

SPECIAL MEETING NOTICE

September 8, 2023 – 3:00 p.m.

Workshop Conference Room (2nd floor) - Anoka City Hall

PRELIMINARY SPECIAL AGENDA*Agenda to be Finalized at Meeting*

- A. CALL TO ORDER
- B. ROLL CALL
- C. APPROVE AGENDA
- D. RESIDENT'S FORUM
- E. NEW BUSINESS
 - 1. Permit #2022-09R ~ Legacy at Petersen Farms ~ Andover
- F. OTHER BUSINESS
- G. ADJOURNMENT

NOTE: Some or all members of the Lower Rum River WMO may participate in the September 8, 2023 Lower Rum River WMO meeting by Zoom rather than by being personally present at the Lower Rum River WMO regular meeting place at the Anoka City Hall, 2015 First Avenue North, Anoka, MN 55303. Members of the public can physically attend, although there is very limited seating in the workshop conference room (2nd floor) as appropriate social distancing will be done by the Commission and visitors.

Members of the public may also monitor and participate in meetings remotely by attending via video conference (Zoom Webinar). Please contact Becky Wozney at 763.434.2030 x140 or becky.wozney@anokaswcd.org for Zoom link information.

*Pending: Permit #2016-16 ~ 2274 164th Avenue Driveway Access ~ Wetland Replacement Plan
Permit #2022-07 ~ 54 Tiger Street ~ Ramsey*

Next Meeting: Regular meeting is September 21, 2023 – at 8:00 a.m.

*** PLEASE POST **
PUBLIC WELCOME TO ATTEND**

GRADING, STORMWATER MANAGEMENT AND EROSION/ SEDIMENT CONTROL PERMIT APPLICATION

A \$100.00 application fee and additional \$700.00 escrow deposit must accompany this permit application.

Permits are to be processed at the same time as the site plan, preliminary plat or other city land use or building application submitted to the city in which the work or project is located.

The permit application and supporting documentation must be submitted to the LRRWMO by the THIRD THURSDAY OF THE MONTH TO BE ON THE FOLLOWING REGULARLY SCHEDULED MONTHLY LRRWMO MEETING AGENDA. A PERMIT NUMBER WILL NOT BE ASSIGNED UNTIL CITY AUTHORIZATION IS RECEIVED.

Project Name: Petersen Farms Phase 3 (Legacy at Petersen Farms)

Address/Location: Located generally north of 165th Avenue NW and west of Dakota Street NW

Project Description/Purpose: Single Family Home Development

Keith Petersen
Name of Applicant (Site Owner or Property Owner)
 3084 Kahlberg Ct. NE
Address
 St. Michael, MN 55376
City, State, Zip
 651-225-7739
Phone Fax
 kpetersen@aeifunds.com
Email

Chris Call Landform
Applicant's Contact Organization Name
 105 South Fifth Avenue, Suite 513
Address
 Minneapolis, MN 55401
City, State, Zip
 612-638-0262
Phone Fax
 ccall@landform.net
Email

Submittal Requirements

Completed Grading, Stormwater Management and Erosion/ Sediment Control permit applications are to be submitted as per LRRWMO attachments G1 (Permit Requirements) and G2 (Office Procedure) included with this application. Note that projects involving potential wetland impacts and/or involving a Wetland Replacement Plan require a separate permit application and are subject to additional requirements.

PROJECT SUBMITTALS (check all that apply):

- GRADING PLAN:** Including existing and proposed contours and boundaries of all wetlands and surface waters.
- STORM SEWER/ DRAINAGE PLAN:** Including all permanent drainage features and all permanent water quality features.
- STORM DRAINAGE CALCULATIONS:** Design computations as required by the LRRWMO.
- EROSION CONTROL PLAN:** Including all temporary and permanent measures proposed to retain all sediment on site.
- OTHER**

START OF
PROJECT: _____

EST. COMPLETION
DATE: _____

APPROVAL
DATE: _____

By signing this Permit Application, the undersigned consents and agrees on behalf of the Applicant that:

1. The permit application fee is non-refundable. Escrow deposits will be held by the LRRWMO until the project has been completed and all conditions of issuance of the permit are satisfied. The Applicant is responsible for all expenses incurred by the LRRWMO in the processing, administration and enforcement of the permit application and permit. The escrow deposit will be used to reimburse the LRRWMO for all expenses incurred by the LRRWMO in processing, administering and enforcing the permit application and permit, including engineering, legal and other consultant costs. If such expenses exceed the escrow deposit, the LRRWMO will bill the Applicant or Permittee for such excess amount and payment will be due within twenty (20) days of mailing the invoice. Timely payment of such invoices is a condition of all permits and work may be stopped on the project for failure to make payments when due.
2. The undersigned, its agents, principal, assigns and/or representatives (hereinafter "Permittee") shall abide by all the standard conditions and special terms and conditions of the LRRWMO.
3. Any work that violates the terms of the permit may result in the LRRWMO or the City in which the work is being done immediately causing the work on the project relating to the permit to cease and desist. All work on the project shall cease until the permit conditions are met and approved by the LRRWMO and/or the City in which the work is being done.
4. The Permittee agrees to be bound by the terms of the LRRWMO permit requirements, final permit, standard conditions, and special conditions required by the LRRWMO for approval of the permit. The undersigned has the authority to bind the permit holder, the owner of the property and/or any entity performing work on the property pursuant to the terms of LRRWMO permit, and shall be responsible for complying with terms of the LRRWMO permit.


"I certify that I have thoroughly read and understand the above information."

<p><u>Keith Petersen</u></p> <p>Signature of property owner or designated Agent (no agent without a letter of authority)</p>	<p><u>9-15-22</u></p> <p>Date</p>	<p><u><i>Chris Call</i></u></p> <p>Signature of applicant if different from property owner</p>	<p><u>9-15-22</u></p> <p>Date</p>
<p>Keith Petersen</p> <p>Print Signer's name</p>		<p>Chris Call</p> <p>Print Signer's name</p>	
<p>Application Acknowledged by City:</p>	<p><u>Jason Law</u></p> <p>Name of City Official</p>	<p><u>Andover</u></p> <p>City</p>	<p><u>Sep 15, 2022</u></p> <p>Date</p>

SIGNATURE OF LRRWMO CHAIRMAN: ** _____

****NOTE: Subject to conditions recommended by Barr Engineering (see attached)**

PERMIT IS NOT VALID IF PROJECT HAS NOT STARTED WITHIN ONE YEAR FROM DATE OF APPROVAL

To: Lower Rum River Water Management Organization
From: Barr Engineering Co. 
Date: August 31, 2023
Re: Permit #2022-09R: Legacy at Petersen Farms (Peterson Farms 3rd Addition):
Andover

We have received plans, dated July 17, 2023 – revised August 23 and 28, 2023, and a LRRWMO permit application for the Legacy at Petersen Farms (Peterson Farms 3rd Addition) development in Andover. This addition proposes 33 single family residential lots on approximately 77 acres located north of 165th Avenue at 7th Avenue N.W. in Andover. The parcel is currently a farm with mixed fields, wetlands, woods, and the farmstead including barns.

Wetlands

The LRRWMO being the LGU administering the requirements of the Wetland Conservation Act in Andover approved the determination of the wetland boundaries and types on this phase of the project. The approved Notice of Decision is dated June 6, 2022. There are no wetland impacts proposed within the 3rd Addition. However, the plans show a future extension of 170th Avenue that will have potential impacts to Wetland 3 (66P) as shown on the plans. Correspondence dated July 27, 2023, from the applicant and attached for reference indicates understanding that this wetland crossing would be pursued in a future phase of the project and, “We understand this (future connection) is subject to a regulatory process that may or may not be successful and anticipate preparing necessary wetland impact application at that time.”

Floodplain

Associated with the future extension of 170th Avenue discussed in the paragraphs above, the future roadway crossing of Wetland 3 (66P) will encroach (fill) approximately 4,110 cubic feet of floodplain volume below the 100-year high-water elevation of the wetland. The plans show that a future mitigation located west of Wetland 1 (64P) will provide approximately 9,800 cubic yards of floodplain volume. The floodplain mitigation to be provided must be hydraulically connected to and below the flood elevation of Wetland 3.

Again, this is a future condition, not part of this phase of the project, and shown for illustrative purposes.

Stormwater Management

Overview

The project will add 16.0 acres (697,641 square feet) of new impervious area to the site with 462,315 square feet (10.6 acres) of existing site impervious to remain – a total of 1,159,956 square feet of impervious area on the site. The site has been subdivided into 3 drainage areas (North, South and West). The storm water management plan indicates that 27 basins are to be constructed, 15 that have been

designed as bioretention facilities (providing volume retention, water quality treatment and rate control) with 12 providing rate control, and water quality management for the project area.

The Braun geotechnical report, addendum 1 dated November 28, 2022, identifies the underlying soils on the site as poorly graded sand with silt (SP-SM). In the areas of Basins 72 and 75 located in the North subdrainage area, lenses of lean and fat clay (CH) were encountered. Groundwater encountered varies from depths of 4 feet (ST-311) to 12 feet (ST-304 and 307) below ground surface. A table in a later section of this document shows groundwater elevations observed in this phase of the project. Infiltration rates of 0.45 inches/hour was used for the SP-SM underlying soils and 0.2 inches/hour for Basins 72 and 75 were used by the applicant. Using the Minnesota Storm Water Manual, an infiltration rate of 0.06 inches/hour has been used in our review for Basins 72 and 75.

Rates of Runoff

As stated, the site has been subdivided into 3 drainage basins – North, South, and West. The following table summarizes the existing and proposed discharges for the 2-, 10-, and 100-year frequency storm events leaving each of the drainage basins: (The discharges shown have been rounded to the nearest whole number.)

Frequency	Existing Discharge – North Drainage Basin c.f.s.	Proposed Discharge – North Drainage Basin c.f.s.
2-Year	<1.0	<1.0
10-Year	0	<1.0
100-Year	27.4	13.2

Frequency	Existing Discharge South Drainage Basin - c.f.s.	Proposed Discharge South Drainage Basin - c.f.s.
2-Year	<1.0	<1.0
10-Year	<1.0	<1.0
100-Year	<1.0	<1.0

Frequency	Existing Discharge West Drainage Basin - c.f.s.	Proposed Discharge West Drainage Basin - c.f.s.
2-Year	<1.0	<1.0
10-Year	<1.0	<1.0
100-Year	<1.0	<1.0

Volume Retention

A volume retention of 96,663 cubic feet is required from the 1,159,956 square feet of new and existing impervious area to remain. As stated, the on-site underlying soils have been classified as poorly graded sand (SP). With an infiltration rate of 0.45 inches/hour and 0.06 inches/hour for Basins 72 and 75 (according to the Minnesota Stormwater Manual – we have used an infiltration rate of 0.06 inches/hour for Basins 72 and 75), an area of 22,653 square feet is required within the bioretention basins allowing a draw-down within 48 hours.

From the HydroCAD modeling submitted, the 15 bioretention facilities are to provide a retention volume of 123,879 cubic feet (96,663 cubic feet required) with an area of 97,787 square feet (22,653 square feet required). The volumes and areas are at a depth to the outlet of the basins or 1.8 feet (whichever is less) allowing for the drawdown of the retention volume within 48 hours assuming an infiltration rate of 0.45 inches/hour. For Basins 72 and 75, a depth of 0.24 feet or the basin outlet (whichever is less) is used for the drawdown of the retention volume within 48 hours using an infiltration rate of 0.06 inches/hour.

Water Quality

LRRWMO water quality criteria require an annual removal efficiency of 90% for total suspended solids (TSS) and 60% of total phosphorous (TP) for the project. The following table shows the relationship of removal efficiency provided within each drainage basin and pounds removed per year of TSS and TP.

Basin	Annual Removal Efficiency TP - %	Removal of TP in lbs./year	Annual Removal Efficiency TSS - %	Removal of TSS in lbs./year
North	95	19.3	95	3,506
South	90	18.7	95	3,572
West	91	15.3	91	2,778

The LRRWMO water quality requirements are met.

100-year: Low Floor/Low Opening Elevations

The attachment to this review memorandum provides an overall comparison of the low floor and low opening elevation(s) for each proposed structure to, (1) the flood elevation of a riparian basin, and (2) groundwater. LRRWMO criteria requires a minimum separation of 2 feet between the calculated 100-year frequency flood elevation of a basin and the finished floor elevation of an adjacent structure. For 17 proposed structures, Plot 1 of the Low Floor Elevation Assessment has been used for compliance with LRRWMO requirements.

In summary for the overall site;

- the LRRWMO criteria for the low floor elevation of a structure being two feet above the 100-year frequency flood elevation of a riparian stormwater basin is met.
- In instances where the Low Floor Elevation Assessment has been used, sufficient distance is provided between a proposed structure and a riparian basin for the draw down of the retention volume not having a direct impact, through seepage, on the structure.
- the applicable low opening of the proposed structures is greater than two feet above the high-water elevation of a riparian basin.

A minimum 3-foot separation between the bottom of an infiltration facility and groundwater is required. The following table shows the relationship of groundwater and the bottom elevation of a proposed bioretention basins.

Basin	Groundwater elevation M.S.L.	Infiltration Basin Bottom Elevation M.S.L.	Separation feet
21	875.5	879.3	3.8
21.2	875.5	891.4	15.9
21.3	879.5	889.5	10.0
21.4	875.5	886.8	11.3
21.5	875.5	888.0	12.5
24.1	868.0	878.5	10.5
24.2	868.0	881.5	13.5
31	876.5	880.0	3.5
61	880.0	887.5	7.5
62.1	875.3	888.0	12.7
62.2	880.0	888.0	8.0
64.1	874.0	883.3	9.3
64.2	880.0	885.5	5.5
64.3	880.0	883.3	3.3
72	873.0	876.6*	3.6
75	862.0	877.5*	15.5

*Elevation of the infiltration bench to be construction within the basin(s).

Erosion and Sediment Control

Silt fence, sediment control check locks and a rock construction entrance(s) are to be provided for erosion control at key locations throughout the Phase 3 area.

Recommendation

It is our recommendation that the LRRWMO approve of the permit for this project subject to the following conditions:

1. Erosion control measures are required to be installed prior to the commencement of site grading.
2. Upon completion of construction and restoration of disturbed areas, the permit applicant is responsible for the removal of all erosion control measures installed throughout the construction site.
3. To minimize the potential of material from leaving the site and being tracked onto existing roadways, a rock filter construction entrance being a minimum of two feet in height and having side slopes of 4:1 must be constructed at the entryway onto the site. The rock construction entrance(s) will provide an erosion control facility and enable construction traffic to enter the site.
4. Street sweeping must be undertaken and completed on an as needed basis.
5. Compliance with the storm water management requirements of the Lower Rum River Watershed Management Organization is to be administered for this project by the City of Andover.
6. Compliance with the City of Andover's comments for storm water management plan on the project.
7. The plans show a future extension of 170th Avenue that will have potential impacts to Wetland 3 (66P) as shown on the plans. Correspondence dated July 27, 2023, from the applicant and attached for reference indicates an understanding that this wetland crossing would be pursued in a future phase of the project and, "We understand this (future connection) is subject to a regulatory process that may or may not be successful and anticipate preparing necessary wetland impact application at that time."

The LRRWMO's action on Permit #2022-09R does **not** include the proposed construction of the future extension of 170th Avenue crossing Wetland 3 (66P), determination/approval of potential wetland impacts or associated floodplain impacts/mitigation.

8. 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; shall obtain the written consent of all persons, agencies, or authorities concerned, and shall acquire all necessary property rights and interest.

Stormwater Summary

Lot	Block	Basin	100 yr. HY	Low Floor	Separation Δ	Low Opening	Separation Δ	Garage Floor**	Separation Δ	Appendix 4A		
										GW	Required Separation Distance-Ft.	Proposed Separation Distance-Ft.
1	1	21.3	890.5	891.0	0.5 *	891.0	0.5	899.5	9.0	875.3	10	40
2	1	21.3	890.5	889.5	-1.0 *	889.5	-1.0	898.0	7.5	875.3	18	60
3	1	22P	879.0	889.5	10.5	889.5	10.5					
4	1	22P	879.0	888.7	9.7	887.7	8.7					
5	1	22P	879.0	886.3	7.3	886.3	7.3					
6	1	22P	879.0	884.5	5.5	884.5	5.5					
7	1	24.2 / 24P	883.3 / 878.0	885.1	1.8 / 7.1 *	885.1	1.8 / 7.1	893.6	10.3	868.0	10	120
8	1	24.2 / 24.1	883.3	883.5	0.2 / 0.2 * / *	883.5	0.2 / 0.2	892.0	8.7	868.0	12	40
9	1	24.1	883.3	887.5	1.2 *	887.5	4.2			868.0	10	35
10	1	65P	877.6	888.5	10.9	888.5	10.9					
11	1	66P	877.4	887.5	10.1	887.5	10.1					
12	1	66P	877.4	882.5	5.1	882.5	5.1					
1	2	64P	878.7	882.5	3.8	882.5	3.8					
2	2	64P	878.7	887.5	8.8	887.3	8.6					
3	2	64.1 / 64P	886.6 / 878.7	885.0	-1.6 / 6.3 *	885.0	-1.6 / 6.3	893.5	6.9	874.0	28	45
4	2	64.1 / 64P	886.6 / 878.7	885.0	-1.6 / 6.3 *	885.0	-1.6 / 6.3	893.5	6.9	874.0	28	50
1	3	64.3 / 24.3	886.9 / 884.3	887.5	0.6 / 3.2 *	896.0	9.1 / 11.7			880.0	48	250
2	3	24.3	884.3	886.5	2.2	895.0	10.7					
3	3	24.3	884.3	884.5	0.2 *	893.0	8.7			879.5	70	70

Lot	Block	Basin	100 yr. HY	Low Floor	Separation Δ	Low Opening	Separation Δ	Garage Floor**	Separation Δ	Appendix 4A		
										GW	Required Separation Distance-Ft.	Proposed Separation Distance-Ft.
4	3	24.3	884.3	884.5	0.2 *	893.0	8.7			879.5	70	70
5	3	24.3	884.3	886.5	2.2	895.0	10.7					
6	3	24.3	884.3	888.5	4.2	897.0	12.7					
7	3	21.5	889.9	891.0	1.1 *	894.5	4.6			875.5	12	110
1	4	61	891.2	891.5	0.3 *	895.0	3.8			880.0	25	250
2	4	62.1 / 61	891.5 / 891.2	891.0	-0.5 / 0.4 * / *	894.5	3.0 / 3.3			875.3 / 880.0	10 / 28	45 / 280
3	4	62.2	891.8	891.5	-0.3 *	895.0	3.2			880.0	25	30
4	4	21.4	889.0	888.5	-0.5 *	892.0	3.0			875.5	18	50
5	4	21.2/21.4/ 21	892.0/889.0/885.8	889.5	-2.5*/0.5* / 3.7	889.5	2.5/0.5 / 3.7	898.0	9.0	875.5	18	25/160
6	4	21.2 /21	892.0/885.8	889.0	-3.0*/3.2	889.0	-3.0	897.5	5.5	875.5	10	12
7	4	21	885.8	890.8	5.0	890.8	5.0					
8	4	31	885.8	890.8	5.0	890.8	5.0					
9	4	31	885.8	888.0	2.2	888.0	2.2					

* Appendix 4A used for compliance with LRRWMO low floor criteria.

** Garage floor is the lowest opening adjacent to a stormwater basin.

Bob Obermeyer

From: Darren B. Lazan, RLA <DLazan@landform.net>
Sent: Thursday, July 27, 2023 10:05 AM
To: Bob Obermeyer
Subject: Legacy at Petersen Farms

CAUTION: This email originated from outside of your organization.

I am the President of Landform Professional Services, the applicant on the Legacy at Petersen Farms project, as well as the managing partner of JD Andover Holdings, LLC the owner/developer.

As part of this current phase of Petersen Farms, Landform/JDA are NOT requesting approvals for extending 170th across the wetland and onto the upland area where we currently show 4 lots on the concept plans. However, we DO anticipate pursuing future phases where we are able to make that connection, as that is the only viable access to that upland area. We understand this is subject to a regulatory process that may or may not be successful and anticipate preparing necessary wetland impact applications at that time.

We are addressing flood plain and stormwater for that area as part of the current application to assure we don't back ourselves into a corner, but recognize we cannot proceed with any impacts until the regulatory process is completed.

If you have any further questions, please let me know.

Darren B. Lazan, RLA
President
Landform Professional Services, LLC

612-221-8143