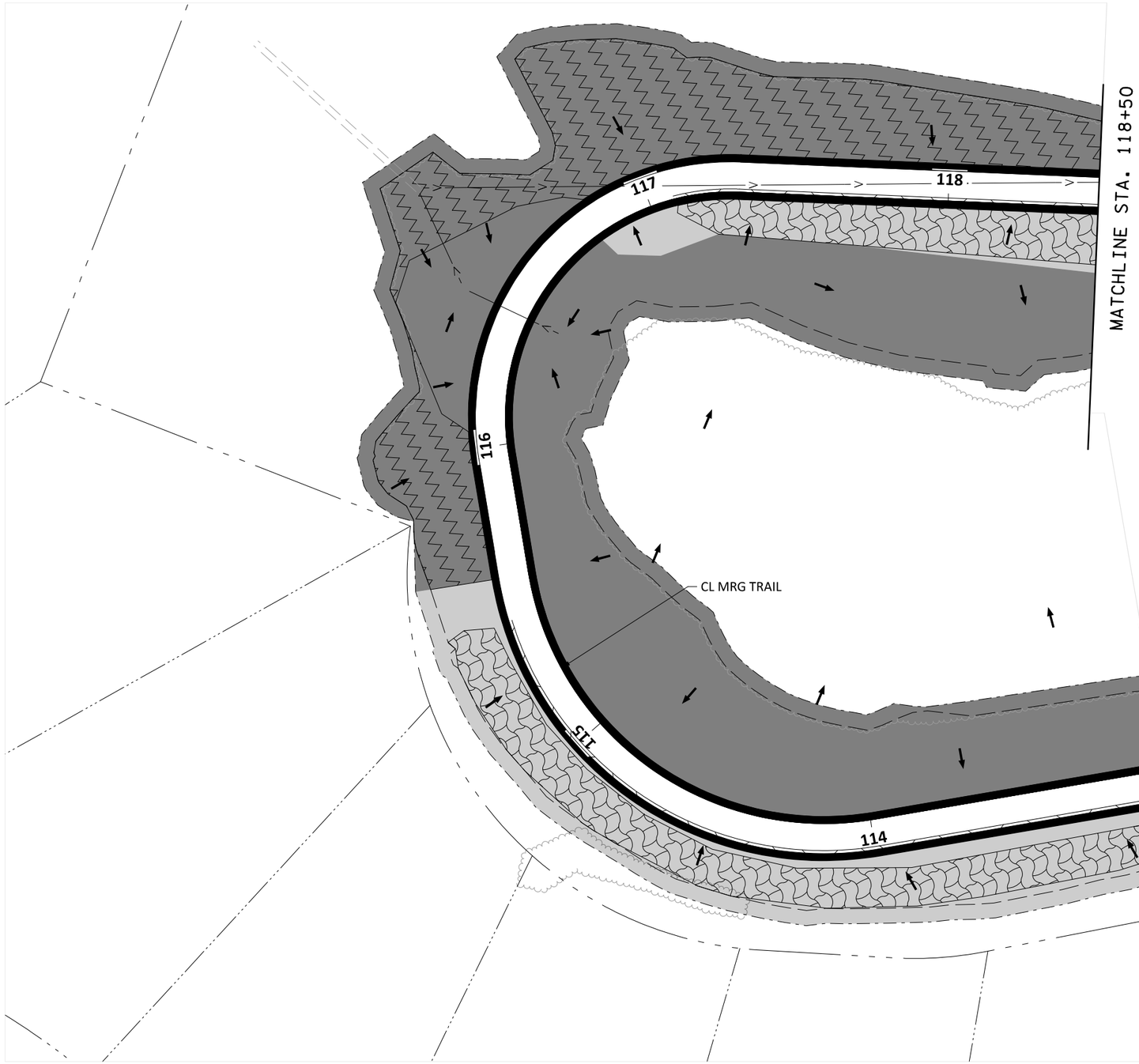

SCALE IN FEET

LEGEND

- GRADING LIMITS
- CONSTRUCTION LIMITS
- EXISTING RIGHT OF WAY
- PARCEL LINES
- SURFACE FLOW DIRECTION
- ROOT BARRIER

SEEDING ZONES

- UPLAND PRAIRIE MIX
- SHADY WOODLAND MIX
- LOW MAINT. FESCUE MIX

PLANTING ZONES

- TREE/SHRUB
- OAK SAVANNA

GENERAL NOTES:

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8. TREE AND SHRUB INSTALLATION SPACING IS DETAILED IN THE SPECIFICATIONS FOR ALL PLANTING ZONES.
9. SEE MAINTENANCE SPECIFICATION IN NATIVE VEGETATION ESTABLISHMENT AND ENCHANCEMENT SPECIFICATION.

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DAKOTA COUNTY

CP 42-161

TURF ESTABLISHMENT PLANS

SHEET 3 OF 4

SHEET 35

OF 36

LEGEND

- GRADING LIMITS
- CONSTRUCTION LIMITS
- EXISTING RIGHT OF WAY
- SURFACE FLOW DIRECTION
- ROOT BARRIER

SEEDING ZONES

- UPLAND PRAIRIE MIX
- SHADY WOODLAND MIX
- LOW MAINT. FESCUE MIX

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- TREE/SHRUB
- OAK SAVANNA

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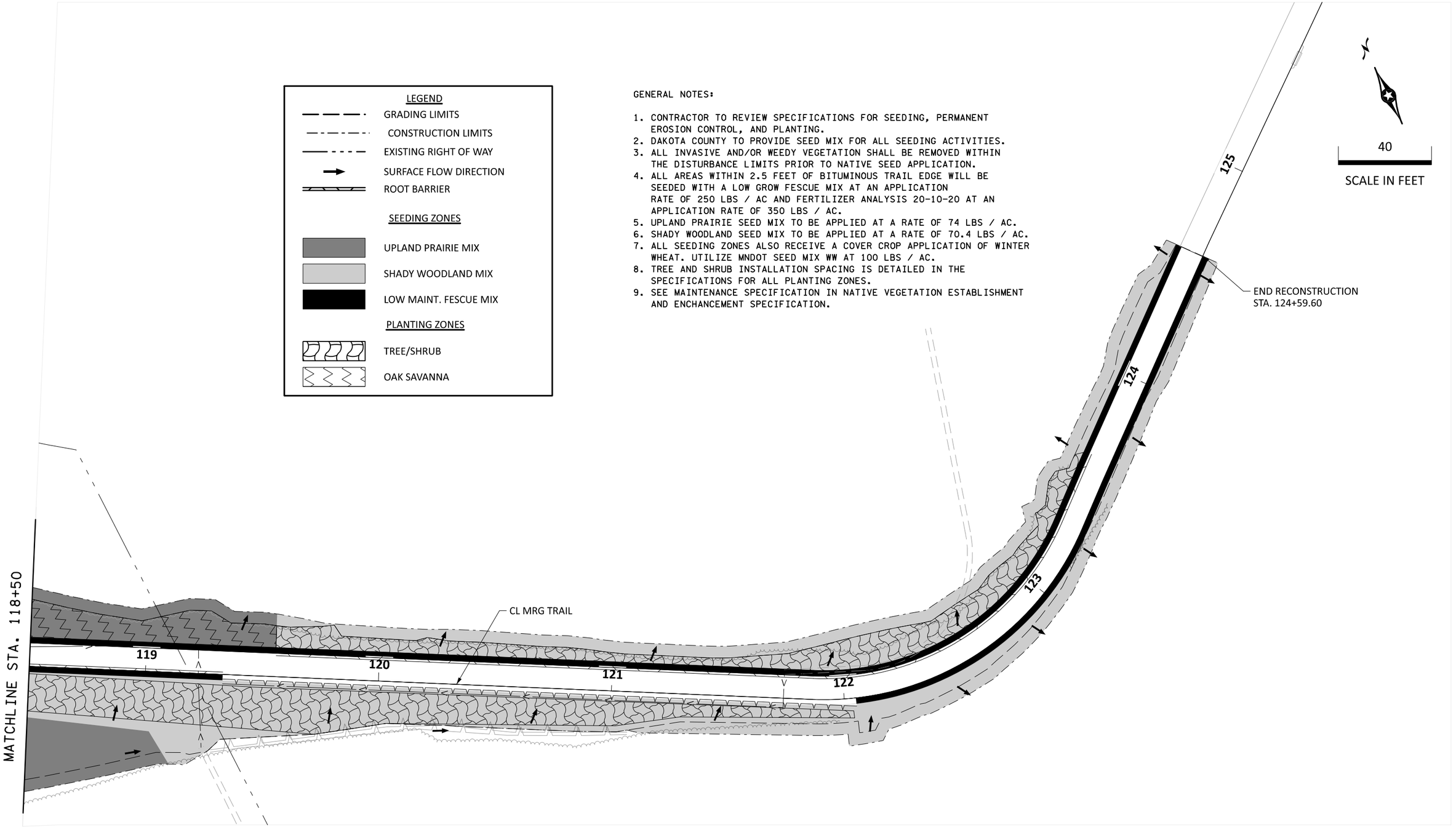

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DAKOTA COUNTY

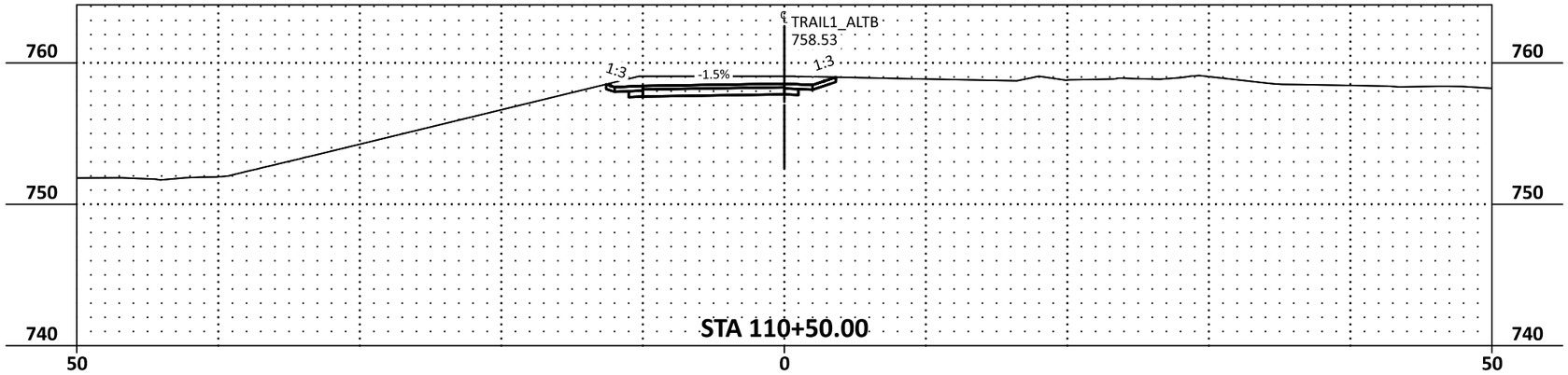
CP 42-161

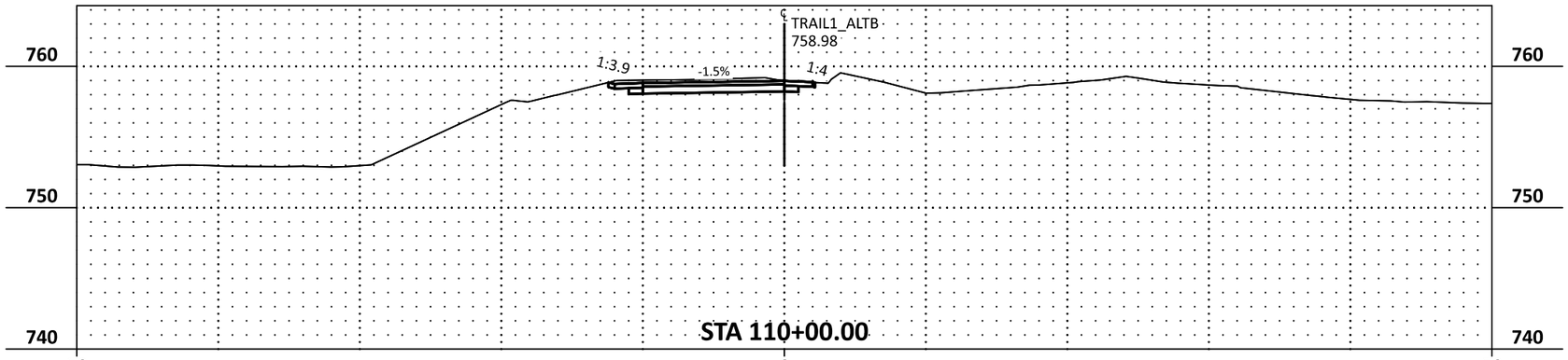
TURF ESTABLISHMENT PLANS

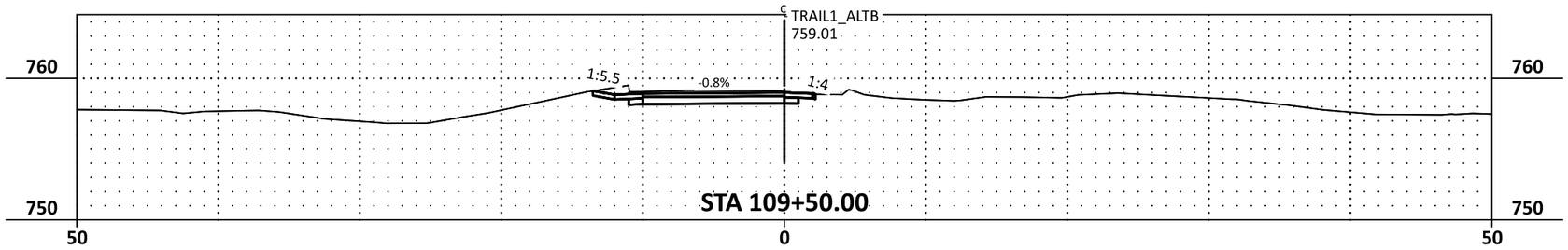
SHEET 4 OF 4

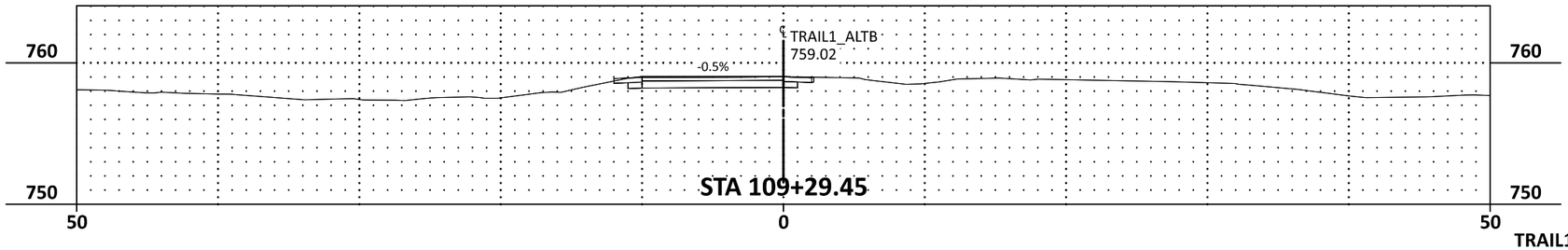
SHEET 36

OF 36









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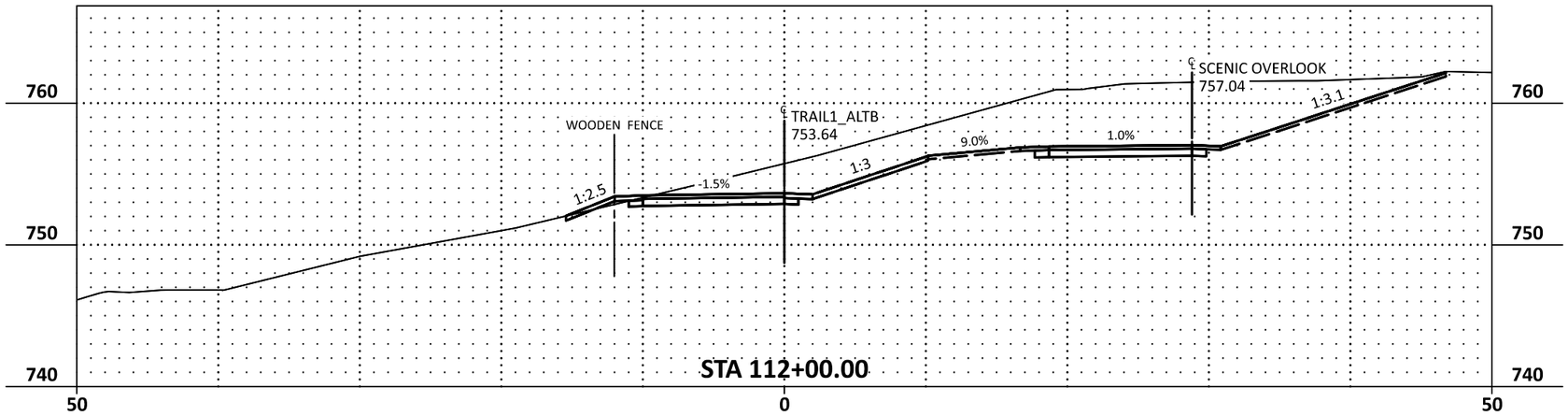
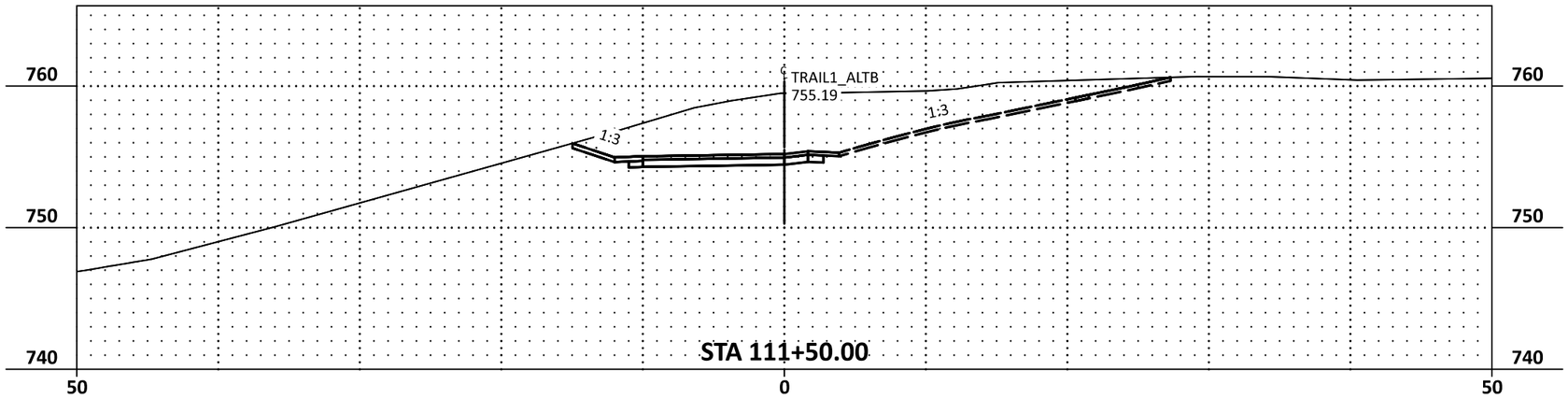
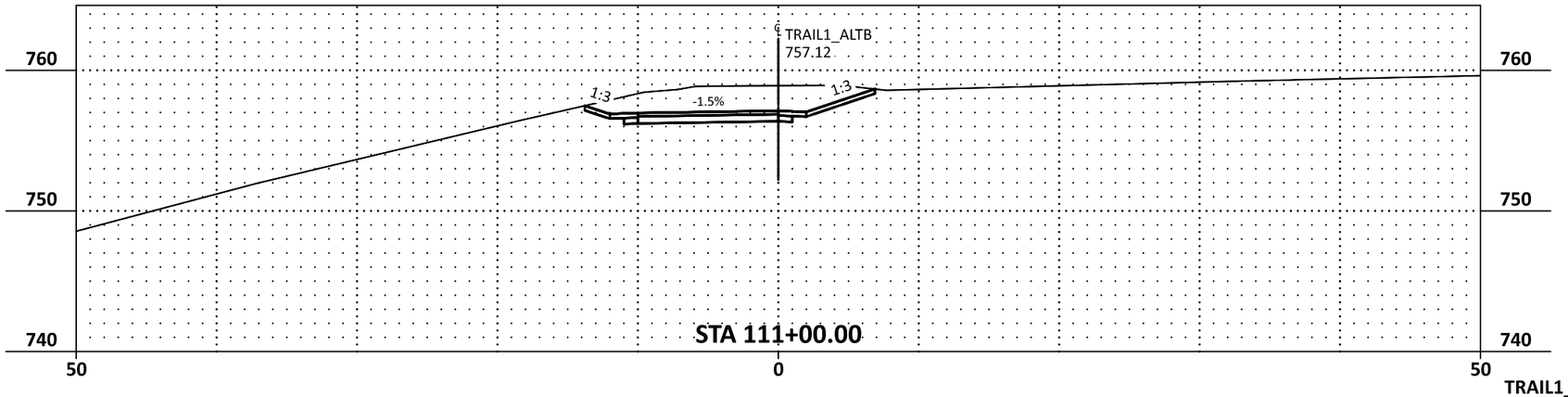
DAKOTA COUNTY | MRG TRAIL | SHEET NO. 1 OF 22 SHEETS







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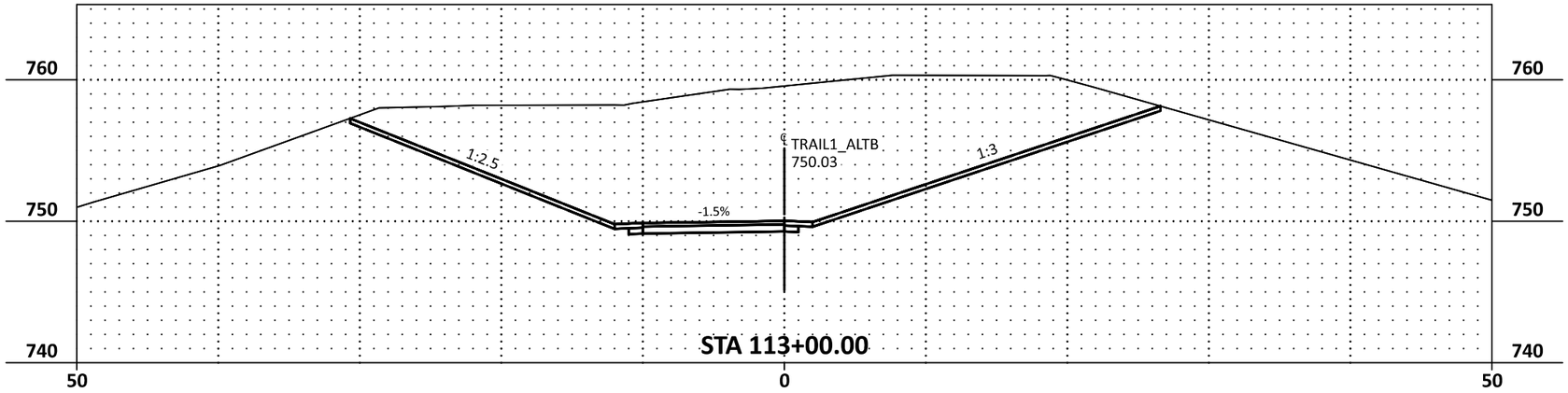
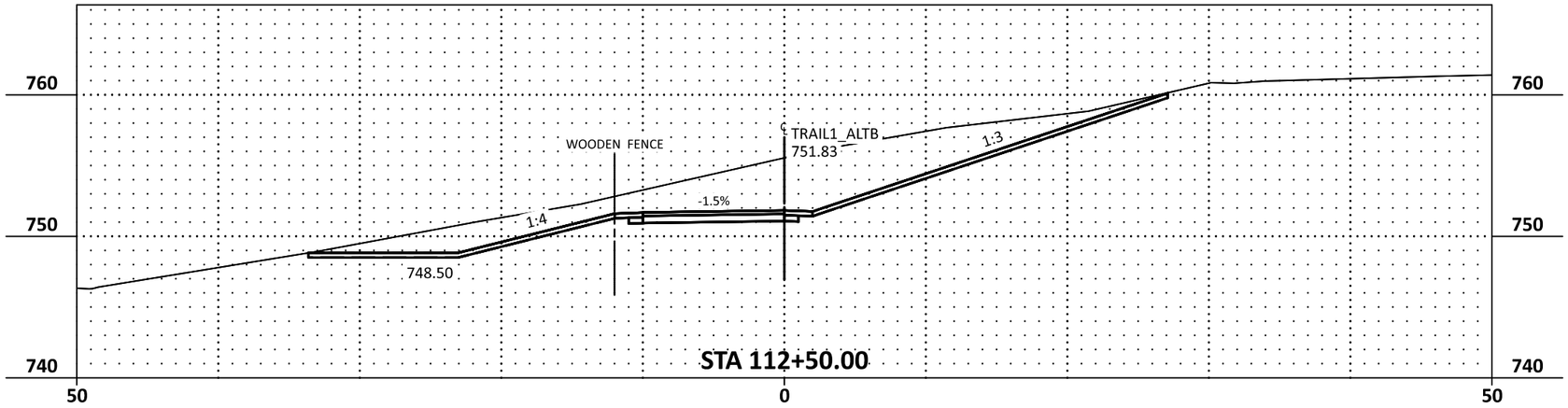
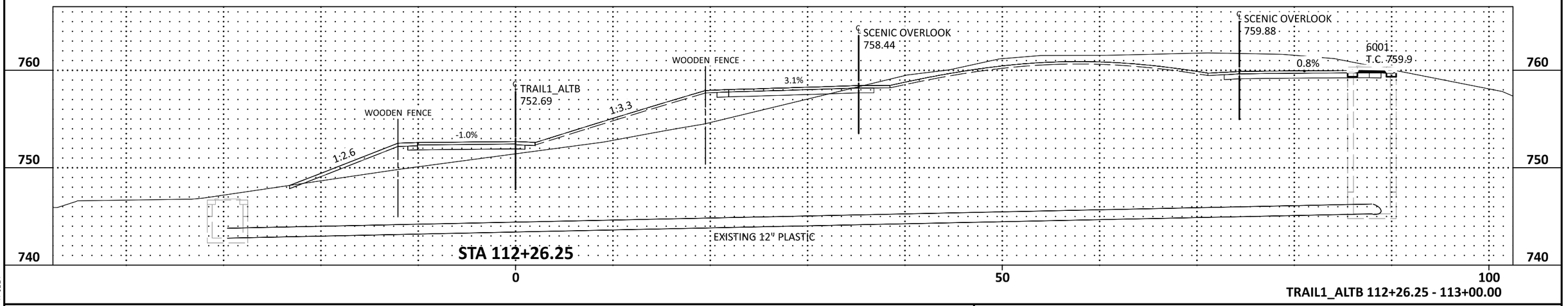
DAKOTA COUNTY | MRG TRAIL | SHEET NO. 2 OF 22 SHEETS







TRAIL1_ALTB 112+26.25 - 113+00.00

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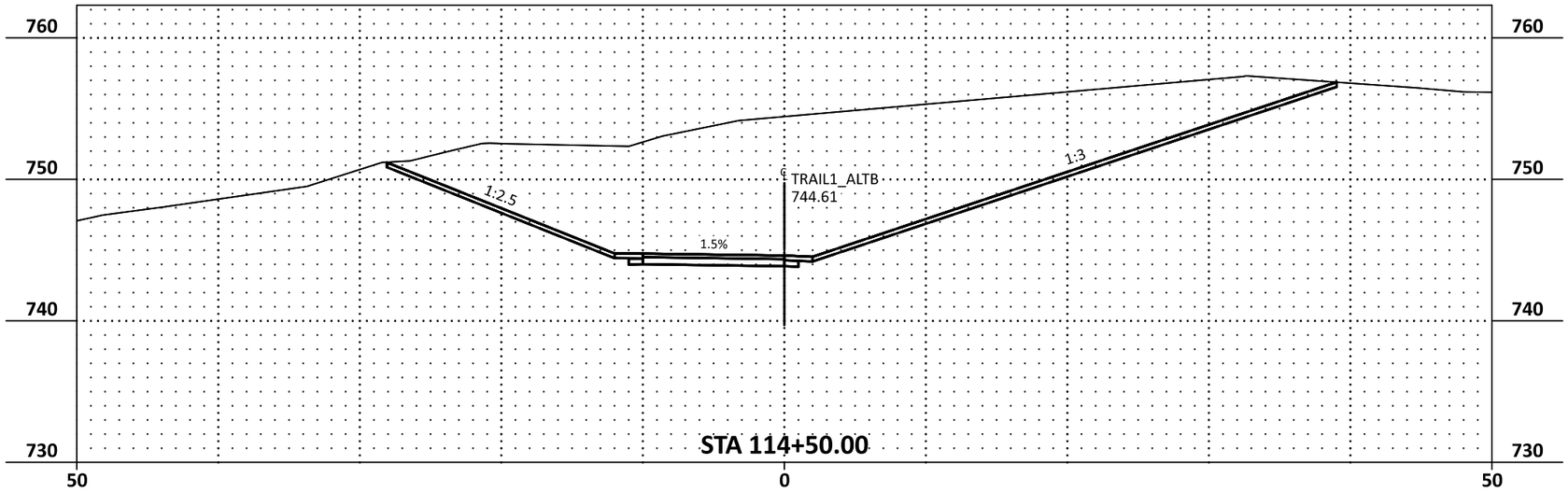

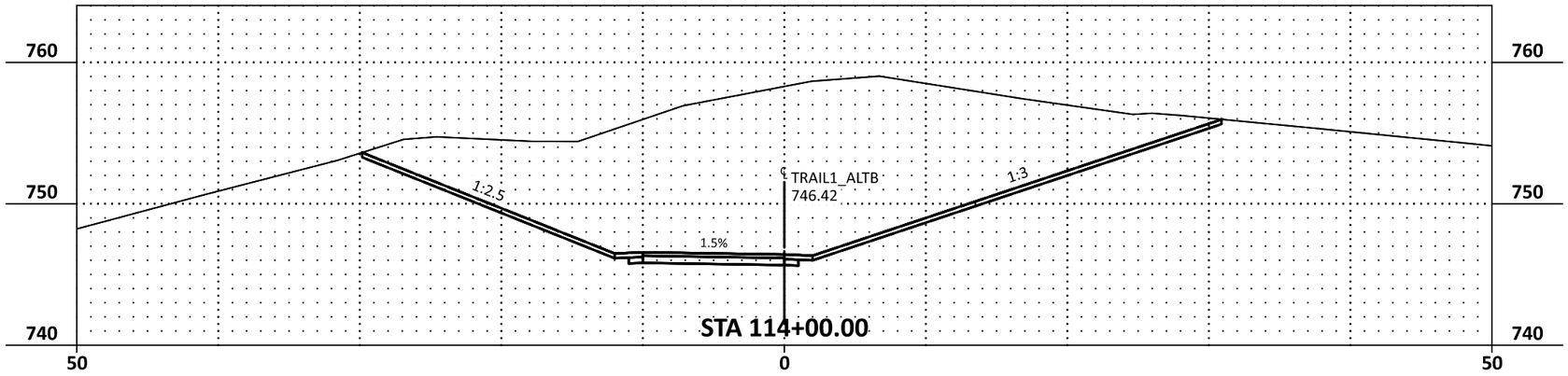

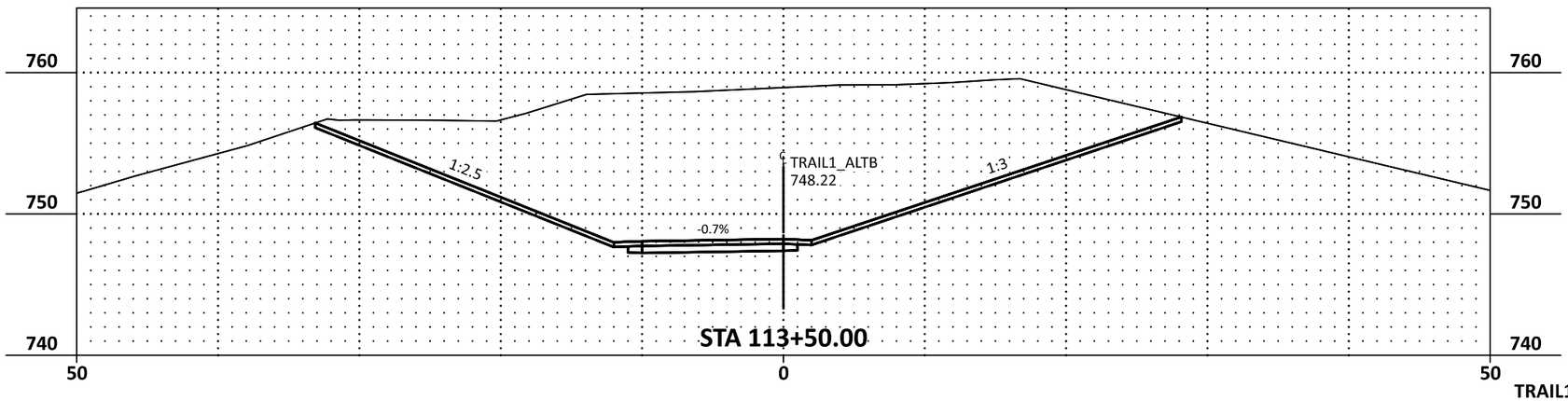

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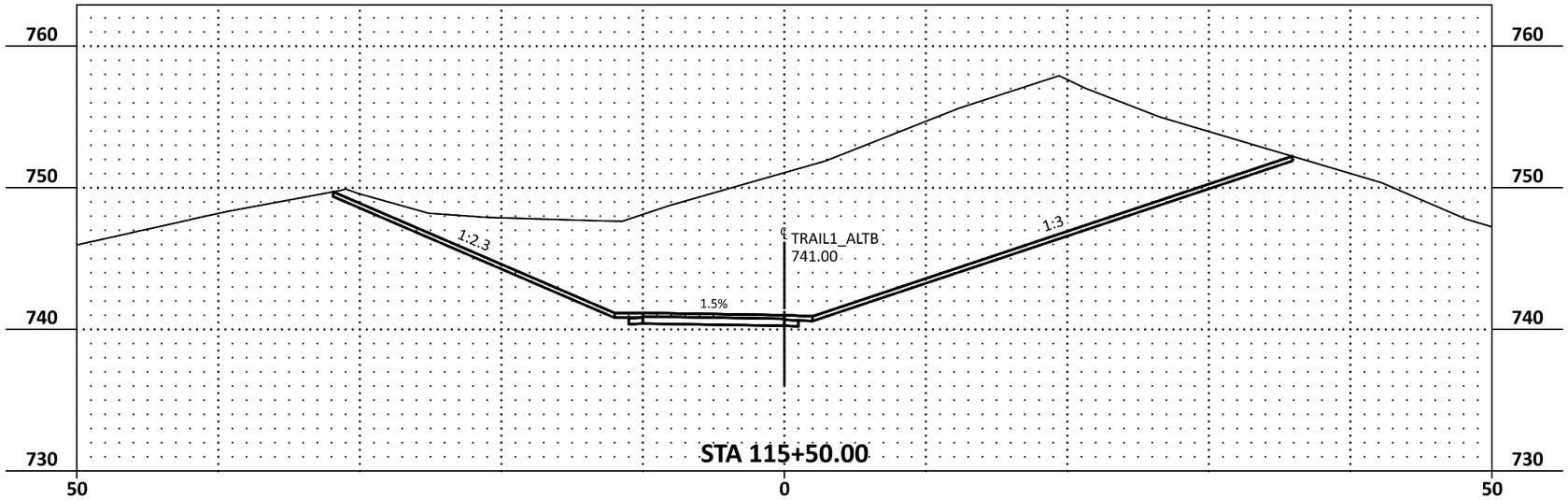
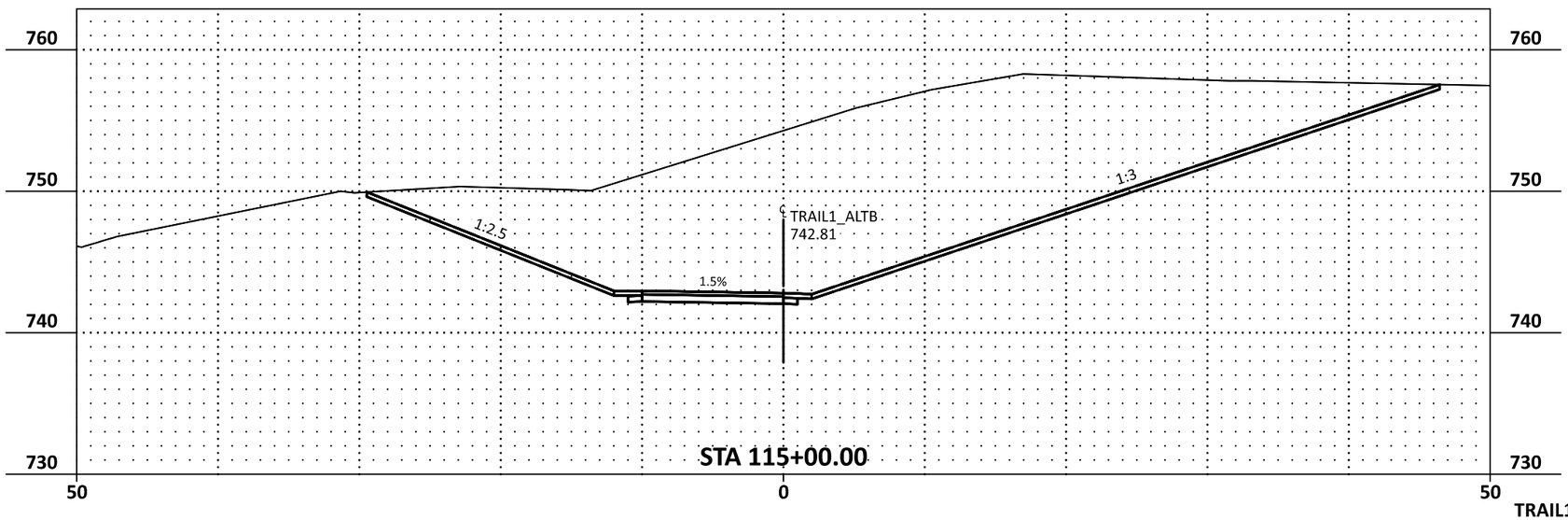
TRAIL1_ALTB 113+50.00 - 114+50.00





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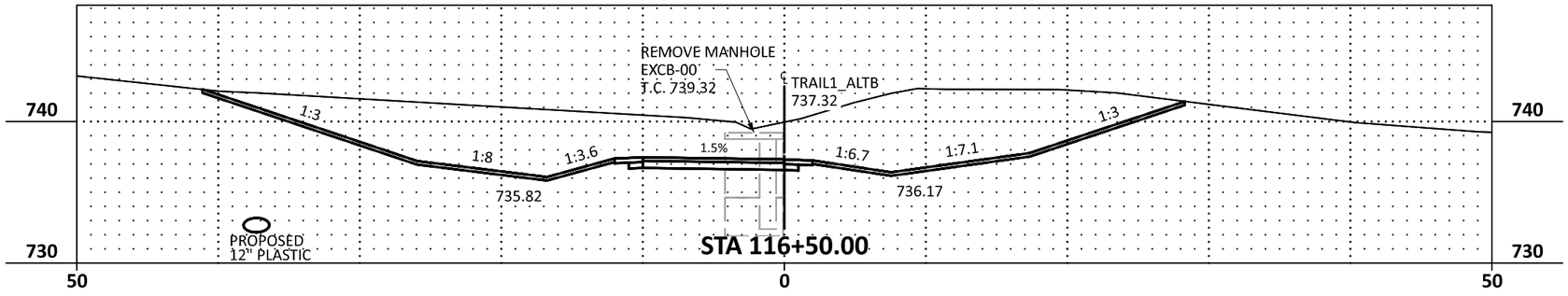

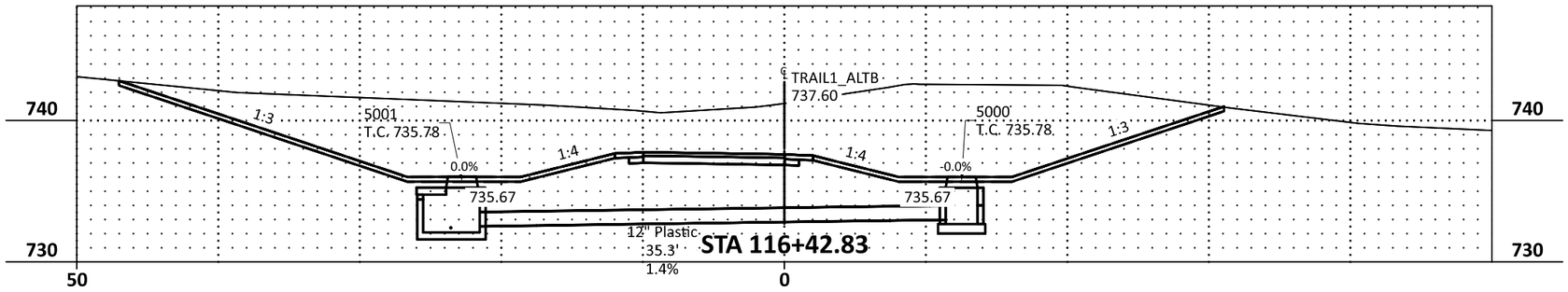

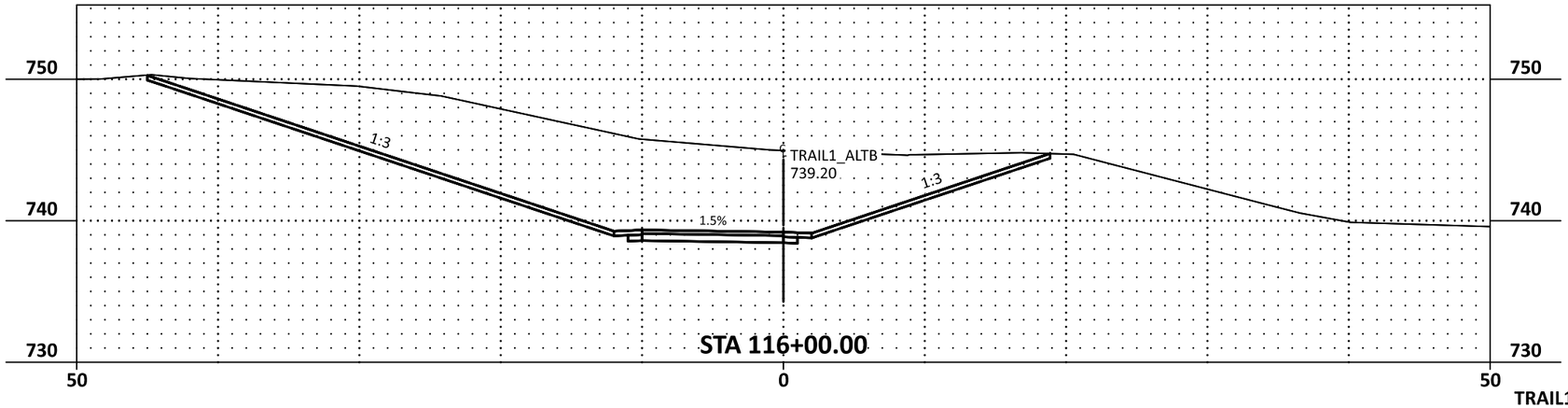

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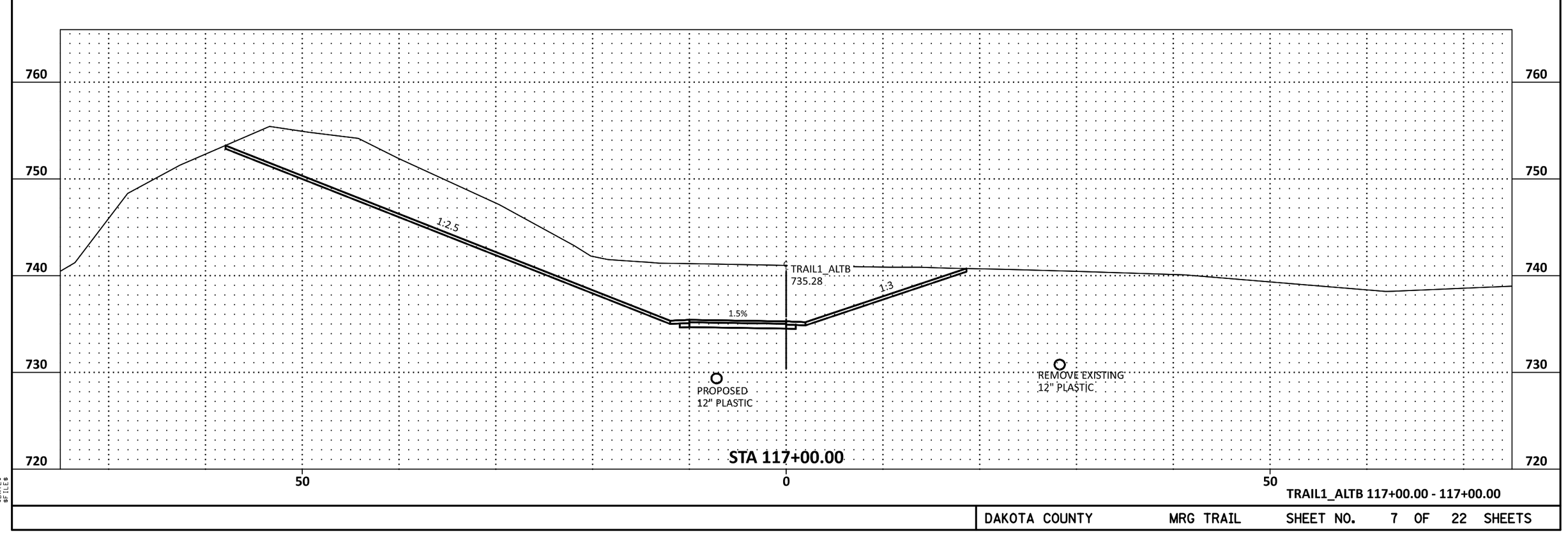

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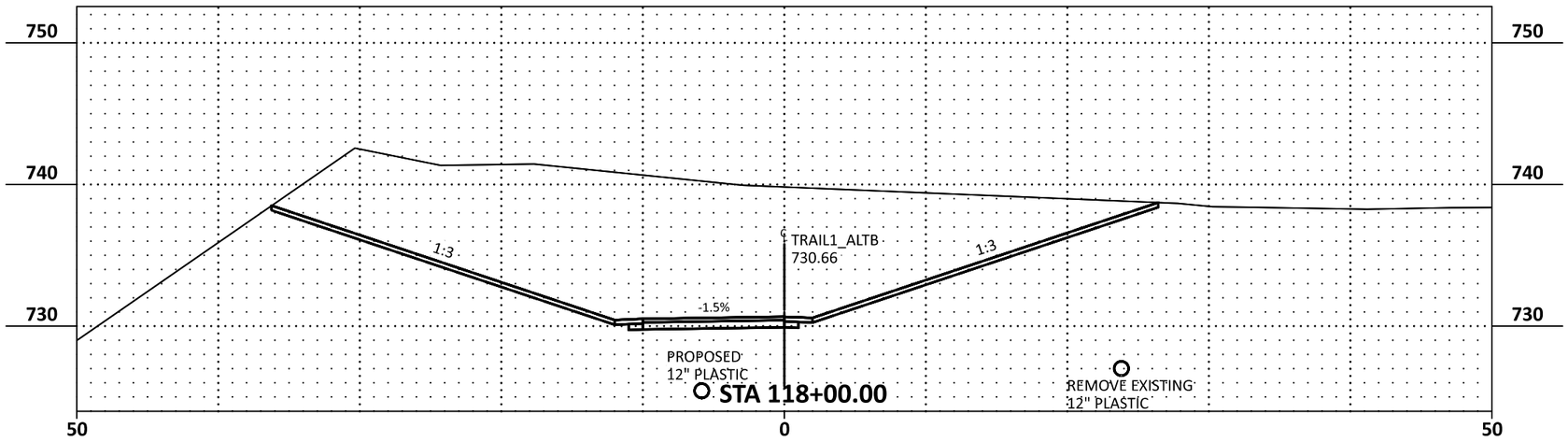
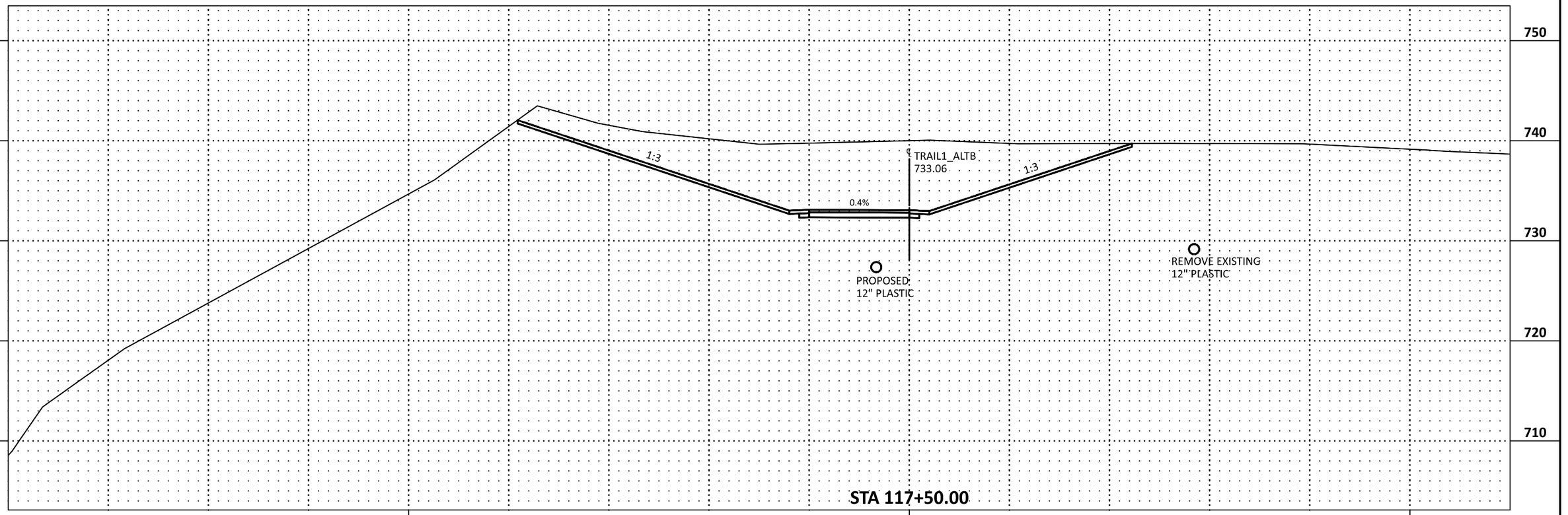
DAKOTA COUNTY | MRG TRAIL | SHEET NO. 7 OF 22 SHEETS





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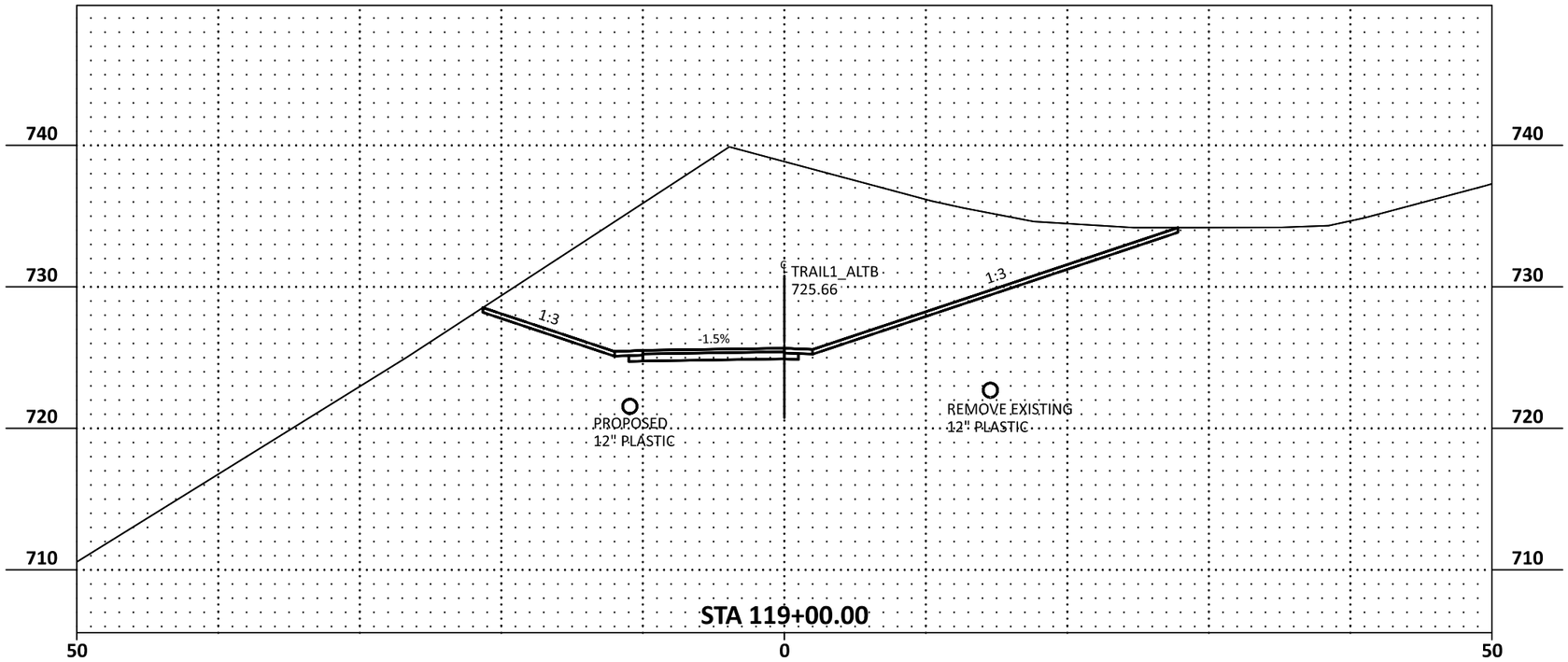

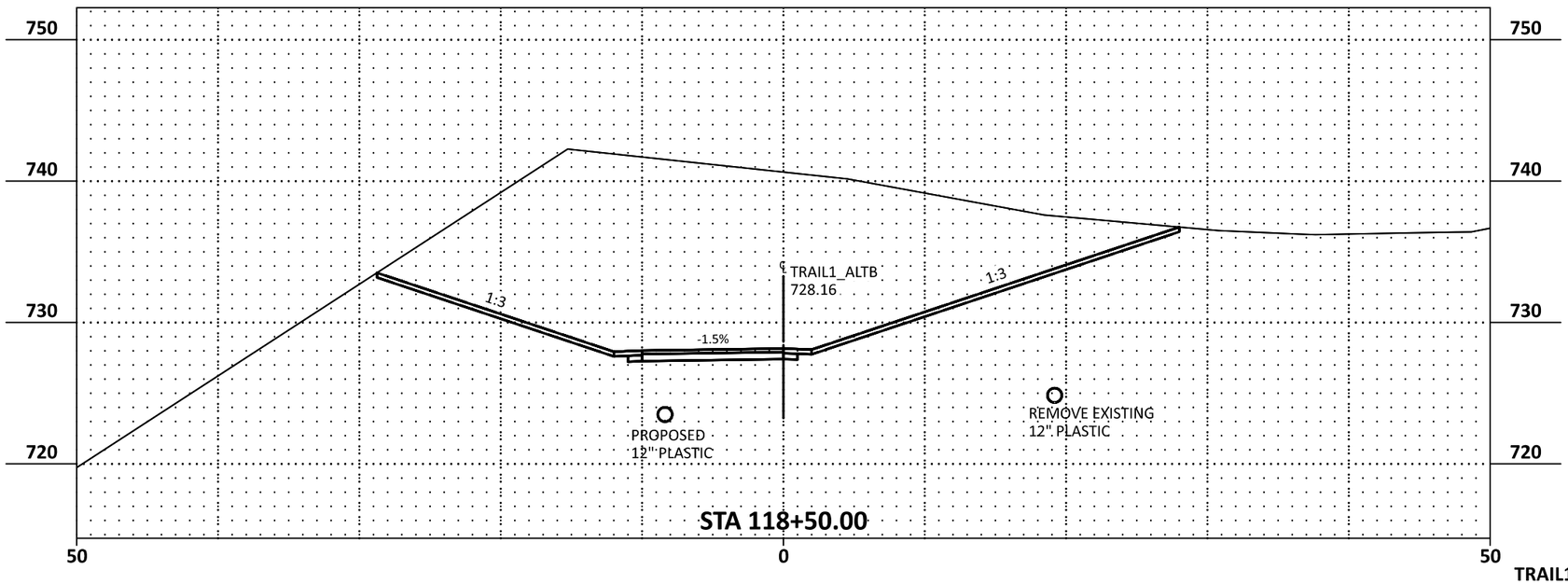

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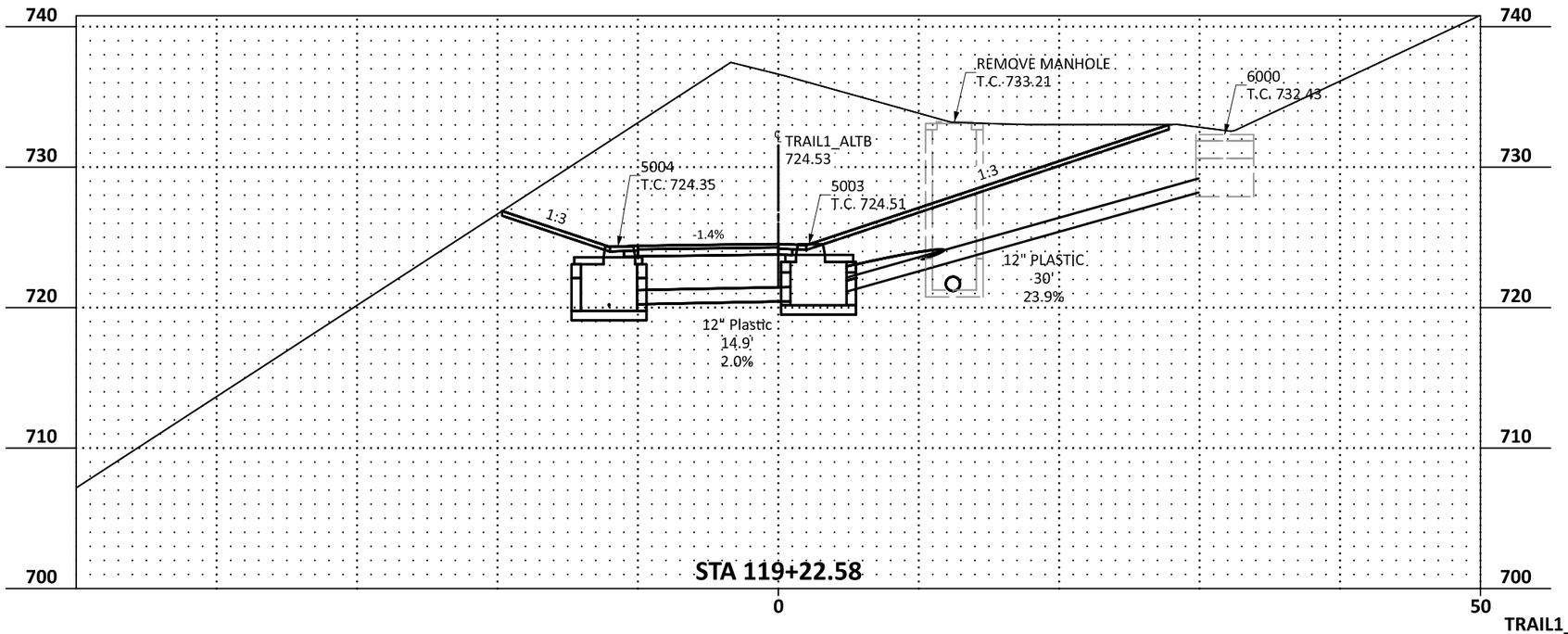

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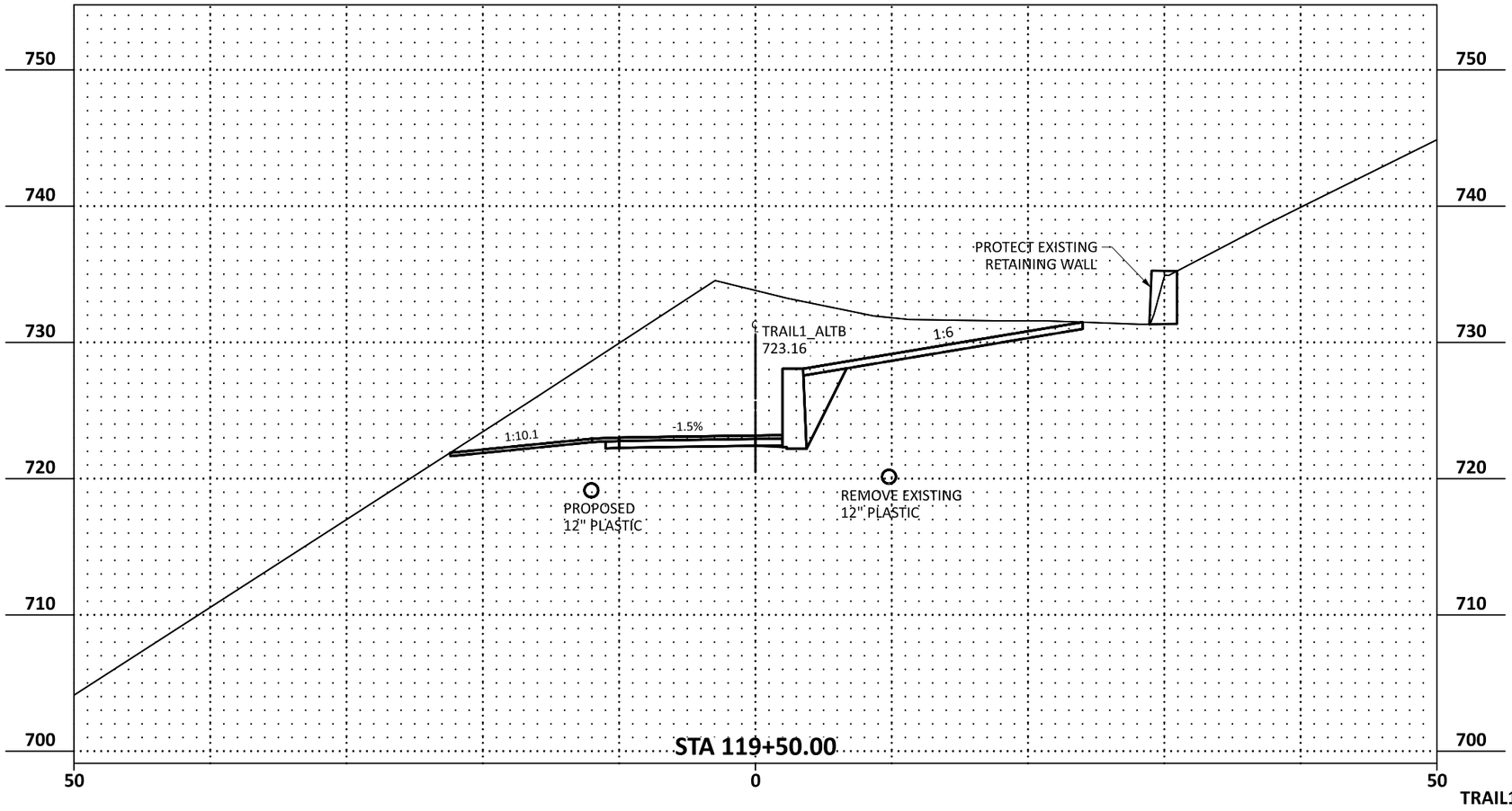

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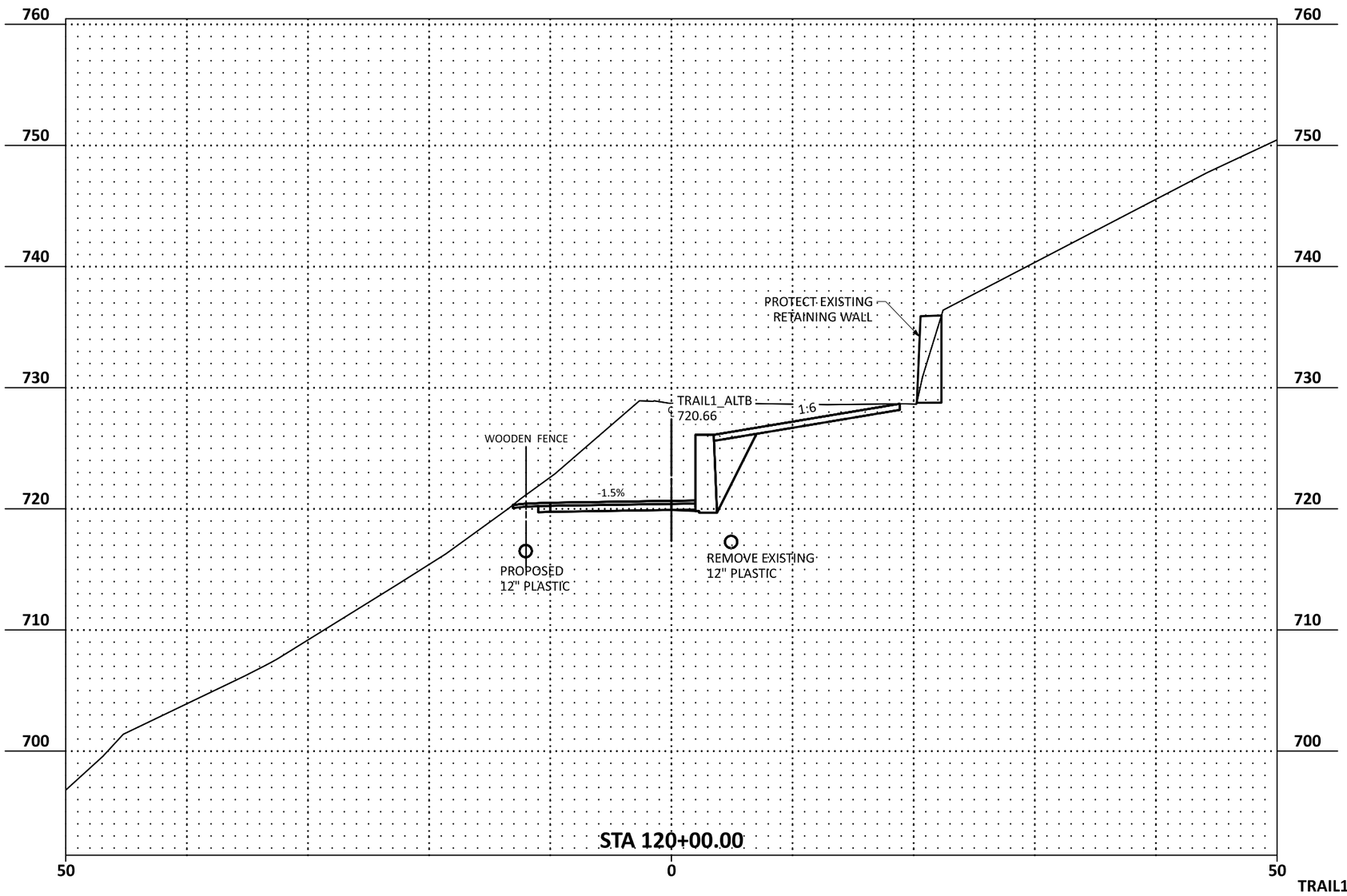

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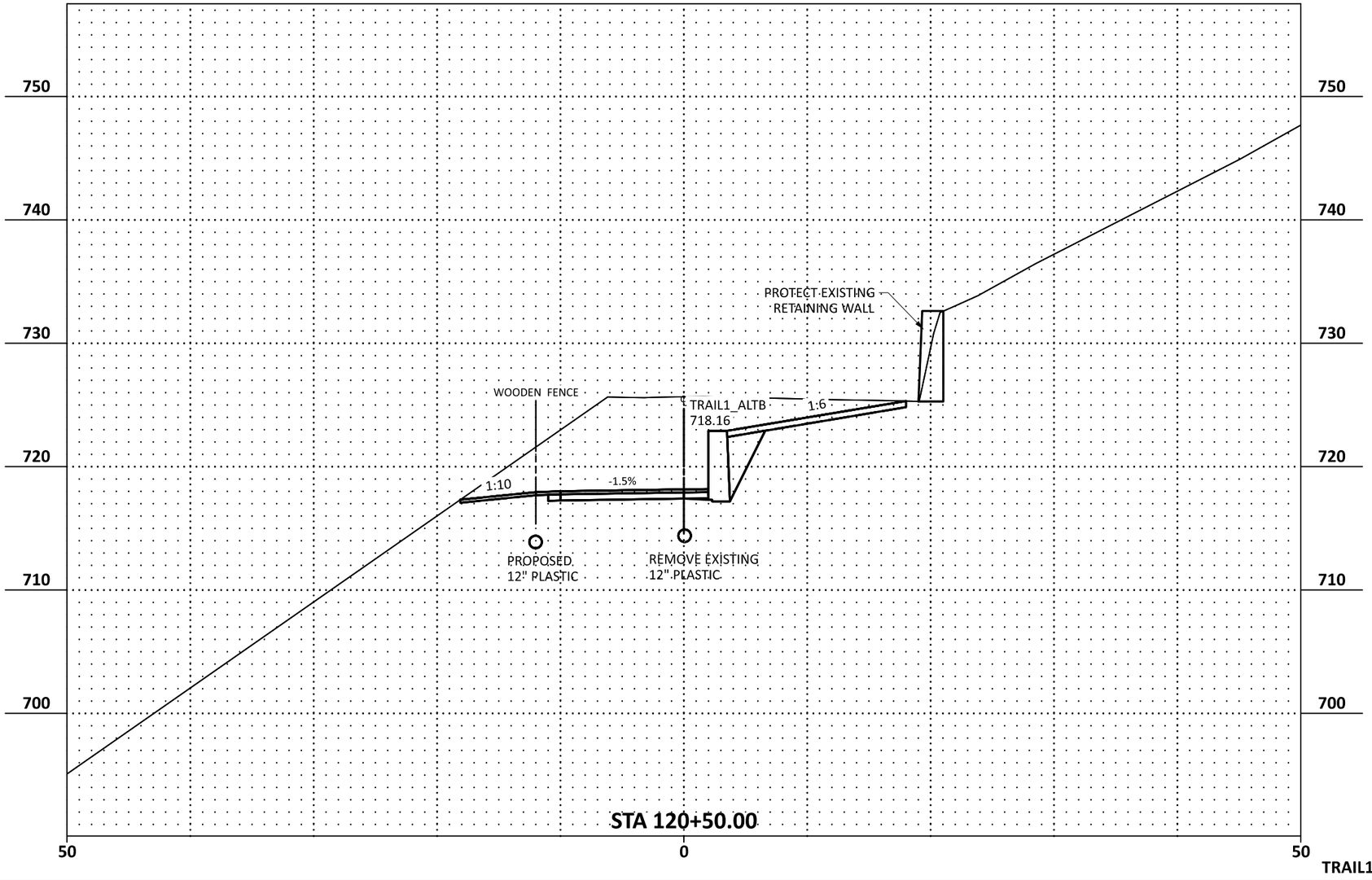

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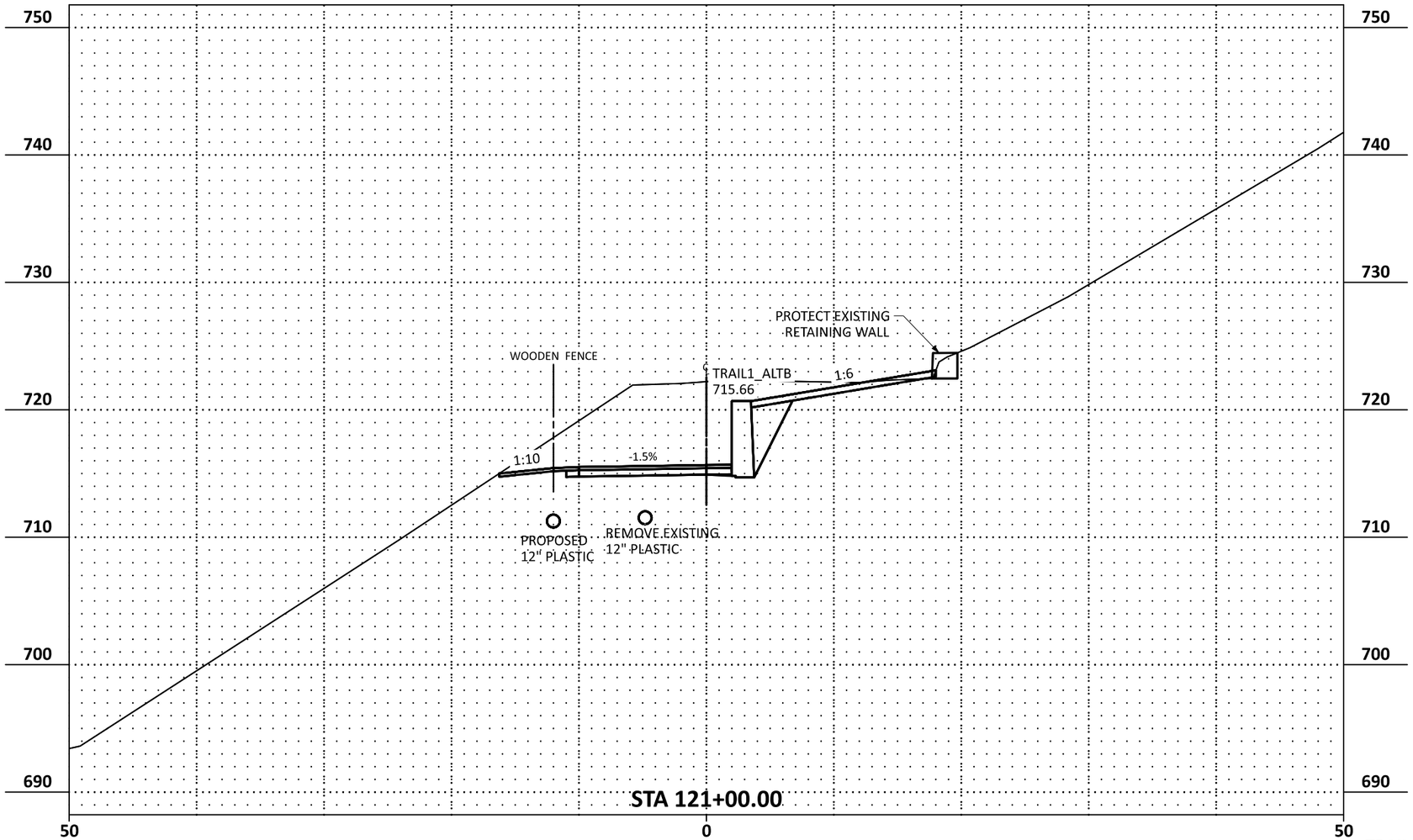

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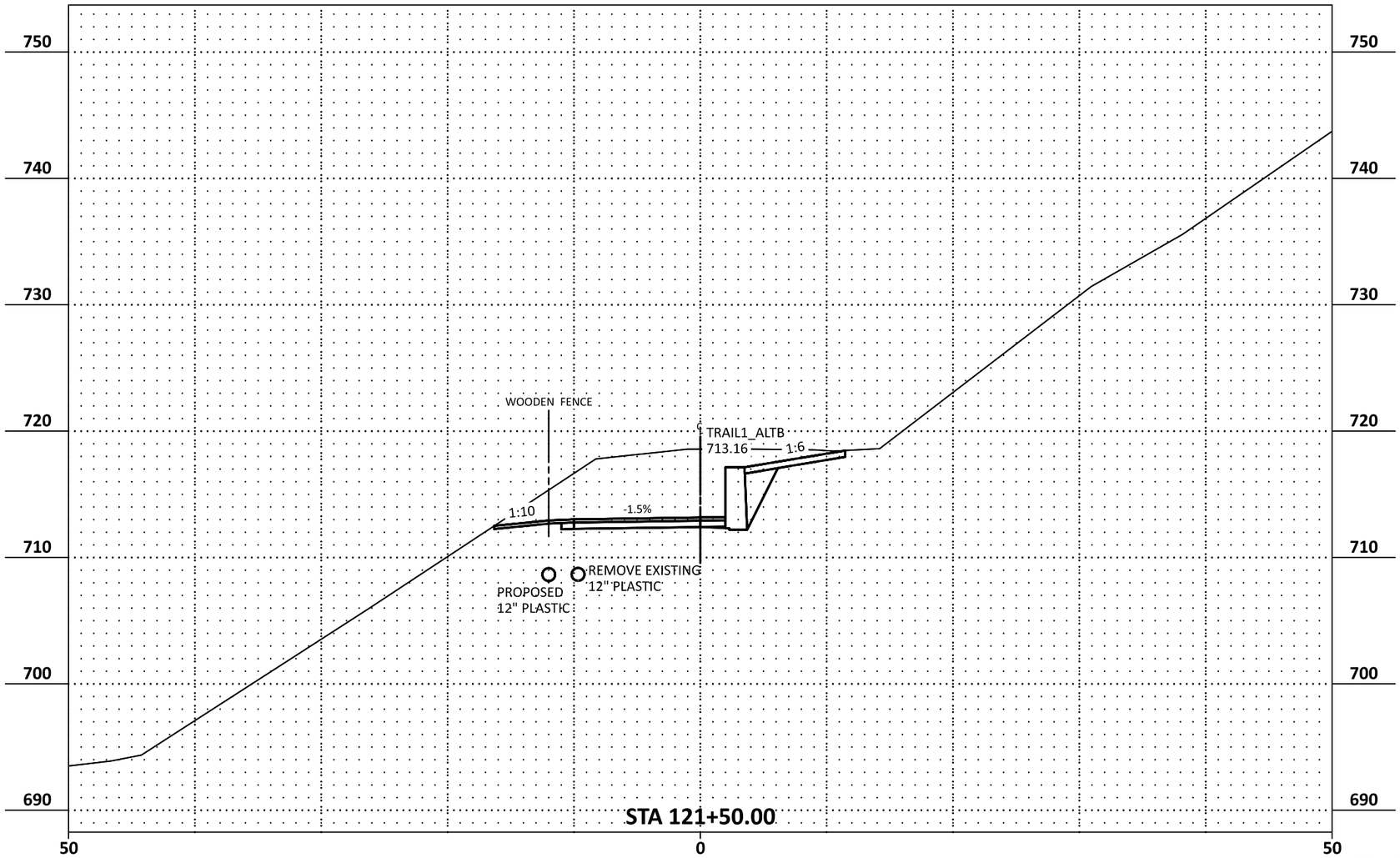

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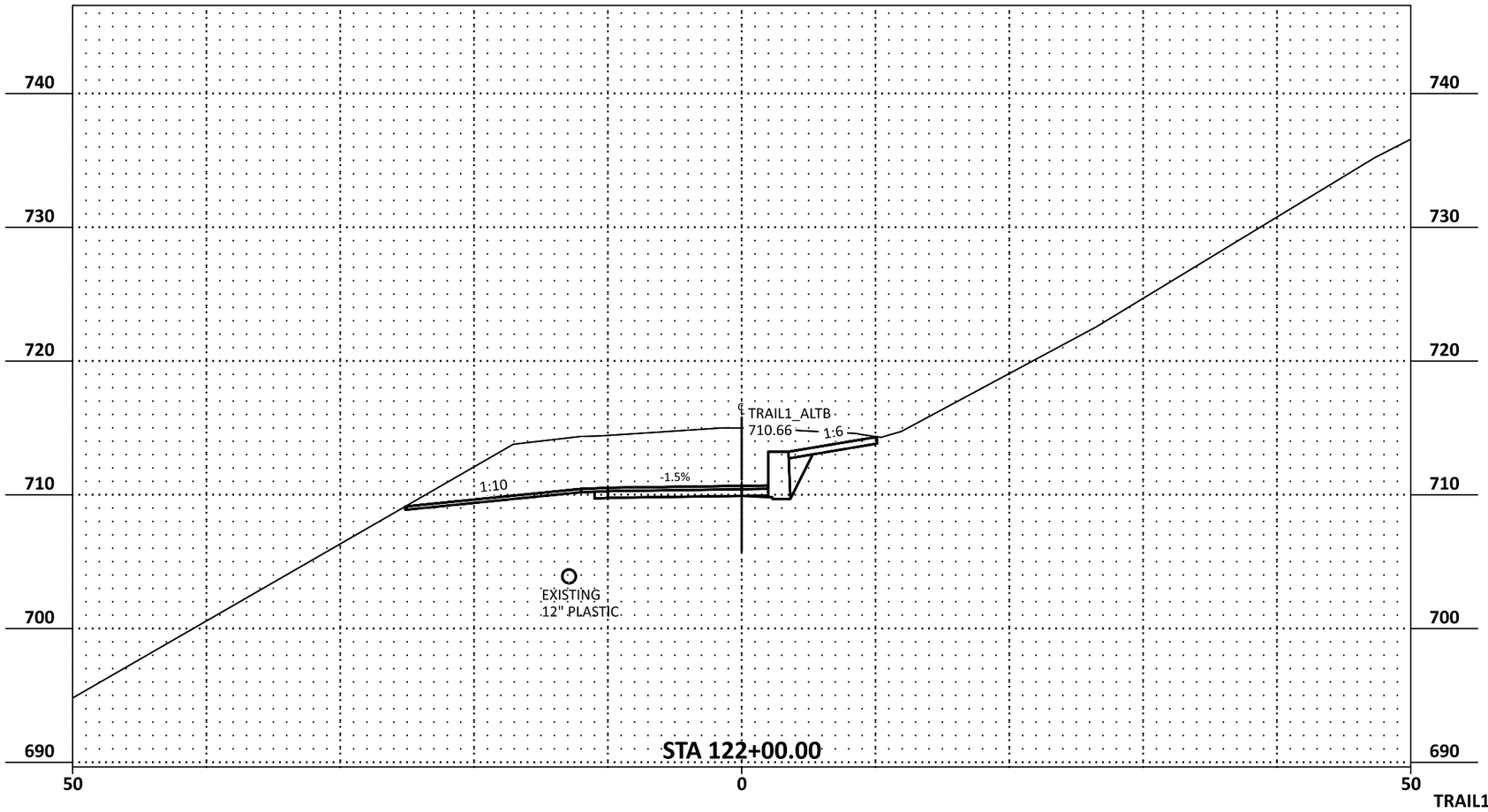

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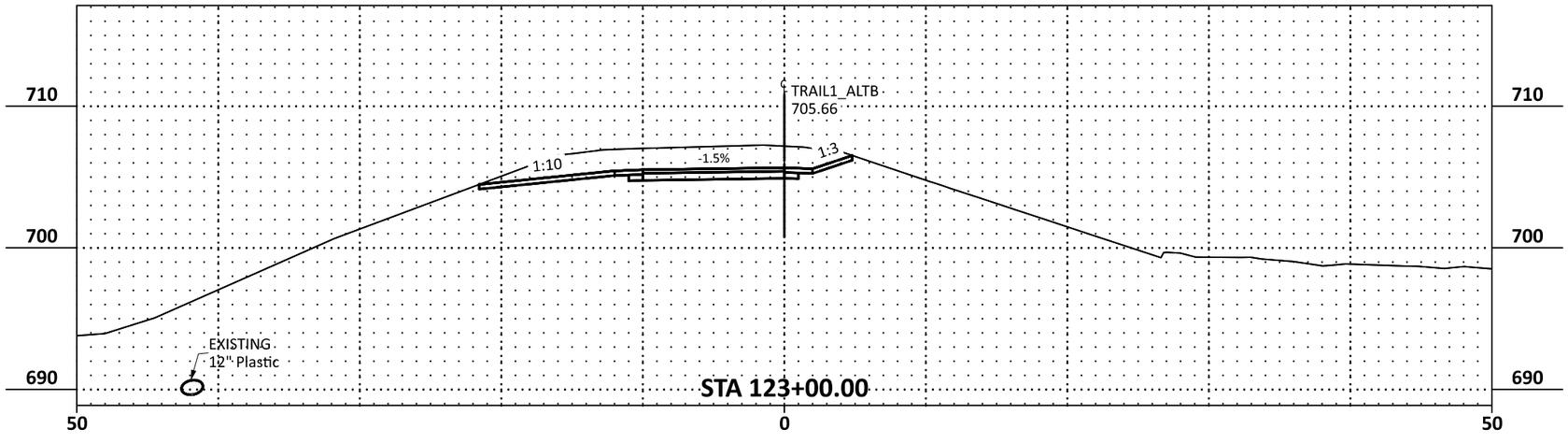

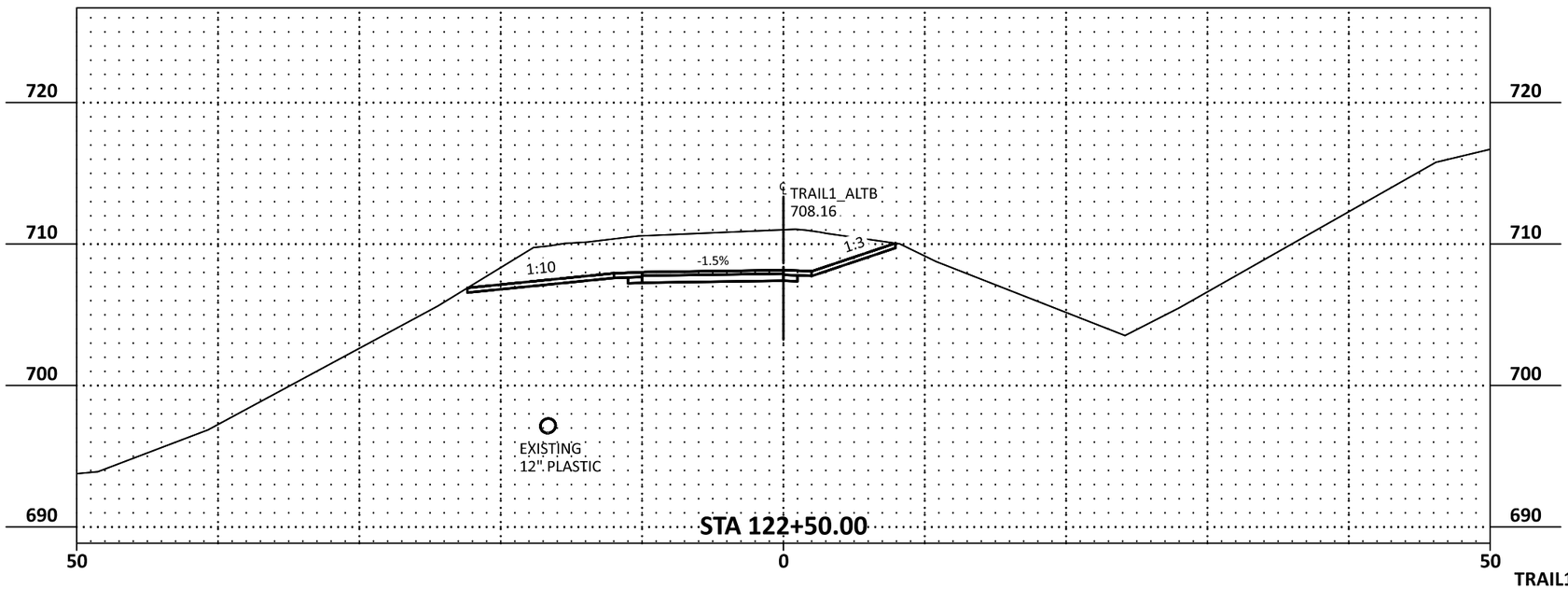

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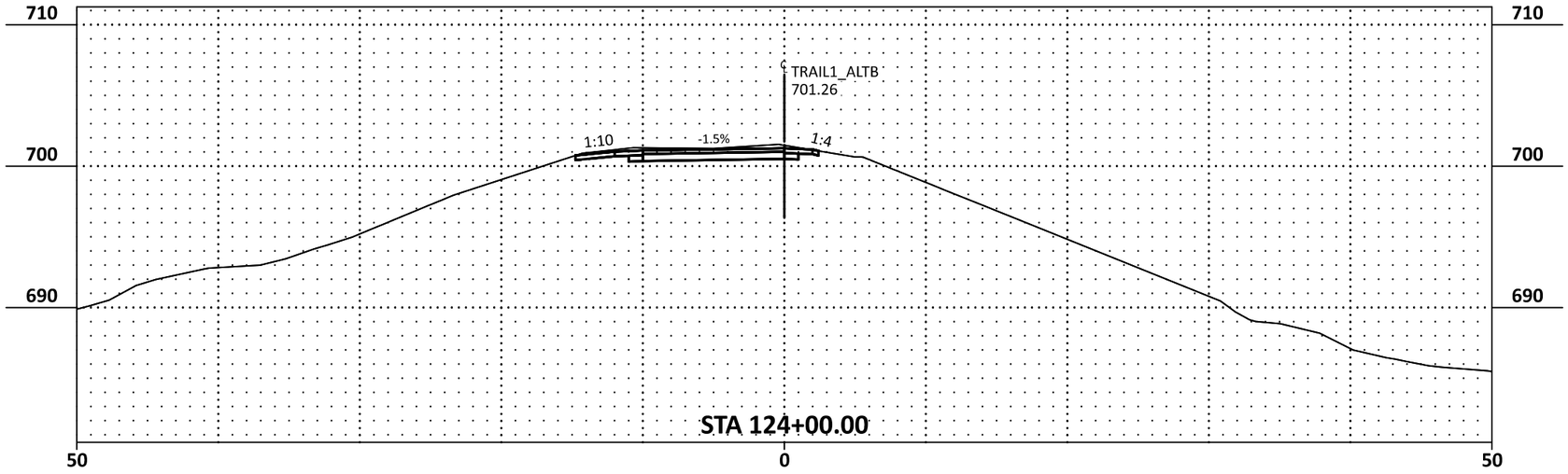

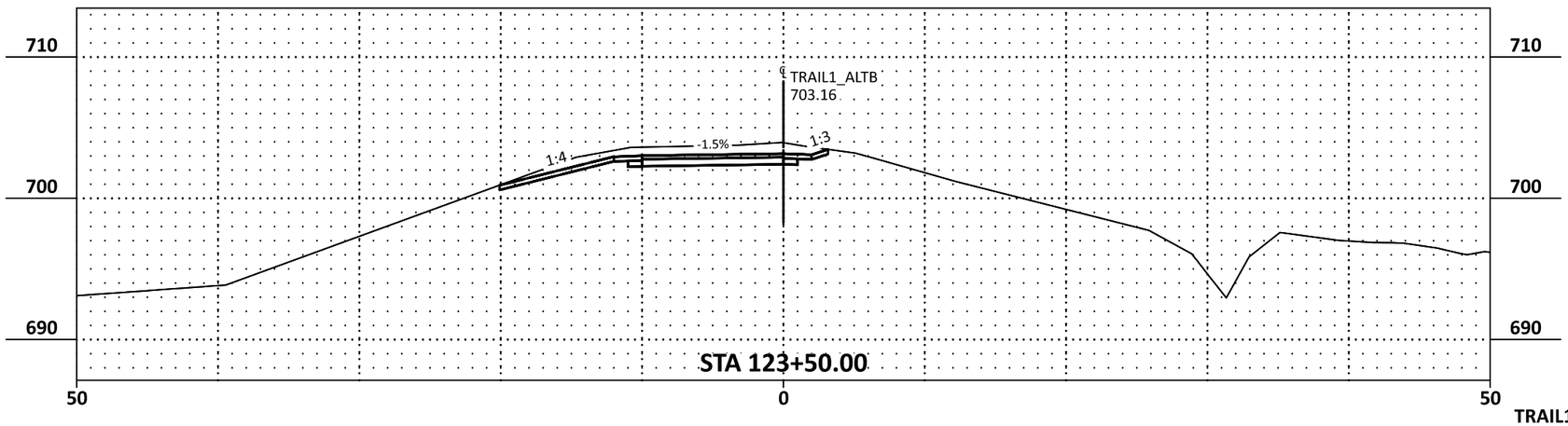

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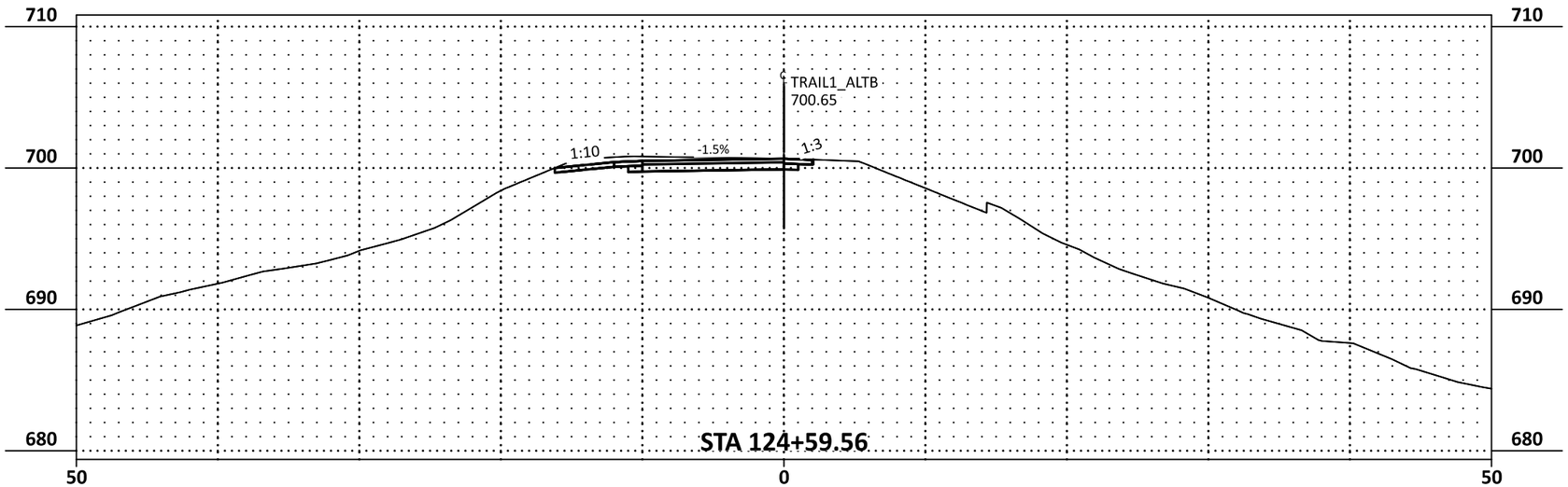

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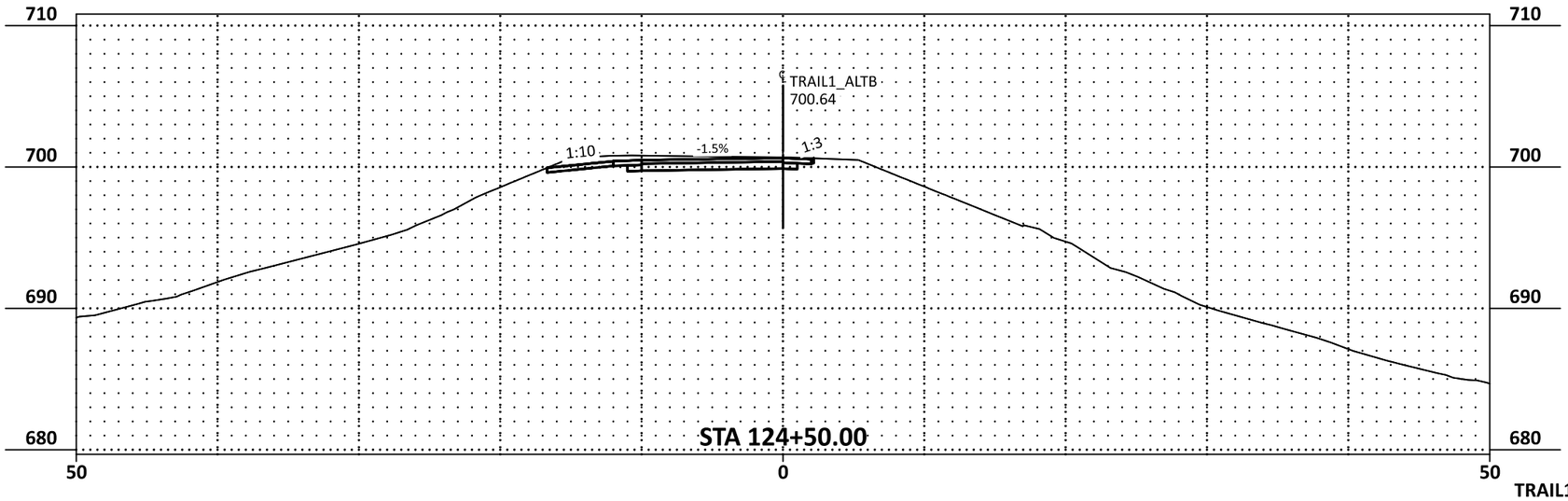

STA 124+50.00

TRAIL1_ALTB 124+50.00 - 124+59.56

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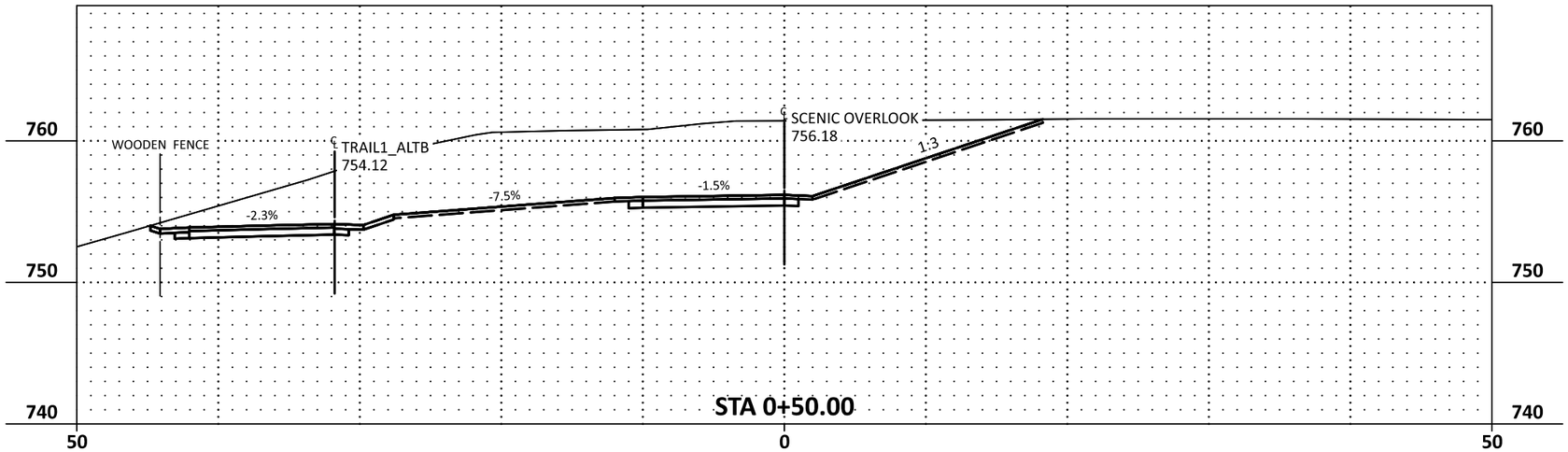

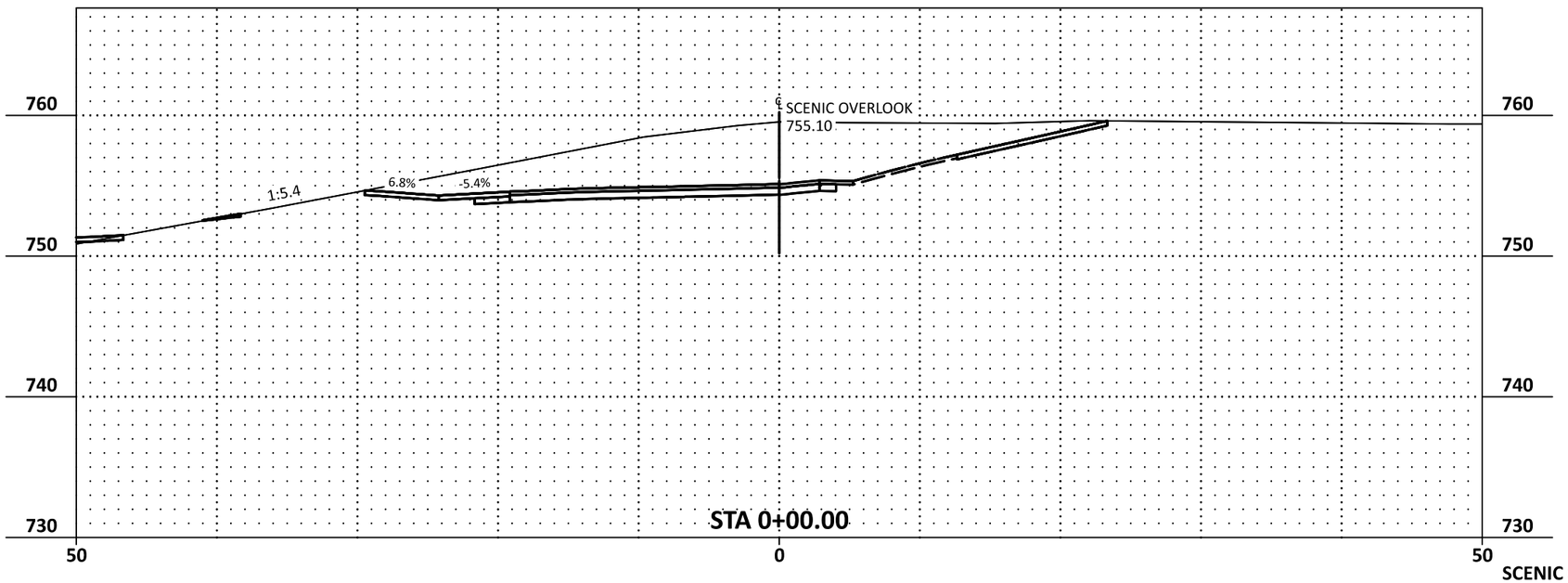

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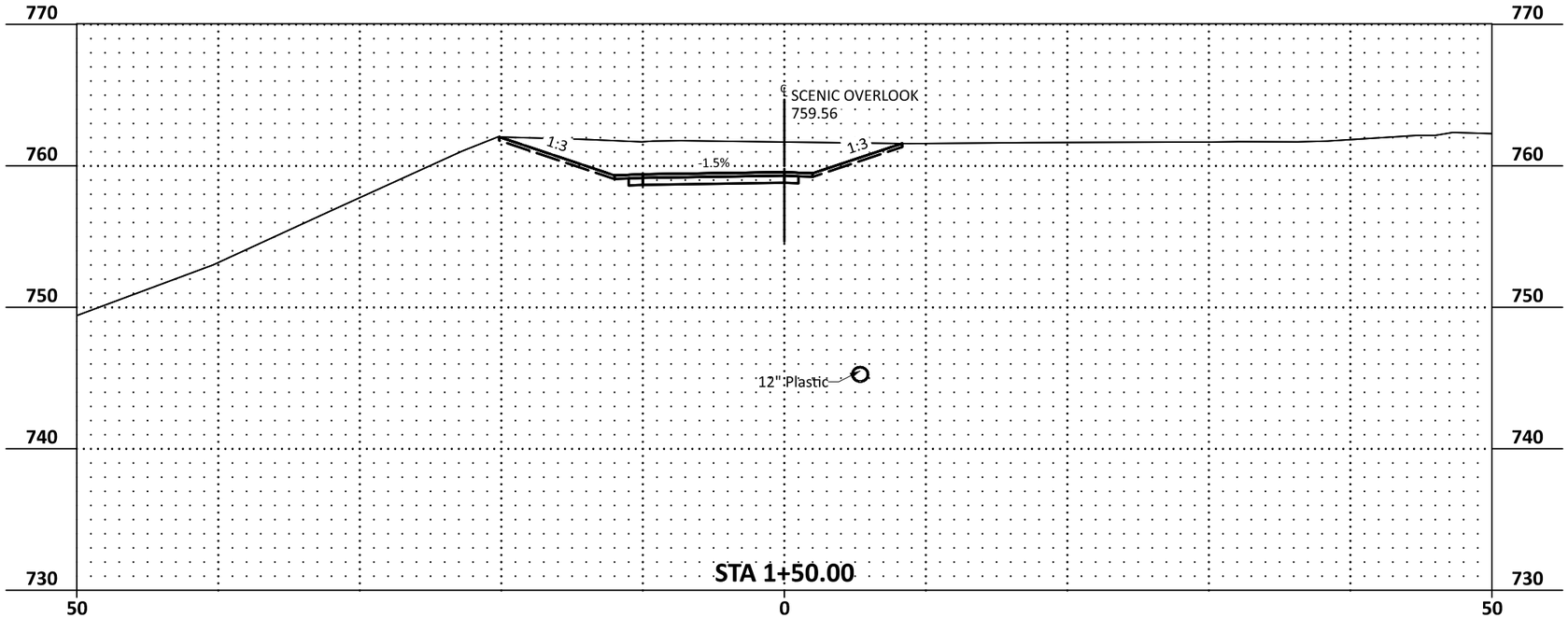

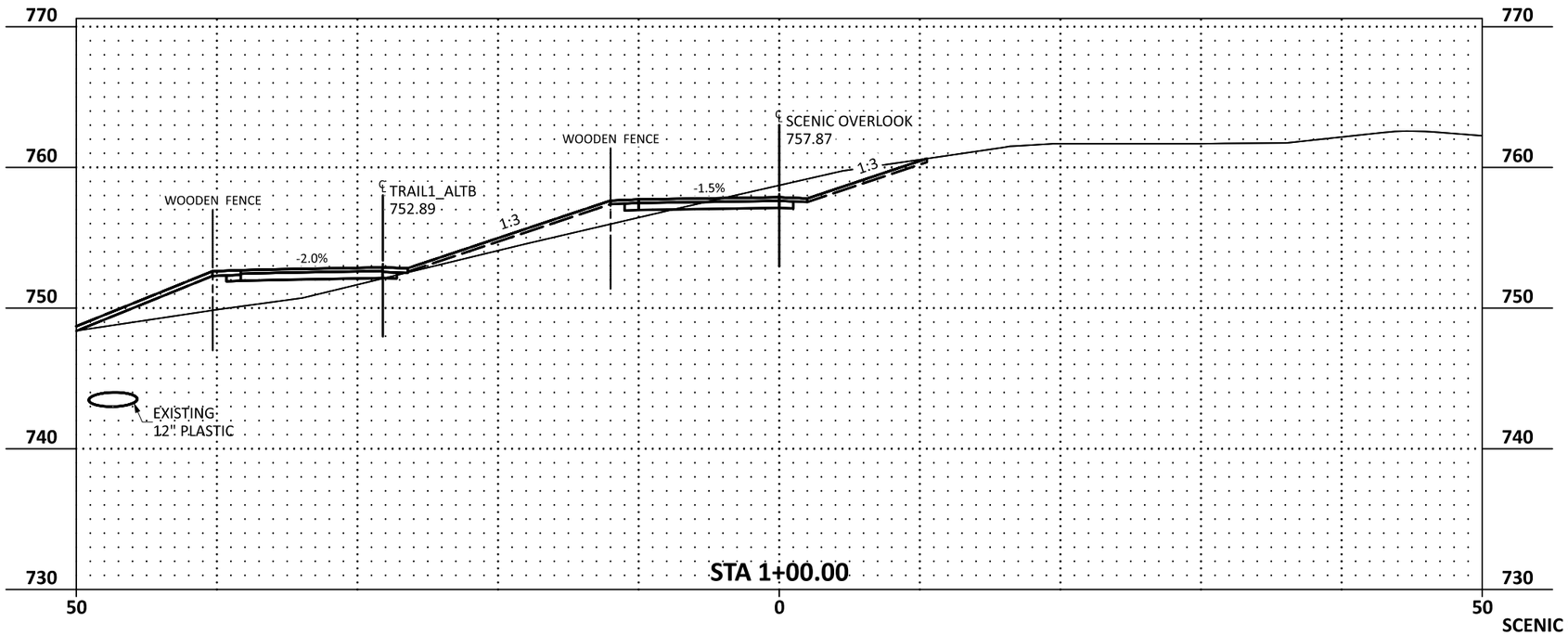

SCENIC OVERLOOK 1+00.00 - 1+50.00

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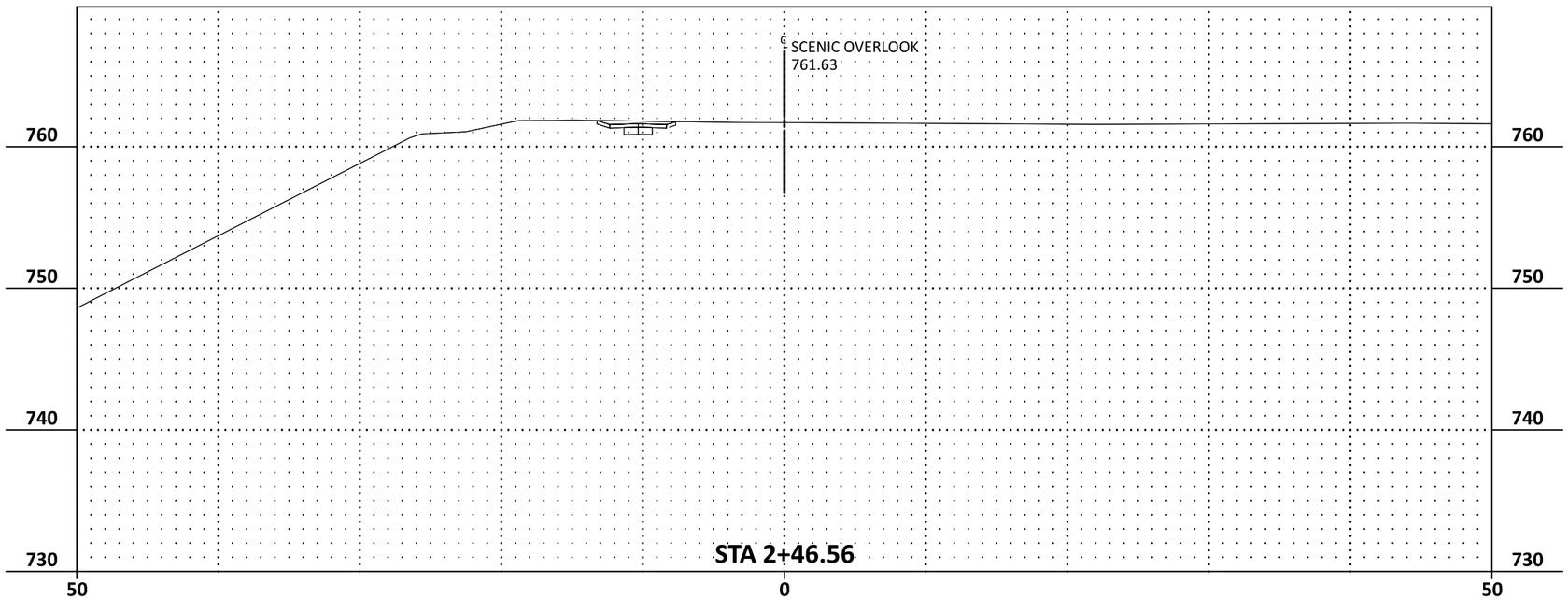
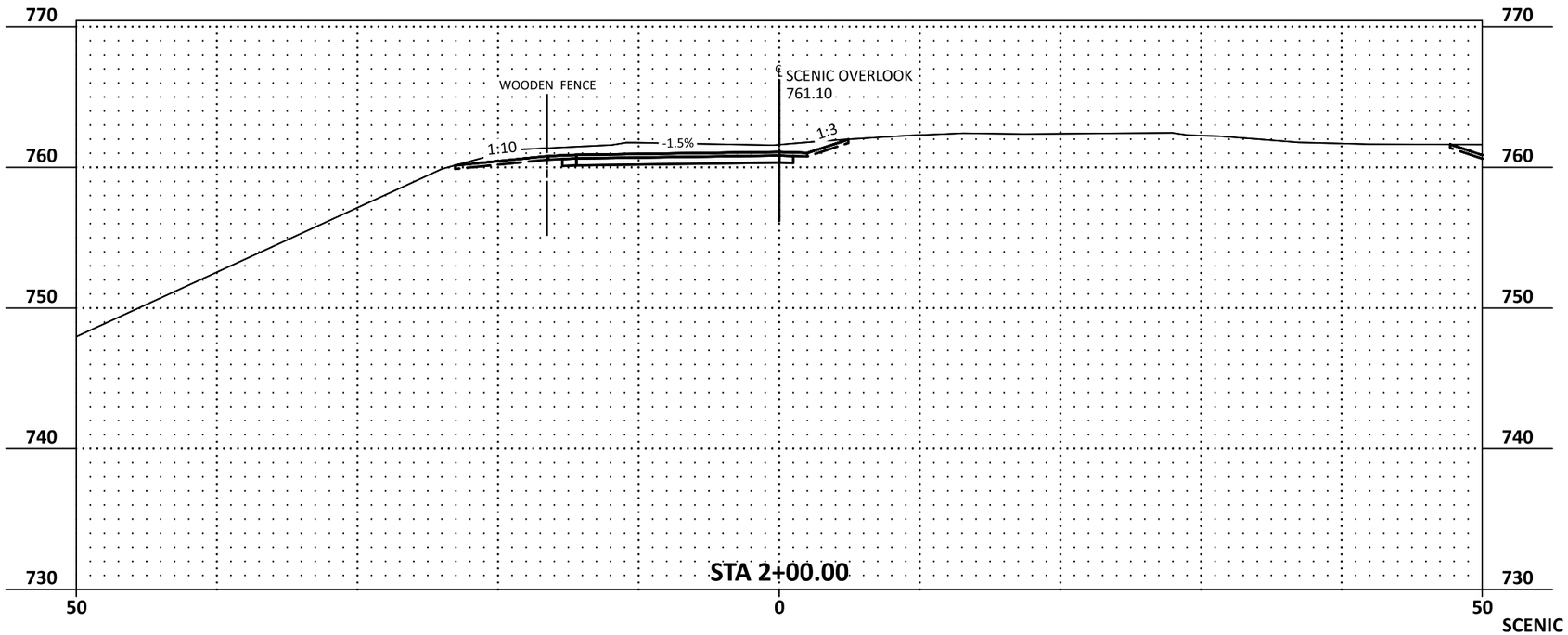


STA 2+46.56



STA 2+00.00

SCENIC OVERLOOK 2+00.00 - 2+47.40

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United States Department of the Interior

FISH AND WILDLIFE SERVICE
Minnesota-Wisconsin Ecological Services Field Office
3815 American Blvd East
Bloomington, MN 55425-1659
Phone: (952) 858-0793

In Reply Refer To: 11/07/2024 16:26:15 UTC
Project Code: 2025-0016389
Project Name: MRG Trail

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

This response has been generated by the Information, Planning, and Conservation (IPaC) system to provide information on natural resources that could be affected by your project. The U.S. Fish and Wildlife Service (Service) provides this response under the authority of the Endangered Species Act of 1973 (16 U.S.C. 1531-1543), the Bald and Golden Eagle Protection Act (16 U.S.C. 668-668d), the Migratory Bird Treaty Act (16 U.S.C. 703-712), and the Fish and Wildlife Coordination Act (16 U.S.C. 661 *et seq.*).

Threatened and Endangered Species
The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and may be affected by your proposed project. The species list fulfills the requirement for obtaining a Technical Assistance Letter from the U.S. Fish and Wildlife Service under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the IPaC system by completing the same process used to receive the enclosed list.

Consultation Technical Assistance
Please refer to refer to our Section 7 website for guidance and technical assistance, including step-by-step instructions for making effects determinations for each species that might be present and for specific guidance on the following types of projects: projects in developed areas, HUD, CDBG, EDA, USDA Rural Development projects, pipelines, buried utilities, telecommunications, and requests for a Conditional Letter of Map Revision (CLOMR) from FEMA.

We recommend running the project (if it qualifies) through our **Minnesota-Wisconsin Federal Endangered Species Determination Key (Minnesota-Wisconsin ("D-key"))**. A demonstration video showing how-to access and use the determination key is available. Please note that the Minnesota-Wisconsin D-key is the third option of 3 available d-keys. D-keys are tools to help Federal agencies and other project proponents determine if their proposed action has the potential to adversely affect federally listed species and designated critical habitat. The Minnesota-Wisconsin D-key includes a structured set of questions that assists a project proponent in determining whether a proposed project qualifies for a certain predetermined consultation outcome for all federally listed species found in Minnesota and Wisconsin (except for the northern long-eared bat- see below), which includes determinations of “no effect” or “may affect, not likely to adversely affect." In each case, the Service has compiled and analyzed the best available information on the species’ biology and the impacts of certain activities to support these determinations.

If your completed d-key output letter shows a "No Effect" (NE) determination for all listed species, print your IPaC output letter for your files to document your compliance with the Endangered Species Act.

For Federal projects with a “Not Likely to Adversely Affect” (NLAA) determination, our concurrence becomes valid if you do not hear otherwise from us after a 30-day review period, as indicated in your letter.

If your d-key output letter indicates additional coordination with the Minnesota-Wisconsin Ecological Services Field Office is necessary (i.e., you get a “May Affect” determination), you will be provided additional guidance on contacting the Service to continue ESA coordination outside of the key; ESA compliance cannot be concluded using the key for “May Affect” determinations unless otherwise indicated in your output letter.

Note: Once you obtain your official species list, you are not required to continue in IPaC with d-keys, although in most cases these tools should expedite your review. If you choose to make an effects determination on your own, you may do so. If the project is a Federal Action, you may want to review our section 7 step-by-step instructions before making your determinations.

Using the IPaC Official Species List to Make No Effect and May Affect Determinations for Listed Species

1. If IPaC returns a result of “There are no listed species found within the vicinity of the project,” then project proponents can conclude the proposed activities will have **no effect** on any federally listed species under Service jurisdiction. Concurrence from the Service is not required for **no effect** determinations. No further consultation or coordination is required. Attach this letter to the dated IPaC species list report for your records.
2. If IPaC returns one or more federally listed, proposed, or candidate species as potentially present in the action area of the proposed project – other than bats (see below) – then project proponents must determine if proposed activities will have **no effect** on or **may affect** those species. For assistance in determining if suitable habitat for listed, candidate, or proposed species occurs within your project area or if species may be affected by project activities, you can obtain Life History Information for Listed and Candidate Species on our office website. If no impacts will occur to a species on the IPaC species list (e.g., there is no habitat present in the project area), the appropriate determination is **no effect**. No further consultation or coordination is required. Attach this letter to the dated IPaC species list report for your records.

3. Should you determine that project activities **may affect** any federally listed, please contact our office for further coordination. Letters with requests for consultation or correspondence about your project should include the Consultation Tracking Number in the header. Electronic submission is preferred.

Northern Long-Eared Bats
Northern long-eared bats occur throughout Minnesota and Wisconsin and the information below may help in determining if your project may affect these species.

Suitable summer habitat for northern long-eared bats consists of a wide variety of forested/wooded habitats where they roost, forage, and travel and may also include some adjacent and interspersed non-forested habitats such as emergent wetlands and adjacent edges of agricultural fields, old fields and pastures. This includes forests and woodlots containing potential roosts (i.e., live trees and/or snags ≥3 inches dbh for northern long-eared bat that have exfoliating bark, cracks, crevices, and/or hollows), as well as linear features such as fencerows, riparian forests, and other wooded corridors. These wooded areas may be dense or loose aggregates of trees with variable amounts of canopy closure. Individual trees may be considered suitable habitat when they exhibit the characteristics of a potential roost tree and are located within 1,000 feet (305 meters) of forested/wooded habitat. Northern long-eared bats have also been observed roosting in human-made structures, such as buildings, barns, bridges, and bat houses; therefore, these structures should also be considered potential summer habitat and evaluated for use by bats. If your project will impact caves or mines or will involve clearing forest or woodland habitat containing suitable roosting habitat, northern long-eared bats could be affected. For bat activity dates, please review Appendix L in the Range-wide Indiana Bat and Northern Long-Eared Bat Survey Guidelines.

Examples of unsuitable habitat include:

- Individual trees that are greater than 1,000 feet from forested or wooded areas,
- Trees found in highly developed urban areas (e.g., street trees, downtown areas),
- A pure stand of less than 3-inch dbh trees that are not mixed with larger trees, and
- A monoculture stand of shrubby vegetation with no potential roost trees.

If IPaC returns a result that northern long-eared bats are potentially present in the action area of the proposed project, project proponents can conclude the proposed activities **may affect** this species **IF** one or more of the following activities are proposed:

- Clearing or disturbing suitable roosting habitat, as defined above, at any time of year,
- Any activity in or near the entrance to a cave or mine,
- Mining, deep excavation, or underground work within 0.25 miles of a cave or mine,
- Construction of one or more wind turbines, or
- Demolition or reconstruction of human-made structures that are known to be used by bats based on observations of roosting bats, bats emerging at dusk, or guano deposits or stains.

If none of the above activities are proposed, project proponents can conclude the proposed activities will have **no effect** on the northern long-eared bat. Concurrence from the Service is not required for **No Effect** determinations. No further consultation or coordination is required. Attach this letter to the dated IPaC

species list report for your records.

If any of the above activities are proposed, and the northern long-eared bat appears on the user's species list, the federal project user will be directed to either the northern long-eared bat and tricolored bat range-wide D-key or the Federal Highways Administration, Federal Railways Administration, and Federal Transit Administration Indiana bat/Northern long-eared bat D-key, depending on the type of project and federal agency involvement. Similar to the Minnesota-Wisconsin D-key, these d-keys helps to determine if prohibited take might occur and, if not, will generate an automated verification letter. Additional information about available tools can be found on the Service's northern long-eared bat website.

Whooping Crane
Whooping crane is designated as a non-essential experimental population in Wisconsin and consultation under Section 7(a)(2) of the Endangered Species Act is only required if project activities will occur within a National Wildlife Refuge or National Park. If project activities are proposed on lands outside of a National Wildlife Refuge or National Park, then you are not required to consult. For additional information on this designation and consultation requirements, please review "Establishment of a Nonessential Experimental Population of Whooping Cranes in the Eastern United States."

Other Trust Resources and Activities
Bald and Golden Eagles - Although the bald eagle has been removed from the endangered species list, this species and the golden eagle are protected by the Bald and Golden Eagle Act and the Migratory Bird Treaty Act. It is the responsibility of the project proponent to survey the area for any migratory bird nests. If there is an eagle nest on-site while work is on-going, eagles may be disturbed. We recommend avoiding and minimizing disturbance to eagles whenever practicable. If you cannot avoid eagle disturbance, you may seek a permit. A nest take permit is always required for removal, relocation, or obstruction of an eagle nest. For communication and wind energy projects, please refer to additional guidelines below.

Migratory Birds - The Migratory Bird Treaty Act (MBTA) prohibits the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests, except when specifically authorized by the Service. The Service has the responsibility under the MBTA to proactively prevent the mortality of migratory birds whenever possible and we encourage implementation of recommendations that minimize potential impacts to migratory birds. Such measures include clearing forested habitat outside the nesting season (generally March 1 to August 31) or conducting nest surveys prior to clearing to avoid injury to eggs or nestlings.

Communication Towers - Construction of new communications towers (including radio, television, cellular, and microwave) creates a potentially significant impact on migratory birds, especially some 350 species of night-migrating birds. However, the Service has developed voluntary guidelines for minimizing impacts.

Transmission Lines - Migratory birds, especially large species with long wingspans, heavy bodies, and poor maneuverability can also collide with power lines. In addition, mortality can occur when birds, particularly hawks, eagles, kites, falcons, and owls, attempt to perch on uninsulated or unguarded power poles. To minimize these risks, please refer to guidelines developed by the Avian Power Line Interaction Committee and the Service. Implementation of these measures is especially important along sections of lines adjacent to wetlands or other areas that support large numbers of raptors and migratory birds.

Wind Energy - To minimize impacts to migratory birds and bats, wind energy projects should follow the Service's Wind Energy Guidelines. In addition, please refer to the Service's Eagle Conservation Plan Guidance, which provides guidance for conserving bald and golden eagles in the course of siting, constructing, and operating wind energy facilities.

State Department of Natural Resources Coordination
While it is not required for your Federal section 7 consultation, please note that additional state endangered or threatened species may also have the potential to be impacted. **Please contact the Minnesota or Wisconsin Department of Natural Resources for information on state listed species that may be present in your proposed project area.**

Minnesota
Minnesota Department of Natural Resources - Endangered Resources Review Homepage
Email: Review.NHIS@state.mn.us

Wisconsin
Wisconsin Department of Natural Resources - Endangered Resources Review Homepage
Email: DNRERReview@wi.gov

We appreciate your concern for threatened and endangered species. Please feel free to contact our office with questions or for additional information.

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Bald & Golden Eagles
- Migratory Birds
- Wetlands

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Minnesota-Wisconsin Ecological Services Field Office
3815 American Blvd East
Bloomington, MN 55425-1659
(952) 858-0793

PROJECT SUMMARY

Project Code: 2025-0016389
Project Name: MRG Trail
Project Type: Recreation Operations
Project Description: The proposed project will resurface portions and modify the existing Mississippi River Greenway Trail in Hastings, MN to meet ADA requirements.
Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@44.75491285,-92.87924578780013,14z

Counties: Dakota County, Minnesota

ENDANGERED SPECIES ACT SPECIES

There is a total of 7 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

MAMMALS

NAME	STATUS
Northern Long-eared Bat *Myotis septentrionalis* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Endangered
Tricolored Bat *Perimyotis subflavus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/10515	Proposed Endangered

BIRDS

NAME	STATUS
Whooping Crane *Grus americana* Population: U.S.A. (AL, AR, CO, FL, GA, ID, IL, IN, IA, KY, LA, MI, MN, MS, MO, NC, NM, OH, SC, TN, UT, VA, WI, WV, western half of WY) No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/758	Experimental Population, Non-Essential

CLAMS

NAME	STATUS
Higgins Eye (pearlymussel) *Lampsilis higginsii* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/5428	Endangered
Salamander Mussel *Simpsonaias ambigua* There is **proposed** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/6208	Proposed Endangered

INSECTS

NAME	STATUS
Monarch Butterfly *Danaus plexippus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate
Western Regal Fritillary *Argynnis idalia occidentalis* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/12017	Proposed Threatened

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

USFWS NATIONAL WILDLIFE REFUGE LANDS AND FISH HATCHERIES

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

BALD & GOLDEN EAGLES

Bald and golden eagles are protected under the Bald and Golden Eagle Protection Act[1] and the Migratory Bird Treaty Act[2].

Any person or organization who plans or conducts activities that may result in impacts to bald or golden eagles, or their habitats[3], should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the "Supplemental Information on Migratory Birds and Eagles".

---

1. The Bald and Golden Eagle Protection Act of 1940.
2. The Migratory Birds Treaty Act of 1918.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

There are likely bald eagles present in your project area. For additional information on bald eagles, refer to Bald Eagle Nesting and Sensitivity to Human Activity

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the PROBABILITY OF PRESENCE SUMMARY below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle *Haliaeetus leucocephalus* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Oct 15 to Aug 31
Golden Eagle *Aquila chrysaetos* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680	Breeds elsewhere

PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "Supplemental Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

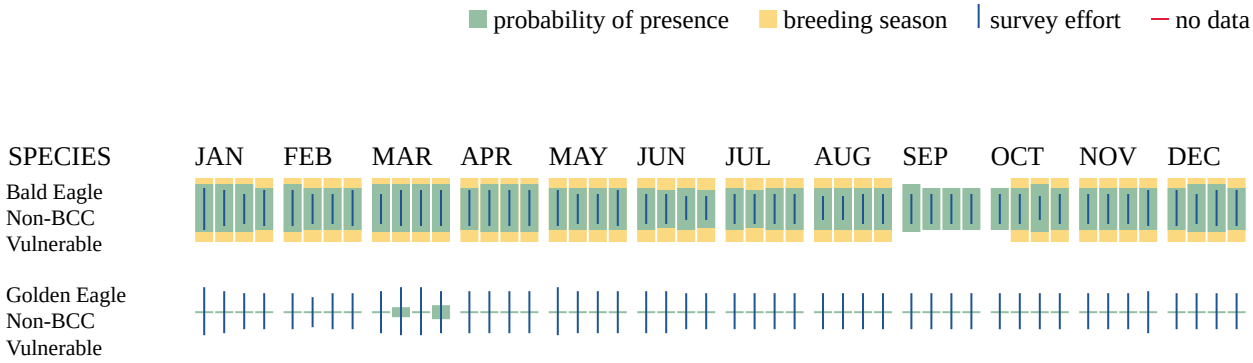
Probability of Presence (■)

Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

Breeding Season (■)
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

Survey Effort (|)
Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data (–)
A week is marked as having no data if there were no survey events for that week.



Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

MIGRATORY BIRDS

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats[3] should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the "Supplemental Information on Migratory Birds and Eagles".

---

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the PROBABILITY OF PRESENCE SUMMARY below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
American Golden-plover *Pluvialis dominica* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/10561	Breeds elsewhere
Bald Eagle *Haliaeetus leucocephalus* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Oct 15 to Aug 31
Black-billed Cuckoo *Coccyzus erythropthalmus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9399	Breeds May 15 to Oct 10
Bobolink *Dolichonyx oryzivorus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9454	Breeds May 20 to Jul 31
Cerulean Warbler *Setophaga cerulea* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/2974	Breeds Apr 21 to Jul 20

NAME	BREEDING SEASON
Chimney Swift *Chaetura pelagica* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9406	Breeds Mar 15 to Aug 25
Eastern Whip-poor-will *Antrostomus vociferus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/10678	Breeds May 1 to Aug 20
Golden Eagle *Aquila chrysaetos* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680	Breeds elsewhere
Grasshopper Sparrow *Ammodramus savannarum perpallidus* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/8329	Breeds Jun 1 to Aug 20
Henslow's Sparrow *Centronyx henslowii* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3941	Breeds May 1 to Aug 31
Lesser Yellowlegs *Tringa flavipes* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9679	Breeds elsewhere
Pectoral Sandpiper *Calidris melanotos* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9561	Breeds elsewhere
Prairie Loggerhead Shrike *Lanius ludovicianus excubitorides* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/8833	Breeds Feb 1 to Jul 31
Prothonotary Warbler *Protonotaria citrea* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9439	Breeds Apr 1 to Jul 31
Red-headed Woodpecker *Melanerpes erythrocephalus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9398	Breeds May 10 to Sep 10

NAME	BREEDING SEASON
Rusty Blackbird *Euphagus carolinus* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9478	Breeds elsewhere
Semipalmated Sandpiper *Calidris pusilla* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9603	Breeds elsewhere
Upland Sandpiper *Bartramia longicauda* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9294	Breeds May 1 to Aug 31
Wood Thrush *Hylocichla mustelina* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9431	Breeds May 10 to Aug 31

PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "Supplemental Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

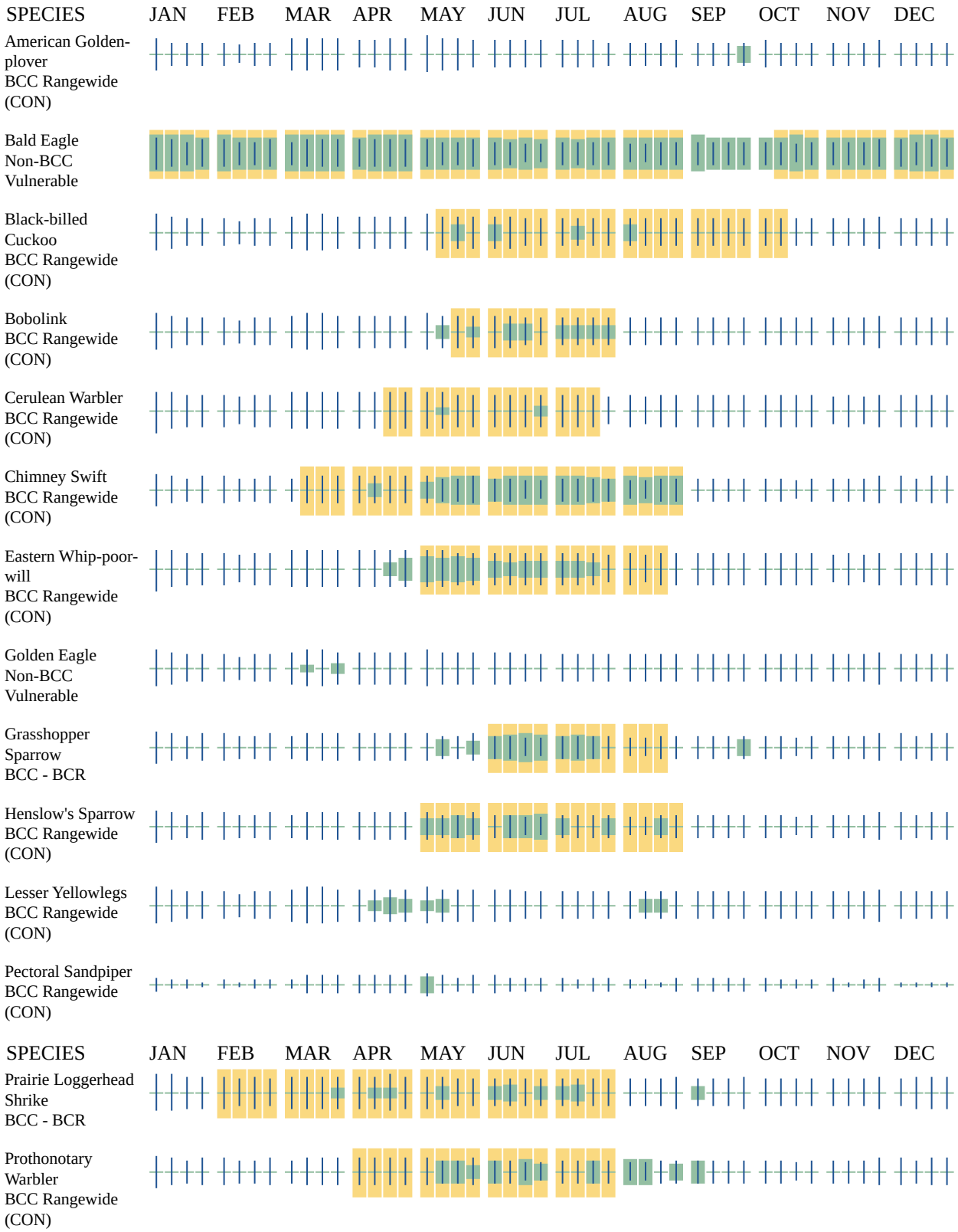
Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

Breeding Season (■)
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

Survey Effort (|)
Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

■ probability of presence ■ breeding season | survey effort – no data


SPECIES
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
OCT
NOV
DEC
American Golden-plover BCC Rangewide (CON)
Bald Eagle Non-BCC Vulnerable
Black-billed Cuckoo BCC Rangewide (CON)
Bobolink BCC Rangewide (CON)
Cerulean Warbler BCC Rangewide (CON)
Chimney Swift BCC Rangewide (CON)
Eastern Whip-poor-will BCC Rangewide (CON)
Golden Eagle Non-BCC Vulnerable
Grasshopper Sparrow BCC - BCR
Henslow's Sparrow BCC Rangewide (CON)
Lesser Yellowlegs BCC Rangewide (CON)
Pectoral Sandpiper BCC Rangewide (CON)
SPECIES
JAN
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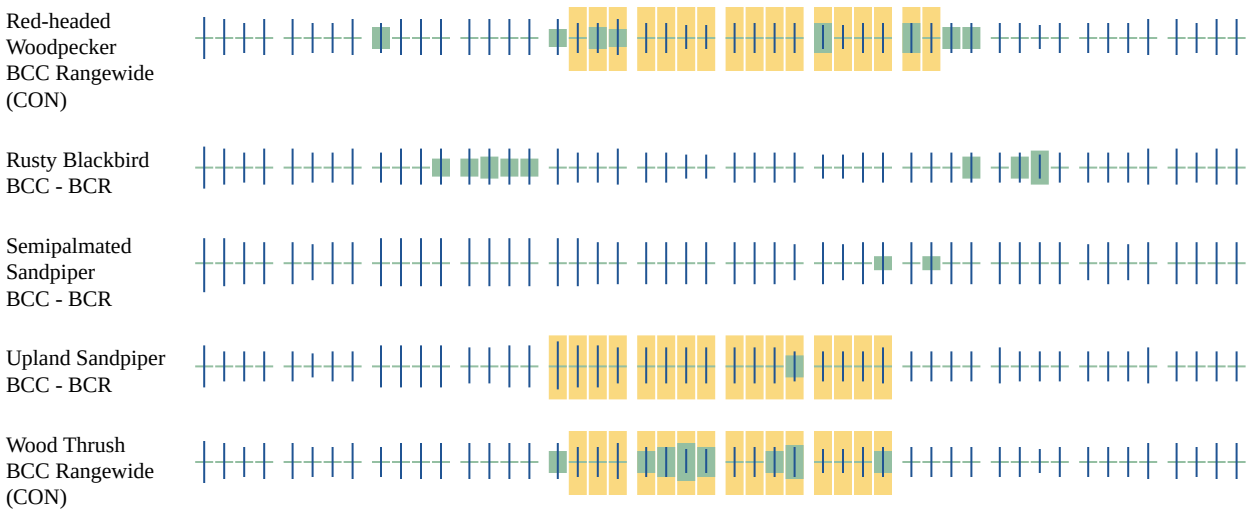
DEC
Prairie Loggerhead Shrike BCC - BCR
Prothonotary Warbler BCC Rangewide (CON)



Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

WETLANDS

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

FRESHWATER EMERGENT WETLAND

- PEM1Cx
- PEM1Ax

FRESHWATER POND

- PUBFx

IPAC USER CONTACT INFORMATION

Agency:	HR Green
Name:	Carl Folz
Address:	2550 University Avenue W.
Address Line 2:	Suite 400 North
City:	St. Paul
State:	MN
Zip:	55114
Email	cfolz@hrgreen.com
Phone:	6516597791

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Minnesota-Wisconsin Ecological Services Field Office
3815 American Blvd East
Bloomington, MN 55425-1659
Phone: (952) 858-0793

In Reply Refer To: 11/07/2024 16:43:52 UTC
Project code: 2025-0016389
Project Name: MRG Trail

Subject: Consistency letter for the 'MRG Trail' project under the amended February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion (dated March 23, 2023) for Transportation Projects within the Range of the Indiana Bat and Northern Long-eared Bat (NLEB).

To whom it may concern:

The U.S. Fish and Wildlife Service (Service) has received your request dated November 07, 2024 to verify that the **MRG Trail** (Proposed Action) may rely on the concurrence provided in the amended February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion Opinion (dated March 23, 2023) for Transportation Projects within the Range of the Indiana Bat and Northern Long-eared Bat (PBO) to satisfy requirements under section 7(a)(2) of the Endangered Species Act of 1973 (ESA) (87 Stat.884, as amended; 16 U.S.C. 1531 *et seq.*).

Based on the information you provided (Project Description shown below), you have determined that the Proposed Action is within the scope and adheres to the criteria of the PBO, including the adoption of applicable avoidance and minimization measures. **At least one of the qualification interview questions indicated an activity or portion of your project is consistent with a not likely to adversely affect determination therefore, the overall determination for your project is, may affect, and is not likely to adversely affect (NLAA) the endangered Indiana bat (*Myotis sodalis*) and/or the endangered northern long-eared bat (*Myotis septentrionalis*)**. Consultation with the Service pursuant to section 7(a)(2) of the ESA (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*) is required.

This "may affect - not likely to adversely affect" determination becomes effective when the lead Federal action agency or designated non-federal representative requests the Service rely on the PBO to satisfy the agency's consultation requirements for this project.

Please provide this consistency letter to the lead Federal action agency or its designated non-federal representative with a request for review, and as the agency deems appropriate, submit for concurrence verification through the IPaC system. The lead Federal action agency or designated

non-federal representative should log into IPaC using their agency email account and click "Search by record locator". They will need to enter the record locator **546-152333822**.

For Proposed Actions that include bridge/culvert or structure removal, replacement, and/or maintenance activities: If your initial bridge/culvert or structure assessment documented signs of bat use or occupancy, or an assessment failed to detect Indiana bats and/or NLEBs, yet are later detected prior to, or during construction, please submit the Post Assessment Discovery of Bats at Bridge/Culvert or Structure Form (User Guide Appendix E) to this Service Office within 2 working days of any potential take. In these instances, potential incidental take of Indiana bats and/or NLEBs is covered under the Incidental Take Statement in the 2018 FHWA, FRA, FTA PBO (provided that the take is reported to the Service).

If the Proposed Action is modified, or new information reveals that it may affect the Indiana bat and/or northern long-eared bat in a manner or to an extent not considered in the PBO, further review to conclude the requirements of ESA section 7(a)(2) may be required.

For Proposed Actions that include bridge/culvert or structure removal, replacement, and/or maintenance activities:
If your initial bridge/culvert or structure assessments failed to detect Indiana bats and/or NLEB use or occupancy, yet bats are later detected prior to, or during construction, please submit the Post Assessment Discovery of Bats at Bridge/Culvert or Structure Form (User Guide Appendix E) to this Service Office within 2 working days of the incident. In these instances, potential incidental take of Indiana bats and/or NLEBs may be exempted provided that the take is reported to the Service. If the Proposed Action may affect any other federally-listed or proposed species and/or designated critical habitat, additional consultation between the lead Federal action agency and this Service Office is required. If the proposed action has the potential to take bald or golden eagles, additional coordination with the Service under the Bald and Golden Eagle Protection Act may also be required. In either of these circumstances, please advise the lead Federal action agency accordingly.

The following species may occur in your project area and **are not** covered by this determination:

- Higgins Eye (pearlymussel) *Lampsilis higginsii* Endangered
- Monarch Butterfly *Danaus plexippus* Candidate
- Salamander Mussel *Simpsonaias ambigua* Proposed Endangered
- Tricolored Bat *Perimyotis subflavus* Proposed Endangered
- Western Regal Fritillary *Argynnis idalia occidentalis* Proposed Threatened
- Whooping Crane *Grus americana* Experimental Population, Non-Essential

PROJECT DESCRIPTION

The following project name and description was collected in IPaC as part of the endangered species review process.

NAME

MRG Trail

DESCRIPTION

The proposed project will resurface portions and modify the existing Mississippi River Greenway Trail in Hastings, MN to meet ADA requirements.

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@44.75491285,-92.87924578780013,14z

DETERMINATION KEY RESULT

Based on your answers provided, this project(s) may affect, but is not likely to adversely affect the endangered Indiana bat and/or the endangered northern long-eared bat, therefore, consultation with the U.S. Fish and Wildlife Service pursuant to Section 7(a)(2) of the Endangered Species Act of 1973 (ESA) (87 Stat. 884, as amended 16 U.S.C. 1531 *et seq.*) is required. However, also based on your answers provided, this project may rely on the concurrence provided in the amended February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion (dated March 23, 2023) for Transportation Projects within the Range of the Indiana Bat and Northern Long-eared Bat.

QUALIFICATION INTERVIEW

1. Is the project within the range of the Indiana bat[1]?

   [1] See Indiana bat species profile

   Automatically answered
   No

2. Is the project within the range of the northern long-eared bat[1]?

   [1] See northern long-eared bat species profile

   Automatically answered
   Yes

3. Which Federal Agency is the lead for the action?

   A) Federal Highway Administration (FHWA)

4. Are *all* project activities limited to non-construction[1] activities only? (examples of non-construction activities include: bridge/abandoned structure assessments, surveys, planning and technical studies, property inspections, and property sales)

   [1] Construction refers to activities involving ground disturbance, percussive noise, and/or lighting.

   No

5. Does the project include *any* activities that are **greater than** 300 feet from existing road/rail surfaces[1]?

   [1] Road surface is defined as the actively used [e.g. motorized vehicles] driving surface and shoulders [may be pavement, gravel, etc.] and rail surface is defined as the edge of the actively used rail ballast.

   No

6. Does the project include *any* activities **within** 0.5 miles of a known Indiana bat and/or NLEB hibernaculum[1]?

   [1] For the purpose of this consultation, a hibernaculum is a site, most often a cave or mine, where bats hibernate during the winter (see suitable habitat), but could also include bridges and structures if bats are found to be hibernating there during the winter.

   No

7. Is the project located **within** a karst area?

   Yes

8. Will the project include *any* type of activity that could impact a **known** hibernaculum[1], or impact a karst feature (e.g., sinkhole, losing stream, or spring) that could result in effects to a **known** hibernaculum?

   [1] For the purpose of this consultation, a hibernaculum is a site, most often a cave or mine, where bats hibernate during the winter (see suitable habitat), but could also include bridges and structures if bats are found to be hibernating there during the winter.

   No

9. Is there *any* suitable[1] summer habitat for Indiana Bat or NLEB **within** the project action area[2]? (includes any trees suitable for maternity, roosting, foraging, or travelling habitat)

   [1] See the Service's summer survey guidance for our current definitions of suitable habitat.

   [2] The action area is defined as all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action (50 CFR Section 402.02). Further clarification is provided by the User's Guide for the Range-wide Programmatic Consultation for Indiana Bat and Northern Long-eared Bat.

   Yes

10. Will the project remove *any* suitable summer habitat[1] and/or remove/trim any existing trees **within** suitable summer habitat?

    [1] See the Service's summer survey guidance for our current definitions of suitable habitat.

    Yes

11. Will the project clear more than 20 acres of suitable habitat per 5-mile section of road/rail?

    No

12. Have presence/probable absence (P/A) summer surveys[1][2] been conducted[3][4] **within** the suitable habitat located within your project action area?

    [1] See the Service's summer survey guidance for our current definitions of suitable habitat.

    [2] Presence/probable absence summer surveys conducted within the fall swarming/spring emergence home range of a documented Indiana bat hibernaculum (contact local Service Field Office for appropriate distance from hibernacula) that result in a negative finding requires additional consultation with the local Service Field Office to determine if clearing of forested habitat is appropriate and/or if seasonal clearing restrictions are needed to avoid and minimize potential adverse effects on fall swarming and spring emerging Indiana bats.

    [3] For projects within the range of either the Indiana bat or NLEB in which suitable habitat is present, and no bat surveys have been conducted, the transportation agency will assume presence of the appropriate species. This assumption of presence should be based upon the presence of suitable habitat and the capability of bats to occupy it because of their mobility.

    [4] Negative presence/probable absence survey results obtained using the summer survey guidance are valid for a minimum of two years from the completion of the survey unless new information (e.g., other nearby surveys) suggest otherwise.

    No

13. Does the project include activities **within documented NLEB habitat**[1][2]?

    [1] Documented roosting or foraging habitat – for the purposes of this consultation, we are considering documented habitat as that where Indiana bats and/or NLEB have actually been captured and tracked using (1) radio telemetry to roosts; (2) radio telemetry biangulation/triangulation to estimate foraging areas; or (3) foraging areas with repeated use documented using acoustics. Documented roosting habitat is also considered as suitable summer habitat within 0.25 miles of documented roosts.)

    [2] For the purposes of this key, we are considering documented corridors as that where Indiana bats and/or NLEB have actually been captured and tracked to using (1) radio telemetry; or (2) treed corridors located directly between documented roosting and foraging habitat.

    No

14. Will the removal or trimming of habitat or trees occur **within** suitable but **undocumented NLEB** roosting/foraging habitat or travel corridors?

    Yes

15. What time of year will the removal or trimming of habitat or trees **within** suitable but **undocumented NLEB** roosting/foraging habitat or travel corridors occur?

    B) During the inactive season

16. Will *any* tree trimming or removal occur **within** 100 feet of existing road/rail surfaces?

    Yes

17. Will *any* tree trimming or removal occur **between** 100-300 feet of existing road/rail surfaces?

    No

18. Are *all* trees that are being removed clearly demarcated?

    Yes

19. Will the removal of habitat or the removal/trimming of trees include installing new or replacing existing **permanent** lighting?

    No

20. Does the project include wetland or stream protection activities associated with compensatory wetland mitigation?

    Yes

21. Does the project include slash pile burning?

    No

22. Does the project include *any* bridge removal, replacement, and/or maintenance activities (e.g., any bridge repair, retrofit, maintenance, and/or rehabilitation work)?

    No

23. Does the project include the removal, replacement, and/or maintenance of *any* structure other than a bridge? (e.g., rest areas, offices, sheds, outbuildings, barns, parking garages, etc.)

    No

24. Will the project involve the use of **temporary** lighting *during* the active season?

    No

25. Will the project install new or replace existing **permanent** lighting?

    No

26. Does the project include percussives or other activities (**not including tree removal/ trimming or bridge/structure work**) that will increase noise levels above existing traffic/ background levels?

    No

27. Are *all* project activities that are **not associated with** habitat removal, tree removal/ trimming, bridge and/or structure activities, temporary or permanent lighting, or use of percussives, limited to actions that DO NOT cause any additional stressors to the bat species?

    Examples: lining roadways, unlighted signage , rail road crossing signals, signal lighting, and minor road repair such as asphalt fill of potholes, etc.

    Yes

28. Will the project raise the road profile **above the tree canopy**?

    No

29. Are the wetland or stream protection activities associated with compensatory wetland/ stream mitigation portion of this project consistent with a Not Likely to Adversely Affect determination in this key?

    Automatically answered
    Yes, because your activities associated with compensatory wetland/stream mitigation activities do not clear suitable summer habitat and are not within 0.5 miles of Indiana bat or NLEB hibernaculum.

30. Are the project activities that are not associated with habitat removal, tree removal/ trimming, bridge and/or structure activities, temporary or permanent lighting, or use of percussives consistent with a No Effect determination in this key?

    Automatically answered
    Yes, other project activities are limited to actions that DO NOT cause any additional stressors to the bat species as described in the BA/BO

31. Is the habitat removal portion of this project consistent with a Not Likely to Adversely Affect determination in this key?

    Automatically answered
    Yes, because the tree removal/trimming that occurs outside of the NLEB's active season occurs greater than 0.5 miles from the nearest hibernaculum, is less than 100 feet from the existing road/rail surface, includes clear demarcation of the trees that are to be removed, and does not alter documented roosts and/or surrounding summer habitat within 0.25 miles of a documented roost.

32. **General AMM 1**
Will the project ensure *all* operators, employees, and contractors working in areas of known or presumed bat habitat are aware of *all* FHWA/FRA/FTA (Transportation Agencies) environmental commitments, including all applicable Avoidance and Minimization Measures?

Yes

33. **Hibernacula AMM 1**
Will the project ensure that on-site personnel will use best management practices[1], secondary containment measures, or other standard spill prevention and countermeasures to avoid impacts to possible hibernacula?

[1] Coordinate with the appropriate Service Field Office on recommended best management practices for karst in your state.

Yes

34. **Hibernacula AMM 1**
Will the project ensure that, where practicable, a 300 foot buffer will be employed to separate fueling areas and other major containment risk activities from caves, sinkholes, losing streams, and springs in karst topography?

Yes

35. **Tree Removal AMM 1**
Can *all* phases/aspects of the project (e.g., temporary work areas, alignments) be modified, to the extent practicable, to avoid tree removal[1] in excess of what is required to implement the project safely?

Note: Tree Removal AMM 1 is a minimization measure, the full implementation of which may not always be practicable. Projects may still be NLAA as long as Tree Removal AMMs 2, 3, and 4 are implemented and LAA as long as Tree Removal AMMs 3, 5, 6, and 7 are implemented.

[1] The word “trees” as used in the AMMs refers to trees that are suitable habitat for each species within their range. See the USFWS’ current summer survey guidance for our latest definitions of suitable habitat.

Yes

36. **Tree Removal AMM 3**
Can tree removal be limited to that specified in project plans and ensure that contractors understand clearing limits and how they are marked in the field (e.g., install bright colored flagging/fencing prior to any tree clearing to ensure contractors stay within clearing limits)?

Yes

37. **Tree Removal AMM 4**
    Can the project avoid cutting down/removal of *all* (1) **documented**[1] Indiana bat or NLEB roosts[2] (that are still suitable for roosting), (2) trees **within** 0.25 miles of roosts, and (3) documented foraging habitat any time of year?

    [1] The word documented means habitat where bats have actually been captured and/or tracked.

    [2] Documented roosting or foraging habitat – for the purposes of this consultation, we are considering documented habitat as that where Indiana bats and/or NLEB have actually been captured and tracked using (1) radio telemetry to roosts; (2) radio telemetry biangulation/triangulation to estimate foraging areas; or (3) foraging areas with repeated use documented using acoustics. Documented roosting habitat is also considered as suitable summer habitat within 0.25 miles of documented roosts.)

    Yes

PROJECT QUESTIONNAIRE

1. Have you made a No Effect determination for *all* other species indicated on the FWS IPaC generated species list?

   N/A

2. Have you made a May Affect determination for *any* other species on the FWS IPaC generated species list?

   N/A

3. How many acres[1] of trees are proposed for removal between 0-100 feet of the existing road/rail surface?

   [1] If described as number of trees, multiply by 0.09 to convert to acreage and enter that number.

   0.2

AVOIDANCE AND MINIMIZATION MEASURES (AMMS)

This determination key result includes the committment to implement the following Avoidance and Minimization Measures (AMMs):

HIBERNACULA AMM 1

For projects located within karst areas, on-site personnel will use best management practices, secondary containment measures, or other standard spill prevention and countermeasures to avoid impacts to possible hibernacula. Where practicable, a 300 foot buffer will be employed to separate fueling areas and other major containment risk activities from caves, sinkholes, losing streams, and springs in karst topography.

TREE REMOVAL AMM 1

Modify all phases/aspects of the project (e.g., temporary work areas, alignments) to avoid tree removal.

TREE REMOVAL AMM 2

Apply time of year restrictions for tree removal when bats are not likely to be present, or limit tree removal to 10 or fewer trees per project at any time of year within 100 feet of existing road/

rail surface and **outside of documented** roosting/foraging habitat or travel corridors; visual emergence survey must be conducted with no bats observed.

TREE REMOVAL AMM 3

Ensure tree removal is limited to that specified in project plans and ensure that contractors understand clearing limits and how they are marked in the field (e.g., install bright colored flagging/fencing prior to any tree clearing to ensure contractors stay within clearing limits).

TREE REMOVAL AMM 4

Do not remove **documented** Indiana bat or NLEB roosts that are still suitable for roosting, or trees within 0.25 miles of roosts, or
documented foraging habitat any time of year.

GENERAL AMM 1

Ensure all operators, employees, and contractors working in areas of known or presumed bat habitat are aware of all FHWA/FRA/FTA (Transportation Agencies) environmental commitments, including all applicable AMMs.

DETERMINATION KEY DESCRIPTION: FHWA, FRA, FTA PROGRAMMATIC CONSULTATION FOR TRANSPORTATION PROJECTS AFFECTING NLEB OR INDIANA BAT

This key was last updated in IPaC on November 04, 2024. Keys are subject to periodic revision.

This decision key is intended for projects/activities funded or authorized by the Federal Highway Administration (FHWA), Federal Railroad Administration (FRA), and/or Federal Transit Administration (FTA), which may require consultation with the U.S. Fish and Wildlife Service (Service) under Section 7 of the Endangered Species Act (ESA) for the endangered **Indiana bat** (*Myotis sodalis*) and the endangered **northern long-eared bat** (NLEB) (*Myotis septentrionalis*).

This decision key should only be used to verify project applicability with the Service's amended February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion (dated March 23, 2023) for Transportation Projects. The programmatic biological opinion covers limited transportation activities that may affect either bat species, and addresses situations that are both likely and not likely to adversely affect either bat species. This decision key will assist in identifying the effect of a specific project/activity and applicability of the programmatic consultation. The programmatic biological opinion is not intended to cover all types of transportation actions. Activities outside the scope of the programmatic biological opinion, or that may affect ESA-listed species other than the Indiana bat or NLEB, or any designated critical habitat, may require additional ESA Section 7 consultation.

IPAC USER CONTACT INFORMATION

Agency: HR Green
Name: Carl Folz
Address: 2550 University Avenue W.
Address Line 2: Suite 400 North
City: St. Paul
State: MN
Zip: 55114
Email cfolz@hrgreen.com
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LEAD AGENCY CONTACT INFORMATION

Lead Agency: County of Dakota

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Minnesota-Wisconsin Ecological Services Field Office
3815 American Blvd East
Bloomington, MN 55425-1659
Phone: (952) 858-0793

In Reply Refer To: 11/07/2024 18:56:19 UTC
Project code: 2025-0016389
Project Name: MRG Trail

Subject: Consistency letter for the 'MRG Trail' project under the amended February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion (dated March 23, 2023) for Transportation Projects within the Range of the Indiana Bat and Northern Long-eared Bat (NLEB).

To whom it may concern:

The U.S. Fish and Wildlife Service (Service) has received your request dated November 07, 2024 to verify that the **MRG Trail** (Proposed Action) may rely on the concurrence provided in the amended February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion Opinion (dated March 23, 2023) for Transportation Projects within the Range of the Indiana Bat and Northern Long-eared Bat (PBO) to satisfy requirements under section 7(a)(2) of the Endangered Species Act of 1973 (ESA) (87 Stat.884, as amended; 16 U.S.C. 1531 *et seq.*).

Based on the information you provided (Project Description shown below), you have determined that the Proposed Action is within the scope and adheres to the criteria of the PBO, including the adoption of applicable avoidance and minimization measures. **At least one of the qualification interview questions indicated an activity or portion of your project is consistent with a not likely to adversely affect determination therefore, the overall determination for your project is, may affect, and is not likely to adversely affect (NLAA) the endangered Indiana bat (*Myotis sodalis*) and/or the endangered northern long-eared bat (*Myotis septentrionalis*)**. Consultation with the Service pursuant to section 7(a)(2) of the ESA (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*) is required.

This "may affect - not likely to adversely affect" determination becomes effective when the lead Federal action agency or designated non-federal representative requests the Service rely on the PBO to satisfy the agency's consultation requirements for this project.

Please provide this consistency letter to the lead Federal action agency or its designated non-federal representative with a request for review, and as the agency deems appropriate, submit for concurrence verification through the IPaC system. The lead Federal action agency or designated

non-federal representative should log into IPaC using their agency email account and click "Search by record locator". They will need to enter the record locator **546-152352263**.

For Proposed Actions that include bridge/culvert or structure removal, replacement, and/or maintenance activities: If your initial bridge/culvert or structure assessment documented signs of bat use or occupancy, or an assessment failed to detect Indiana bats and/or NLEBs, yet are later detected prior to, or during construction, please submit the Post Assessment Discovery of Bats at Bridge/Culvert or Structure Form (User Guide Appendix E) to this Service Office within 2 working days of any potential take. In these instances, potential incidental take of Indiana bats and/or NLEBs is covered under the Incidental Take Statement in the 2018 FHWA, FRA, FTA PBO (provided that the take is reported to the Service).

If the Proposed Action is modified, or new information reveals that it may affect the Indiana bat and/or northern long-eared bat in a manner or to an extent not considered in the PBO, further review to conclude the requirements of ESA section 7(a)(2) may be required.

For Proposed Actions that include bridge/culvert or structure removal, replacement, and/or maintenance activities:
If your initial bridge/culvert or structure assessments failed to detect Indiana bats and/or NLEB use or occupancy, yet bats are later detected prior to, or during construction, please submit the Post Assessment Discovery of Bats at Bridge/Culvert or Structure Form (User Guide Appendix E) to this Service Office within 2 working days of the incident. In these instances, potential incidental take of Indiana bats and/or NLEBs may be exempted provided that the take is reported to the Service. If the Proposed Action may affect any other federally-listed or proposed species and/or designated critical habitat, additional consultation between the lead Federal action agency and this Service Office is required. If the proposed action has the potential to take bald or golden eagles, additional coordination with the Service under the Bald and Golden Eagle Protection Act may also be required. In either of these circumstances, please advise the lead Federal action agency accordingly.

The following species may occur in your project area and **are not** covered by this determination:

- Higgins Eye (pearlymussel) *Lampsilis higginsii* Endangered
- Monarch Butterfly *Danaus plexippus* Candidate
- Salamander Mussel *Simpsonaias ambigua* Proposed Endangered
- Tricolored Bat *Perimyotis subflavus* Proposed Endangered
- Western Regal Fritillary *Argynnis idalia occidentalis* Proposed Threatened
- Whooping Crane *Grus americana* Experimental Population, Non-Essential

PROJECT DESCRIPTION

The following project name and description was collected in IPaC as part of the endangered species review process.

NAME

MRG Trail

DESCRIPTION

The proposed project will resurface portions and modify the existing Mississippi River Greenway Trail in Hastings, MN to meet ADA requirements.

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@44.75491285,-92.87924578780013,14z

DETERMINATION KEY RESULT

Based on your answers provided, this project(s) may affect, but is not likely to adversely affect the endangered Indiana bat and/or the endangered northern long-eared bat, therefore, consultation with the U.S. Fish and Wildlife Service pursuant to Section 7(a)(2) of the Endangered Species Act of 1973 (ESA) (87 Stat. 884, as amended 16 U.S.C. 1531 *et seq.*) is required. However, also based on your answers provided, this project may rely on the concurrence provided in the amended February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion (dated March 23, 2023) for Transportation Projects within the Range of the Indiana Bat and Northern Long-eared Bat.

QUALIFICATION INTERVIEW

1. Is the project within the range of the Indiana bat[1]?

   [1] See Indiana bat species profile

   Automatically answered
   No

2. Is the project within the range of the northern long-eared bat[1]?

   [1] See northern long-eared bat species profile

   Automatically answered
   Yes

3. Which Federal Agency is the lead for the action?

   A) Federal Highway Administration (FHWA)

4. Are *all* project activities limited to non-construction[1] activities only? (examples of non-construction activities include: bridge/abandoned structure assessments, surveys, planning and technical studies, property inspections, and property sales)

   [1] Construction refers to activities involving ground disturbance, percussive noise, and/or lighting.

   No

5. Does the project include *any* activities that are **greater than** 300 feet from existing road/rail surfaces[1]?

   [1] Road surface is defined as the actively used [e.g. motorized vehicles] driving surface and shoulders [may be pavement, gravel, etc.] and rail surface is defined as the edge of the actively used rail ballast.

   No

6. Does the project include *any* activities **within** 0.5 miles of a known Indiana bat and/or NLEB hibernaculum[1]?

   [1] For the purpose of this consultation, a hibernaculum is a site, most often a cave or mine, where bats hibernate during the winter (see suitable habitat), but could also include bridges and structures if bats are found to be hibernating there during the winter.

   No

7. Is the project located **within** a karst area?

   Yes

8. Will the project include *any* type of activity that could impact a **known** hibernaculum[1], or impact a karst feature (e.g., sinkhole, losing stream, or spring) that could result in effects to a **known** hibernaculum?

   [1] For the purpose of this consultation, a hibernaculum is a site, most often a cave or mine, where bats hibernate during the winter (see suitable habitat), but could also include bridges and structures if bats are found to be hibernating there during the winter.

   No

9. Is there *any* suitable[1] summer habitat for Indiana Bat or NLEB **within** the project action area[2]? (includes any trees suitable for maternity, roosting, foraging, or travelling habitat)

   [1] See the Service's summer survey guidance for our current definitions of suitable habitat.

   [2] The action area is defined as all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action (50 CFR Section 402.02). Further clarification is provided by the User's Guide for the Range-wide Programmatic Consultation for Indiana Bat and Northern Long-eared Bat.

   Yes

10. Will the project remove *any* suitable summer habitat[1] and/or remove/trim any existing trees **within** suitable summer habitat?

    [1] See the Service's summer survey guidance for our current definitions of suitable habitat.

    Yes

11. Will the project clear more than 20 acres of suitable habitat per 5-mile section of road/rail?

    No

12. Have presence/probable absence (P/A) summer surveys[1][2] been conducted[3][4] **within** the suitable habitat located within your project action area?

    [1] See the Service's summer survey guidance for our current definitions of suitable habitat.

    [2] Presence/probable absence summer surveys conducted within the fall swarming/spring emergence home range of a documented Indiana bat hibernaculum (contact local Service Field Office for appropriate distance from hibernacula) that result in a negative finding requires additional consultation with the local Service Field Office to determine if clearing of forested habitat is appropriate and/or if seasonal clearing restrictions are needed to avoid and minimize potential adverse effects on fall swarming and spring emerging Indiana bats.

    [3] For projects within the range of either the Indiana bat or NLEB in which suitable habitat is present, and no bat surveys have been conducted, the transportation agency will assume presence of the appropriate species. This assumption of presence should be based upon the presence of suitable habitat and the capability of bats to occupy it because of their mobility.

    [4] Negative presence/probable absence survey results obtained using the summer survey guidance are valid for a minimum of two years from the completion of the survey unless new information (e.g., other nearby surveys) suggest otherwise.

    No

13. Does the project include activities **within documented NLEB habitat**[1][2]?

    [1] Documented roosting or foraging habitat – for the purposes of this consultation, we are considering documented habitat as that where Indiana bats and/or NLEB have actually been captured and tracked using (1) radio telemetry to roosts; (2) radio telemetry biangulation/triangulation to estimate foraging areas; or (3) foraging areas with repeated use documented using acoustics. Documented roosting habitat is also considered as suitable summer habitat within 0.25 miles of documented roosts.)

    [2] For the purposes of this key, we are considering documented corridors as that where Indiana bats and/or NLEB have actually been captured and tracked to using (1) radio telemetry; or (2) treed corridors located directly between documented roosting and foraging habitat.

    No

14. Will the removal or trimming of habitat or trees occur **within** suitable but **undocumented NLEB** roosting/foraging habitat or travel corridors?

    Yes

15. What time of year will the removal or trimming of habitat or trees **within** suitable but **undocumented NLEB** roosting/foraging habitat or travel corridors occur?

    C) During both the active and inactive seasons

16. Will *any* tree trimming or removal occur **within** 100 feet of existing road/rail surfaces?

    Yes

17. Will **more than** 10 trees be removed **between** 0-100 feet of the road/rail surface *during* the active season[1]?

    [1] Areas containing more than 10 trees will be assessed by the local Service Field Office on a case-by-case basis with the project proponent.

    No

18. Has a visual emergence survey[1] been conducted?

    [1] Refer to the summer survey guidance

    No

19. Do you plan on conducting a visual emergence survey prior to removing trees[1]?

    [1] If bats are detected during a visual emergence survey conducted in suitable but **undocumented** Indiana and/or NLEB habitat, this consultation will no longer be valid and a new consultation will be conducted through IPaC with the habitat now considered as **documented** Indiana and/or NLEB habitat.

    Yes

20. Will *any* tree trimming or removal occur **between** 100-300 feet of existing road/rail surfaces?

    No

21. Are *all* trees that are being removed clearly demarcated?

    Yes

22. Will the removal of habitat or the removal/trimming of trees involve the use of **temporary** lighting?

    No

23. Will the removal of habitat or the removal/trimming of trees include installing new or replacing existing **permanent** lighting?

    No

24. Does the project include wetland or stream protection activities associated with compensatory wetland mitigation?

    Yes

25. Does the project include slash pile burning?

    No

26. Does the project include *any* bridge removal, replacement, and/or maintenance activities (e.g., any bridge repair, retrofit, maintenance, and/or rehabilitation work)?

    No

27. Does the project include the removal, replacement, and/or maintenance of *any* structure other than a bridge? (e.g., rest areas, offices, sheds, outbuildings, barns, parking garages, etc.)

    No

28. Will the project involve the use of **temporary** lighting *during* the active season?

    No

29. Will the project install new or replace existing **permanent** lighting?

    No

30. Does the project include percussives or other activities (**not including tree removal/ trimming or bridge/structure work**) that will increase noise levels above existing traffic/ background levels?

    No

31. Are *all* project activities that are **not associated with** habitat removal, tree removal/ trimming, bridge and/or structure activities, temporary or permanent lighting, or use of percussives, limited to actions that DO NOT cause any additional stressors to the bat species?

    Examples: lining roadways, unlighted signage , rail road crossing signals, signal lighting, and minor road repair such as asphalt fill of potholes, etc.

    Yes

32. Will the project raise the road profile **above the tree canopy**?

    No

33. Are the wetland or stream protection activities associated with compensatory wetland/ stream mitigation portion of this project consistent with a Not Likely to Adversely Affect determination in this key?

    Automatically answered
    Yes, because your activities associated with compensatory wetland/stream mitigation activities do not clear suitable summer habitat and are not within 0.5 miles of Indiana bat or NLEB hibernaculum.

34. Are the project activities that are not associated with habitat removal, tree removal/ trimming, bridge and/or structure activities, temporary or permanent lighting, or use of percussives consistent with a No Effect determination in this key?

    Automatically answered
    Yes, other project activities are limited to actions that DO NOT cause any additional stressors to the bat species as described in the BA/BO

35. Is the habitat removal portion of this project consistent with a Not Likely to Adversely Affect determination in this key?

    Automatically answered
    Yes, because the tree removal/trimming that occurs during the NLEB's active season occurs greater than 0.5 miles from the nearest hibernaculum, is less than 100 feet from the existing road/rail surface, removes 10 or fewer trees, includes clear demarcation of the trees that are to be removed, and does not alter documented roosts and/or surrounding summer habitat within 0.25 miles of a documented roost. Additionally, visual emergence surveys will be conducted immediately prior to the removal of trees and, if NLEBs are observed, this consultation will be invalidated and a new consultation will be initiated. Project proponents must contact the local FWS office in this case to determine if the habitat will be considered "documented NLEB habitat" for their new consultation.

36. Is the habitat removal portion of this project consistent with a Not Likely to Adversely Affect determination in this key?

    Automatically answered
    Yes, because the tree removal/trimming that occurs outside of the NLEB's active season occurs greater than 0.5 miles from the nearest hibernaculum, is less than 100 feet from the existing road/rail surface, includes clear demarcation of the trees that are to be removed, and does not alter documented roosts and/or surrounding summer habitat within 0.25 miles of a documented roost.

37. **General AMM 1**
    Will the project ensure *all* operators, employees, and contractors working in areas of known or presumed bat habitat are aware of *all* FHWA/FRA/FTA (Transportation Agencies) environmental commitments, including all applicable Avoidance and Minimization Measures?

    Yes

38. **Hibernacula AMM 1**
Will the project ensure that on-site personnel will use best management practices[1], secondary containment measures, or other standard spill prevention and countermeasures to avoid impacts to possible hibernacula?

[1] Coordinate with the appropriate Service Field Office on recommended best management practices for karst in your state.

Yes

39. **Hibernacula AMM 1**
Will the project ensure that, where practicable, a 300 foot buffer will be employed to separate fueling areas and other major containment risk activities from caves, sinkholes, losing streams, and springs in karst topography?

Yes

40. **Tree Removal AMM 1**
Can *all* phases/aspects of the project (e.g., temporary work areas, alignments) be modified, to the extent practicable, to avoid tree removal[1] in excess of what is required to implement the project safely?

Note: Tree Removal AMM 1 is a minimization measure, the full implementation of which may not always be practicable. Projects may still be NLAA as long as Tree Removal AMMs 2, 3, and 4 are implemented and LAA as long as Tree Removal AMMs 3, 5, 6, and 7 are implemented.

[1] The word “trees” as used in the AMMs refers to trees that are suitable habitat for each species within their range. See the USFWS’ current summer survey guidance for our latest definitions of suitable habitat.

Yes

41. **Tree Removal AMM 3**
Can tree removal be limited to that specified in project plans and ensure that contractors understand clearing limits and how they are marked in the field (e.g., install bright colored flagging/fencing prior to any tree clearing to ensure contractors stay within clearing limits)?

Yes

42. **Tree Removal AMM 4**
Can the project avoid cutting down/removal of *all* (1) **documented**[1] Indiana bat or NLEB roosts[2] (that are still suitable for roosting), (2) trees **within** 0.25 miles of roosts, and (3) documented foraging habitat any time of year?

[1] The word documented means habitat where bats have actually been captured and/or tracked.

[2] Documented roosting or foraging habitat – for the purposes of this consultation, we are considering documented habitat as that where Indiana bats and/or NLEB have actually been captured and tracked using (1) radio telemetry to roosts; (2) radio telemetry biangulation/triangulation to estimate foraging areas; or (3) foraging areas with repeated use documented using acoustics. Documented roosting habitat is also considered as suitable summer habitat within 0.25 miles of documented roosts.)

Yes

PROJECT QUESTIONNAIRE

1. Have you made a No Effect determination for *all* other species indicated on the FWS IPaC generated species list?

   N/A

2. Have you made a May Affect determination for *any* other species on the FWS IPaC generated species list?

   N/A

3. How many acres[1] of trees are proposed for removal between 0-100 feet of the existing road/rail surface?

   [1] If described as number of trees, multiply by 0.09 to convert to acreage and enter that number.

   0.2

AVOIDANCE AND MINIMIZATION MEASURES (AMMS)

This determination key result includes the committment to implement the following Avoidance and Minimization Measures (AMMs):

HIBERNACULA AMM 1

For projects located within karst areas, on-site personnel will use best management practices, secondary containment measures, or other standard spill prevention and countermeasures to avoid impacts to possible hibernacula. Where practicable, a 300 foot buffer will be employed to separate fueling areas and other major containment risk activities from caves, sinkholes, losing streams, and springs in karst topography.

TREE REMOVAL AMM 1

Modify all phases/aspects of the project (e.g., temporary work areas, alignments) to avoid tree removal.

TREE REMOVAL AMM 2

Apply time of year restrictions for tree removal when bats are not likely to be present, or limit tree removal to 10 or fewer trees per project at any time of year within 100 feet of existing road/ rail surface and **outside of documented** roosting/foraging habitat or travel corridors; visual emergence survey must be conducted with no bats observed.

TREE REMOVAL AMM 3

Ensure tree removal is limited to that specified in project plans and ensure that contractors understand clearing limits and how they are marked in the field (e.g., install bright colored flagging/fencing prior to any tree clearing to ensure contractors stay within clearing limits).

TREE REMOVAL AMM 4

Do not remove **documented** Indiana bat or NLEB roosts that are still suitable for roosting, or trees within 0.25 miles of roosts, or
documented foraging habitat any time of year.

GENERAL AMM 1

Ensure all operators, employees, and contractors working in areas of known or presumed bat habitat are aware of all FHWA/FRA/FTA (Transportation Agencies) environmental commitments, including all applicable AMMs.

DETERMINATION KEY DESCRIPTION: FHWA, FRA, FTA PROGRAMMATIC CONSULTATION FOR TRANSPORTATION PROJECTS AFFECTING NLEB OR INDIANA BAT

This key was last updated in IPaC on November 04, 2024. Keys are subject to periodic revision.

This decision key is intended for projects/activities funded or authorized by the Federal Highway Administration (FHWA), Federal Railroad Administration (FRA), and/or Federal Transit Administration (FTA), which may require consultation with the U.S. Fish and Wildlife Service (Service) under Section 7 of the Endangered Species Act (ESA) for the endangered **Indiana bat** (*Myotis sodalis*) and the endangered **northern long-eared bat** (NLEB) (*Myotis septentrionalis*).

This decision key should only be used to verify project applicability with the Service's amended February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion (dated March 23, 2023) for Transportation Projects. The programmatic biological opinion covers limited transportation activities that may affect either bat species, and addresses situations that are both likely and not likely to adversely affect either bat species. This decision key will assist in identifying the effect of a specific project/activity and applicability of the programmatic consultation. The programmatic biological opinion is not intended to cover all types of transportation actions. Activities outside the scope of the programmatic biological opinion, or that may affect ESA-listed species other than the Indiana bat or NLEB, or any designated critical habitat, may require additional ESA Section 7 consultation.

IPAC USER CONTACT INFORMATION

Agency: HR Green
Name: Carl Folz
Address: 2550 University Avenue W.
Address Line 2: Suite 400 North
City: St. Paul
State: MN
Zip: 55114
Email cfolz@hrgreen.com
Phone: 6516597791

LEAD AGENCY CONTACT INFORMATION

Lead Agency: County of Dakota

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Minnesota-Wisconsin Ecological Services Field Office
3815 American Blvd East
Bloomington, MN 55425-1659
Phone: (952) 858-0793

In Reply Refer To: 03/06/2025 21:07:24 UTC
Project Code: 2025-0016389
Project Name: MRG Trail

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

This response has been generated by the Information, Planning, and Conservation (IPaC) system to provide information on natural resources that could be affected by your project. The U.S. Fish and Wildlife Service (Service) provides this response under the authority of the Endangered Species Act of 1973 (16 U.S.C. 1531-1543), the Bald and Golden Eagle Protection Act (16 U.S.C. 668-668d), the Migratory Bird Treaty Act (16 U.S.C. 703-712), and the Fish and Wildlife Coordination Act (16 U.S.C. 661 *et seq.*).

Threatened and Endangered Species
The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and may be affected by your proposed project. The species list fulfills the requirement for obtaining a Technical Assistance Letter from the U.S. Fish and Wildlife Service under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the IPaC system by completing the same process used to receive the enclosed list.

Consultation Technical Assistance
Please refer to refer to our Section 7 website for guidance and technical assistance, including step-by-step instructions for making effects determinations for each species that might be present and for specific guidance on the following types of projects: projects in developed areas, HUD, CDBG, EDA, USDA Rural Development projects, pipelines, buried utilities, telecommunications, and requests for a Conditional Letter of Map Revision (CLOMR) from FEMA.

We recommend running the project (if it qualifies) through our **Minnesota-Wisconsin Federal Endangered Species Determination Key (Minnesota-Wisconsin ("D-key"))**. A demonstration video showing how-to access and use the determination key is available. Please note that the Minnesota-Wisconsin D-key is the third option of 3 available d-keys. D-keys are tools to help Federal agencies and other project proponents determine if their proposed action has the potential to adversely affect federally listed species and designated critical habitat. The Minnesota-Wisconsin D-key includes a structured set of questions that assists a project proponent in determining whether a proposed project qualifies for a certain predetermined consultation outcome for all federally listed species found in Minnesota and Wisconsin (except for the northern long-eared bat- see below), which includes determinations of “no effect” or “may affect, not likely to adversely affect." In each case, the Service has compiled and analyzed the best available information on the species’ biology and the impacts of certain activities to support these determinations.

If your completed d-key output letter shows a "No Effect" (NE) determination for all listed species, print your IPaC output letter for your files to document your compliance with the Endangered Species Act.

For Federal projects with a “Not Likely to Adversely Affect” (NLAA) determination, our concurrence becomes valid if you do not hear otherwise from us after a 30-day review period, as indicated in your letter.

If your d-key output letter indicates additional coordination with the Minnesota-Wisconsin Ecological Services Field Office is necessary (i.e., you get a “May Affect” determination), you will be provided additional guidance on contacting the Service to continue ESA coordination outside of the key; ESA compliance cannot be concluded using the key for “May Affect” determinations unless otherwise indicated in your output letter.

Note: Once you obtain your official species list, you are not required to continue in IPaC with d-keys, although in most cases these tools should expedite your review. If you choose to make an effects determination on your own, you may do so. If the project is a Federal Action, you may want to review our section 7 step-by-step instructions before making your determinations.

Using the IPaC Official Species List to Make No Effect and May Affect Determinations for Listed Species

1. If IPaC returns a result of “There are no listed species found within the vicinity of the project,” then project proponents can conclude the proposed activities will have **no effect** on any federally listed species under Service jurisdiction. Concurrence from the Service is not required for **no effect** determinations. No further consultation or coordination is required. Attach this letter to the dated IPaC species list report for your records.
2. If IPaC returns one or more federally listed, proposed, or candidate species as potentially present in the action area of the proposed project – other than bats (see below) – then project proponents must determine if proposed activities will have **no effect** on or **may affect** those species. For assistance in determining if suitable habitat for listed, candidate, or proposed species occurs within your project area or if species may be affected by project activities, you can obtain Life History Information for Listed and Candidate Species on our office website. If no impacts will occur to a species on the IPaC species list (e.g., there is no habitat present in the project area), the appropriate determination is **no effect**. No further consultation or coordination is required. Attach this letter to the dated IPaC species list report for your records.

3. Should you determine that project activities **may affect** any federally listed, please contact our office for further coordination. Letters with requests for consultation or correspondence about your project should include the Consultation Tracking Number in the header. Electronic submission is preferred.

Northern Long-Eared Bats
Northern long-eared bats occur throughout Minnesota and Wisconsin and the information below may help in determining if your project may affect these species.

Suitable summer habitat for northern long-eared bats consists of a wide variety of forested/wooded habitats where they roost, forage, and travel and may also include some adjacent and interspersed non-forested habitats such as emergent wetlands and adjacent edges of agricultural fields, old fields and pastures. This includes forests and woodlots containing potential roosts (i.e., live trees and/or snags ≥3 inches dbh for northern long-eared bat that have exfoliating bark, cracks, crevices, and/or hollows), as well as linear features such as fencerows, riparian forests, and other wooded corridors. These wooded areas may be dense or loose aggregates of trees with variable amounts of canopy closure. Individual trees may be considered suitable habitat when they exhibit the characteristics of a potential roost tree and are located within 1,000 feet (305 meters) of forested/wooded habitat. Northern long-eared bats have also been observed roosting in human-made structures, such as buildings, barns, bridges, and bat houses; therefore, these structures should also be considered potential summer habitat and evaluated for use by bats. If your project will impact caves or mines or will involve clearing forest or woodland habitat containing suitable roosting habitat, northern long-eared bats could be affected. For bat activity dates, please review Appendix L in the Range-wide Indiana Bat and Northern Long-Eared Bat Survey Guidelines.

Examples of unsuitable habitat include:
- Individual trees that are greater than 1,000 feet from forested or wooded areas,
- Trees found in highly developed urban areas (e.g., street trees, downtown areas),
- A pure stand of less than 3-inch dbh trees that are not mixed with larger trees, and
- A monoculture stand of shrubby vegetation with no potential roost trees.

If IPaC returns a result that northern long-eared bats are potentially present in the action area of the proposed project, project proponents can conclude the proposed activities **may affect** this species **IF** one or more of the following activities are proposed:
- Clearing or disturbing suitable roosting habitat, as defined above, at any time of year,
- Any activity in or near the entrance to a cave or mine,
- Mining, deep excavation, or underground work within 0.25 miles of a cave or mine,
- Construction of one or more wind turbines, or
- Demolition or reconstruction of human-made structures that are known to be used by bats based on observations of roosting bats, bats emerging at dusk, or guano deposits or stains.

If none of the above activities are proposed, project proponents can conclude the proposed activities will have **no effect** on the northern long-eared bat. Concurrence from the Service is not required for **No Effect** determinations. No further consultation or coordination is required. Attach this letter to the dated IPaC

species list report for your records.

If any of the above activities are proposed, and the northern long-eared bat appears on the user's species list, the federal project user will be directed to either the northern long-eared bat and tricolored bat range-wide D-key or the Federal Highways Administration, Federal Railways Administration, and Federal Transit Administration Indiana bat/Northern long-eared bat D-key, depending on the type of project and federal agency involvement. Similar to the Minnesota-Wisconsin D-key, these d-keys helps to determine if prohibited take might occur and, if not, will generate an automated verification letter. Additional information about available tools can be found on the Service's northern long-eared bat website.

Whooping Crane
Whooping crane is designated as a non-essential experimental population in Wisconsin and consultation under Section 7(a)(2) of the Endangered Species Act is only required if project activities will occur within a National Wildlife Refuge or National Park. If project activities are proposed on lands outside of a National Wildlife Refuge or National Park, then you are not required to consult. For additional information on this designation and consultation requirements, please review "Establishment of a Nonessential Experimental Population of Whooping Cranes in the Eastern United States."

Other Trust Resources and Activities
Bald and Golden Eagles - Although the bald eagle has been removed from the endangered species list, this species and the golden eagle are protected by the Bald and Golden Eagle Act and the Migratory Bird Treaty Act. It is the responsibility of the project proponent to survey the area for any migratory bird nests. If there is an eagle nest on-site while work is on-going, eagles may be disturbed. We recommend avoiding and minimizing disturbance to eagles whenever practicable. If you cannot avoid eagle disturbance, you may seek a permit. A nest take permit is always required for removal, relocation, or obstruction of an eagle nest. For communication and wind energy projects, please refer to additional guidelines below.

Migratory Birds - The Migratory Bird Treaty Act (MBTA) prohibits the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests, except when specifically authorized by the Service. The Service has the responsibility under the MBTA to proactively prevent the mortality of migratory birds whenever possible and we encourage implementation of recommendations that minimize potential impacts to migratory birds. Such measures include clearing forested habitat outside the nesting season (generally March 1 to August 31) or conducting nest surveys prior to clearing to avoid injury to eggs or nestlings.

Communication Towers - Construction of new communications towers (including radio, television, cellular, and microwave) creates a potentially significant impact on migratory birds, especially some 350 species of night-migrating birds. However, the Service has developed voluntary guidelines for minimizing impacts.

Transmission Lines - Migratory birds, especially large species with long wingspans, heavy bodies, and poor maneuverability can also collide with power lines. In addition, mortality can occur when birds, particularly hawks, eagles, kites, falcons, and owls, attempt to perch on uninsulated or unguarded power poles. To minimize these risks, please refer to guidelines developed by the Avian Power Line Interaction Committee and the Service. Implementation of these measures is especially important along sections of lines adjacent to wetlands or other areas that support large numbers of raptors and migratory birds.

Wind Energy - To minimize impacts to migratory birds and bats, wind energy projects should follow the Service's Wind Energy Guidelines. In addition, please refer to the Service's Eagle Conservation Plan Guidance, which provides guidance for conserving bald and golden eagles in the course of siting, constructing, and operating wind energy facilities.

State Department of Natural Resources Coordination
While it is not required for your Federal section 7 consultation, please note that additional state endangered or threatened species may also have the potential to be impacted. **Please contact the Minnesota or Wisconsin Department of Natural Resources for information on state listed species that may be present in your proposed project area.**

Minnesota
Minnesota Department of Natural Resources - Endangered Resources Review Homepage
Email: Review.NHIS@state.mn.us

Wisconsin
Wisconsin Department of Natural Resources - Endangered Resources Review Homepage
Email: DNRERReview@wi.gov

We appreciate your concern for threatened and endangered species. Please feel free to contact our office with questions or for additional information.

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Bald & Golden Eagles
- Migratory Birds
- Wetlands

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Minnesota-Wisconsin Ecological Services Field Office
3815 American Blvd East
Bloomington, MN 55425-1659
(952) 858-0793

PROJECT SUMMARY

Project Code: 2025-0016389
Project Name: MRG Trail
Project Type: Recreation Operations
Project Description: The proposed project will resurface portions and modify the existing Mississippi River Greenway Trail in Hastings, MN to meet ADA requirements.
Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@44.75491285,-92.87924578780013,14z

Counties: Dakota County, Minnesota

ENDANGERED SPECIES ACT SPECIES

There is a total of 7 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

MAMMALS

NAME	STATUS
Northern Long-eared Bat *Myotis septentrionalis* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Endangered
Tricolored Bat *Perimyotis subflavus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/10515	Proposed Endangered

BIRDS

NAME	STATUS
Whooping Crane *Grus americana* Population: U.S.A. (AL, AR, CO, FL, GA, ID, IL, IN, IA, KY, LA, MI, MN, MS, MO, NC, NM, OH, SC, TN, UT, VA, WI, WV, western half of WY) No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/758	Experimental Population, Non-Essential

CLAMS

NAME	STATUS
Higgins Eye (pearlymussel) *Lampsilis higginsii* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/5428	Endangered
Salamander Mussel *Simpsonaias ambigua* There is **proposed** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/6208	Proposed Endangered

INSECTS

NAME	STATUS
Monarch Butterfly *Danaus plexippus* There is **proposed** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/9743	Proposed Threatened
Western Regal Fritillary *Argynnis idalia occidentalis* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/12017	Proposed Threatened

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

USFWS NATIONAL WILDLIFE REFUGE LANDS AND FISH HATCHERIES

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

BALD & GOLDEN EAGLES

Bald and Golden Eagles are protected under the Bald and Golden Eagle Protection Act [2] and the Migratory Bird Treaty Act (MBTA) [1]. Any person or organization who plans or conducts activities that may result in impacts to Bald or Golden Eagles, or their habitats, should follow appropriate regulations and consider implementing appropriate avoidance and minimization measures, as described in the various links on this page.

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1. The Bald and Golden Eagle Protection Act of 1940.
2. The Migratory Birds Treaty Act of 1918.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

There are Bald Eagles and/or Golden Eagles in your project area.

Measures for Proactively Minimizing Eagle Impacts
For information on how to best avoid and minimize disturbance to nesting bald eagles, please review the National Bald Eagle Management Guidelines. You may employ the timing and activity-specific distance recommendations in this document when designing your project/ activity to avoid and minimize eagle impacts. For bald eagle information specific to Alaska, please refer to Bald Eagle Nesting and Sensitivity to Human Activity.

The FWS does not currently have guidelines for avoiding and minimizing disturbance to nesting Golden Eagles. For site-specific recommendations regarding nesting Golden Eagles, please consult with the appropriate Regional Migratory Bird Office or Ecological Services Field Office.

If disturbance or take of eagles cannot be avoided, an incidental take permit may be available to authorize any take that results from, but is not the purpose of, an otherwise lawful activity. For assistance making this determination for Bald Eagles, visit the Do I Need A Permit Tool. For assistance making this determination for golden eagles, please consult with the appropriate Regional Migratory Bird Office or Ecological Services Field Office.

Ensure Your Eagle List is Accurate and Complete

If your project area is in a poorly surveyed area in IPaC, your list may not be complete and you may need to rely on other resources to determine what species may be present (e.g. your local FWS field office, state surveys, your own surveys). Please review the Supplemental Information on Migratory Birds and Eagles, to help you properly interpret the report for your specified location, including determining if there is sufficient data to ensure your list is accurate.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to bald or golden eagles on your list, see the "Probability of Presence Summary" below to see when these bald or golden eagles are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle *Haliaeetus leucocephalus* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Oct 15 to Aug 31
Golden Eagle *Aquila chrysaetos* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680	Breeds elsewhere

PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "Supplemental Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

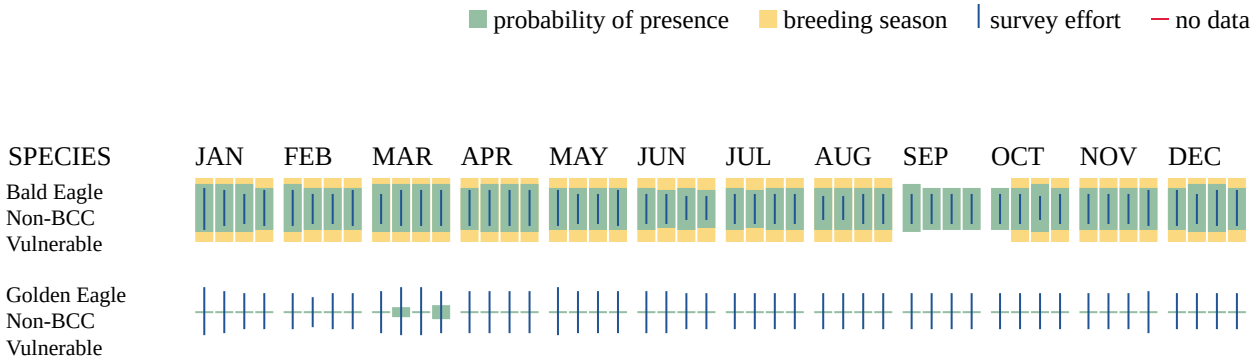
Probability of Presence (■)

Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

Breeding Season (■)
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

Survey Effort (|)
Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data (–)
A week is marked as having no data if there were no survey events for that week.



Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide avoidance and minimization measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

MIGRATORY BIRDS

The Migratory Bird Treaty Act (MBTA) [1] prohibits the take (including killing, capturing, selling, trading, and transport) of protected migratory bird species without prior authorization by the Department of Interior U.S. Fish and Wildlife Service (Service). The incidental take of migratory birds is the injury or death of birds that results from, but is not the purpose, of an activity. The Service interprets the MBTA to prohibit incidental take.

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1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the "Probability of Presence Summary" below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
American Golden-plover *Pluvialis dominica* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/10561	Breeds elsewhere
Bald Eagle *Haliaeetus leucocephalus* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Oct 15 to Aug 31
Black-billed Cuckoo *Coccyzus erythropthalmus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9399	Breeds May 15 to Oct 10
Bobolink *Dolichonyx oryzivorus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9454	Breeds May 20 to Jul 31
Cerulean Warbler *Setophaga cerulea* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/2974	Breeds Apr 21 to Jul 20
Chimney Swift *Chaetura pelagica* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9406	Breeds Mar 15 to Aug 25
Eastern Whip-poor-will *Antrostomus vociferus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/10678	Breeds May 1 to Aug 20
Golden Eagle *Aquila chrysaetos* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680	Breeds elsewhere
Grasshopper Sparrow *Ammodramus savannarum perpallidus* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/8329	Breeds Jun 1 to Aug 20
Henslow's Sparrow *Centronyx henslowii* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3941	Breeds May 1 to Aug 31

NAME	BREEDING SEASON
Lesser Yellowlegs *Tringa flavipes* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9679	Breeds elsewhere
Pectoral Sandpiper *Calidris melanotos* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9561	Breeds elsewhere
Prairie Loggerhead Shrike *Lanius ludovicianus excubitorides* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/8833	Breeds Feb 1 to Jul 31
Prothonotary Warbler *Protonotaria citrea* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9439	Breeds Apr 1 to Jul 31
Red-headed Woodpecker *Melanerpes erythrocephalus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9398	Breeds May 10 to Sep 10
Rusty Blackbird *Euphagus carolinus* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9478	Breeds elsewhere
Semipalmated Sandpiper *Calidris pusilla* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9603	Breeds elsewhere
Upland Sandpiper *Bartramia longicauda* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9294	Breeds May 1 to Aug 31
Wood Thrush *Hylocichla mustelina* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9431	Breeds May 10 to Aug 31

PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "Supplemental

Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

Breeding Season (■)
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

Survey Effort (|)
Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide avoidance and minimization measures for birds
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

WETLANDS

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

FRESHWATER EMERGENT WETLAND

- PEM1Cx
- PEM1Ax

FRESHWATER POND

- PUBFx

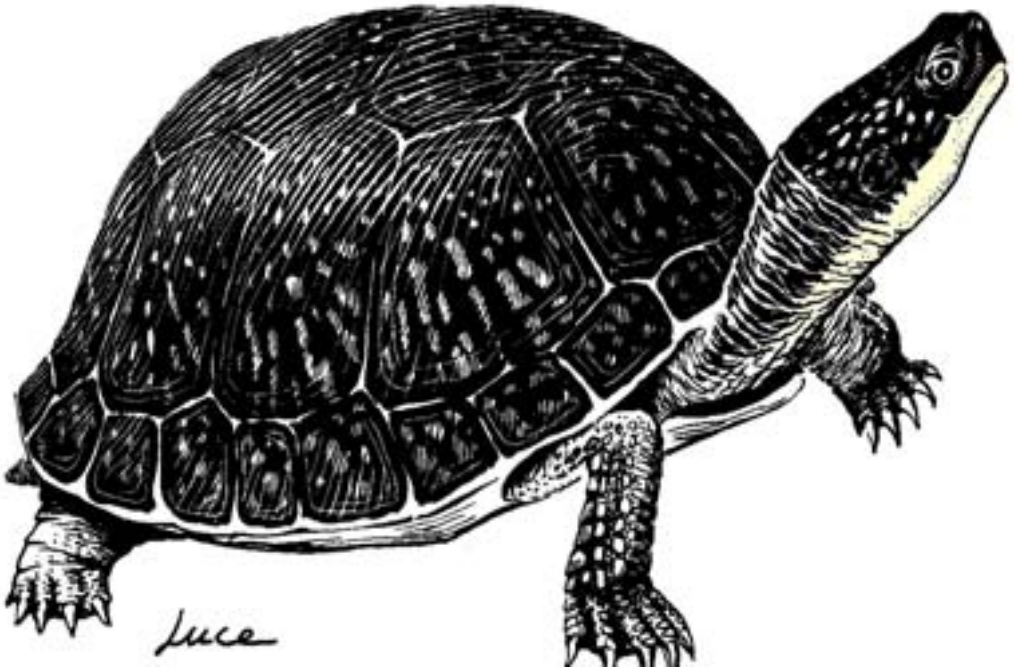
IPAC USER CONTACT INFORMATION

Agency: HR Green
Name: Carl Folz
Address: 2550 University Avenue W.
Address Line 2: Suite 400 North
City: St. Paul
State: MN
Zip: 55114
Email cfolz@hrgreen.com
Phone: 6516597791

LEAD AGENCY CONTACT INFORMATION

Lead Agency: County of Dakota

CAUTION



BLANDING'S TURTLES

MAY BE ENCOUNTERED IN THIS AREA

The unique and rare Blanding's turtle has been found in this area. Blanding's turtles are a State Threatened species and are protected under Minnesota Statute 84.095, Protection of Threatened and Endangered Species. Please be careful of turtles on roads and in construction sites. For additional information on turtles, or to report a Blanding's turtle sighting, contact the DNR Nongame Specialist nearest you: Bemidji (218-308-2641); Grand Rapids (218-327-4518); New Ulm (507-359-6033); Rochester (507-280-5070); or St. Paul (651-259-5764).

DESCRIPTION: The Blanding's turtle is a medium to large turtle (5 to 10 inches) with a black or dark blue, dome-shaped shell with muted yellow spots and bars. The bottom of the shell is hinged across the front third, enabling the turtle to pull the front edge of the lower shell firmly against the top shell to provide additional protection when threatened. The head, legs, and tail are dark brown or blue-gray with small dots of light brown or yellow. A distinctive field mark is the bright yellow chin and neck.

Illustration by Don Luce, from Turtles in Minnesota, Natural History Leaflet No. 9, June 1989, James Ford Bell Museum of Natural History

SUMMARY OF RECOMMENDATIONS FOR AVOIDING AND MINIMIZING IMPACTS TO BLANDING'S TURTLE POPULATIONS

(see Environmental Review Fact Sheet Series for full recommendations)

- A flyer with an illustration of an adult Blanding's turtle should be given to all contractors working in the area. Homeowners should also be informed of the presence of Blanding's turtles in the area.
- Turtles which are in imminent danger should be moved, by hand, out of harms way. Turtles which are not in imminent danger should be left undisturbed to continue their travel among wetlands and/or nest sites.
- If a Blanding's turtle nests in your yard, do not disturb the nest, and do not allow pets near the nest.
- Blanding's turtles do not make good pets. It is illegal to keep this threatened species in captivity.
- Silt fencing should be set up to keep turtles out of construction areas. It is critical that silt fencing be removed after the area has been revegetated.
- Small, vegetated temporary wetlands should not be dredged, deepened, or filled.
- All wetlands should be protected from pollution; use of fertilizers and pesticides should be avoided, and run-off from lawns and streets should be controlled. Erosion should be prevented to keep sediment from reaching wetlands and lakes.
- Roads should be kept to minimum standards on widths and lanes.
- Roads should be ditched, not curbed or below grade. If curbs must be used, 4" high curbs at a 3:1 slope are preferred.
- Culverts under roads crossing wetland areas, between wetland areas, or between wetland and nesting areas should be at least 36 in. diameter and flat-bottomed or elliptical.
- Culverts under roads crossing streams should be oversized (at least twice as wide as the normal width of open water) and flat-bottomed or elliptical.
- Utility access and maintenance roads should be kept to a minimum.
- Because trenches can trap turtles, trenches should be checked for turtles prior to being backfilled and the sites should be returned to original grade.
- Terrain should be left with as much natural contour as possible.
- Graded areas should be revegetated with native grasses and forbs.
- Vegetation management in infrequently mowed areas -- such as in ditches, along utility access roads, and under power lines -- should be done mechanically (chemicals should not be used). Work should occur fall through spring (after October 1st and before June 1st).

Compiled by the Minnesota Department of Natural Resources Division of Ecological Resources, Updated March 2008
Endangered Species Environmental Review Coordinator, 500 Lafayette Rd., Box 25, St. Paul, MN 55155 / 651-259-5109

Minnesota Department of Natural Resources
Division of Ecological & Water Resources
500 Lafayette Road, Box 25
St. Paul, MN 55155-4025

June 4, 2024

Ted McCaslin
HR Green, Inc.

RE: Natural Heritage Review of the proposed **Young Park Trail Improvements,**
T35N R26W Sections 14 and 15; Sherburne County

Dear Ted McCaslin,

For all correspondence regarding the Natural Heritage Review of this project please include the project ID **MCE-2024-00375** in the email subject line.

As requested, the Minnesota Natural Heritage Information System has been reviewed to determine if the proposed project has the potential to impact any rare species or other significant natural features. Based on the project details provided with the request, the following rare features may be impacted by the proposed project:

State-listed Species

- Blanding's turtles (*Emydoidea blandingii*), a state-listed threatened species, have been documented in the vicinity of the proposed project. Blanding's turtles use upland areas up to and over a mile distant from wetlands, waterbodies, and watercourses. Uplands are used for nesting, basking, periods of dormancy, and traveling between wetlands. Factors believed to contribute to the decline of this species include collisions with vehicles, wetland drainage and degradation, and the development of upland habitat. Any added mortality can be detrimental to populations of Blanding's turtles, as these turtles have a low reproduction rate that depends upon a high survival rate to maintain population levels.

  This project has the potential to impact this rare turtle through direct fatalities and habitat disturbance/destruction due to excavation, fill, and other construction activities associated with the project. Minnesota's Endangered Species Statute (Minnesota Statutes, section 84.0895) and associated Rules (Minnesota Rules, part 6212.1800 to 6212.2300 and 6134) prohibit the take of threatened or endangered species without a permit. As such, **the following avoidance measures are required**:

- The proposed project area has characteristics of good turtle nesting habitat. To prevent turtles from nesting within the project area, install silt fencing or similar turtle-proof barriers around all soil stockpiles, gravel pads, and other areas of exposed soil/sand/sediment to **prevent turtle access from May 15 to July 15.**
  - Silt fencing or similar turtle-proof barriers must be buried a minimum of 10 inches, regularly inspected, and maintained as needed.
  - Temporary fencing or other barriers must be removed prior to project closeout.
  - Filter logs do not count as a turtle-proof barrier.
- The Blanding's turtle flyer must be given to all contractors working in the area.
- Check bare ground within construction areas for turtles before the use of heavy equipment or any ground disturbance.
- Report any sightings to Reports.NHIS@state.mn.us; please include date, observer, location, and photograph of the Blanding's turtle.
- If turtles are in imminent danger, move them by hand out of harm's way; otherwise, they are to be left undisturbed. Directions on how to move turtles safely can be found at Helping Turtles Across the Road.

Please refer to the Blanding's turtle fact sheet for additional recommendations (both lists) that may be relevant to your project.

Please contact Review.NHIS@state.mn.us **to confirm that the above avoidance measures will be implemented or to inform us that they are not feasible.** If the measures are not feasible, a project-specific avoidance plan will likely be needed.

- Please visit the DNR Rare Species Guide for more information on the habitat use of these species and recommended measures to avoid or minimize impacts.

Federally Protected Species

- To ensure compliance with federal law, conduct a federal regulatory review using the U.S. Fish and Wildlife Service's (USFWS) online Information for Planning and Consultation (IPaC) tool.

Environmental Review and Permitting

- Please include a copy of this letter and the MCE-generated Final Project Report in any state or local license or permit application. Please note that measures to avoid or minimize disturbance to the above rare features may be included as restrictions or conditions in any required permits or licenses.

The Natural Heritage Information System (NHIS), a collection of databases that contains information about Minnesota's rare natural features, is maintained by the Division of Ecological and Water Resources, Department of Natural Resources. The NHIS is continually updated as new information becomes available, and is the most complete source of data on Minnesota's rare or otherwise significant

species, native plant communities, and other natural features. However, the NHIS is not an exhaustive inventory and thus does not represent all of the occurrences of rare features within the state. Therefore, ecologically significant features for which we have no records may exist within the project area. If additional information becomes available regarding rare features in the vicinity of the project, further review may be necessary.

For environmental review purposes, the results of this Natural Heritage Review are valid for one year; the results are only valid for the project location and project description provided with the request. **If project details change or the project has not occurred within one year, please resubmit the project for review within one year of initiating project activities.**

The Natural Heritage Review does not constitute project approval by the Department of Natural Resources. Instead, it identifies issues regarding known occurrences of rare features and potential impacts to these rare features. Visit the Natural Heritage Review website for additional information regarding this process, survey guidance, and other related information. For information on the environmental review process or other natural resource concerns, you may contact your DNR Regional Environmental Assessment Ecologist.

Thank you for consulting us on this matter and for your interest in preserving Minnesota's rare natural resources.

Sincerely,

Molly Barrett
Natural Heritage Review Specialist
Molly.Barrett@state.mn.us

Cc: Melissa Collins, Regional Environmental Assessment Ecologist, Central (Region 3)