Permit No. 2018-100 Received complete: July 30, 2018

Applicant: Paul Lynch Jr.; PLH & Associates

Consultant: Amanda Thomas; ISG, Inc.

Project: Building Addition and Parking Lot Expansion for PLH & Associates

Location: 4451 West 76th Street: Edina

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

Reviewer: BCO

## **General Background & Comments**

The project proposes the construction of two building additions (780 and 480 square feet respectively) and a 21 stall parking lot expansion for PLH & Associates located at 5215 Edina Industrial Boulevard in Edina.

The project site information is:

- Total Site Area: 87,991 square feet
- Existing Total Site Impervious Area: 57,064 square feet
- New Impervious Area: 7,144 square feet
- New Total Site Impervious Area: 60,984 square feet (3,920 increase in impervious area)
- 6.9% increase in the percentage of site impervious area
- Disturbed and Reconstructed Impervious Area: 3,049 square feet
- 5.3% of the existing impervious area will be disturbed and replaced
- Total New and Reconstructed Impervious Area: 10,193 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 the increase in site impervious area is 6.9% and the existing impervious area disturbed and replaced is 5.3% of the site impervious area, storm water management is required for the 7,144 square feet of new

impervious area and 3,049 square feet of the disturbed and replaced impervious area (10,193 square feet).

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 a rainwater garden/infiltration basin that will provide volume retention, rate control and water quality management.

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 July 24, 2018.
- 2. Plans, no date but submitted on July 24, 2018, prepared by ISG, Inc.
- 3. Storm Water Management calculations dated July 24 and revised July 30, 2018, prepared by ISG, Inc.
- 4. Soil boring information dated July 20, 2018 prepared by Braun Intertec.

#### 4.0 Stormwater Management

Stormwater management, volume retention, rate control and water quality management will be provided within a rainwater garden/infiltration basin to be constructed

The existing and proposed 2, 10 and 100 year frequency discharges from the site are:

Frequency	Existing Discharge c.f.s.	Proposed Discharge c.f.s.
2 year	3.8	3.5
10 year	6.6	6.3
100 year	13.3	13.2

There is one discharge point leaving the site from the area disturbed. The existing discharge from the other location on the site will not be affected by the project and will not change from existing conditions. Rule 4.3.1b is met.

An infiltration volume of 934 cubic feet is required from the 10,193 square feet of new, disturbed and replaced impervious area. The soils information provided indicates the underlying soils beneath 3 feet of fill is poorly graded sand (SP) having an infiltration rate of 0.8 inches/hour using the Minnesota Storm Water Manual. The fill material is to be removed beneath the rainwater garden/infiltration area and be replaced with a free draining material. A volume of 1,142 cubic feet will be provided by the rainwater garden/infiltration area (934 cubic feet required). An area of 292 feet is required, 970 square feet is to be provided, for volume

retention using this infiltration rate. This is based on a maximum allowable inundation depth of 3.2 feet within the basin with a required 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, and required upstream pretreatment, will provide an annual removal efficiency of 90% for total suspended solids (78 lbs.) and an annual removal efficiency of 90% for total phosphorus (0.43 lbs.). Rule 4.3.1c is met.

The HydroCAD modeling provided shows the calculated 100-year frequency flood elevation of the rainwater garden/infiltration basin as 826.1 M.S.L. The finished floor of the existing building is 829.8 M.S.L., a 3.7 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 rainwater garden/infiltration basin will be provided by a sump manhole located immediately upstream of the basin.

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 Amanda Thomas, ISG, Inc.

### 11.0 Fees

Fees for the project are:

Rules 2.0-6.0	\$1.500
114169 2.0-0.0	Ψ1.JUU

### 12.0 Financial Assurances

Financial Assurances for the project are:

Rule 4.0 Volume Retention: 292	sq. $\pi$ . x \$12/sq. $\pi$ . = \$3,504	\$3,504
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Chloride Management: \$5000

Rule 5: Silt fence: 486 L.F. x \$2.50/L.F.= \$1,215

Inlet Protection: 2 x \$100/each = \$200

Site restoration: 0.43 acres x \$2500/ acre = \$1,075 \$2,490

Contingency and Administration \$2,606

### **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 \$13,600 \$8,600 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.

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 \$8,600 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. 2018-100 with	h the conditions recommended by staff.	

Permit #:

2018-100

**Project Name:** 

Building Additions and Parking Lot Expansion for PLH & Associates; 4451 West 76th Street:

Edina

**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.2018-100

Is hereby issued to Paul Lynch Jr., PLH & Associa	ates, subject to the conditions specified
in the attached form:	

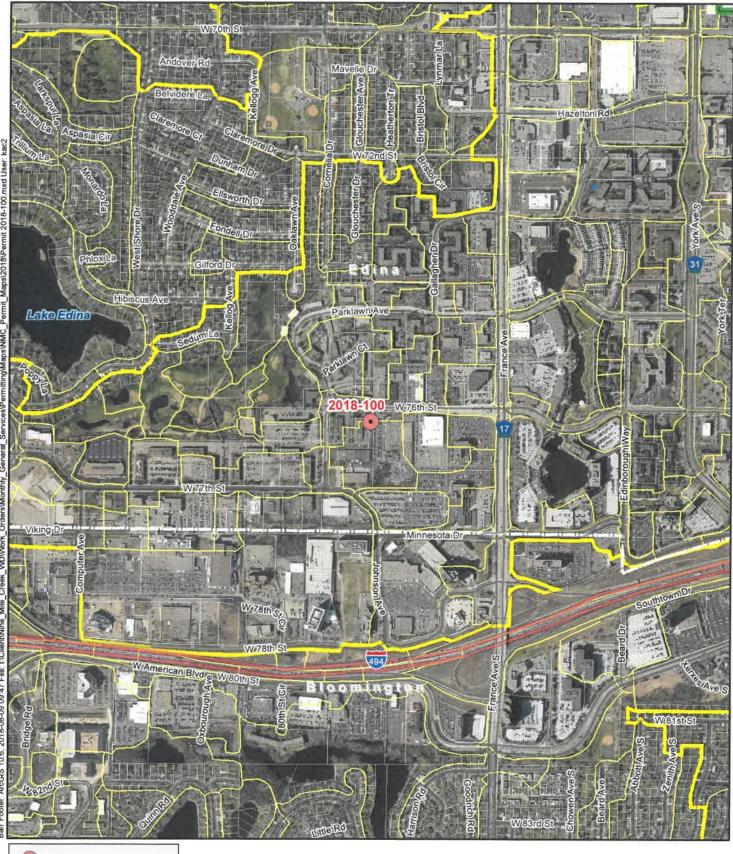
For the construction of two building additions and a parking lot expansion at 4451 West 78th Street in Edina.

Steve Kloiber

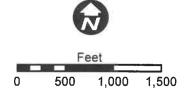
Steve Kloibei

Chair, Board of Managers

This permit expires on: September 1, 2019







PERMIT LOCATION MAP PERMIT 2018-100 Nine Mile Creek Watershed District