#### Permit Application Review

Permit No. 2018-96 Received complete: July 23, 2018

Applicant: Robert Straebel; Nicolet Real Estate

Consultant: Benjamin Johnson; Kimley-Horn and Associates

Project: Truck Dock Construction

Location: 1800 West 94th Street: Bloomington

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

Reviewer: BCO

## **General Background & Comments**

The project proposes the construction of a 4-foot deeptruck loading dock for the existing building located at 1800 West 94<sup>th</sup> Street in Bloomington. An area of approximately 400 square feet will be disturbed however more than 50 cubic yards of material will be excavation thereby requiring a permit from the District.

The project site information is:

- Total Site Area: 4.63 acres
- Existing Total Site Impervious Area: 4.44 acres (193,406 square feet)
- New Total Site Impervious Area: 193,406 square feet
- No increase (0%) in the percentage of site impervious area
- Existing impervious area to be disturbed and replaced: 4,007 square feet
- 2.1% of the existing impervious area will be disturbed and replaced

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 the there is no increase in the on-site impervious area and 2.1% of the site impervious area is to be disturbed and replaced, storm water management is required for the 4,007 square feet of disturbed and replaced impervious area.

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, Rules 4.2.1a and 5.2.1a.

Storm water management is to be provided underground within 82 lineal feet of perforated 30-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.

Inlet protection will be provided for erosion control.

#### **Exhibits**

- 1. Permit Application dated July 12, 2018.
- 2. Plans dated July 17, 2018 prepared by Kimley-Horn and Associates.
- Storm Water Management calculations dated July 16, 2018, prepared by Kimley-Horn and Associates.
- 4. Geotechnical report dated July 9, 2018 prepared by Braun Intertec.
- 5. E-mail correspondence dated July 19, 2018 summarizing 3 items that required additional information for the submittal to be complete.
- 6. E-mail dated July 23, 2018 stating that Robert Straebel is the new owner of the property. The submittal is complete.

#### 4.0 Stormwater Management

Stormwater management, volume retention, and water quality management will be provided underground within 82 lineal feet of 30-inch perforated HDPE to be installed. 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 367 cubic feet is required from the 4,007 square feet of disturbed and replaced impervious area. The soils information identifies the underlying on-site soils as poorly graded sand (SP) having an infiltration rate of 0.8 inches/hour using the Minnesota Storm Water Manual. A volume of 368 cubic feet will be provided by the pipe system (367 cubic feet required). An area of 115 feet is required for volume retention using this infiltration rate. The pipe system provides an area of 142 square feet based on a maximum depth of 3.2 feet required for the inundation 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 pipe system will provide an annual removal efficiency of 94% for total suspended solids (28.6 lbs.) and an annual removal efficiency of 94% for total phosphorus (0.16 lbs.). Rule 4.3.1c is met.

The HydroCAD modeling provided shows the calculated 100-year frequency flood elevation of the underground pipe system as 825.9 M.S.L. The finished floor of the existing building is 832.7 M.S.L., a 6.8 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.

Groundwater was not observed in the borings to an elevation of 816.6 M.S.L. The invert of the perforated pipe is 823.5 – a minimum separation of 6.9 feet between the bottom of an infiltration facility and groundwater. Rule 4.5.4d (i) 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 a sump manhole 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 inlet control. The project contact is Benjamin Johnson, Kimley-Horn and Associates.

### **11.0 Fees**

Fees for the project are:

Rules 2.0-6.0	\$750

#### 12.0 Financial Assurances

Financial Assurances for the project are:

Rule 4.0 Volume Retention: 115 sq. ft. x \$12/sq. ft. = \$1,380	\$1,380
Chloride Management:	\$5000
Rule 5: Inlet Protection: 2 x \$100/each = \$200	

Site restoration: 44.4 sq. yd. x \$22/ sq. yd. (bituminous) = \$978	\$1,178
Contingency and Administration	\$1,142

## Minimum \$5000 Financial Assurance

#### **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 \$10,000 \$5,000 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 Bloomington (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.

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 \$5,000 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. 2018-96 with	n the conditions recommended by staff.	

**Permit #:** 2018-96

Project Name: Bloomington Truck Loading Dock Addition; 1800 West 94th Street: Bloomington

Approval Date: August 15, 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.



# Permit No.2018-96

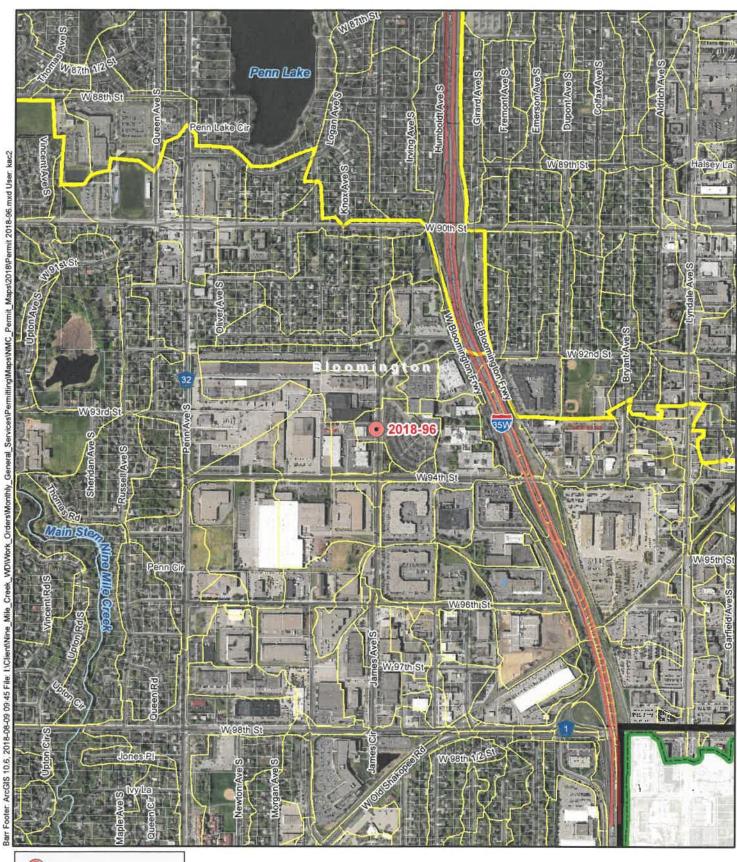
Is hereby issued to Rob Straebel, Nicolet Real Estate, subject to the conditions specified in the attached form:

For the construction of a truck loading dock for the building located at 1800 West 94<sup>th</sup> Street in Bloomington.

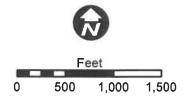
Steve Kloiber

Chair, Board of Managers

This permit expires on: September 1, 2019







PERMIT LOCATION MAP PERMIT 2018-96 Nine Mile Creek Watershed District