



MEMORANDUM

Comfort Lake-Forest Lake Watershed District

Date: September 19, 2023
To: CLFLWD Board of Managers
From: Mike Kinney, District Administrator
Subject: CLFLWD Permit 23-010 – Ingersoll Ponds



Forest Lake
Management District

Background/Discussion

CLFLWD Permit 23-010 – Ingersoll Ponds is a proposed five lot subdivision for single family homes located East of Ingersoll Avenue N and 1,000 feet south of 210 Street North, Forest Lake.

The total size of the site is 60 acres, and the project would result in approximately 1.5 impervious cover. The project triggered CLFLWD rules 2.0, 3.0, 4.0, 9.0, & 10.0 which require stormwater management, erosion control, and wetland buffers. Stormwater management requirements are met through four bioinfiltration basins. Erosion control requirements will be met through a detailed erosion control plan which includes rock construction entrances, silt fence, sediment control logs, erosion control blankets, and revegetation specifications along with a detailed SWPPP.

The individual lots will be sold to builders requiring permit transfers and they will provide lot specific erosion control plans. Numerous wetlands are onsite including seven Manage 3 wetlands which require 25-foot buffers, three Manage 2 wetlands requiring 50-foot buffers, and one Manage 1 wetland requiring a 75-foot buffer. These buffer widths have been met with variable width buffers following district requirements. Invasive species are present in the planned buffers requiring a revegetation plan.

Recommended Motion

Proposed Motion: Manager _____ moves to approve permit application #23-010 with conditions stated in EOR's September 18, 2023, Permit Application #23-010, Forest Lake memorandum. Seconded by Manager _____.

Attached

Emmons & Olivier Resources' Memorandum
Emmons & Olivier Resources' Exhibit

Project	Ingersoll Ponds	Date	9-20-2023
To	Mike Kinney	Contact Info	CLFLWD
Cc	Board of Managers	Contact Info	CLFLWD
From	Greg D. Graske, P.E.	Contact Info	EOR
Regarding	Permit Application #23-010, City of Forest Lake		

Applicant

PelSol LLC
 Attn: John Peltier
 9726 Scandia Trail North
 Forest Lake, MN 55025
 Phone: 651-248-1946
 johnpeltier@frontiernet.net

Authorized Agent

Same as Applicant

Project Purpose: The proposed project will build a residential subdivision called Ingersoll Ponds on a 60 acre site, resulting in approximately 1.5 acres impervious cover, and including 5 single-family home lots.

Project Location: East of Ingersoll Avenue N and 1,000 feet south of 210 Street North, Forest Lake. Site drains to Forest Lake.

Applicable District Rules: 2.0, 3.0, 4.0, 9.0 & 10.0

Recommendation: Approval, with issuance on receipt of the following:

1. Execution of a maintenance instrument satisfactory to the CLFLWD addressing the ongoing operation and maintenance of the proposed stormwater management features and the protection of vegetated wetland buffer. 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.
2. Financial Assurance in the amount of \$5,000 for grading and alteration.
3. Financial Assurance in the amount of \$50,000 for stormwater management or demonstration that the applicant has provided the municipality with a financial assurance, specific to the stormwater facilities, of equal or greater value.

Stipulations of Permit:

4. All buffer markers shall be installed prior to any lot grading or home construction.
5. Implementation of approved buffer management plan.
6. A permit transfer will be required for each individual lot from the developer to the home builders. A site plan with lot specific erosion control requirements will be required. See the District website for lot specific erosion control requirements.
7. Submittal of as-built survey for all stormwater features and pipe.

Rule 2.0: Stormwater Management

The proposed project will build a residential subdivision called Ingersoll Ponds. The proposed project will result in 5 residential lots on an existing 60-acre site. The runoff from impervious areas is routed to three biofiltration basins. Overflow from the basins is eventually routed to a large wetland complex to the eastern side of the property.

Under proposed conditions runoff is routed to biofiltration basins. Biofiltration is proposed based on clay soils identified in the provided soil borings. Water will be routed via vegetated swales which will provide pre-treatment prior to reaching the filtration basins. For new development the volumes at the point of discharge must not increase from 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 0.15 acre-feet (Predevelopment volume vs. Post-development volume for the 2-year event). Utilizing a 0.65 conversion factor for the biofiltration facilities results in a required treatment volume of 0.23 acre-feet. The filtration basins exceed the required treatment volume. The basins are also designed to capture the volume of stormwater runoff from the 2-year event per rule 2.3.3. An acceptable 80-10-10 mix of sand-compost-peat for the biofiltration facility has been proposed.

A fraction of site hard surface, consisting of rooftops and portions of driveways, drains to backyards and will sheet flow through turf areas and particularly through the protected wetland buffers around the onsite wetlands, so most or all of the regulated volume will be captured for the 24-hour precipitation event with a return frequency of two years, and suspended solids will be removed from this runoff to the maximum extent practicable.

The site meets District rate control requirements for the 2, 10 and 100 year event at all discharge locations. A summary table of rates leaving the site is summarized below. A summary table of rates leaving the site is summarized below.

Rate Control Summary

Conditions	2-year	10-year	100-year
Existing (cfs)	7.1	17.1	44
Proposed (cfs)	0.2	2.7	30

The project meets the wetland bounce and inundation period requirements for all onsite wetlands.

Sequencing of Construction notes are included in the plan set indicating that the proposed stormwater facilities will be constructed concurrent with the work authorized by the permit.

The proposed low floors and low openings satisfy District freeboard requirements.

Rule 3.0: Erosion Control

A detailed erosion control plan has been submitted including rock construction entrances, silt fence, sediment control logs, erosion control blankets, and revegetation specifications. A detailed SWPPP has also been submitted. The proposed plans meet District erosion control requirements.

Based on the Stormwater Management Plan Narrative, driveway and home construction will be done by others. General guidance for erosion control requirements for each individual lot has been provided on the plan set that can ultimately be provided to the builders. A permit transfer will be required for each individual lot from the developer to the home builders. A site plan with lot specific erosion control requirements will be required. See the District website for lot specific 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 has numerous wetlands onsite. A MnRAM assessment for the onsite wetlands has been submitted indicating that the small, farmed wetlands (Wetlands 2,4, 6-10) are Manage 3, requiring a 25-foot wetland buffer. There are three Manage 2 wetlands (Wetlands 1, 5 & 11), requiring a 50-foot buffer, and one Manage 1 wetland (Wetland 3), requiring a 75-foot buffer. The proposed plan provides additional buffer on steep slopes and incorporates buffer averaging meeting District buffer requirements.

A memo was provided from Midwest Wetland titled Ingersoll Ponds Wetland Buffer Survey and Enhancement Plan. This memo indicates areas of buffer that currently have more than 30% invasive species. The Buffer Survey and Revegetation Plan (sheet L-100) includes the required treatment and revegetation plan.

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; Forest Lake has a state-approved floodplain ordinance.

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 \$4,700 review and inspection deposit. The applicant has submitted \$4,710. The required permit fees have been submitted.

Rule 10.0: Financial Assurances

The financial assurances required for the proposed project are \$5000 for grading and erosion control and \$50,000 for stormwater management facilities. 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, specific to the stormwater facilities, of equal or greater value.

Rule 11.0: Variances

The proposed project does not require a variance.

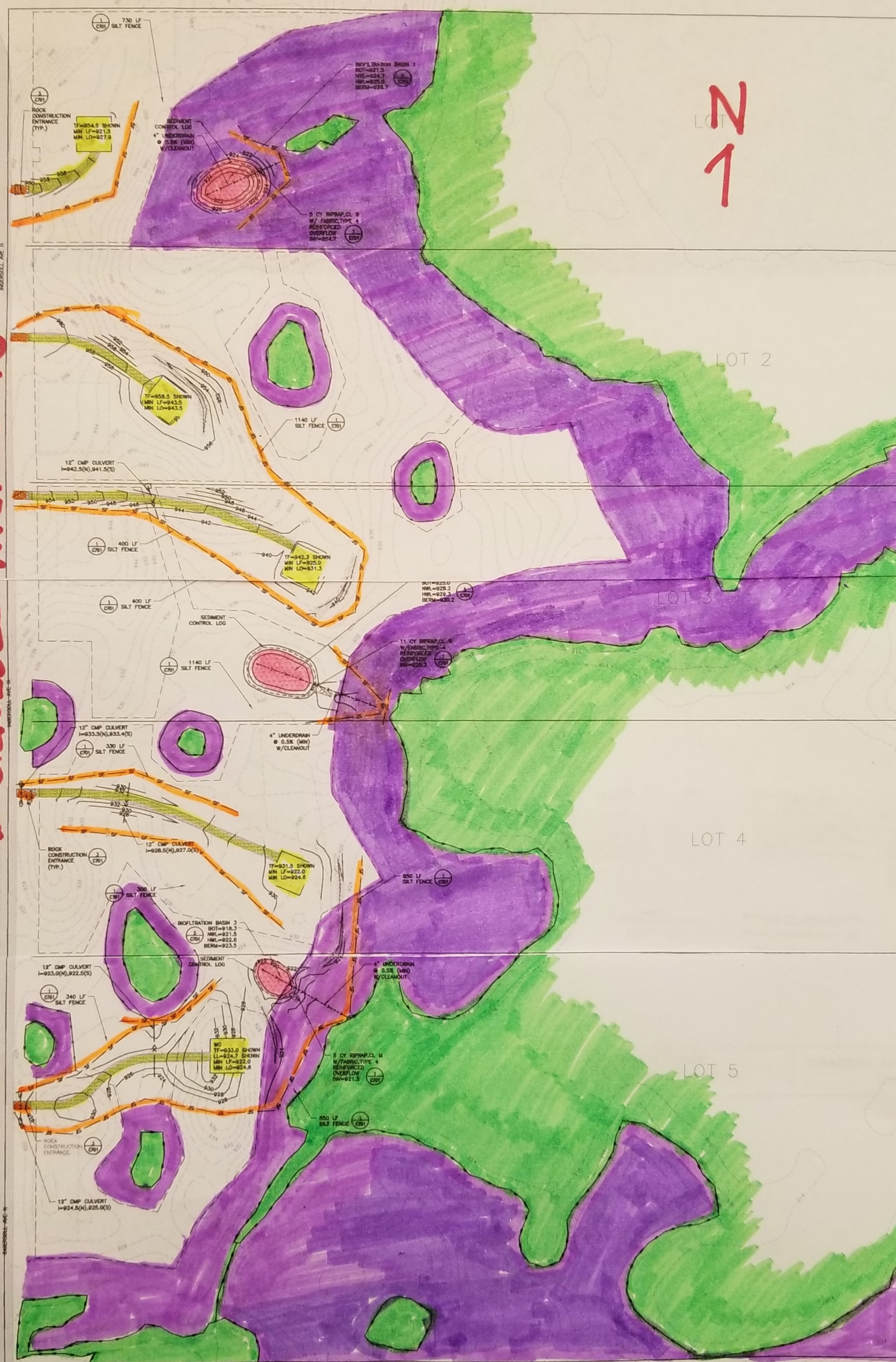
Submittals Received

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

1. Application, received June 7, 2023, prepared June 5, 2023, prepared by Applicant.
2. Application fee in the amount of \$10, received June 5, 2023.
3. Permit review and inspection deposit in the amount of \$4,700, received June 5, 2023.
4. Certificate of Survey with Subdivision Concept, received June 7, 2023, dated February 17, 2023, prepared by Landmark Surveying, Inc.
5. Stormwater Management Plan received September 11, 2023, dated September 11, 2023, prepared by Civil Methods, Inc.
6. Soil Testing Report, received June 7, 2023, dated May 5, 2023, prepared by Zierke Soil Testing.
7. Buffer Exhibit, received June 26, 2023, dated June 19, 2023, prepared by Landmark Surveying, Inc.
8. MNRAM summary letter and supporting documentation, received January 12, 2023, dated January 11, 2023, prepared by Jacobson Environmental, PLLC.
9. Ingersoll Ponds Wetland Buffer Survey and Enhancement Plan, received August 8, 2023, dated July 27, 2023, prepared by Midwest Wetland Improvements.
10. Plan Set (7-pages), received September 11, 2023, dated September 11, 2023, prepared by Civil Methods, Inc.
11. Response to Engineer's Report, received August 8, 2023, dated August 7, 2023, prepared by Civil Methods, Inc.
12. Subsurface Soil Investigation, received August 8, 2023, dated July 10, 2023, prepared by Interstate Geotechnical Engineering, Inc.
13. Response to Engineer's Report, received September 11, 2023, dated September 11, 2023, prepared by Civil Methods, Inc.
14. Ingersoll Ponds Buffer Survey & Revegetation Plan (sheet L-100), received August 29, 2023, dated July 28, 2023, prepared by Midwest Wetland Improvements.

INGERSOLL AVENUE N

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