

Project	Gregory Contracting LLC	Date	6/15/2022
To	Mike Kinney	Contact Info	CLFWLD
Cc	Board of Managers	Contact Info	CLFLWD
From	Madison Rogers, P.E. Greg D. Graske, P.E.	Contact Info	EOR
Regarding	Permit Application #22-015 Gregory Contracting LLC, City of Wyoming		

Applicant

Piper Properties LLC
 23090 Havelka Ct. N.
 Forest Lake, MN 55025
 651-206-2853
 dj@gregorycontracting.com

Authorized Agent

Nathan Nohner, Larson Engineering
 3524 Labore Road
 White Bear Lake, MN 55110
 612-224-6725
 nnohner@larsonengr.com

Project Purpose: The proposed project will construct a new office building and parking lot on a 1.78 acre site, resulting in 0.52 acres of new impervious cover proposed with Phase 1 of the project. A future building is also proposed and will add an additional 0.34 acres of impervious surface, resulting in a total future impervious surface cover of 0.86 acres for the site. The stormwater management for the project has accounted for Phase 1 and Phase 2 impervious surface.

Project Location: Northwest quadrant of Hazel Ave and US Highway 8, site drains to Comfort Lake.

Applicable District Rules: 1.0, 2.0, 3.0, 9.0 & 10.0

Recommendation: Approved with issuance conditioned on receipt of:

Prior to permit issuance, the following are required:

1. Provide architectural building plan that shows the proposed building roof drains to Drainage Area B.
2. Revise grading such that the impervious area within Drainage Area A is tributary to the proposed stormwater BMP.
3. Provide additional documentation and revise plans if necessary to show that there is adequate pretreatment for the filtration basins.
4. Execution of a maintenance instrument satisfactory to the CLFLWD addressing the ongoing operation and maintenance of the proposed stormwater management features including the filtration basins 1A and 1B. The proposed instrument shall be provided to the District for review prior to execution, and documentation of recording with the County must be provided before permit issuance.
5. Financial Assurance in the amount of \$3,500 for grading and alteration.
6. Financial Assurance in the amount of \$62,500 for stormwater management or demonstration that the applicant has provided the municipality with a financial assurance of equal or greater value.

Stipulations of Permit:

7. Submittal of as-built survey for all stormwater features and pipes.
8. Additional permitting prior to Phase 2 construction.

Rule 2.0: Stormwater Management

The proposed project will construct a new building, bituminous and gravel parking lots and driveways, and sidewalks. The majority of the site currently drains to the north through private ditches before reaching the Sunrise River which ultimately discharges to Comfort Lake. The submitted soil borings indicate clay type soils making infiltration not feasible. To meet stormwater management requirements, a stormwater filtration basin is proposed. The filtration basin consists of two basin areas that are connected by a 12-inch equalizer pipe. The basins are discharged by filtration through the filtration basin media and a riprap overflow during larger storm events. There is a very small portion of the proposed site that will not be treated by the filtration basins and will flow to County Rd 8 to the southwest of the project site. However, the un-treated area does not include any of the proposed impervious surfaces and runoff volumes and rates are negligible.

Pretreatment per rule 2.3.11 shall be included with the final plans. The stormwater that is discharged from the filtration basins that leaves the site to the north drains to an existing private ditch. The applicant has shown that the project will have no adverse impacts on the downstream landowners due to the decrease in rates. The conveyance capacity of the ditch will not be affected by the project.

The proposed project meets the stormwater standards for new developments. The rate control for the 2-, 10-, and 100-year storm events are reduced from pre-development to proposed conditions. A summary of the rates leaving the site is shown below.

Rate Control Summary

Conditions	2-year	10-year	100-year
Existing (cfs)	2.07	4.27	8.93
Proposed (cfs)	1.57	2.70	5.05

For new developments, the volume at the point of discharge must not increase from the pre-development conditions for the 24-hour precipitation event with a return frequency of two years. Based on the submitted calculations, the required infiltration volume for the site is 6,405 cubic feet (Pre-development volume vs post-development volume for the 2-year event). Utilizing a conversion factor of 0.5 for a filtration basin with a sand filter, the required treatment volume is 12,810 cubic feet. The filtration basins are sized provide the 12,833 cubic feet of treatment volume. The filtration basins are also designed to capture the volume of stormwater from the 2-year event per rule 2.3.3.

Per rule 2.3.5, proposed developments subject to rule 2.0 must meet the freeboard requirements of rule 7.3. The filtration basin is required to meet the standards of a detention basin for rule 7.3. There is shown to be 2-feet of freeboard between the proposed and future building LFE and the 100-year HWL of the filtration basin.

The project does not include any subdivision and no wetlands are shown on the site survey. The proposed project is not required to meet any wetland bounce and inundation period requirements per rule 2.3.4.

All stormwater BMPs will be built concurrently with Phase 1. The BMPs are sized to handle stormwater runoff for Phase 1 and Phase 2. Plans must be submitted to the district when Phase 2 occurs to confirm impervious amount assumptions and verify that low floor elevations are satisfied for the phase 2 building.

Rule 3.0: Erosion Control

The proposed project meets erosion and sediment control standards and includes a rock construction entrance, erosion control blanket, silt fence around the project perimeter. A detailed SWPPP has also been submitted. The proposed plan meets District erosion control requirements. The District may require the installation of additional sediment control best management practices at a later time, if deemed necessary based on site conditions during construction.

Rule 4.0: Lake, Stream, and Wetland Buffer Requirements

The proposed project does not trigger this rule; a subdivision was not proposed and no municipal rezoning or variance was required for this project.

Rule 5.0: Shoreline and Streambank Alterations

The proposed project does not trigger this rule; a DNR general permit applicable to owners who hold a District permit is not in effect.

Rule 6.0: Watercourse and Basin Crossings

The proposed project does not trigger this rule; no roadways, utilities, or water control structures are proposed in the bed of District waterbodies.

Rule 7.0: Floodplain and Drainage Alterations

The proposed project does not trigger this rule; Wyoming has a state-approved floodplain ordinance. does not trigger this rule; no floodplain alterations are proposed.

Rule 8.0: Wetland Management

The proposed project does not trigger this rule; the District is not the LGU for wetland impacts.

Rule 9.0: Fees

The fees for the proposed project are the \$10 application fee and the \$4,250 review and inspection deposit. The fees have been submitted.

Rule 10.0: Financial Assurances

The financial assurances required for the proposed project are \$3,500 for grading and alteration and \$62,500 for stormwater management. A financial assurance to CLFLWD for stormwater management facilities is not needed if the applicant demonstrates that the applicant has provided the municipality with a financial assurance for the facility of equal or greater value.

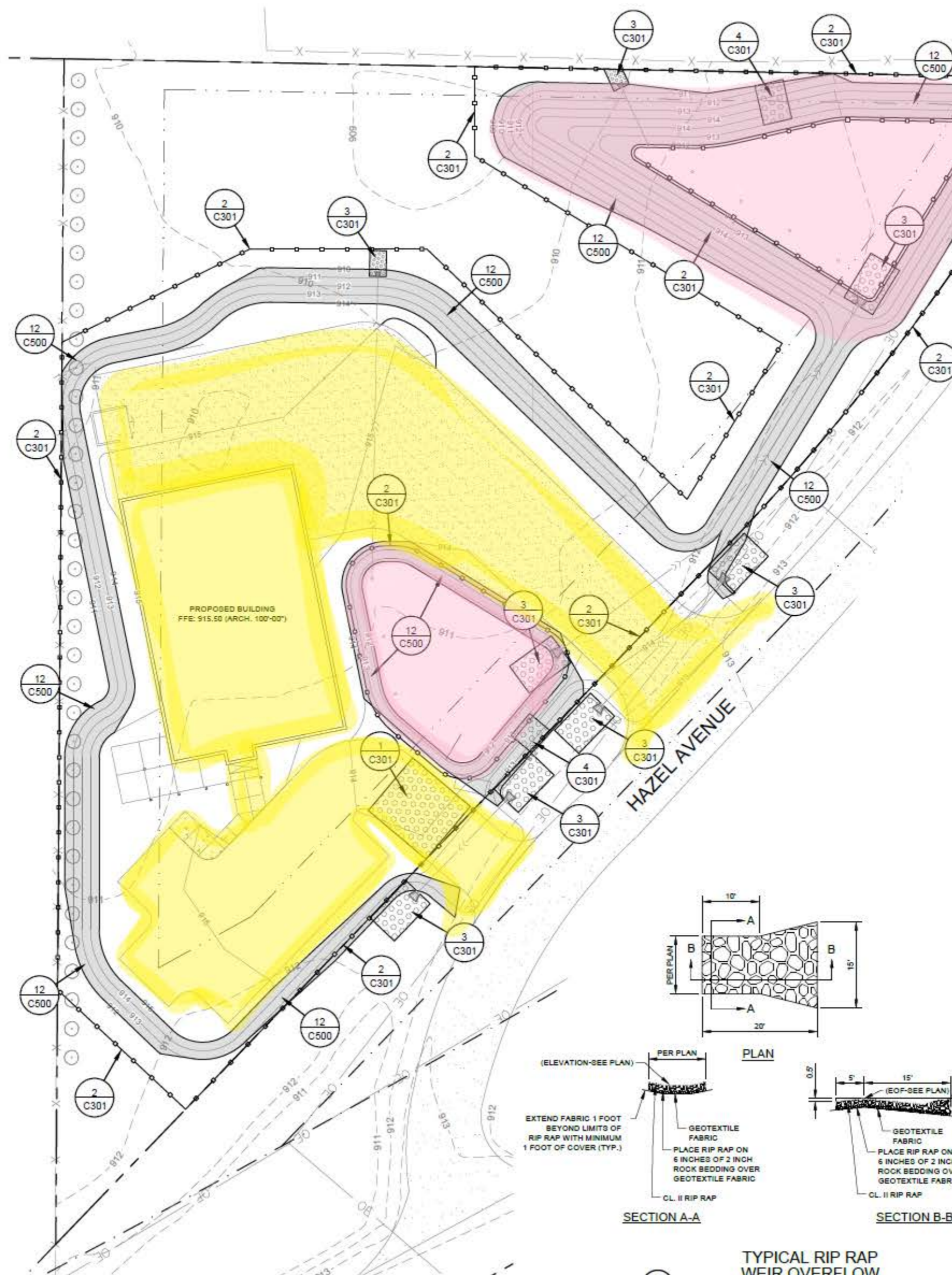
Rule 11.0: Variances

The proposed project does not require a variance.

Submittals Received

The following submittals were received and reviewed as the basis for this permit application review:

1. Application, received May 26, 2022, prepared May 20, 2022, prepared by Applicant.
2. Permit Application Fee in the amount of \$10, received May 26, 2022.
3. Permit review and inspection deposit in the amount of \$4,250, received May 26, 2022.
4. Certificate of Survey, received May 26, 2022, prepared February 18, 2022, prepared by Larson Engineering.
5. Construction Plan Set (7-pages), received May 26, 2022, prepared May 23, 2022, prepared by Larson Engineering.
6. Stormwater Calculations, received May 26, 2022, prepared May 24, 2022, prepared by Larson Engineering.
7. Geotechnical Exploration Report, received May 26, 2022, prepared May 6, 2022, prepared by American Engineering Testing.
8. Updated Construction Plan Set (7-pages), received June 10, 2022, prepared June 10, 2022, prepared by Larson Engineering.
9. Updated Stormwater Calculations, received June 10, 2022, prepared June 10, 2022, prepared by Larson Engineering.
10. Response to Comments, received June 10, 2022, prepared June 10, 2022

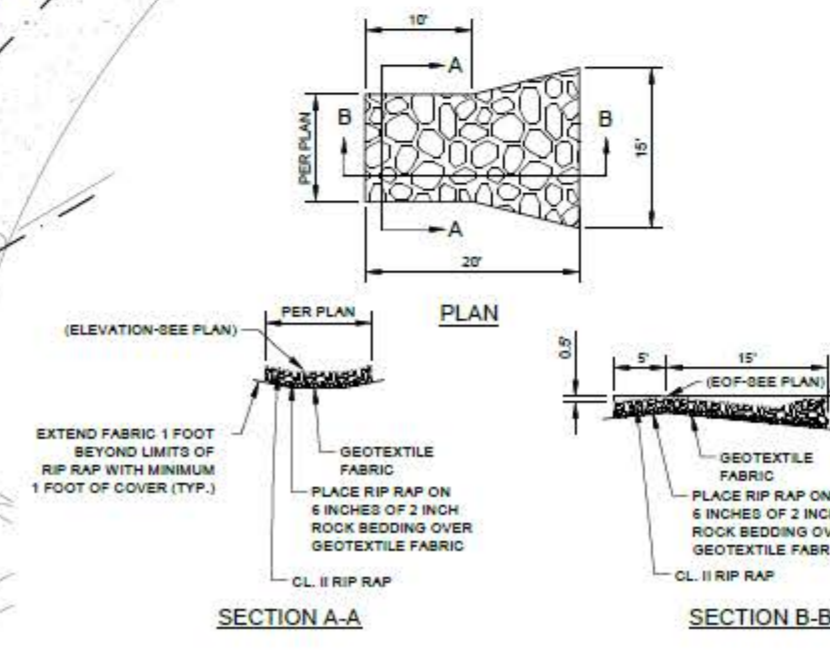
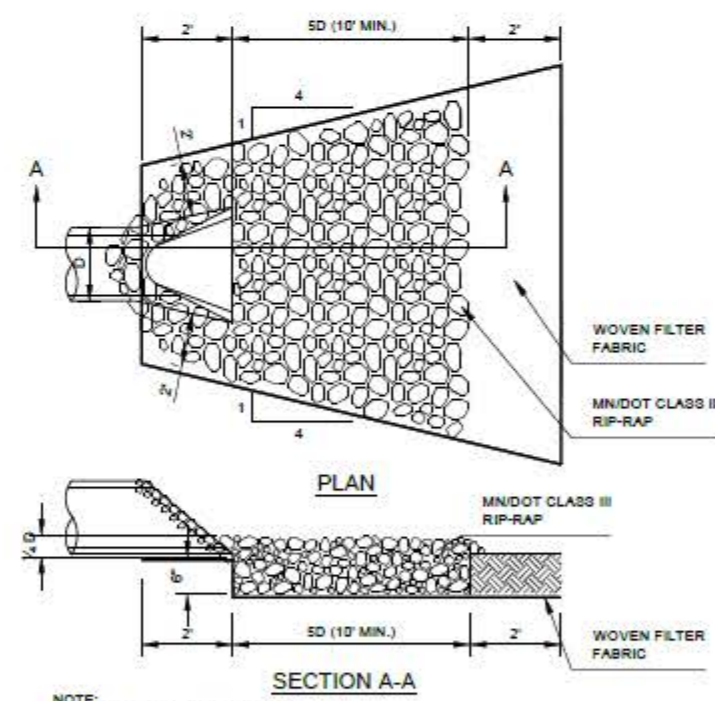
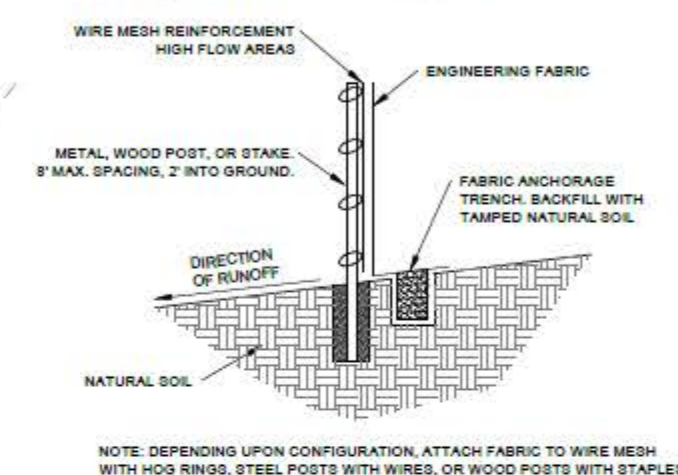
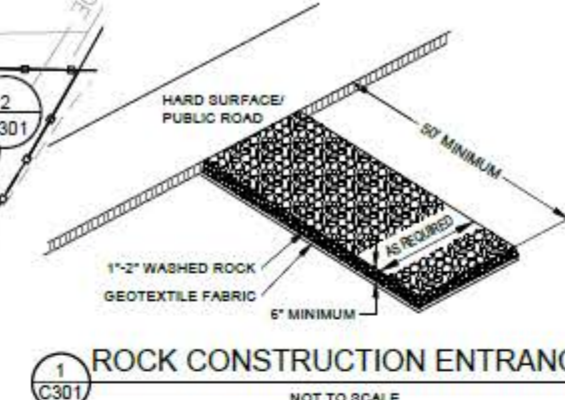


SYMBOL LEGEND



EROSION CONTROL NOTES

- Owner and Contractor shall obtain MPCA-NPDES permit. Contractor shall be responsible for all fees pertaining to this permit. The SWPPP shall be kept onsite at all times.
- Install temporary erosion control measures (silt fence, silt fence, and rock construction entrances) prior to beginning any excavation or demolition work at the site.
- Erosion control measures shown on the erosion control plan are the absolute minimum. The contractor shall install temporary earth dikes, sediment traps or basins, additional siltation fencing, and/or disk the soil parallel to the contours as deemed necessary to further control erosion. All changes shall be recorded in the SWPPP.
- All construction site entrances shall be surfaced with crushed rock across the entire width of the entrance and from the entrance to a point 50' into the construction zone.
- The toe of the silt fence shall be trenched in a minimum of 6". The trench backfill shall be compacted with a vibratory plate compactor.
- All grading operations shall be conducted in a manner to minimize the potential for site erosion. Sediment control practices must be established on all down gradient perimeters before any up gradient land disturbing activities begin.
- All exposed soil areas must be stabilized as soon as possible to limit soil erosion but in no case later than 7 days after the construction activity in that portion of the site has temporarily or permanently ceased. Temporary stockpiles without significant silt, clay or organic components (e.g., clean aggregate stockpiles, demolition concrete stockpiles, sand stockpiles) and the constructed base components of roads, parking lots and similar surfaces are exempt from this requirement.
- The normal wetted perimeter of any temporary or permanent drainage ditch or swale that drains water from any portion of the construction site, or diverts water around the site, must be stabilized within 200 lineal feet from the property edge, or from the point of discharge into any surface water. Stabilization of the last 200 lineal feet must be completed within 24 hours after connecting to a surface water. Stabilization of the remaining portions of any temporary or permanent ditches or swales must be complete within 7 days after connecting to a surface water and construction in that portion of the ditch has temporarily or permanently ceased.
- Pipe outlets must be provided with energy dissipation within 24 hours of connection to surface water.
- All riprap shall be installed with a filter material or soil separation fabric and comply with the Minnesota Department of Transportation Standard Specifications.
- All storm sewers discharging into wetlands or water bodies shall outlet at or below the normal water level of the respective wetland or water body at an elevation where the downstream slope is 1 percent or flatter. The normal water level shall be the invert elevation of the outlet of the wetland or water body.
- All storm sewer catch basins not needed for site drainage during construction shall be covered to prevent runoff from entering the storm sewer system. Catch basins necessary for site drainage during construction shall be provided with inlet protection.
- In areas where concentrated flows occur (such as swales and areas in front of storm catch basins and inlets) the erosion control facilities shall be backed by stabilization structure to protect those facilities from the concentrated flows.
- Inspect the construction site once every seven days during active construction and within 24 hours after a rainfall event greater than 0.5 inches in 24 hours. All inspections shall be recorded in the SWPPP.
- All BMPs must be repaired, replaced, or supplemented when they become nonfunctional or the sediment reaches 1/3 of the capacity of the BMP. These repairs must be made within 24 hours of discovery, or as soon as field conditions allow access. All repairs shall be recorded in the SWPPP.
- If sediment escapes the construction site, off-site accumulations of sediment must be removed in a manner and at a frequency sufficient to minimize off-site impacts.
- All soils tracked onto pavement shall be removed daily.
- All filtration areas must be inspected to ensure that no sediment from ongoing construction activity is reaching the filtration area and these areas are protected from compaction due to construction equipment driving across the filtration area.
- Temporary soil stockpiles must have silt fence or other effective sediment controls, and cannot be placed in surface waters, including stormwater conveyances such as curb and gutter systems, or conduits and ditches unless there is a bypass in place for the stormwater.
- Collected sediment, asphalt and concrete millings, floating debris, paper, plastic, fabric, construction and demolition debris and other wastes must be disposed of properly and must comply with MPCA disposal requirements.
- Oil, gasoline, paint and any hazardous substances must be properly stored, including secondary containment, to prevent spills, leaks or other discharge. Restricted access to storage areas must be provided to prevent vandalism. Storage and disposal of hazardous waste must be in compliance with MPCA regulations.
- External washing of trucks and other construction vehicles must be limited to a defined area of the site. Runoff must be contained and waste properly disposed of. No engine degreasing is allowed onsite.
- All liquid and solid wastes generated by concrete washout operations must be contained in a leak-proof containment facility or impermeable liner. A compacted clay liner that does not allow washout liquids to enter ground water is considered an impermeable liner. The liquid and solid wastes must not contact the ground, and there must not be runoff from the concrete washout operations or areas. Liquid and solid wastes must be disposed of properly and in compliance with MPCA regulations. A sign must be installed adjacent to each washout facility to inform concrete equipment operators to utilize the proper facilities.
- Upon completion of the project and stabilization of all graded areas, all temporary erosion control facilities (silt fences, hay bales, etc.) shall be removed from the site.
- All permanent sedimentation basins must be restored to their design condition immediately following stabilization of the site.
- Contractor shall submit Notice of Termination for MPCA-NPDES permit within 30 days after Final Stabilization.



2022.06.10 WATERSHED SUBMITTAL - NOT FOR CONSTRUCTION

Larson Engineering, Inc.
3524 Labore Road
White Bear Lake, MN 55110
651.481.9120 (F) 651.481.9201
www.larsonengr.com

I hereby certify that this plan, specifications 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.

Thomas J. Stubbins
First M. Last, P.E.
Date: 06.10.2022 Lic. No.: 25520

REVISIONS:

No.	Description	Date

GREGORY CONTRACTING LLC

HAZEL AVENUE WYOMING, MN

C301
EROSION CONTROL PLAN

22-015

