

Permit Application Review

Permit No. 2018-84
Received complete: June 27, 2018

Applicant: David Weinberger; 5215 Edina Offices, LLC.

Consultant: Charlie Butterworth; Alliant Engineering

Project: Parking Lot Drainage Improvements

Location: 5215 Edina Industrial Boulevard: Edina

Rule(s): 4,5,11,12

Reviewer: BCO

General Background & Comments

The project proposes mill and overlay of the existing parking lot including the removal of a portion of the existing pavement for drainage improvements at 5215 Edina Industrial Boulevard in Edina.

The project site information is:

- Total Site Area: 87,120 square feet
- Existing Total Site Impervious Area: 82,120 square feet
- New Total Site Impervious Area : 82,120 square feet
- No increase (0%) in the percentage of site impervious area
- Existing impervious area to be disturbed for drainage improvements: 3,500 square feet
- Disturbed and Replaced Impervious Area: 3,500 square feet
- 4.3% of the existing impervious area will be disturbed and replaced
- Total Area to be Mill and Overlay: 35,848 square feet

The Nine Mile Creek Watershed District's Rule for Redevelopment, Rule 4.2.3, states, if a proposed activity will disturb more than 50% of the existing impervious surface on a parcel or will increase the imperviousness of the parcel by more than 50%, storm water management will apply to the entire project parcel. Otherwise, the storm water requirements will apply only to the disturbed areas and additional impervious area on the parcel. Since there is no increase in the on-site impervious area and 4.3% of the site impervious area is to be disturbed and replaced, storm water management is required for the 3,500 square feet of disturbed and replaced impervious area. Under paragraph 4.2.2b, mill and overlay is exempt from the

Stormwater Management Rule if, as here the underlying native soils are not being altered or disturbed.

The District's requirements for both storm water management and erosion and sediment control apply to the project because more than 50 cubic yards of material will be disturbed and 5000 square feet or more surface area disturbed, Rules 4.2.1a and b and 5.2.1a and b.

Storm water management is to be provided within 126 lineal feet of perforated 36-inch HDPE storm sewer system that will provide volume retention and water quality management. Rate control will be maintained at existing conditions as a result of no proposed increase in the site impervious area.

Silt fence is to be constructed at the limits of construction, inlet protection and a rock construction entrance will be provided for erosion control.

Exhibits

1. Permit Application dated May 26, 2018.
2. Plans dated May 27, 2018 prepared by Alliant Engineering.
3. Storm Water Management calculations latest revision June 27, 2018, prepared by Alliant Engineering.

4.0 Stormwater Management

Stormwater management, volume retention, and water quality management will be provided within 126 lineal feet of 36-inch perforated HDPE to be installed for drainage improvements. Rate control will be maintained at existing conditions for the 2, 10 and 100 year frequency discharges with no change in the site impervious area proposed by the project.

An infiltration volume of 321 cubic feet is required from the 3,500 square feet of disturbed and replaced impervious area. It has been assumed that the underlying soil is a silty loam (MH) having an infiltration rate of 0.3 inches/hour using the Minnesota Storm Water Manual. A soil boring will be required to verify this assumption. A volume of 325 cubic feet will be provided by the pipe system (321 cubic feet required). An area of 268 feet is required for volume retention using this infiltration rate. This is based on a depth of 1.2 feet required for the basin to drawdown in 48 hours (4.3.1a (ii)).

The District's water quality criterion requires a 60% annual removal efficiency for phosphorus and 90% annual removal efficiency for total suspended solids. The results of the MIDS calculator show that the basin will provide an annual removal efficiency of 93% for total suspended solids (24.2 lbs.) and an annual removal efficiency of 93% for total phosphorus (0.13 lbs.). Rule 4.3.1c is met.

The HydroCAD modelling provided shows the 100-year frequency flood elevation of the underground infiltration system as 835.6 M.S.L. The finished floor of the existing building is 837.7 M.S.L., a 2.1 foot separation. District Rule 4.3.3 states that a stormwater management facility must be constructed at an elevation that ensures that no adjacent habitable building will be brought into noncompliance with a standard in subsections 4.3.3 c, requiring at least two feet of separation provided between the 100-year high water elevation of a constructed facility and the low floor elevation of a structure. Rule 4.3.3 is met.

In accordance with Rule 4.3.1a (i), the pre-treatment of runoff prior to reaching the section of perforated pipe used for infiltration will be provided by two sump manholes within the system.

In accordance with Rule 4.3.4, a post-project chloride management plan must be provided that will, 1) designate an individual authorized to implement the chloride-use plan and 2) designate a MPCA certified salt applicator engaged in the implementation of the chloride-use plan for the site.

5.0 Erosion and Sediment Control

The submitted erosion and sediment control plan includes silt fence at the limits of construction, inlet control and a gravel construction entrance. The project contact is Charlie Butterworth, Alliant Engineering.

11.0 Fees

Fees for the project are:

Rules 2.0-6.0	\$1,500
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12.0 Financial Assurances

Financial Assurances for the project are:

Rule 4.0 Volume Retention: 268 sq. ft. x \$12/sq. ft. = \$3,216	\$3,216
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Chloride Management: \$5000

Rule 5: Silt fence: 1010 L.F. x \$2.50/L.F. = \$2,020

Inlet Protection: 3 x \$100/each = \$300

Site restoration: 33 sq. yd. x \$22/ sq. yd. (bituminous) = \$733	\$3,053
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Contingency and Administration	\$2,731
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Findings

The proposed project includes the information necessary, plan sheets and erosion control plan, for review.

1. Rules 4 and 5 are met.

Recommendation

Approval, contingent upon:

1. General Conditions
2. Financial Assurance in the amount of \$14,000 - \$9,000 for stormwater management, erosion control and site restoration and \$5,000 for compliance with the chloride management requirements.
3. Submission of documentation that a drainage easement over the stormwater-management facility has been submitted to Edina (4.5.4i), if such easement is required by the city, and a receipt showing recordation of a maintenance declaration for the on-site storm water management facility. A draft of the declaration must be approved by the District prior to recordation.

4. A soil boring taken in the area proposed for infiltration to confirm that the underlying soils are a Type B soil and that groundwater was not encountered to a minimum depth of 3 feet below the invert of the 36-inch perforated HDPE. Should either groundwater be encountered less than 3 feet below the invert of the 36-inch pipe or the soils are not determined to be a Type B soil having a minimum infiltration rate of 0.3 inches/hour, a redesign and/or location of the infiltration facility will be necessary to comply with District requirements.

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

1. Per Rule 4.5.6, an as-built drawing of the storm water facilities conforming to the design specifications as approved by the District must be submitted.
2. Submission of a plan for post-project management of Chloride use on the site. The plan must include 1) the designation of an individual authorized to implement the chloride use plan and 2) the designation of a Minnesota Pollution Control Agency certified salt applicator engaged in the implementation of the chloride-use plan for the site. The release of the \$5,000 of the financial assurance required for the chloride-management plan requires that chloride-management plan has been provided and approved by the District's Administrator.
3. For the release of the \$9,000 financial assurance required in Recommendation #2, Rule 12.4.1b requires demonstration and confirmation that the storm water management facilities have been constructed or installed and are functioning as designed and permitted. Verification, through daily observation logs and photographs, must be provided showing the storm water facilities used for volume retention have drawn down within 48 hours from the completion of two 1-inch (approximate) separate rainfall events.

Board Action

It was moved by Manager _____, seconded by Manager _____ to approve permit application No. 2018-61 with the conditions recommended by staff.

Permit #: 2018-84
Project Name: Parking Lot Improvements – 5215 Edina Offices – 5215 Edina Industrial Boulevard: Edina
Approval Date: July 18, 2018

General Provisions

1. All temporary erosion control measures shown on the erosion and sedimentation control plans must be installed prior to commencement of surface or vegetation alteration and be maintained until completion of construction and vegetation is established as determined by NMCWD.

If silt fence is used, the bottom flap must be buried and the maximum allowable spacing between posts is 4-foot on center. All posts must be either 2-inch x 2-inch pine, hardwood, or steel fence posts. If hay bales are used, all bales must be staked in place and reinforced on the downstream side with snow fence.

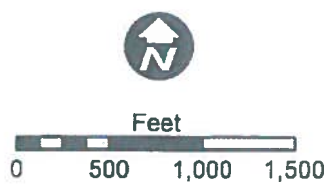
2. All areas altered because of construction must be restored with seed and disced mulch, sod, wood fiber blanket, or be hard surfaced within two weeks after completion of land alteration and no later than the end of the permit period.
3. Upon final stabilization, the permit applicant is responsible for the removal of all erosion control measures installed throughout the project site.
4. At the entryway onto the site, a rock filter dike being a minimum of two feet in height and having maximum side slopes of 4:1 must be constructed. This rock filter dike will enable construction traffic to enter the site and also provide an erosion control facility.
5. If dewatering is required and sump pumps are used, all pumped water must be discharged through an erosion control facility prior to leaving the construction site. Proper energy dissipation must be provided at the outlet of the pump system.
6. The NMCWD must be notified a minimum of 48 hours prior to commencement of construction.
7. The NMCWD, its officers, employees and agents review, comment upon, and approve plans and specifications prepared by permit applicants and their consultants for the limited administrative purpose of determining whether there is reasonable assurance that the proposed project will comply with the regulations and criteria of the NMCWD. The determination of the NMCWD that issuance of this permit is appropriate was made in reliance on the information provided by the applicant.
8. The grant of this permit shall not in any way relieve the permittee, its engineer, or other professional consultants of responsibility, nor shall it make the NMCWD responsible for the technical adequacy of the engineer's or consultant's work. The grant of this permit shall not relieve the permittee from complying with all conditions and requirements of the permit which shall be retained by the permittee with the permit.
9. The issue of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations.
10. This permit is permissive only. No liability shall be imposed upon the NMCWD or any of its officers, agents or employees, officially or personally, on account of the granting of this permit or on account of any damage to any person or property resulting from any act or omission of the permittee or any of its agents, employees, or contractors.

11. In all cases where the doing by the permittee of anything authorized by this permit shall involve the taking, using, or damaging of any property, rights or interests of any other person or persons, or of any publicly-owned lands or improvements or interests, the permittee, before proceeding therewith, shall obtain the written consent of all persons, agencies, or authorities concerned, and shall acquire all necessary property, rights, and interest.
12. The permit is transferable only with the approval of the NMCWD (see NMCWD Rule 1.0). The permittee shall make no changes, without written permission previously obtained from the NMCWD, in the dimensions, capacity, or location of any items of work authorized by this permit.
13. The permittee shall grant access to the site at all reasonable times during and after construction to authorized representatives of the NMCWD for inspection of the work authorized by this permit.
14. This permit may be terminated by the NMCWD at any time deemed necessary in the interest of public health and welfare, or for violation of any of the provisions of this permit.
15. Construction work authorized under this permit shall be completed on or before date specified above. The permittee may, in writing, request that the NMCWD extend the time to complete the project in accordance with NMCWD Rule 1.0.

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- Permit Location
- District Legal Boundary
- Nine Mile Creek Watershed
- Municipalities
- Major Watersheds
- Small Watersheds
- Parcels



PERMIT LOCATION MAP
PERMIT 2018-84
Nine Mile Creek
Watershed District